```
In [ ]:
In [14]: # To search documents
         #Import Elascticsearch and helpers from elasticsearch
         from elasticsearch import Elasticsearch,helpers
         import json
         es = Elasticsearch(['http://localhost:9200'])
         es.ping() #connection testing
         res = es.search(index="pdgithub issues", body={"query": {"match all": {}}})
         # Extract the total hit count
         print("Got %d Hits:" % res['hits']['total']['value'])
         # Extract hits from the response
         hits = res.get('hits', {})
         # Pretty print the hits
         print(json.dumps(hits, indent=2))
        Got 3879 Hits:
          "total": {
            "value": 3879,
            "relation": "eq"
          },
          "max score": 1.0,
          "hits": [
              " index": "pdgithub issues",
              "_id": "LzyfUZMBhjF0vW2DRbFb",
              "_score": 1.0,
              " source": {
                "_type": "issue",
                " repo": "langchain",
                " issueNumber": "28276",
                "_title": "langchain-chroma== 0.1.4 method get_by_ids is listed in
        documentation BUT I am getting NotImplementedError",
                "_createdAt": "2024-11-22T01:13:50Z",
                " closedAt": "2024-12-31T00:36:30Z",
                " state": "open",
                "_body": "### Checked other resources\n\n- [X] I added a very descri
        ptive title to this issue.\n- [X] I searched the LangChain documentation wit
        h the integrated search.\n- [X] I used the GitHub search to find a similar q
        uestion and didn't find it.\n- [X] I am sure that this is a bug in LangChain
        rather than my code.\n- [X] The bug is not resolved by updating to the lates
```

t stable version of LangChain (or the specific integration package).\n\n###

Example Code\n\n```\r\n#-----\r\n# HuggingFace embedding (no iss ue)\r\nfrom langchain_huggingface import HuggingFaceEmbeddings\r\nembeddings = HuggingFaceEmbeddings(model=\"sentence-transformers/all-mpnet-base-v2\")\r \n\r\n\r\n#-----\r\n# create langchain-chroma persistent client w ith collection name 'example collection; (no issue)\r\nfrom langchain chrom a import Chroma\r\n\r\nvector_store = Chroma(\r\n collection name=\"examp le collection\", # collection is \"table\" in vectore store \r\n ing function=hf, # hf is huggingface embeddings derived from the previou s step \r\n persist_directory=\"./vectorstore/chroma_langchain_db\", # W here to save data locally, remove if not necessary\r\n)\r\n\r\n\r\n#---------\r\n# add at least one document into vector collection (no issue)\r \nfrom uuid import uuid4\r\nfrom langchain core.documents import Document\r\ $n\r document 1 = Document(\r n$ page content=\"I had chocolate chip panca kes and scrambled eggs for breakfast this morning.\",\r\n metadata={\"sou rce\": \"tweet\"},\r\n $id=1,\r\n)\r\n\couments = [\r\n$ document 1, $\r \n \r \n \ = [str(uuid4()) for _ in range(len(documents))] \r \n \end{tabular}$ _store.add_documents(documents=documents, ids=uuids)\r\n\r\n\r\n\r\n#--------- ERROR ENCOUNTERED when running get_by_ids \r\n# attempt to run ge t_by_Ids yields NotImplementedError\r\nvector_store.get_by_ids(['6314982d-45 $5f-47cc-bf97-6e5324f6af62'])\r\n\r\n```\n\n\#\# Error Message and Stack Trace$ (if applicable)\n\n{\r\n\t\"name\": \"NotImplementedError\",\r\n\t\"message \": \"Chroma does not yet support get_by_ids.\",\r\n\t\"stack\": \"----------\r\nNotImp Traceback (most recent call last)\r\nCel lementedError l In[87], line $3\r\n$ 1 # testing get the first two document ids\r\n 2 # ids = ['db1e5f74-f18d-4765-a193-d30eaed7552f', '12861b34-df54-4e40-8e1eae9ea901d378']\r\n---> 3 vector store.get by ids(['6314982d-455f-47cc-bf97-6e5324f6af62'])\r\n 5 # get by ids() functionality is not avaiable unti l v0.2.11\r\n\r\nFile ~/Documents/0_-_Python_Projects/05_Gen_AI/venv_3_11/li b/python3.11/site-packages/langchain core/vectorstores/base.py:164, in Vecto rStore.get_by_ids(self, ids)\r\n 140 \\\"\\\"Get documents by their I 142 The returned documents are expected to have the I Ds.\r\n 141 \r\n D field set to the ID of the\r\n (...)\r\n 161 .. versionadded:: 0.2.11 163 msg = f\\\"{self.__class__.__name__} doe 162 \\\"\\\"\\\"\r\n $\r\n$ s not yet support get_by_ids.\\\"\r\n--> 164 raise NotImplementedError(msg)\ r\n\r\nNotImplementedError: Chroma does not yet support get_by_ids.\"\r\n}\n \n### Description\n\nI am just trying to run the vector_store method `get_by _ids` - it is listed as one of the available methods in [here](https://pyth on.langchain.com/api_reference/chroma/vectorstores/langchain chroma.vectorst ores.Chroma.html)\r\n\n\### System Info\n\n\$ python -m langchain_core.sys_i nfo\r\n\r\nSystem Information\r\n-----\r\n> 0S: Darwin\r\n> 0S Version: Darwin Kernel Version 23.6.0: Mon Jul 29 21:13:00 PDT 2024; root:x nu-10063.141.2~1/RELEASE X86 64\r\n> Python Version: 3.11.10 (main, Nov 19 2024, 15:24:32) [Clang 12.0.0 (clang-1200.0.32.29)]\r\n\r\nPackage Informati on\r\n-----\r\n> langchain core: 0.3.19\r\n> langchain: 0.3.7\ r\n> langchain_community: 0.3.4\r\n> langsmith: 0.1.143\r\n> langchain_chrom a: 0.1.4\r\n> langchain experimental: 0.3.3\r\n> langchain grog: 0.2.1\r\n> langchain_huggingface: 0.1.2\r\n> langchain_text_splitters: 0.3.2\r\n\r\nOpt ional packages not installed\r\n-----\r\n> langgra

ph\r\n> langserve\r\n\r\n0ther Dependencies\r\n-----\r\n> aioht tp: 3.11.6\r\n> async-timeout: Installed. No version info available.\r\n> ch romadb: 0.5.20\r\n> dataclasses-json: 0.6.7\r\n> fastapi: 0.115.5\r\n> groq: 0.12.0\r\n> httpx: 0.27.2\r\n> httpx-sse: 0.4.0\r\n> huggingface-hub: 0.26.2\r\n> jsonpatch: 1.33\r\n> numpy: 1.26.4\r\n> orjson: 3.10.11\r\n> packagin g: 24.2\r\n> pydantic: 2.9.2\r\n> pydantic-settings: 2.6.1\r\n> PyYAML: 6.0. 2\r\n> requests: 2.32.3\r\n> requests-toolbelt: 1.0.0\r\n> sentence-transfor mers: 3.3.1\r\n> SQLAlchemy: 2.0.36\r\n> tenacity: 9.0.0\r\n> tokenizers: 0.20.3\r\n> transformers: 4.46.3\r\n> typing-extensions: 4.12.2",

"GitHub_Issue_vector": [-0.021848976612091064, -0.019959725439548492. -0.00041755521669983864, -0.01879156194627285. -0.018647344782948494, 0.013405032455921173, 0.008617005310952663, -0.023997819051146507, -0.014565984718501568, -0.01882040500640869, 0.014212651178240776. -0.012049386277794838, -0.026752376928925514, 0.02999727427959442, -0.0005547873442992568, 0.005876869894564152, 0.021719180047512054, -0.0287570022046566, 0.02506503090262413, -0.00012033161328872666, 0.005559591110795736, 0.01459482777863741, -0.007019795011729002, -0.008407889865338802, -0.02764652669429779, 0.022469112649559975, 0.029420403763651848, -0.0431499257683754, -0.010924488306045532, 0.006284284871071577. 0.03161251172423363, -0.007492107804864645, -0.02790611796081066, -0.027834009379148483, -0.024791017174720764, -0.023262308910489082, 0.030372239649295807, -0.023810336366295815. 0.026463942602276802, -0.012561358511447906,

0.005912924185395241, 0.002204727614298463, 0.009402992203831673, -0.04669767990708351, -0.011710474267601967, 0.044101763516664505, -0.0059057134203612804, -0.005858842749148607, -0.02467564307153225, 0.01289305929094553, 0.020868295803666115, 0.046293869614601135, 0.003583808895200491, -0.015777412801980972, 0.005400951486080885, -0.01734938472509384, 0.026939859613776207, 0.026420677080750465, -0.000518282235134393, -0.009439046494662762, 0.025699587538838387. 0.003466632217168808, -0.015907209366559982, -0.015791835263371468, -0.01925305835902691, -0.004020067397505045, 0.0015079759759828448, 0.010924488306045532, 0.02650720626115799, 0.008595372550189495, 0.011256189085543156, -0.0068503390066325665, -0.007063060067594051, 0.00029204078600741923, 0.03466992825269699, -0.02787727490067482, -0.0019253058126196265, -0.027689792215824127, 0.0333431251347065, -0.010455780662596226, 0.03262203559279442, -0.014479453675448895, -0.025468839332461357, 0.027372512966394424, 0.046322714537382126, 0.03429495915770531, 0.01778203807771206. 0.022728703916072845, 0.013246392831206322, -0.013816052116453648,

- 0.0068647610023617744, 0.006435713265091181. 0.02323346585035324, 0.000867559399921447, -0.005036802031099796, 0.012914692051708698, -0.004319319035857916, 0.018315643072128296, 0.007895917631685734, -0.010823535732924938, -0.027170607820153236, 0.01964244619011879, -0.02931945212185383, -0.011234556324779987. -0.013116596266627312, -0.019916459918022156, 0.014883263036608696, -0.002253401093184948, 0.02973768301308155, 0.011263399384915829, -0.024517003446817398, 0.02967999503016472, -0.017983943223953247, -0.030026117339730263, 0.005977822467684746, -0.0379004031419754, -0.016253331676125526, -0.010585576295852661, -0.0065655093640089035, -0.007063060067594051, 0.03588135540485382, 0.020305847749114037, 0.007207277696579695, -0.007975236512720585, 0.046755366027355194, 0.010758637450635433, -0.0006534862914122641, -0.035044893622398376, -0.01395305898040533, -0.014443399384617805, 0.021978773176670074, -0.0030610200483351946, 0.01938285492360592, -0.000822040718048811, -0.01080190297216177, 0.028064757585525513, -0.014825575985014439. -0.012640678323805332, -0.008703536354005337-0.010938909836113453,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purne...ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.016642719507217407, 0.042169246822595596, 0.0008603485184721649, -0.018993467092514038, -0.018099317327141762, 0.022829657420516014, -0.009020814672112465, 0.0069368695840239525, -0.0114364605396986, -0.01098217535763979, 0.016267752274870872, -0.006911631673574448, -0.013383399695158005, -0.00727938674390316, 0.023348839953541756, 0.007513740565627813, -0.008364624343812466, -0.003645101562142372, -0.008912651799619198, -0.009489522315561771, -0.010073604062199593. 0.011631154455244541, -0.009604896418750286, -0.019079996272921562, 0.0016539964126423001, 0.028295505791902542, 0.03141060844063759, -0.019916459918022156, -0.03781387209892273, 0.009128978475928307, -0.021416323259472847, -0.008386257104575634, -0.019498229026794434, 0.016512922942638397, 0.020320268347859383, 0.016945576295256615, 0.014710201881825924, -0.005253128707408905, -0.023752650246024132, -0.008782856166362762, -0.004477958660572767, 0.028540676459670067, 0.021675914525985718, 0.027170607820153236, -0.02212299033999443, 0.009864488616585732, -0.010542311705648899. -0.007351495325565338, 0.011717685498297215, 0.007297413889318705,

0.026031289249658585, 0.018027208745479584, 0.014227072708308697, -0.004777210298925638, -0.5653332471847534, -0.02186339907348156, -0.015575507655739784, -0.015171698294579983, 0.008494420908391476, 0.008797277696430683, -0.02330557443201542, 0.011934012174606323, -0.027660949155688286, 0.04692842811346054, -0.02673795446753502, -0.018286800011992455, 0.011385984718799591, -0.006972924340516329, -0.0027509520296007395, -0.023478636518120766, 0.023521902039647102. -0.022656595334410667, -0.003839795244857669, 0.024848703294992447, -0.028814690187573433. 0.025439996272325516, 0.005545169115066528, 0.0009144301293417811, -0.016527345404028893, 0.01312380749732256, 0.010152923874557018, -0.010917277075350285, 0.025829384103417397, -0.005397346336394548, -0.01706095039844513, 0.02457468956708908, 0.03668897598981857, -0.008141087368130684, 0.043813325464725494, 0.0026896593626588583, -0.015258229337632656, 0.0594753660261631, -0.0080906106159091, -0.007931971922516823, -0.018286800011992455, -0.02225278504192829, 0.030602987855672836, 0.011155236512422562, -0.0015575507422909140.006024693138897419,

-0.0023489452432841063, 0.016657140105962753, 0.0015350168105214834, -0.014854419976472855, 0.02134421467781067, -0.01184748113155365. 0.0059561897069215775, 0.013304079882800579, 0.022959452122449875, -0.02010394260287285, 0.006367209833115339, -0.023060405626893044, 0.03360271453857422, -0.011573467403650284. -0.007838230580091476, 0.007275781128555536, -0.008068978786468506, 0.001512482762336731, -0.018243534490466118, 0.02643509767949581, 0.010015917010605335, 0.00190187047701329, 0.007178434170782566, -0.03360271453857422, 0.0184598620980978, -0.0004191325861029327, -0.03175672888755798. 0.00476278830319643, -0.010030338540673256, 0.017133058980107307, 0.03291046991944313, 0.007153196260333061, -0.014097277075052261, 0.009785168804228306, 0.017320541664958, -0.00827088300138712, -0.0428038015961647, 0.004214761313050985, 0.02346421405673027, 0.008249250240623951, -0.029521355405449867, -0.00338190421462059, -0.013505984097719193, -0.035967886447906494, 0.0030213601421564817, 0.03715047240257263, 0.00035784009378403425, -0.0395444855093956, 0.016253331676125526, 0.013779997825622559,

- 0.012784896418452263, -0.026161083951592445, -0.0007310032960958779, -0.03957332670688629, -0.01948380656540394, 0.007585849147289991, -0.014811154454946518, 0.00860979501157999, 0.022800812497735023, -0.016037004068493843, -0.026824485510587692, 0.003991223871707916. 0.024819860234856606, 0.010895644314587116, -0.022671017795801163, -0.0007841835613362491, -0.002466122154146433, 0.02124326303601265, 0.003070033621042967, -0.03847727179527283, -0.00536850281059742. -0.004499590955674648, 0.005671359598636627, -0.006493400316685438, 0.018546391278505325, -0.019498229026794434, -0.022108567878603935. -0.0024408840108662844, 0.03556407615542412, -0.012582991272211075, -0.02274312637746334, -0.01117686927318573, -0.014782310463488102. 0.020709656178951263, 0.006168910767883062, -0.009568842127919197, -0.0048204753547906876, -0.018027208745479584, -0.017493603751063347, 0.040150199085474014, 0.02049333043396473, 0.005894897039979696, 0.024142038077116013, -0.01928190141916275, 0.01524380687624216, -0.007048638537526131, 0.015762990340590477, 0.0020929588936269283, -0.026449520140886307, -0.021286526694893837,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purne...ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.007297413889318705, -0.009165032766759396, -0.005501904059201479, -0.009028025902807713, -0.024098772555589676, -0.018474282696843147, -0.036198634654283524, -0.006972924340516329, 0.01269836537539959, -0.002599523402750492, -0.008617005310952663, -0.037698496133089066, 0.003861428005620837, 0.0052062575705349445. 0.008696325123310089, 0.01546013355255127, -0.011400406248867512, 0.009013604372739792, -0.019195372238755226, -0.01369346771389246, 0.007456053514033556. 0.018647344782948494, -0.031064486131072044, -0.025584213435649872, -0.011270610615611076, -0.01843101717531681, 0.009821223095059395, 0.007557005621492863, 0.017046527937054634, 0.02251237817108631, -0.007106325589120388, 0.0032268702052533627, -0.028439722955226898, -0.004751971922814846, -0.0046978904865682125, 0.005588434636592865, 0.000605714216362685, -0.022469112649559975, 0.02820897474884987, 0.01524380687624216. 0.011530202813446522, 0.013022854924201965, 0.0031042853370308876, 0.024690063670277596, -0.002215543994680047, -0.006839522626250982, -0.026262037456035614, 0.006612380035221577. 0.006536665838211775, 0.0027004757430404425,

0.011486937291920185, 0.01876271888613701, -0.014392922632396221, 0.02144516631960869, -0.0010311562800779939, 0.021921085193753242, -0.0050115641206502914, -0.0148255759850144390.0001297958951909095, -0.020637547597289085, 0.008876597508788109, -0.04049631953239441, 0.0037857138086110353, -0.008963127620518208, 0.013231971301138401, 0.022425847128033638, -0.020551016554236412, -0.012784896418452263, -0.014796732924878597, -0.013556460849940777, -0.010722583159804344. 0.008898230269551277, -0.007398366462439299, 0.013058909215033054, -0.02594475820660591, 0.02731482684612274, 0.0019415303831920028, -0.0009482311434112489, -0.002219149377197027, -0.022267207503318787, 0.021026935428380966, -0.01760897785425186, 0.02098366990685463, -0.007571427617222071, -0.01853197067975998, 0.02134421467781067, 0.004304897505789995, -0.002460713963955641, 0.019887616857886314, 0.00903523713350296, 0.0676669254899025, -0.016123535111546516. 0.01483999751508236, -0.03042992763221264, -0.007744488772004843, 0.019844351336359978, -0.01830122247338295, -0.005667754448950291, 0.03184325993061066, 0.003459421219304204,

0.01227292325347662, 0.024949656799435616, -0.011804215610027313, 0.011458093300461769, -0.01657060906291008, -0.002172278705984354, -0.016267752274870872-0.01595047302544117, 0.005552380345761776, -0.022007616236805916, 0.010888434015214443, 0.01631101779639721, 0.003854217007756233, 0.018416596576571465. 0.007308230269700289, -0.019469384104013443, 0.02999727427959442, 0.008826120756566525, 0.011198502033948898, 0.00155845214612782, -0.0038001355715095997, -0.03735237568616867, -0.009251562878489494, -0.01967128925025463, -0.019988568499684334, -0.02235373854637146, -0.027574418112635612, -0.02758883871138096, 0.023392105475068092, 0.005581223871558905, 0.016484079882502556, 0.01307333167642355, 0.033516187220811844, 0.018113737925887108, 0.0011077719973400235, -0.02307482622563839, 0.021099044010043144, 0.004701496101915836, 0.0024102376773953438, -0.01721959002315998, -0.02101251482963562, 0.0194405410438776, -0.029362717643380165, 0.0009752719779498875, -0.032333601266145706, 0.023896867409348488, -0.00344860483892262, -0.011941222473978996, -0.03391999378800392, 0.016887888312339783,

0.04715917631983757, -0.017234010621905327. -0.004827686585485935, 0.01719074510037899, -0.01974339783191681, 0.03092026710510254, -0.02114230953156948, 0.019036732614040375, 0.0575140044093132, -0.006313128396868706, 0.013736732304096222, -0.021675914525985718, 0.008588162250816822, -0.018344487994909286. -0.008407889865338802, -0.008487209677696228, -0.009907753206789494, -0.012445984408259392, 0.0035279246512800455, 0.007665168959647417, -0.028064757585525513-0.0004459480696823448, 0.028901219367980957, -0.018733873963356018, -0.014537140727043152, -0.05679291859269142, 0.006219387054443359, -0.0026950675528496504, -0.004333741031587124, 0.018878092989325523, -0.015416868031024933, -0.0120926508679986, -0.016484079882502556, 0.008977550081908703, -0.015474556013941765, -0.02284407801926136, -0.0027888091281056404, 0.008898230269551277, -0.014191018417477608, -0.031352922320365906. 0.006713332142680883, 0.002729319268837571, 0.03850611671805382, 0.030343396589159966, 0.00031795489485375583, -0.0023633670061826706, 0.008617005310952663, 0.016037004068493843, 0.005018774885684252, 0.003973196726292372,

0.0022443875204771757, 0.02656489424407482. 0.02689659409224987, 0.011234556324779987 0.0061148288659751415, 0.005750679410994053, 0.0029168021865189075, -0.024271832779049873, -0.005714625120162964, 0.0019667684100568295, 0.0041029928252100945, 0.027011968195438385. -0.01039088238030672, 0.02016163058578968, 0.04078475758433342, -0.00038735964335501194, 0.0036090470384806395, 0.007578638382256031, 0.030776049941778183, 0.025151560083031654, -0.01336897723376751. -0.0026031287852674723, -0.002938434947282076, -0.007557005621492863, -0.024372786283493042. 0.0031818023417145014, -0.00928040686994791, -0.010477413423359394, 0.025339044630527496, 0.034525707364082336, -0.0500146858394146, -0.015662038698792458, 0.024617955088615417, 0.01659945398569107. -0.013325712643563747-0.005411767866462469, -0.021127888932824135, 0.0007530866423621774, -0.0013935031602159142, -0.03850611671805382, -0.006453740410506725, 0.010499046184122562, -0.008076189085841179, -0.0024553057737648487, -0.012626256793737411, 0.013729522004723549, -0.018113737925887108. 0.0038866661489009857, 0.016498500481247902, -0.005480271298438311,

-0.01587836444377899, -0.004247210454195738, 0.025829384103417397, -0.013412242755293846-0.0031854077242314816, 0.010282719507813454, 0.01770992949604988, 0.025468839332461357, -0.02552652731537819, -0.055610332638025284, 0.020551016554236412, -0.02722829580307007, 0.003158366773277521, 0.002868128940463066, 0.010657685808837414, -0.0032142512500286102, -0.037208158522844315, 0.01693115383386612, 0.021776868030428886, 0.0026536050718277693, 0.00974190328270197, -0.012820950709283352, 0.013570882380008698, 0.02771863527595997, 0.007571427617222071, 0.03974638879299164, -0.013960270211100578, -0.005822788458317518, 0.0051882304251194, -0.020190473645925522, -0.03435264900326729, -0.012864216230809689, -0.03518911078572273, 0.0015782820992171764, 0.009215508587658405, -0.004218366928398609, -0.006594352889806032, 0.009294828400015831, 0.015964895486831665, -0.02085387520492077, 0.0030465982854366302, -0.006727754138410091, 0.011688841506838799, -0.003628876991569996, -0.004423876758664846, 0.010066392831504345, -0.008119454607367516, -0.015488977544009686, 0.012251290492713451, -0.016758093610405922,

- 0.03190094605088234, 0.025310199707746506, -0.006821495480835438, -0.0038830607663840055, -0.0061653051525354385, -0.02594475820660591, -0.014602039009332657, 0.002938434947282076, 0.018647344782948494. 0.029463669285178185, -0.001218639314174652, -0.00413544150069356. -0.01693115383386612, -0.02431509830057621, -0.006049931049346924, 0.020767344161868095, -0.006410475354641676, -0.006158094387501478, 0.000953639333602041, -0.02000299096107483, -0.009554420597851276. 0.0009162328788079321, -0.021921085193753242, -0.031237546354532242, -0.028915641829371452, 0.006655645091086626, -0.002649999689310789, 0.00225880928337574, 0.008782856166362762, -0.004196734167635441, -0.01938285492360592, -0.01312380749732256, -0.022281629964709282, 0.016945576295256615, 0.0012961563188582659, 0.010239453986287117, 0.04539972171187401, 0.03363155946135521, 0.08428080379962921, -0.022671017795801163, -0.006309522781521082, -0.0004153018235228956, 0.0054189786314964294, 0.003199829487130046, -0.015993738546967506, 0.012619045563042164, 0.003216054057702422, -0.007344284560531378. 0.017637820914387703, -0.005599251016974449,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.0063780262134969234, -0.013585303910076618, -0.021517274901270866, 0.006111223716288805, -0.0032178566325455904, 0.0097202705219388, -0.029824214056134224, -0.033285439014434814, -0.00907129142433405, 0.021546119824051857, 0.004874557256698608, -0.0038001355715095997, -0.04548625275492668, -0.013578093610703945. 0.027199450880289078, -0.03126639127731323, 0.00798965897411108, -0.00741999875754118, 0.03443918004631996, -0.002604931592941284, 0.019628023728728294. 0.0008292515994980931, 0.027934961020946503, 0.006489795166999102, 0.0036955776158720255. -0.027242716401815414, 0.001517890952527523, 0.006597958039492369, -0.0035729927476495504, 0.03149713948369026, 0.01938285492360592, -0.017623398452997208, -0.028064757585525513, 0.03242013230919838, -0.007701223250478506, -0.027920540422201157, -0.013671834953129292, 0.00570380873978138, -0.00475557753816247, -0.03663128614425659, -0.013592515140771866, -0.012929113581776619, -0.006381631828844547, 0.008573739789426327, 0.006572720129042864, 0.017724351957440376, -0.02428625524044037, -0.039861761033535004, 0.020608704537153244, -0.004968298599123955,

- 0.030343396589159966, 0.005462244153022766, 0.0535912849009037, 0.026983125135302544, 0.0017125847516581416, -0.017262853682041168, -0.011912379413843155, 0.00328095187433064, -0.0067998627200722694, 0.03882339596748352, 0.02104135788977146, -0.02294503152370453, -0.0009626529063098133, 0.017825303599238396, -0.01524380687624216, -0.038650333881378174, -0.03905414417386055, 0.04274611547589302, -0.00012359904940240085, 0.02637741155922413, -0.013080541975796223, -0.02431509830057621, -0.05356243997812271, 0.012345031835138798, -0.0025923126377165318, 0.015041902661323547, 0.01621006615459919, -0.005523536819964647, -0.011111970990896225, 0.010448569431900978, -0.024646800011396408, 0.029564620926976204, 0.02669469080865383, 0.009323672391474247, -0.008984760381281376, -0.009893331676721573, -0.015734147280454636, 0.02516598254442215, 0.03143944963812828, 0.029146390035748482. -0.005267550237476826, -0.01375836506485939, 0.038159992545843124, -0.01672924868762493, -0.01610911265015602, -0.020435642451047897, -0.005274761002510786, 0.04225577786564827. -0.0228729210793972, 0.012489249929785728,

file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.015027481131255627, -0.014674147590994835, 0.011869113892316818, 0.0019361221930012107, -0.0017810881836339831, -0.01246761716902256, -0.0006399658741429448, 0.011061495169997215, 0.017320541664958, 0.000825646158773452, 0.006803468335419893, 0.002644591499119997, -0.01052067894488573, -0.0014620065921917558, -0.01755128987133503, -0.03224707022309303, 0.03198747709393501, -0.03715047240257263, -0.015936052426695824, -0.031352922320365906, -0.005884080659598112, 0.027170607820153236, -0.02434394136071205, 0.018705030903220177, 0.007484897039830685, 0.05203373357653618, -0.015070745721459389, 0.04061169549822807, 0.011739318259060383, 0.0025256117805838585, -0.04144815728068352, -0.019498229026794434, -0.004070543684065342, -0.009943808428943157. 0.0018874487141147256, 0.0126623110845685, -0.03074720688164234, 0.0029276185669004917, 0.016224486753344536, -3.222363375243731e-05. 0.025771696120500565, -0.01804162934422493, 0.014010746031999588, -0.011710474267601967, 0.020349113270640373, -0.0444478839635849, -0.004157074261456728, 0.037208158522844315. -0.029031015932559967, 0.0031367342453449965,

0.014883263036608696, 0.0036144552286714315, 0.018056051805615425, -0.01928190141916275, 0.023478636518120766, -0.0145443519577384, -0.0020118365064263344, 0.01008081529289484, -0.004438298754394054, -0.010845168493688107, -0.008076189085841179, -0.00562088331207633, -0.026781219989061356, -0.04127509519457817, -0.023622853681445122, 0.029131969437003136, 0.009402992203831673, 0.007477685809135437, -0.0017666664207354188, 0.024589112028479576, 0.032766252756118774. 0.027343669906258583, -0.02539673075079918, -0.017046527937054634, -0.021935507655143738, 0.012929113581776619, 0.00632394477725029. -0.014940950088202953, -0.01308775320649147, 0.03227591514587402, 0.01695999689400196, -0.01558993011713028, -0.014342446811497211, -0.008999181911349297, -0.031064486131072044, -0.005754285026341677, -0.0004141750978305936, 0.007888706400990486, 0.0037027886137366295, -0.0018351698527112603. -0.021690336987376213, 0.006875577382743359, -0.01351319532841444, 0.013996324501931667, -0.0287570022046566, 0.00889101903885603, -0.00041778053855523467, 0.017767615616321564. 0.003151156008243561, -0.00042994890827685595,

- -0.029881900176405907, -0.006594352889806032, 0.028785845264792442, 0.013686256483197212, 0.027761900797486305, 0.027819586917757988, -0.019166527315974236-0.0050980946980416775, -0.007542584091424942, -0.02023373916745186, -0.017738772556185722, -0.021935507655143738, 0.01326802559196949, -0.002163264900445938. -0.028454145416617393, 0.016902310773730278, -0.008256461471319199, -0.0025436391588300467, -0.016815779730677605, 0.007484897039830685, -0.002736530266702175. 0.010196189396083355, 0.006623196415603161, -0.0018748296424746513, 0.006194148678332567, -0.010188978165388107, 0.02366611920297146, 0.004456325899809599, 0.021430745720863342, 0.020305847749114037, -0.0002399872028036043, 0.013909793458878994, 0.00818435288965702, 0.03406421095132828, -0.016383126378059387, -0.015431290492415428, 0.019065575674176216, 0.002083945320919156, 0.03149713948369026, -0.022238364443182945. 0.02310366928577423, -0.027444621548056602, -0.01411890983581543, -0.006349182687699795, -0.015964895486831665, -0.012121494859457016, -0.0018324657576158643, -0.02552652731537819. -0.014162174426019192, -0.009294828400015831,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- 0.011789794079959393, 0.03342965617775917. -0.0039263260550796986, -0.026334146037697792, -0.019599180668592453, -0.028843533247709274, -0.010744215920567513, 0.00827088300138712, -0.008501631207764149, -0.0408424437046051, 0.0009806801099330187, 0.005094489082694054, -0.02931945212185383, -0.0013944045640528202, 0.2049044668674469, -0.011119182221591473, 0.014731834642589092, 0.020810609683394432, -0.006745781283825636, 0.029131969437003136, -0.011429250240325928. -0.0007566920830868185, -0.018805984407663345, 0.0036955776158720255, 0.022526798769831657, -0.00527836661785841, 0.012914692051708698, -0.0055199312046170235, -0.00970584899187088, 0.03409305587410927, -0.02882911078631878, -0.024170881137251854, -0.026103397831320763, 0.004423876758664846, -0.008400678634643555, -0.0033097954001277685, 0.0045753056183457375, -0.03042992763221264, 0.016065847128629684, -0.01974339783191681, -0.02101251482963562, 0.009453468024730682, -0.002336326288059354, 0.005299999378621578, -0.012655099853873253, 0.01499863713979721, 0.0034684347920119762, -0.021906662732362747, -0.00889101903885603, -0.0025742852594703436,
- $file: ///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html$

0.029766526073217392, 0.020998092368245125, 0.01375836506485939, 0.023579588159918785, 0.0008490814943797886, -0.03265088051557541, 0.008256461471319199, -0.026478363201022148, 1.3837290680385195e-05, 0.015330337919294834, -0.0055163255892694, 0.012121494859457016, -0.010030338540673256, -0.002339931670576334. -0.01745033822953701, -0.0022371765226125717, 0.03317006304860115, 0.020349113270640373, 0.009467889554798603, -0.03677550330758095, -0.007138774264603853. -0.010938909836113453, -0.026233192533254623, 0.0037893191911280155, -0.020147208124399185. 0.012914692051708698, 0.017724351957440376, 0.020075099542737007, -0.022310473024845123, 0.007888706400990486, -0.029910743236541748, -0.016887888312339783, -0.013361766934394836. -0.0060787745751440525, 0.003973196726292372, -0.01356367114931345, 0.0006300509558059275, 0.014465032145380974, -0.015676461160182953, -0.02421414665877819, 0.03117986023426056, -0.009619317948818207, 0.011248977854847908, 0.03980407491326332, 0.018604079261422157, -0.030112648382782936, -0.011595100164413452, 0.022800812497735023, -0.024098772555589676, -0.019959725439548492,

0.019108841195702553, -0.01080190297216177, -0.01098217535763979, -0.019325166940689087 0.010232243686914444, 0.0016765303444117308, -0.018344487994909286, 0.010974964126944542, -0.007268570363521576. 0.0046978904865682125, -0.007228910457342863, 0.01587836444377899. -0.0055920397862792015, -0.008227617479860783. -0.028511833399534225, 0.04589006304740906, 0.021675914525985718, 0.014782310463488102, -0.016411971300840378, -0.0022984689567238092, 0.002599523402750492. -0.020608704537153244, -0.020680813118815422, -0.0016341664595529437, -0.0013213943457230926, -0.03420843183994293, -0.008580951020121574, -0.0005088179605081677, 0.0007715644896961749, 0.016397548839449883, 0.003962380345910788, -0.025641901418566704, 0.03394883871078491, 0.016902310773730278, 0.013224760070443153, -0.020089520141482353, -0.004459931515157223, 0.015128432773053646, 0.003947958815842867, -0.019887616857886314, -0.033025845885276794, -0.000325841800076887, -0.011047073639929295, -0.03533332794904709, 0.0026590132620185614, 0.01685904525220394, 0.024560268968343735, -0.00884054321795702, -0.005296393763273954, -0.009972651489078999,

- -0.03322774916887283, -0.0073370737954974174, -0.007113536354154348, -0.01613795757293701, 0.004023673012852669, -0.0011519385734573007, -0.005166597664356232, -0.00846557691693306, -0.010542311705648899, -0.023896867409348488, -0.012597412802278996, 0.004146257881075144, -0.018315643072128296, -0.0339776836335659, -0.002604931592941284, -0.022671017795801163, 0.011955644935369492, 0.005714625120162964, 0.032564349472522736, -0.023752650246024132, -0.010953331366181374, -0.028583941981196404, -0.020565439015626907, -0.005768706556409597, -0.007766121532768011, -0.0015196936437860131, 0.020219316706061363. 0.018344487994909286, -0.04568815603852272, -0.028583941981196404, -0.18448324501514435, 0.017998363822698593, 0.03614094853401184, -0.047822579741477966, 0.04366910830140114, -0.0016323636518791318, 0.01459482777863741, -0.011075916700065136, 0.0168302021920681, -0.008797277696430683, 0.027559995651245117, -0.007917549461126328, -0.018474282696843147, -0.026002444326877594, -0.019858771935105324, 0.01693115383386612, -0.017075370997190475, 0.0034143533557653427, 0.03700625151395798, 0.008696325123310089,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.046293869614601135, -0.034641083329916, 0.0029690812807530165, -0.0048348973505198956, -0.004870951641350985, 0.0016954588936641812, -0.005303604528307915, 0.00827088300138712, 0.0031637749634683132, -0.01685904525220394, -0.0071027199737727640.010347617790102959. 0.020565439015626907, -0.026103397831320763. 0.03602557256817818, 0.006442924030125141, 0.031525980681180954, -0.008833331987261772, -0.007030611392110586, 0.0232046227902174, 0.03781387209892273, 0.014940950088202953, 0.011724895797669888, -0.02039237879216671, -0.0015881970757618546, -0.011724895797669888, 0.041102033108472824, -0.0174936037510633470.0025688770692795515, -0.008588162250816822, 0.01207822933793068, -0.020839452743530273, -0.012936324812471867. 0.02467564307153225, 0.0031421424355357885, 0.025728432461619377, -0.023680541664361954, 0.026362989097833633, -0.010859590023756027-0.005602856166660786, 0.01680135726928711, -0.013520406559109688, -0.003122312482446432, -0.014912107028067112, -0.008552107959985733, -0.018777139484882355, -0.017392650246620178, -0.001854999689385295, -0.012157549150288105, 0.012200814671814442,

-0.00013892217248212546, 0.01892135851085186, 0.013174283318221569, -0.012179181911051273, 0.027444621548056602, 0.030256865546107292, -0.006597958039492369, 0.020349113270640373. 0.020017411559820175, -0.00842952262610197, -0.018849248066544533, 0.03591020032763481, -0.010059182532131672, 0.01398911327123642, 0.03706394135951996, 0.006204965058714151, 0.008790066465735435, -0.025021765381097794, -0.02921849861741066, 0.0030592172406613827, 0.013231971301138401. -0.016642719507217407, 0.019224215298891068, -0.01031156349927187, 0.0013619555393233895 0.0015809861943125725, 0.02258448675274849. -0.006709726992994547, 0.013967480510473251, -0.0013132821768522263, 0.007549794856458902, 0.008472788147628307, -0.0177387725561857220.004578910768032074, 0.01719074510037899, 0.020277004688978195, -0.033025845885276794, 0.027502309530973434, 0.03582366928458214, -0.03513142466545105 -0.027632104232907295, 0.008754012174904346, 0.00864584930241108, 0.049985844641923904, -0.004005645867437124, 0.042832646518945694, -0.010246665216982365, -0.0026896593626588583, 0.009179454296827316, 0.019454963505268097,

0.05030312016606331, -0.015907209366559982, -0.025382308289408684, 0.0028789450880140066, -0.027242716401815414, -0.01032598502933979, -0.07972352206707001, -0.01369346771389246, 0.0033855095971375704, -0.01436407957226038, -0.010066392831504345, -0.01584952138364315. -0.011696052737534046, 0.024199724197387695. -0.03518911078572273, 0.015863943845033646, -0.01475346740335226, 0.007448842283338308, -0.0031781967263668776, 0.01227292325347662, 0.017133058980107307. 0.0007679590489715338, -0.012150337919592857, 0.009539998136460781, -0.028180131688714027, 0.018416596576571465, 0.01441455539315939, -0.011544624343514442. 0.008162720128893852, 0.014724623411893845, -0.03544870391488075, 0.017637820914387703, -0.04277496039867401, 0.014291970990598202, -0.002033469034358859, 0.017868569120764732, 0.007077482063323259, -0.019714554771780968, 0.0023615641985088587, 0.0041246251203119755, -0.004131836351007223, -0.0024300676304847, 0.00010985330300172791, -0.012669522315263748, 0.023810336366295815, -0.017334964126348495, 0.014097277075052261, 0.01654176600277424, -0.008667482063174248, -0.011926800943911076,

-0.0035802035126835108, -0.017998363822698593, 0.021084623411297798, 0.015863943845033646, 0.006161700002849102, -0.024819860234856606, -0.03640053793787956, 0.022310473024845123, -0.003073639003559947, 0.004030883777886629, 0.005952584091573954, -0.00018939835717901587, 0.001255595008842647, 0.014061222784221172. -0.017983943223953247, -0.02918965555727482, -0.0019180949311703444, -0.019195372238755226, -0.004110203590244055, 0.008681903593242168, 0.015142855234444141. -0.009612107649445534, 0.006731359753757715, -0.014602039009332657, 0.008703536354005337, -0.024517003446817398, -0.0004714115057140589, 0.023868024349212646, -0.00536850281059742, 0.0001712584780761972, 0.0012276528868824244, -0.011609521694481373, 0.00975632481276989, -0.013001222163438797. 0.010636053048074245, -0.013419453985989094, -0.009366936981678009, 0.011039862409234047, -0.006904420908540487, 0.012424351647496223, 0.004200339317321777, 0.012056596577167511, 0.02447373792529106, 0.028122445568442345, -0.002931223949417472, -0.05748516321182251, 0.0033909177873283625, 0.016585031524300575. 0.026608159765601158, -0.010953331366181374,

0.0029456457123160362, 0.02441604994237423, -0.019959725439548492, 0.0023255099076777697, 0.014688569121062756, -0.0011870916932821274, -0.06460951268672943, -0.011342719197273254, -0.061263665556907654, 0.03784271702170372, 0.006558298133313656, -0.036487068980932236. -0.011854692362248898, -0.05151455104351044. 0.003547754604369402, -0.016873467713594437, 0.026290880516171455, 0.022180676460266113, 0.0038253734819591045, -0.01057115476578474, -0.01783972606062889. -0.0097202705219388, 0.007737278006970882, 0.01271278690546751, 0.023478636518120766, -0.006583536509424448, 0.03677550330758095. 0.011075916700065136, -0.006641223561018705, 0.002601326210424304, 0.008732379414141178, 0.01574856974184513, -0.0032178566325455904, 0.021387480199337006, 0.0004971002927049994, 0.04147700220346451, 0.0028320744168013334, -0.02323346585035324, 0.029622308909893036, -0.019527072086930275-0.0006165305385366082, 0.023868024349212646, 0.024170881137251854, -0.00889101903885603, 0.01246761716902256, 0.010693740099668503, 0.041390471160411835, -0.004128230735659599. -0.02630530297756195, -0.03833305463194847,

- 0.012741630896925926, -0.013469929806888103, 0.004056121688336134, 0.01698884181678295, 0.00476278830319643, 0.016527345404028893, 0.006291495636105537, 0.02144516631960869, 0.02627645805478096, 0.008797277696430683, -0.013945848681032658, -0.0287570022046566, 0.0015503398608416319, -0.04464979097247124. -0.0013511392753571272, 0.014746256172657013, -0.00028370317886583507, 0.02565632201731205, 0.04095781594514847, 0.004279659129679203, 0.038188837468624115. -0.021906662732362747, 0.02480543777346611, -0.014688569121062756, -0.03319890797138214, -0.014241494238376617, -0.006969318725168705. -0.011335508897900581, -0.017306119203567505, -0.013094964437186718, 0.005480271298438311, 0.012770473957061768, -0.007225304841995239. 0.0046113599091768265, -0.01349877379834652, -0.011393195949494839, 0.017363807186484337, 0.02575727552175522, 0.020579861477017403, -0.021488431841135025. -0.038650333881378174, 0.0046113599091768265, 0.031006798148155212, 0.02147401124238968, -0.02366611920297146, 0.01202775351703167, 0.013260814361274242, -0.028771424666047096. -0.03141060844063759, 0.039659857749938965,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.017522446811199188, 0.006918842438608408, -0.01657060906291008, 0.020118365064263344. -0.002208332996815443, 0.0161812212318182, 0.028699316084384918, -0.007585849147289991, 0.006814284715801477, -0.007585849147289991, 0.00249676825478673, -0.014688569121062756, -0.016195643693208694, 0.020608704537153244. -0.012626256793737411, -0.013376188464462757, 0.010470202192664146, -0.0070378221571445465, -0.022800812497735023, -0.0071748290210962296, -0.014529929496347904. 0.029232921078801155, -0.00952557660639286, -0.005566801875829697, -0.011169658042490482. -0.010729794390499592, -0.03637169674038887, 0.0336604043841362, 0.01294353511184454, 0.007477685809135437, 0.02506503090262413, -0.02271428145468235, 0.026781219989061356, 0.03804462030529976. 0.002197516616433859, 0.0045104073360562325, 0.035939041525125504, 0.007542584091424942, -0.006334761157631874, 0.011508570052683353, -0.024170881137251854, -0.01680135726928711, -0.009309249930083752, -0.011450883001089096, 0.01758013293147087, -0.004351768177002668, 0.02170475944876671, 0.10291372984647751, -0.004355373326689005. -0.012265712022781372,

```
-0.0017666664207354188,
  -0.041102033108472824,
  0.010174556635320187,
  0.0035333328414708376,
  -0.0026968703605234623,
  -0.003720815759152174,
  -0.008631426841020584,
  -0.001345731085166335,
  -0.012215236201882362,
  -0.031006798148155212,
  -0.04721686244010925,
  -0.02637741155922413,
  0.02029142528772354,
  -0.014270338229835033.
  0.01706095039844513,
  -0.003122312482446432,
  -0.02010394260287285,
  0.02428625524044037,
  0.00802571326494217,
  0.016916731372475624,
  -0.019469384104013443,
  -0.004910611547529697,
  0.00536850281059742,
  0.014580406248569489,
  -0.00864584930241108,
  0.006060747429728508,
  -0.043351829051971436,
  0.021748023107647896,
  0.01537360344082117,
  -0.031035641208291054,
  -0.040179040282964706,
  -0.00038645826862193644,
  -0.002722108503803611,
  0.014032378792762756.
  0.002469727536663413,
  0.021906662732362747,
  -0.004849318880587816,
  0.01587836444377899,
  0.006049931049346924,
  -0.00926598533987999,
  -0.04499591141939163,
  0.012619045563042164,
  0.02010394260287285,
  -0.004221972078084946,
  -0.00827088300138712,
  -0.043121080845594406
]
```

} },

```
" index": "pdgithub issues",
"_id": "MDyfUZMBhjF0vW2DRbFb",
"_score": 1.0,
" source": {
 "_type": "issue",
  " repo": "langchain",
  " issueNumber": "28275",
 "_title": "docs: poetry publish",
  "_createdAt": "2024-11-21T23:57:01Z",
  " closedAt": "2024-12-31T00:36:30Z",
  "_state": "open",
  "_body": "None",
  "GitHub Issue vector": [
    -0.008065586909651756,
    -0.007394031155854464,
    0.002886995440348983,
    0.0024300608783960342,
    -0.03137617185711861,
    0.017612747848033905,
    -0.014026504941284657,
    -0.028634563088417053.
    -0.019565105438232422,
    -0.009817169047892094,
    0.02715298719704151,
    -0.008093279786407948,
    -0.010073329322040081,
    -0.010509493760764599,
    -0.011527211405336857,
    0.0037627865094691515,
    0.008771758526563644,
    -0.02308211661875248,
    0.01035718247294426,
    0.015438848175108433,
    0.015397308394312859,
    0.02089436911046505,
    -0.020423587411642075,
    0.01256569940596819,
    -0.024051371961832047,
    0.007262489292770624,
    0.017709674313664436,
    -0.022694414481520653,
    0.016505029052495956,
    0.005503984168171883,
    0.015300382860004902,
    -0.02974228374660015,
    0.003006421495229006,
    -0.020215891301631927.
    0.0006226598052307963,
    0.019274327903985977,
    0.01866508275270462,
```

-0.019163556396961212, 0.009727166965603828, -0.018942013382911682, -0.001056661014445126, 0.014005735516548157, 0.018415845930576324, -0.0178204458206892, -0.01878970116376877, -0.002855840837582946, 0.016366563737392426, -0.004873968195170164, -0.008294053375720978, 0.018332766368985176, 0.0278176199644804, 0.0007459802436642349, -0.00717941066250205, 0.009429466910660267, -0.00016345361655112356, -0.0041747200302779675, 0.01498191338032484, 0.02960381843149662, -0.003897789865732193, -0.014102661050856113, -0.0026914135087281466, -0.004693963564932346, -0.017488129436969757, -0.006874787621200085, -0.009921018034219742, -0.011568751186132431, -0.024355994537472725, 0.02175285294651985, 0.011485672555863857, -0.0316254086792469, 0.016671186313033104, 0.00875098817050457, -0.01051641721278429, -0.028468405827879906, 0.033646997064352036, -0.013791114091873169, 0.019800495356321335, -0.014130353927612305, -0.001589751336723566, 0.005597447976469994, 0.01316802203655243, -0.009907171130180359, -0.011783371679484844, 0.029077650979161263, 0.02844071201980114. 0.00600591953843832, 0.030683845281600952,

0.012337232008576393, 0.0040674093179404736, -0.019094323739409447, 0.02902226522564888, 0.011970299296081066, 0.029049957171082497, 0.0168373454362154, 0.0199112668633461, 0.0396563783288002, -0.011125663295388222. 0.025657566264271736, 0.03173618018627167, -0.03636091202497482, -0.005981688387691975, 0.01629733107984066, -0.02254210226237774, -0.010876426473259926, -0.01937125436961651, -0.013943426311016083, 0.006244771648198366, -0.007539419457316399. 0.029299195855855942, 0.010717191733419895, -0.0045901150442659855, 0.03456086665391922, 0.011312590911984444, -0.053198255598545074, 0.009782552719116211, 0.0024906392209231853, -0.010883348993957043, -0.015965014696121216, 0.0069474815391004086, -0.0011622406309470534, 0.03594551607966423, 0.012115688063204288, -0.0009779090760275722, -0.01219184324145317, 0.010080252774059772, 0.002090821508318186, -0.003946252632886171, -0.02731914632022381, -0.01856815628707409, -0.011243358254432678, 0.019454333931207657, 0.016768112778663635, 0.010544110089540482, -0.006064767017960548, 0.0009770436445251107, 0.015688085928559303, -0.01874816231429577,

0.011603367514908314, -0.022389791905879974, -0.014871141873300076, -0.013410335406661034, 0.052755165845155716, -0.0258098766207695, -0.015286536887288094, -0.02107437327504158, 0.015397308394312859, 0.000698382849805057, -0.004946662113070488, 0.021683620288968086, -0.006507855374366045, 0.01950971968472004, -0.017792753875255585, 0.0009181960485875607, -0.006760553922504187, -0.004607423208653927, 0.017155814915895462, -0.002353905001655221, 0.01955125853419304, -0.015840396285057068, 0.001416670042090118, 0.015148071572184563, 0.021849777549505234, 0.015217304229736328, -0.018540464341640472. 0.0010211793705821037, 0.03414547070860863, 0.02741607092320919, -0.0032660432625561953, -0.014261895790696144, -0.004780504386872053, -0.030296143144369125. -0.0014876334462314844, -0.02813608944416046, 0.03048999421298504, -0.022334406152367592, 0.03805018216371536, 0.0056389872916042805. 0.01579885743558407, -0.011361053213477135, -0.004808197263628244, -0.03852096572518349, 0.01259339228272438, 0.005964380223304033, 0.048241209238767624. -0.01968972384929657. 0.013624956831336021, 0.01053718663752079,

0.0030427684541791677, 0.022126708179712296, -0.002800454618409276, 0.010758730582892895, 0.027969930320978165, -0.001933317631483078, 0.005947072058916092, -0.6265264749526978, -0.02432830072939396, -0.003501433879137039, 0.004693963564932346, 0.006466315593570471, 0.013417258858680725, 0.006002457812428474, -0.0008277611341327429, -0.0039670225232839584, -0.0021254378370940685, -0.016269637271761894, 0.004918969236314297, 0.015411155298352242, -0.009263308718800545. 0.002618719357997179, -0.004406648688018322, 0.025560639798641205, -0.005407058633863926, -0.022043628618121147, 0.00270179845392704, -0.023815980181097984, 0.02129591815173626, 0.017169659957289696, 0.007477110251784325, -0.002135822782292962, -0.020437434315681458, 0.025505254045128822, 0.011665676720440388, -0.005666680168360472, -0.01575731672346592, -0.03289928659796715, 0.0169204231351614, 0.0113887470215559, 0.011326437816023827, 0.0494873933494091, -0.002052743686363101, -0.0057220663875341415, 0.018720468506217003, -0.006109768524765968, 0.022251326590776443, -0.025879109278321266, -0.0006672282470390201, 0.014234202913939953,

0.000593668723013252, -0.01404035184532404, -0.01701734960079193, 0.024480612948536873, -0.013285716995596886, 0.007657114882022142, 0.015618852339684963, 0.012233383022248745, 0.004437803290784359, -0.014428053982555866, -0.00032625815947540104, 0.017155814915895462, -0.01243415754288435, 0.02844071201980114. -0.027651460841298103, -0.0003931107930839062, 0.015120378695428371, 0.006338235456496477, -0.012087995186448097, -0.006445546168833971, -0.012205690145492554, -0.010883348993957043, 0.011077200062572956, 0.007234796416014433, 0.023151349276304245, 0.0033387374132871628, -0.03691476956009865, 0.0024612154811620712, -0.0017143698642030358, -0.0047355033457279205, -0.035336270928382874, 0.013071096502244473, 0.009907171130180359, 0.01937125436961651. 0.03126539662480354, -0.009124843403697014, 0.006826324854046106, -0.012094918638467789, -0.01852661743760109, -0.01509268581867218, -0.010911042802035809, 0.03361930325627327, 0.011007968336343765, -0.01589578203856945, 0.0047043487429618835, -0.000920792284887284, -0.006269003264605999, -0.004025870002806187, 0.02173900604248047, 0.002681028563529253,

- -0.008716371841728687, -0.013472644612193108, 0.027609921991825104, 0.006535548251122236, 0.01225415337830782, 0.024189837276935577, -0.02562987245619297, -0.0012885899050161242, 0.01571577787399292, 0.004136641975492239, 0.0026533356867730618, 0.026197578758001328, 0.007373261731117964, -0.03796710446476936. -0.005053972825407982, 0.01960664428770542, -0.00480127427726984, -0.011513365432620049, 0.006172077730298042, 0.0003539511817507446, 0.018498925492167473. 0.007629422005265951, -0.04447495937347412, 0.01257262285798788, -0.011547981761395931, 0.005898609291762114, 0.007435570936650038, -0.007643268443644047, 0.019537411630153656, -0.012233383022248745, 0.028606869280338287, 0.010419491678476334, 0.01964818499982357, -0.023829827085137367. -0.03821634128689766, -0.02067282609641552, 0.008314823731780052, -0.009574854746460915, 0.021282071247696877, 0.04140103608369827, 0.008397902362048626, 0.021365150809288025, 0.010149484500288963, 0.022528257220983505, 0.008744064718484879, 0.019412793219089508, 0.01768198050558567, -0.007615575101226568, -0.005998996552079916, 0.008709448389708996,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.014144199900329113, 0.013264947570860386, -0.05870916321873665, -0.02607296034693718, -0.002057936042547226, -0.016975808888673782, 0.023455971851944923, -0.017778906971216202, -0.006490547209978104, -0.014732676558196545, -0.0056389872916042805, 0.0020994755905121565. 0.0017913910560309887, 0.012669548392295837. -0.0269175972789526, -0.018554311245679855-0.0015101339668035507, 0.012177997268736362, 0.001779275364242494, -0.014815755188465118, -0.01422035600990057, -0.02558833360671997, -0.016768112778663635, -0.014968067407608032, 0.0033162368927150965. 0.000845501956064254, -0.02639142982661724, 0.009436390362679958, -0.017294278368353844, 0.010281026363372803, -0.012531083077192307, -0.0031933491118252277, -0.007110178004950285, -0.02022973634302616, 0.007560189347714186, -0.01840199902653694, 0.00453126709908247, -0.011838758364319801, 0.006580549292266369, -0.012946478091180325, 0.0013258024118840694, 0.019080476835370064, 0.007172487210482359, 0.029077650979161263, 0.03505934029817581, 0.0007624229183420539, -0.007899428717792034, -0.0134587986394763, 0.016865037381649017, -0.0034979721531271935,

0.022445177659392357, -0.02093590795993805. -0.0015906167682260275, -0.0144003601744771, 0.001293782377615571, 0.007262489292770624, 0.04638577625155449, -0.004181643016636372, 0.014261895790696144, 0.01960664428770542, -0.012870321981608868, -0.004036254715174437, -0.023165196180343628, 0.0022483256179839373, -0.025422174483537674, 0.018069682642817497, -0.005230515729635954, 0.021683620288968086, -0.008342516608536243, -0.015965014696121216, -0.010945658199489117, 0.00210986053571105, -0.013140329159796238, -0.007947891019284725, -0.03436701372265816, -0.02227901853621006, 0.0020319740287959576. -0.017086582258343697, 0.005777452141046524, 0.001306763500906527, -0.018858933821320534, 0.013341103680431843, -0.0031362322624772787, 0.014594211243093014, 0.016408102586865425, 0.010467953979969025, -0.013666495680809021, -0.006528624799102545, 0.02518678456544876, 0.013888039626181126, -0.00255121779628098, 0.0001460373168811202, 0.012108764611184597, 0.03987792134284973, -0.02254210226237774, 0.015840396285057068, -0.016366563737392426, -0.0019194710766896605, 0.012967247515916824, -0.0026325657963752747,

-0.02669605240225792, 0.014857294969260693, -0.0018831241177394986, 0.019191250205039978, -0.007920198142528534, 0.0016382141038775444, -4.1025665268534794e-05, -0.0078025031834840775, -0.007940968498587608, -0.006930173374712467, -0.022306712344288826, 0.016449643298983574. -0.0228190328925848, -0.018332766368985176. 0.019495872780680656, -0.01643579639494419, 0.03528088331222534, -0.0026948752347379923, -0.010419491678476334, 0.012524159625172615, 0.037662480026483536, 0.03112693317234516, -0.017335819080471992-0.009741012938320637, -0.018055835738778114, -0.003565473947674036, 0.002255248837172985, -0.009713320061564445, -0.011367976665496826, 0.007809426169842482, -0.022126708179712296, 0.036997850984334946, 0.011367976665496826, 0.015051146037876606, 0.010592573322355747, 0.02835763245820999, -0.0024231376592069864, -0.048905838280916214, -0.004330493044108152, 0.0054832142777740955, 0.015064992941915989. 0.011492595076560974, 0.0005664083873853087, -0.018208147957921028, 0.01187337376177311, -0.027291452512145042, 0.009609471075236797. 0.025505254045128822, -0.010170254856348038. -0.002501024166122079,

- -0.010620266199111938, -0.01638041064143181, -0.022472869604825974, 0.02625296451151371, -0.008917146362364292, 0.00207697506994009, 0.020645132288336754, -0.003534319344907999, 0.009104073978960514, 0.03159771487116814, 0.009706396609544754, 0.028689948841929436, 0.006497470196336508, 0.017446590587496758, -0.02326212078332901, -0.005818991921842098, -0.015286536887288094, 0.03129309043288231, 0.01053718663752079, 0.006265541538596153, -0.020077425986528397. -0.0189697053283453, 0.007664037868380547, -0.0011397401103749871, -0.010467953979969025, 0.011776448227465153, -0.012911861762404442, -0.012752627022564411, -0.034090083092451096, -0.0007178545347414911, -0.005258208606392145, 0.057933758944272995, 0.045610371977090836, 0.019315868616104126, 0.007906352169811726, -0.006421314552426338, 0.008896376937627792, -0.029936134815216064, -0.011748755350708961, 0.005981688387691975, -0.011035661213099957, -0.012814936228096485, -0.008660986088216305, 0.004960509017109871, -0.002914688317105174, 0.02410675771534443, -0.0038320189341902733, -0.006314004305750132. -0.035779356956481934, -0.011146432720124722,

file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.0010298334527760744, 0.009526392444968224, -0.033813152462244034, -0.0004184239369351417. 0.0016581184463575482, 0.02916073054075241, -0.00607169046998024, 0.0010523340897634625. 0.007774809841066599, 0.013396489433944225, -0.01125028170645237, -0.0016806189669296145, -0.006487085483968258, 0.0062932344153523445. 0.018097376450896263, -0.015051146037876606, 0.05854300409555435, 0.014441899955272675, 0.004029331728816032, 0.013223407790064812, 0.018554311245679855. 0.022832879796624184, 0.010834886692464352, -0.0009406966273672879, -0.031154626980423927, -0.005767067428678274, -0.013811884447932243, -0.023275967687368393, 0.03924098238348961, -0.0020423587411642075, -0.01955125853419304, 0.03461625054478645, 0.013915733434259892, -0.03749632462859154, -0.029548432677984238, 0.026806825771927834, 0.029271502047777176, -0.015328075736761093, 0.020423587411642075, -0.022306712344288826, -0.020063579082489014, -0.014857294969260693, 0.004873968195170164, -0.016131173819303513, -0.011790295131504536, -0.007643268443644047, 0.0014564787270501256. -0.016463488340377808, -0.008356363512575626, -0.02571295201778412,

0.016352716833353043, 0.015051146037876606, -0.001385515439324081, 0.006279387976974249, -0.012994940392673016, 0.017557362094521523, 0.0016399448504671454, 0.02629450522363186, -0.01125028170645237, 0.0019108171109110117, 0.008654062636196613, -0.030877696350216866, -0.032123882323503494, 0.021725159138441086, -0.014303434640169144, 0.013431105762720108, -0.0032885437831282616, -0.009657934308052063, -0.007065176963806152, -0.015729624778032303, 0.03220696002244949, -0.019675876945257187, 0.0021877470426261425, -0.005895147565752268, -0.031043853610754013, 0.02472984977066517, -0.003262581769376993, 0.0067709386348724365, 0.029437659308314323, -0.0139295794069767, 0.020202044397592545, 0.0031950799748301506, -0.03996099904179573, -0.03276082128286362, -0.03018537163734436, -0.010412568226456642, -0.00787865836173296, -0.0033231601119041443, 0.02508985809981823, -0.023815980181097984, 0.024051371961832047, 0.015508080832660198, -0.009235615842044353, 0.010710268281400204, 0.0001552322501083836, 0.0018692775629460812, 0.01319571491330862, 0.01011486817151308, 0.0006360736442729831, -0.010384875349700451,

-0.0031777718104422092, 0.0019315867684781551, -0.022292865440249443, 0.024120604619383812, 0.03755170851945877, -0.00028818027931265533. 0.032262347638607025, -0.007470186799764633, -0.024937547743320465, -0.012780319899320602, 0.008245591074228287, 0.017709674313664436, 0.018318919464945793, 0.022735953330993652, -0.015078838914632797, -0.022791339084506035, -0.028634563088417053, 0.016145018860697746, 0.003949714358896017, -0.018235841765999794, -0.007580959238111973, -0.011007968336343765, -0.007477110251784325, -0.02893918566405773, -0.02616988681256771, 0.02219594083726406, -0.03508703410625458, -0.005683988332748413, -0.0017161006107926369, 0.01225415337830782, 0.006566702853888273, -0.01643579639494419, -0.00021883961744606495, 0.008183281868696213, 0.0017308125970885158, -0.00980332214385271, 0.001262627774849534, -0.0030168062075972557, -0.016463488340377808, 0.03738555312156677, 0.015161918476223946, 0.04702271521091461, 0.002738145412877202, 0.029437659308314323, -0.001328398589976132, 0.026460662484169006, -0.007117101456969976, 0.004849736578762531, -0.004347801208496094, -0.010606419295072556,

-0.0038147110026329756, 0.015106531791388988, 0.017072735354304314, 0.011395669542253017, -0.0023954445496201515, -0.006466315593570471, 0.010412568226456642, -0.017155814915895462, -0.00035568198654800653, -0.03320390731096268, -0.0377732515335083, -0.02334520034492016, -0.014428053982555866, -0.020866677165031433, 0.017128121107816696, -0.03209618851542473, -0.01665733940899372, 0.04333954676985741, -0.0015923475148156285, -0.0015386923914775252, -0.009561008773744106, 0.025200631469488144, -0.01884508691728115, 0.012835705652832985, 0.005171667784452438, 0.01317494548857212, -0.023691361770033836, 0.01589578203856945, -0.019855881109833717, -0.02330365963280201, 0.0024819851387292147, 0.010197947733104229, 0.0015637892065569758, 0.0004963105311617255, 0.011942606419324875, -0.03245619684457779, 0.04519497603178024, -0.009927940554916859, -0.011077200062572956, -0.02147592231631279, -0.01808352954685688, -0.006950943265110254, -0.01524499710649252, 0.00505743408575654, -0.033951617777347565, 0.022002089768648148, 0.01728043332695961, 0.007096331566572189, 0.01808352954685688, -0.016394255682826042,

-0.011631060391664505, 0.0057012964971363544, -0.01334802620112896, 0.03458855673670769, 0.02946535311639309, 0.015189611352980137, 0.023871367797255516, 0.00672939931973815, -0.02817762829363346, 0.015521926805377007, -0.022085167467594147, -0.00474588805809617. 0.01884508691728115, 0.009921018034219742, 0.009387927129864693, -0.020963601768016815, 0.02500678040087223, -2.3082007828634232e-05, -0.013846500776708126, -0.03780094534158707, 0.02960381843149662. -0.011056430637836456, 0.01256569940596819, -0.02232055924832821, -0.00195927987806499, -0.017751213163137436, 0.020340509712696075, -0.03508703410625458, 0.006725937593728304, -0.023372892290353775, 0.0009874285897240043, -0.0002475061919540167, 0.010841810144484043, -0.002708721673116088, 0.036499373614788055, 0.0008645408670417964, -0.02245902456343174, -0.00475627277046442, 0.005756682716310024, -0.02446676604449749, 0.01759890280663967, 0.006535548251122236, 0.04569345340132713, -0.014275741763412952, -0.006442084442824125, 0.028468405827879906, -0.0015404231380671263, 0.004700887016952038, -0.008889453485608101, -0.0039012515917420387,

0.033065441995859146, -0.02772069349884987, 0.00816943496465683, -0.003061807481572032-0.01064795907586813, 0.0036416295915842056, -0.02380213513970375, -0.009297925047576427, -0.030656151473522186, -0.017128121107816696, -0.00391855975612998, 0.005126666743308306, 0.019038937985897064, -0.014151123352348804, -0.012808012776076794, -0.020243583247065544, -0.01964818499982357, -0.00935331080108881, -0.009907171130180359, 0.012738780118525028, -0.03134847804903984. -0.032483890652656555, -0.004036254715174437, -0.043422624468803406, 0.013105712831020355, -0.002947573782876134, 0.016588106751441956, -0.015646545216441154, 0.04951508715748787, -0.020160505548119545, 0.02647450938820839, -0.01946817897260189, -0.04638577625155449, -0.011181049048900604, 0.004742426332086325, -0.02366366982460022, -0.01656041480600834, -0.004018946550786495, -0.010675651952624321, -0.022043628618121147, 0.010675651952624321, 0.0023071730975061655, 0.0035222035367041826, -0.020118964836001396, -0.013278793543577194, 0.017668135464191437, 0.01509268581867218, 0.006680936552584171, -0.009381003677845001, -0.001220222911797464,

0.04015485197305679, -0.01856815628707409, -0.0006278522778302431, -0.0054001351818442345, -0.006573626305907965, -0.01466344390064478, -0.0019229328026995063, 0.027028368785977364, -0.017114274203777313, -0.006123614963144064, -0.02456369251012802, 0.007574035786092281, -0.001177817932330072, -0.010834886692464352, -0.02330365963280201, -0.010758730582892895, -0.03032383695244789, -0.03622244670987129, 0.017349665984511375, 0.02514524571597576, 0.007110178004950285. 0.014580365270376205, 0.015840396285057068, 0.02669605240225792, 0.015314229764044285, -0.02133745700120926, -0.020243583247065544. -0.03575166314840317, -0.008702525869011879-0.001457344158552587, -0.02857917733490467, -0.01995280757546425, 0.03450547903776169, 0.03417316451668739, 0.009727166965603828, -0.017405051738023758, -0.011866451241075993, -0.0024023677688091993, -0.027845311909914017, -0.015868090093135834, -0.014760369434952736, 0.001056661014445126, 0.0008104529697448015, 0.004043178167194128, -0.0003954906715080142, -0.004635116085410118, 0.01066872850060463. 0.0008853106410242617, -0.021143605932593346, -0.0009432928636670113,

0.0013050326379016042, 0.014303434640169144, -0.02968689799308777, -0.009104073978960514, -0.010966428555548191, 0.02468831092119217, 0.025920648127794266, 0.010502570308744907, 0.010938735678792, -0.01109797041863203, -0.02446676604449749, -0.03289928659796715, -0.023137502372264862, -0.0013664765283465385, 0.01080719381570816, 0.02027127705514431, -0.0336746908724308, -0.021877471357584, 0.0016892730491235852, -0.0106133427470922470.009083304554224014. -0.02767915464937687, 0.01996665447950363, 0.017668135464191437, 0.038825586438179016, -0.03032383695244789, -0.008044816553592682, -0.004700887016952038, -0.01611732691526413, 0.027305299416184425, 0.0024906392209231853, -0.003236619522795081, 0.02603142149746418, -0.015411155298352242, -0.003032383508980274, -0.012524159625172615. 0.03129309043288231, -0.022735953330993652, -0.00511282030493021, 0.02737453207373619, 0.023386739194393158, 0.006525163538753986, -0.015785010531544685, -0.0037939411122351885, -0.0257683377712965, 0.0031656562350690365, 0.0074563403613865376, 0.01553577370941639, -0.007345568388700485, -0.004361647646874189,

0.007366338279098272, -0.042176440358161926. -0.023857520893216133, 0.002674105344340205, 0.020520513877272606, 0.0024248682893812656, -0.00922176893800497, -0.015452694147825241, -0.002608334645628929, -0.00904176477342844, 0.00888253003358841, -0.008924069814383984, -0.02902226522564888, -0.008141742087900639. 0.011104893870651722, -0.013258024118840694, 0.023109808564186096, 0.2030450850725174, -0.006725937593728304, 0.020257430151104927, 0.03004690632224083, -0.006348620634526014, 0.04045947268605232, -0.0046835788525640965, -0.0070720999501645565, 0.0039670225232839584, 0.01710042729973793, 0.018235841765999794, -0.01422035600990057, 0.0011406054254621267, -0.011513365432620049, -0.007691731210798025, 0.025394482538104057, -0.03173618018627167, -0.02982536144554615, -0.024799082428216934, -0.02348366566002369, -0.01316802203655243, -0.0109595051035285, -0.0024854468647390604, -0.004171258304268122, 0.008688678964972496, -0.000293589080683887, -0.010315642692148685, -0.00886176060885191, -0.010461031459271908, 0.015120378695428371, -0.008543291129171848, 0.014635751023888588, 0.010585649870336056,

-0.018775854259729385, -0.0033145060297101736, 0.0030843080021440983, 0.030656151473522186, 0.014732676558196545, 0.030573073774576187, 0.002082167426124215, 0.0084394421428442, -0.02731914632022381, 0.024009831249713898, -0.0049224309623241425, 0.014732676558196545, 0.04281337931752205, -0.013804960995912552. -0.017778906971216202, -0.009699473157525063, 0.008217898197472095, -0.022126708179712296, -0.008660986088216305, 0.051093585789203644, 0.02910534478724003, 0.02111591398715973, -0.001902163028717041, -0.011984146200120449, 0.025103705003857613, 0.0020077426452189684, 0.012731857597827911, -0.01937125436961651, 0.0143588213250041, 0.005220130551606417, 0.016588106751441956, -0.02526986412703991, -0.01898355223238468, -0.039407141506671906. -0.025242170318961143, 0.003427008865401149, -0.018291227519512177, -0.009069457650184631, -0.022749800235033035, 0.010301796719431877, 0.0055143688805401325, -0.005438213236629963, -0.02549140714108944, 0.011554904282093048, 0.0258098766207695, 0.016311177983880043, 0.033646997064352036, 0.0020735133439302444, -0.004448188468813896, -0.013244178146123886,

-0.016061941161751747, 0.0031396939884871244, -0.039545606821775436, 0.0011293551651760936, 0.009581778198480606, -0.022154400125145912, -0.010343335568904877, -0.020506666973233223, -0.010197947733104229, -0.0015248458366841078, -0.004240490961819887, 0.016892731189727783. 0.011367976665496826, 0.0018017758848145604. 0.010994121432304382, -0.00612707668915391, 0.0024542922619730234, -0.027665307745337486, 0.04322877526283264, 0.008937915787100792, -0.006660166662186384. -0.015064992941915989, 0.007504803128540516, 0.0054312897846102715, -0.016145018860697746, -0.01870662160217762, -0.026765285059809685, 0.026183731853961945, -0.022168247029185295, -0.002343520289286971, 0.014746523462235928, -0.004333954770117998, 0.00904176477342844, 0.010156407952308655, -0.025519100949168205, 0.014248048886656761, 0.01243415754288435, 0.011174125596880913, -0.026723746210336685, 0.0021548615768551826, 0.013154175132513046, 0.004479343071579933, 0.0028194936458021402, -0.012669548392295837, 0.00156032748054713, -0.002824686001986265, -0.01406804472208023, 0.0198281891644001, -0.010731037706136703, 0.0005265997024253011,

-0.03215157240629196, -0.002234478946775198, 0.025117551907896996, -0.008273283950984478, 0.003072192193940282, 0.02219594083726406, -0.014261895790696144, -0.003023729659616947, -0.003683169139549136, -0.014884987846016884, -0.018817394971847534, -0.010641035623848438, -0.016865037381649017, 0.028966879472136497, -0.014968067407608032, 0.0006391025381162763, -0.02594834193587303, -0.020949754863977432, -0.020686671137809753, -0.01285647600889206, -0.006265541538596153. 0.04289645701646805, -0.031182318925857544, -0.019398946315050125, -0.03863173723220825, -0.023995986208319664, 0.01719735376536846, -0.03544704243540764, 0.0052132075652480125, 0.0249098539352417, -0.016643494367599487, -0.03309313580393791, -0.0002715212176553905, -0.1787860095500946. 0.00630708085373044, 0.03658245503902435, -0.011499518528580666, 0.014130353927612305, 0.012378771789371967, 0.016726572066545486, -0.018374307081103325, -0.000490685342811048, -0.019745109602808952, 0.028745334595441818, -0.00534821068868041, -0.007304029073566198, -0.022583642974495888, -0.026529895141720772, 0.023608284071087837, -0.018817394971847534,

0.007044407073408365, 0.01589578203856945. 0.027651460841298103, 0.025242170318961143, -0.016574261710047722, 0.02317904122173786, -0.00229332665912807, 0.006757092196494341, -0.011935683898627758, -0.011624136939644814, 0.03594551607966423, -0.0027242989744991064, -0.010703344829380512, -0.011395669542253017. 0.012517236173152924, 0.011811064556241035, -0.012081071734428406, 0.0376070961356163, 0.016629647463560104, 0.0030843080021440983, -0.00920099951326847. 0.015175764448940754, 0.028773028403520584, -0.006570164579898119, 0.031459249556064606, 0.011644907295703888, -0.01996665447950363, -0.019454333931207657, 0.01696196384727955, 0.016186559572815895, 0.010343335568904877, 0.01009409874677658, -0.03818864747881889. -0.002582372399047017, -0.019260482862591743, -0.016491182148456573, 0.0025789106730371714, 0.006937096826732159, 0.023054422810673714, 0.006590934470295906, 0.011354130692780018, 0.002355635864660144, -0.019745109602808952, -0.0043824175372719765, -0.025699105113744736, 0.0075324964709579945, -0.0044966512359678745. -0.0021202454809099436, 0.004043178167194128, -0.023497510701417923,

0.03317621350288391, -0.0006222270894795656, -0.0014971528435125947, -0.018831240013241768, -0.0039358679205179214, 0.01914970949292183, 0.013569570146501064, 0.011776448227465153, -0.0034062392078340054, -0.00667401310056448, 0.017446590587496758, 0.01669888012111187, 0.0143588213250041, -0.014344974420964718. 0.025602178648114204, -0.02330365963280201, 0.0023089039605110884, 0.03960099071264267, 0.008093279786407948, -0.005787837319076061, -0.012288768775761127, -0.0002574583631940186, 0.014732676558196545, 0.021420536562800407, -0.018360460177063942, 0.003873558482155204, 0.0005741970962844789, 0.011084123514592648, 0.011755678802728653, 0.001488498761318624, 0.0030479608103632927, 0.0114095164462924, -0.0009303117403760552, 0.009616394527256489. 0.012524159625172615, -0.021448228508234024, 0.0024023677688091993, 0.03486548736691475, -0.012981094419956207, -0.01579885743558407, 0.026239117607474327, 0.037440937012434006, -0.018069682642817497, -0.022666720673441887, 0.026363737881183624, 0.008224821649491787, 0.018997399136424065, 0.009471006691455841, 0.019994346424937248, 0.023677516728639603,

-0.02201593667268753, 0.011451056227087975. -0.0018554311245679855, 0.03411777690052986, -0.027914544567465782, -0.016172712668776512, 0.012821859680116177, -0.008072509430348873, -0.002890456933528185, -0.054444439709186554, -0.018249686807394028, -0.00044741504825651646, -0.0031085393857210875, -0.03048999421298504. -0.0029925748240202665, -0.00814866553992033, 0.03893635794520378, 0.007158640772104263, -0.010772577486932278-0.00022803455067332834, 0.017529670149087906. 0.00629669614136219, 0.013479568064212799, 0.021669773384928703, -0.020326662808656693, 0.002758915303274989, -0.008501751348376274, -0.01852661743760109, 0.011748755350708961, 0.010862579569220543, -0.02380213513970375, 0.008515598252415657, 0.0017230239463970065, 0.0024283300153911114, 0.027166834101080894, -0.03303775191307068, 0.02639142982661724, 0.016048094257712364, -0.010917965322732925, 0.021365150809288025, -0.019800495356321335, -0.011804142035543919, -0.015064992941915989, -0.0055766780860722065, 0.018291227519512177, -0.003122385824099183, -0.012697241269052029, 0.017155814915895462. -0.03652706742286682, -0.009879478253424168,

0.044308800250291824, 0.02916073054075241, -0.037440937012434006, -0.008543291129171848, -0.014524978585541248, 0.0023712131660431623, 0.015175764448940754, 0.0019004321657121181, -0.02263902872800827, -0.048158127814531326, 0.01812506839632988, -0.020645132288336754, -0.008162512443959713, 0.005472829099744558, -0.016892731189727783, -0.0024577537551522255, 0.03757940232753754, 0.0017714867135509849, -0.02799762412905693, 0.0010627189185470343, -0.023774441331624985, -0.0009484852780587971, 0.030157677829265594, 0.01020487118512392, 0.004752811510115862, 0.0013015710283070803, -0.029797669500112534, 0.010371028445661068, -0.013576493598520756, -0.015106531791388988, 0.014026504941284657, -0.01111873984336853, 0.007719424087554216, -0.019191250205039978, -0.024037525057792664, -0.0007481437060050666, -0.009962556883692741, 0.010308719240128994, -0.010038712993264198, -0.01538346242159605, -0.010142561979591846, 0.00020391136058606207, -0.0009969479870051146, 0.010412568226456642, 0.015965014696121216, 0.016352716833353043, 0.024217529222369194, 0.02938227355480194, -0.020742056891322136, 0.012247229926288128,

0.015078838914632797, 0.032483890652656555, -0.04652424156665802, 0.005798222031444311, 0.007947891019284725, 0.01719735376536846, -0.002473331056535244, -0.005299747921526432, 0.0026066037826240063, -0.04242567718029022, -0.03137617185711861, -0.08817451447248459, 0.026682207360863686, -0.0033127751667052507. -0.04477958381175995, -0.014248048886656761, -0.03126539662480354, 0.012025685980916023, -0.01674041897058487, 0.00022565468680113554, 0.005881301127374172. -0.009360234253108501, 0.01910817064344883, 0.011201818473637104, -0.01538346242159605, -0.012226459570229053, -0.017875831574201584, 0.018138915300369263, -0.011956453323364258, -0.004804735537618399, 0.01069642137736082, -0.009858707897365093, -0.020368201658129692, 0.002971805166453123, 0.011637983843684196, -0.013811884447932243, 0.014234202913939953, -0.0160204004496336, 0.03411777690052986, -0.0014971528435125947, 0.0011033930350095034, 0.009983327239751816, -0.04616423323750496, -0.01469113677740097, 0.018540464341640472, 0.019232789054512978, 0.013084943406283855, -0.002672374714165926. 0.025103705003857613, 0.013742651790380478,

0.02857917733490467, -0.01741889677941799. -0.018138915300369263, 0.02236209809780121, -0.03544704243540764, 0.0010081983637064695, 0.02593449503183365, -0.008051740005612373, -0.00157677021343261, 0.018471231684088707, -0.004946662113070488, 0.036499373614788055. 0.027665307745337486, -0.013943426311016083, -0.02456369251012802, 0.005088589154183865, -0.009824092499911785, 0.004607423208653927, 0.02643296867609024, -0.012773396447300911, -0.013424182310700417, 0.02468831092119217, 0.001663310918956995, 0.006088998634368181, -0.018235841765999794, 0.019634338095784187, -0.007643268443644047. -0.0034945106599479914, 0.0011657022405415773, 0.0034650866873562336, -0.0396563783288002, -0.021988242864608765, -0.02175285294651985, -0.004995124880224466. 0.003184695029631257, 0.023899059742689133, -0.010197947733104229, -0.0003031085361726582, -0.009962556883692741, 0.007345568388700485, 0.034007005393505096, 0.005147436633706093, -0.004372032359242439, -0.005282439757138491, 0.014649597927927971, 0.027845311909914017, 0.013029556721448898 -0.0072486428543925285, 0.004115872085094452, 0.004569345153868198,

-0.005936686880886555, -0.03857634961605072, 0.004697425290942192, -0.0031466172076761723, 0.020908216014504433, 0.0034425861667841673, 0.02508985809981823, -0.02693144418299198, 0.010232564061880112, -0.006757092196494341, -0.006466315593570471, 0.012988017871975899, -0.00044611693010665476, 0.017308125272393227. -0.023012883961200714, -0.02751299738883972, 0.004867044743150473, -0.03406239300966263, -0.010017943568527699, -0.004399725701659918, 0.01701734960079193, -0.00018108625954482704, -0.004552036989480257, -0.015701930969953537, -0.004489727783948183. -0.01790352538228035, 0.01129874400794506, 0.003333545057103038, -0.006404006388038397, -0.024660617113113403, 0.035557813942432404, 0.006421314552426338, 0.01581270433962345, 0.047659654170274734, -0.028108395636081696, 0.009367157705128193, 0.02358059026300907, -0.013728804886341095, 0.003423547139391303, 0.029991520568728447, -0.005680526606738567, 0.01170029304921627, -0.007816349156200886, -0.024175990372896194, -0.008384056389331818, -0.0015923475148156285, -0.007207103539258242, -0.030960775911808014, -0.0055455234833061695, 0.0002719539334066212,

```
0.08662370592355728,
0.008688678964972496,
-0.010419491678476334,
0.011901067569851875,
-0.029271502047777176,
0.018055835738778114,
-0.007816349156200886,
-0.0012011838844045997,
0.007767886854708195,
-0.025339096784591675.
-0.0028039163444191217,
-0.007352491840720177.
-0.02155900187790394,
-0.050068944692611694,
-0.024480612948536873,
0.006760553922504187,
-0.017045041546225548,
0.01037795189768076,
-0.0027416071388870478,
-0.0016347524942830205,
0.029769975692033768.
0.021351303905248642,
0.002379867248237133,
-0.004372032359242439,
-0.026737593114376068,
0.00687824934720993,
0.022182093933224678,
-0.00980332214385271,
0.0016174443298950791,
-0.010661805048584938,
-0.0007291047950275242,
-0.0037974028382450342,
-0.010232564061880112,
-0.014649597927927971,
0.009713320061564445,
0.02089436911046505,
0.005801683757454157,
-0.0036243214271962643,
0.008709448389708996,
0.0026325657963752747.
0.009782552719116211,
0.015452694147825241,
-0.04372724890708923,
-0.029216116294264793,
0.01020487118512392,
-0.026640666648745537,
0.005881301127374172,
-0.012157227843999863,
-0.029133036732673645
```

]

```
}
   },
      "_index": "pdgithub_issues",
      "_id": "MTyfUZMBhjF0vW2DRbFb",
      "_score": 1.0,
      " source": {
        "_type": "issue",
       "_repo": "langchain",
        "_issueNumber": "28274",
       " title": "docs: Update langchain docs to new Databricks package",
       "_createdAt": "2024-11-21T23:51:30Z",
        " closedAt": "2024-12-31T00:36:30Z",
        " state": "open",
        "_body": "Thank you for contributing to LangChain!\r\n\r\nCtrl+F to
find instances of `langchain-databricks` and replace with `databricks-langch
ain`. \r\n\r\nAdditional guidelines:\r\n- Make sure optional dependencies ar
e imported within a function.\r\n- Please do not add dependencies to pyproje
ct.toml files (even optional ones) unless they are required for unit tests.\
r\n- Most PRs should not touch more than one package.\r\n- Changes should be
backwards compatible.\r\n- If you are adding something to community, do not
re-import it in langchain.\r\n\r\nIf no one reviews your PR within a few day
s, please @-mention one of baskaryan, efriis, eyurtsev, ccurme, vbarda, hwch
ase17.\r\n'',
        "GitHub_Issue_vector": [
          -0.011543878354132175,
          0.004838990513235331,
          -0.009220581501722336.
          -0.03720178082585335,
          -0.007434547878801823,
          0.03360066935420036,
          0.00372453429736197.
          -0.017932942137122154,
          -0.023276524618268013.
          -0.014658547006547451,
          0.00908263586461544,
          -0.005986117757856846,
          -0.011289766989648342,
          0.018760615959763527,
          0.019326919689774513,
          0.00454131793230772.
          0.014041421003639698,
          -0.01091949176043272,
          0.014150326140224934,
          -0.0024576117284595966,
          -0.02011103183031082,
          -0.0037045683711767197,
          -0.0022325424943119287,
          0.003042066004127264,
          -0.01336621306836605,
```

0.019689934328198433, 0.021461447700858116, -0.029970521107316017, -0.00038343461346812546, 0.01553704310208559, 0.008378386497497559, 0.0001802596525521949, -0.002924086060374975, -0.010033735074102879, 0.014542382210493088, -0.014774711802601814, 0.025323929265141487. -0.004635701887309551, 0.014585943892598152, 0.006697627250105143, 0.02342172898352146, 0.007565233390778303, 0.01292333472520113, -0.016088826581835747, -0.020299799740314484, 0.015304713509976864. 0.005158443469554186, -0.02114199474453926, -0.010382229462265968, 0.010142640210688114, 0.024075156077742577, 0.027022838592529297. -0.018847741186618805, 0.004377961158752441, -0.0070570120587944984, -0.015043342486023903, 0.02509159967303276, 0.040802888572216034 -0.0025193244218826294, -0.01725047454237938, -0.0014048682060092688, -0.00487529207020998, -0.019094590097665787, 0.004784537944942713, -0.007819343358278275. -0.009525514207780361, -0.005398033652454615, 0.03365875408053398, 0.000995568698272109, 0.012596621178090572, 0.023320086300373077, -0.004915223456919193, 0.013155664317309856, -0.009707021526992321, 0.02523680403828621,

-0.020517610013484955, -0.0012787204468622804, -0.008748662658035755, 0.002163569675758481, 0.008284002542495728, 0.02609352022409439, 0.008937429636716843, 0.023958992213010788, 0.017018144950270653, 0.016001703217625618, 0.015072383917868137, -0.0011371446307748556, 0.004421522840857506, -0.03496560826897621. -0.015725811943411827, -0.004196453839540482, -0.018295956775546074, 0.01370018720626831, -0.011732645332813263, 0.009569075889885426, 0.012756348587572575. 0.007804823108017445, 0.018789658322930336, 0.0026209685020148754, -0.024351047351956367, -0.006737559102475643, 0.022332685068249702, -0.029360655695199966, -0.01028058584779501, -0.006320091895759106, -0.0018305033445358276, 0.024685021489858627, -0.0038515895139425993, 0.013083062134683132, 0.023058714345097542, -0.013039499521255493, 0.04893442615866661, -0.009721542708575726, -0.037405069917440414, -0.00012660148786380887, -0.020401444286108017, -0.012371552176773548, -0.03836342692375183, 0.010672641918063164, 0.007841124199330807, 0.03839246928691864, 0.0152611518278718, 0.00047055823961272836, -0.0010418531019240618, 0.03397820517420769,

0.015391836874186993, -0.010846888646483421, -0.007376465480774641, -0.004704674705862999, -0.004421522840857506, 0.014426217414438725, 0.018731575459241867, 0.0054887873120605946, -0.02472858317196369, -0.026049958541989326, 0.03513985499739647, -0.012640183791518211, -0.010004694573581219, -0.007071532774716616. 0.00170072540640831, -0.005688445642590523, 0.02706640027463436, -0.003858849871903658, -0.021998710930347443, -0.02806832268834114, 0.013801831752061844. 0.004969675559550524, 0.011050177738070488, 0.018876781687140465, -0.022013232111930847 0.02375570312142372, -0.04176124930381775, 0.018266916275024414, -0.01998034678399563, 0.005917144939303398, 0.007035231217741966, 0.00562673294916749, 0.003964124247431755. -0.007347424048930407, 0.0009066300117410719, -0.00042200495954602957, 0.014585943892598152, 0.01755540631711483, -0.017235953360795975, 0.007899207063019276, 0.02904120273888111, 0.017119789496064186, -0.021766381338238716, -0.009198800660669804, 0.0031745664309710264, -0.012683745473623276, 0.007645096629858017, -0.028649145737290382, 0.00943113025277853, -0.006853723898530006,

0.010694422759115696, 0.026296809315681458, 0.015754852443933487, -0.013692926615476608, 0.013250048272311687, -0.012248126789927483. -0.0009293184848502278, 0.0358368456363678, 0.04698866605758667, -0.013925256207585335, 0.013344432227313519, 0.01256032008677721, -0.00855263415724039, 0.014353614300489426, -0.012952376157045364, 0.02907024323940277, 0.026805030182003975, -0.015667729079723358, -0.012625662609934807, -0.5850059986114502, -0.023654058575630188. -0.005721116904169321, -0.004131110850721598, -0.01256032008677721, -0.0005336321191862226, 0.005448855459690094, 0.03046422079205513, -0.00794276874512434, 0.05157717689871788, -0.022986112162470818, 0.004595770500600338, 0.009213321842253208, -0.006737559102475643, -0.03107408620417118, -0.009213321842253208, 0.023697620257735252, -0.02503351680934429, -0.009293184615671635, 0.011594699695706367, -0.024888310581445694, 0.034791361540555954. 0.004940634593367577, -0.018368560820817947, 0.011398672126233578, 0.00856715440750122, 0.012589361518621445, -0.0019421303877606988, 0.023712141439318657, -0.0029386067762970924, -0.028358733281493187,

0.006955367978662252, 0.005779199302196503, -0.026471056044101715, 0.04681441932916641, -0.002718982519581914, -0.013126623816788197, 0.011631001718342304, -0.00043153410661034286, 0.008683319203555584, -0.030580386519432068, -0.012269907630980015, -0.0014166662003844976, 0.005826391279697418, 0.0007505335961468518. -0.011413192376494408, 0.023363647982478142, -0.003312512068077922, -0.018963905051350594, -0.008037152700126171, 0.013402515091001987, 0.002606448018923402. -0.00628742016851902, -0.007256670389324427, -0.012828950770199299, -0.015072383917868137. 0.018049107864499092, -0.017264995723962784, 0.019094590097665787, 0.011246205307543278, 0.004563098773360252, 0.009358527138829231, 0.005042278673499823, -0.021548572927713394, -0.011689083650708199, -0.018789658322930336, -0.0025665161665529013, -0.012988678179681301, 0.016597047448158264, -0.027661744505167007, 0.005684815347194672, -0.0041855634190142155, -0.0006252934108488262, -0.01646636240184307, 0.00888660829514265, -0.0030293604359030724, -0.004356180317699909, 0.018266916275024414, -0.017177870497107506, 0.04481057450175285, 0.006690367124974728,

-0.019994867965579033, -0.02681955136358738, -0.030057644471526146, 0.03847959265112877, 0.016393758356571198, 0.0027117221616208553, -0.019733497872948647, -0.02645653486251831, -0.012763608247041702, 0.0014629506040364504, 0.004334399476647377, -0.003982274793088436, -0.0391765832901001, 0.01621951162815094. 0.04033822938799858, 0.018237875774502754, -0.007013450376689434, 0.014491559937596321, -0.024583376944065094, -0.021054871380329132, 0.019791578873991966, -0.0033306628465652466, -0.0010581888491287827, 0.03502368927001953, 0.0005604044417850673, -0.03525602072477341, 0.009365787729620934, 0.024888310581445694, -0.007492630276829004, -0.008225920610129833, 0.005815500859171152, -0.012611142359673977, 0.01707622781395912, -0.004690153989940882, -0.043939340859651566, -0.01309032179415226, -0.016045264899730682, 0.019268838688731194, -0.01649540290236473, -0.012799910269677639, 0.017482804134488106, -0.015115945599973202, 0.014157585799694061, 0.019007466733455658, 0.012683745473623276, 0.01203031837940216, -0.0011680008610710502, -0.002733503235504031, 0.02907024323940277, 0.00023550599871668965,

-0.000769138103350997, 0.02712448313832283, -0.01175442710518837, 0.00031831880914978683, 0.022361725568771362, 0.03043518029153347, 5.714650615118444e-05, 0.0129088144749403, -0.01229894906282425, -0.01492717768996954, -0.006980779115110636, 0.0020437745843082666, -0.027589142322540283, 0.0022724741138517857. -0.027603663504123688, -0.05485882982611656, 0.009075376205146313, -0.00029200021526776254, -0.007405506446957588, -0.011986756697297096, -0.0035194307565689087, -0.0382763035595417, 0.008327565155923367, 0.012429635040462017, -0.004907963331788778, 0.0007146858260966837, -0.03119025193154812, -0.01908007077872753, -0.009830446913838387, 0.013221007771790028, 0.016437320038676262, -0.006022419314831495. 0.01012811902910471, -0.03438478335738182, -0.01786033995449543, -0.005212896037846804, 0.008102495223283768, -0.000990123488008976, -0.0315968282520771, 0.022913508117198944 -0.014041421003639698, -0.00776126142591238, -0.002813366474583745, -0.008661538362503052, 0.004838990513235331, -0.007695918437093496, 0.009126197546720505, -0.025672422721982002, -0.006276529747992754, -0.003713643876835704,

0.016204990446567535, -0.012277168221771717, -0.009990173391997814, 0.0437360517680645, 0.014114024117588997, 0.044026464223861694, -0.007434547878801823, 0.013387993909418583, 0.0009592671995051205, -0.008066194131970406, 0.011485795490443707, -0.00914071872830391, -0.001017349655739963-0.0064943390898406506. 0.003561177523806691, 0.0035720679443329573, -0.021011309698224068, -0.008951950818300247, 0.011834289878606796, 0.028605584055185318, 0.014709369279444218. 0.03728890419006348, -0.017598967999219894, -0.003680972382426262, -0.021635696291923523, 0.008559894748032093, -0.03525602072477341, 0.0032580599654465914, -0.013917996548116207, -0.0102733252570033070.0016145093832165003, -0.02584666945040226, 0.0006021512090228498, -0.004120220430195332, 0.006007898598909378, 0.0064181056804955006, -0.011064697988331318, -0.018963905051350594, 0.024612419307231903, -0.01619047112762928, -0.0021563093177974224, 0.00041406400850974023, 0.006951737683266401, 0.00844372995197773, 0.002299700165167451, -0.013003198429942131, 0.02286994643509388, 0.027226127684116364, -0.01710526831448078, 0.006327352020889521,

0.02484474889934063, 0.0065923528745770454. -0.021984189748764038, 0.003523060819134116, 0.009496472775936127, 0.03203244507312775, -0.026006396859884262, 0.031335458159446716. -0.0324971042573452, 0.009692501276731491, 0.013402515091001987, 0.0060442001558840275. -0.020314320921897888, 0.032003406435251236, 0.00448686582967639, 0.025948313996195793, 0.02648557722568512, -0.014375395141541958, -0.002455796580761671, -0.02615160308778286, 0.014760191552340984. -0.012589361518621445, -0.022245561704039574, 0.014404436573386192, -0.013765529729425907. -0.005554129835218191, 0.02787955477833748, 0.013446076773107052, 0.016872938722372055, 0.00268449611030519, 0.01239333301782608, 0.03121929243206978, 0.014673067256808281, 0.02472858317196369, -0.003697308013215661, 0.008117016404867172, -0.031335458159446716, -0.01585649698972702, -0.0211129542440176, -0.014556902460753918, -0.01858636923134327. 0.001079062232747674, -0.04303906112909317, 0.035488348454236984, 0.005931665655225515, 0.013976078480482101, 0.006381804123520851, 0.01680033467710018, -0.0011779838241636753, -0.012596621178090572,

-0.008872087113559246, 0.018368560820817947, 0.011159081943333149, -0.012698265723884106. -0.007075163070112467, -0.016698691993951797, 0.023218441754579544, -0.020793501287698746, 0.017540886998176575, -0.01393977738916874, -0.0025574408937245607, -0.00406213803216815, 0.007118724752217531, -0.01423018891364336. -0.013584022410213947, 0.027923116460442543, -0.015711290761828423, -0.005064059514552355, -0.004878921899944544, -0.001610879204235971, 0.025701463222503662. -0.01307580154389143, -0.00696988869458437, 0.05895363911986351, -0.0032344639766961336, 0.020009389147162437, -0.01588553749024868, 0.008487291634082794, -0.019820621237158775, -0.014005119912326336, -9.704980038804933e-05, -0.015130466781556606, -0.014172106981277466, 0.0017497324151918292, 0.009699761867523193, 0.013032239861786366, 0.0035049100406467915, 0.027995718643069267, -0.0023414469324052334, -0.025469133630394936, -0.02016911469399929, 0.007082423195242882, 0.010273325257003307, 0.015696769580245018, 0.017744174227118492, 0.021417886018753052, 0.005837281700223684, -0.011064697988331318, 0.008995512500405312, -0.03392012417316437,

-0.020967748016119003, -0.002624598564580083, -0.01597266085445881, -0.011747166514396667, -0.001030055107548833, -0.020183635875582695, 0.01916719414293766, 0.045449480414390564, 0.027865033596754074, -0.01022250298410654, 0.0017515475628897548, -0.02420584298670292, -0.026935715228319168, -0.01889130286872387. -0.013279089704155922, 0.021417886018753052, 0.004770017694681883, 0.04158700257539749, 0.025948313996195793, 0.010585518553853035, -0.0028405925258994102, 0.01585649698972702, -0.020851584151387215, -0.02514968067407608, 0.005695705767720938, 0.02472858317196369, 0.03592396900057793, -0.012291688472032547, 0.048063188791275024, 0.01393977738916874, -0.010433051735162735, 0.0024576117284595966, 0.03171299397945404, 0.02326200343668461, 0.01685841754078865, -0.00531454011797905, 0.002708092099055648, 0.014644026756286621, 0.008414688520133495, -0.010752505622804165. 0.012023057788610458, -0.03194532170891762, -0.027777910232543945, 0.031016003340482712, 0.017090747132897377, -0.02612256072461605, -0.015290193259716034, 0.031451623886823654, 0.03290368244051933, 0.012168264016509056,

0.011093739420175552, -0.015232110396027565, -0.01833951845765114, -0.019762538373470306. 0.001554611837491393, -0.015406358055770397, -0.01362032350152731, -0.007950029335916042, 0.01743924245238304, -0.031451623886823654, -0.00855263415724039, -0.03264231234788895, -0.0008517240057699382, -0.028358733281493187. -0.019065549597144127, -0.020459527149796486, 0.007674137596040964, 0.021374324336647987, 0.015043342486023903, 0.03243902325630188, -0.009438390843570232. 0.014353614300489426, 0.01559512596577406, -0.03380395844578743, -0.009387568570673466. 0.011565659195184708, -0.025933794677257538. -0.0068646143190562725, -0.03034805692732334, 0.004505016375333071, -0.007311122491955757, -0.0294623002409935, 0.02748749777674675. 0.00015552925469819456, 0.018354039639234543, -0.030173810198903084, 0.00908263586461544, 0.003477683989331126, 0.016263073310256004, 0.02244884893298149. 0.03421053662896156, -0.014389915391802788, -0.007833864539861679, -0.008937429636716843, -0.019370481371879578, -0.005833651404827833, -0.01858636923134327, -0.0212581604719162. 0.0014520600670948625, 0.004131110850721598,

0.005234676878899336, -0.01562416646629572, 0.014999780803918839, 0.01630663499236107, -0.03229381889104843, -0.012422374449670315, 0.02286994643509388, 0.030057644471526146, -0.0022361725568771362, 0.021650215610861778, -0.018078148365020752-0.025890231132507324, -0.021606653928756714, -0.0022960701026022434, -0.02523680403828621, 0.029476819559931755, 0.05906980484724045, -0.0017070781905204058, 0.018963905051350594, -0.007387355901300907, -0.030609427019953728, -0.01585649698972702, -0.001067264238372445, 0.027298729866743088, 0.022971590980887413, -0.012327990494668484, -0.02044500596821308, -0.022971590980887413, -0.017816778272390366, -0.013387993909418583, 0.012168264016509056, -0.03130641579627991, 0.009903050027787685, -0.022884467616677284, -0.005891733802855015, 0.0034758688416332006, -0.023973513394594193, -0.030899839475750923, -0.03720178082585335, -0.012799910269677639. 0.006374543998390436, 0.01894938386976719, 0.025338448584079742, -0.003891521133482456, -0.0116963442414999, -0.008828525431454182, -0.021679257974028587, -0.015203069895505905, -0.01019346248358488, 0.017961984500288963,

-0.020459527149796486, 0.03116120956838131, 0.023494333028793335, 0.07800467312335968, -0.025977356359362602, -0.008581675589084625, 0.014513340778648853, 0.015290193259716034, -0.011391411535441875, -0.01562416646629572, -0.016030743718147278, -0.01844116300344467, -0.025991875678300858, 0.0020891514141112566. 0.02909928560256958, 0.01828143745660782, -0.0049478947184979916, -0.011827029287815094, -0.011681823991239071, -0.019210755825042725, 0.005365361925214529. -0.007645096629858017, -0.05183854699134827, -0.028532981872558594, 0.012683745473623276, -0.025077078491449356, 0.020052950829267502, -0.024699542671442032-0.02573050558567047, 0.030086684972047806, -0.020851584151387215, 0.00943113025277853, -8.162166341207922e-05. 0.022652138024568558. -0.01910911127924919, 0.026311328634619713, -0.0018767877481877804, 0.03307792916893959, -0.00924962293356657, 0.016393758356571198, -0.0294623002409935, -0.008843045681715012, 0.010846888646483421, 0.00390604161657393, 0.018876781687140465, -0.02153405174612999, 0.009133458137512207, -0.014825534075498581, 0.02879435196518898, -0.0022016861476004124,

- -0.013228267431259155, -0.010215243324637413, -0.03255518898367882, 0.0012043024180456996. -0.04486865922808647, -0.01652444340288639, 0.005140292923897505, 0.007783042266964912, 0.024278445169329643, 0.02250693179666996, 0.02186802588403225, -0.007979070767760277-0.0176134891808033, 0.013482377864420414, -0.01073798444122076, 0.038828086107969284, 0.00034713311470113695, 0.030580386519432068, 0.0352269783616066, 0.0026554549112915993, -0.0076087950728833675. 0.0010336852865293622, -0.017700612545013428, -0.01649540290236473, 0.01473115012049675. 0.030580386519432068, -0.015304713509976864, -0.029476819559931755, 0.008741402067244053, 0.00335607398301363, -0.024685021489858627, -0.0271825660020113, 0.0315968282520771, -0.002568331314250827, 0.015653207898139954, -0.010861409828066826, -0.00511125149205327, -0.007703179027885199, 0.00975058414041996, -0.014694848097860813, 0.0027879553381353617, 0.010215243324637413, -0.0007092406158335507, 0.007543452549725771, 0.01995130628347397, -0.0019820621237158775, 0.02773434855043888. 0.012995937839150429, -0.009837707504630089, -0.0031055936124175787,
- $file: /// Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn... ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html$

0.015130466781556606, -0.020125553011894226, -0.005565020255744457, 0.0031963472720235586, 0.04748236760497093, -0.011652782559394836, 0.00511125149205327, -0.0024920981377363205, -4.157656439929269e-05, -0.003826178377494216, -0.004134741146117449, 0.0014611354563385248, 0.03551739081740379, -0.03708561509847641, 0.024002553895115852, -0.019660893827676773, -0.00605146074667573, 0.013845393434166908, 0.0008440099190920591, -0.01858636923134327, -0.030957922339439392, -0.022855427116155624, -0.003205422777682543, 0.014368134550750256, -0.005652144085615873, 0.0076305759139359, 0.0005998823326081038, -0.010454832576215267, -0.0057320073246955870.0006302848341874778, -0.007332903798669577, 0.04347468167543411, -0.049253880977630615. -0.004526797216385603, -0.011035656556487083, -0.016960062086582184, -0.005143922753632069, 0.009895789436995983, 0.01743924245238304, 0.0070679024793207645, 0.02284090593457222, -0.014999780803918839, 0.0364467091858387, -0.01057099737226963, -0.018354039639234543, -0.03435574099421501, 0.002651824848726392, -0.019573770463466644. -0.01336621306836605, -0.0022525081876665354,

- -0.0075144111178815365, -0.0312773734331131, -0.003116484032943845, 0.014825534075498581, 0.007659617345780134, -0.009053594432771206, -0.012524018995463848, -0.001582745579071343, 0.007176807150244713, 0.006690367124974728, -0.018818698823451996, -0.01652444340288639. 0.04213878512382507, -0.026558179408311844, 0.008450989611446857, 0.0005359009373933077, -0.00794276874512434, -0.025265846401453018, -0.0431261844933033, -0.010367709212005138, -0.027923116460442543, -0.03760835900902748, 0.0005277331219986081, -0.0005050446488894522, -0.020677335560321808, -0.00845825020223856, 0.007358314469456673, -0.02754558064043522, -0.03955411911010742, -0.028474899008870125, 0.024917351081967354, -0.000542707450222224, 0.03130641579627991, 0.02976723201572895. 0.032177653163671494, 0.06598161160945892, 0.021359805017709732, -0.014883616007864475, 0.014614985324442387, -0.013017718680202961, -0.018121710047125816, -0.009903050027787685, -0.03136449679732323, -0.015551564283668995, 0.030202850699424744, 0.006000638473778963, -0.016568005084991455, -0.0023850088473409414, -0.019457604736089706, -0.023102276027202606,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.01764252968132496, -0.0069662583991885185, 0.007155026309192181, 0.009271403774619102, 0.0020891514141112566, 0.002539290115237236, 0.008610716089606285, 0.005343581084161997, 0.019428564235568047, -0.01619047112762928, -0.0010155345080420375, 0.0017814962193369865, 0.0073365336284041405, 0.01377279032021761, -0.006940847262740135, -0.041993577033281326, -0.00975058414041996, 0.023610496893525124, 0.032700393348932266, 0.013554980978369713, 0.019428564235568047. 0.003216313198208809, -0.00916975922882557, -0.009409349411725998, -0.002484837779775262, -0.0081242760643363, -0.003428676864132285, -0.009997433982789516, 0.0030602167826145887, -0.007703179027885199, 0.016117867082357407, -0.0067883809097111225, -0.012422374449670315, -0.03760835900902748, 0.02211487479507923, 0.005917144939303398, 0.0201981570571661, -0.02554173767566681, 0.005176594480872154, -0.006080501712858677. -0.0244526918977499, 0.01022250298410654, -0.01456416305154562, 0.009990173391997814, 0.02615160308778286, -0.0008049858151935041, -0.005710226483643055, -0.013032239861786366, 0.030231891199946404, -0.021969670429825783,

-0.020909665152430534, 0.02320392057299614, 0.021388845518231392, 0.01944308541715145, -0.011355110444128513, 0.007376465480774641, -0.0268776323646307, -0.0028151816222816706, -0.008770443499088287, -0.016059784218668938, -0.03203244507312775, 0.01594362035393715, -0.019355962052941322, -0.043416596949100494. -0.038043975830078125, -0.008814005181193352, 0.023276524618268013, 0.015566084533929825, -0.020343361422419548, -0.011311548762023449, -0.01855732873082161. 0.01562416646629572, 0.0068718744441866875, -0.019907744601368904, -0.02120007760822773, 0.004421522840857506, 0.01054195687174797. -0.020967748016119003, -0.005485157016664743, 0.19968730211257935, 0.00211456255055964, 0.023160358890891075, 0.021417886018753052, -0.007681398186832666, 0.019007466733455658, 0.0009574521682225168, 0.007292971946299076, -0.020575691014528275, 0.01661156862974167, 0.0174682829529047. 0.0010028290562331676, 0.0025120640639215708, -0.008980992250144482, 0.006116803269833326, 0.0349365659058094, -0.023218441754579544, -0.03113216906785965, -0.025077078491449356, -0.01492717768996954, -0.01619047112762928,

1.1599464414757676e-05, -0.01096305437386036, -0.011224424466490746, 0.001359491259790957, -0.01861541159451008, -0.01395429763942957, 0.0025429201778024435, 0.01697458326816559, 0.01783129759132862, -0.01186333131045103, 0.017729654908180237, 0.009191541001200676, -0.025977356359362602, -0.01630663499236107, -0.017932942137122154, 0.03505273163318634, -0.002192610874772072, 0.01858636923134327, 0.013801831752061844, 0.005227416288107634, -0.0449557825922966, -0.002254323335364461, -0.019094590097665787, -0.011362370103597641, 0.023029673844575882, -0.009924830868840218, -0.02189706638455391, -0.013417035341262817, 0.0092641431838274, -0.01359128300100565, 0.005833651404827833, 0.04974757879972458, 0.03304888680577278, 0.021461447700858116, -0.025164201855659485, -0.0030402508564293385, 0.0013413404813036323, -0.0102733252570033070.0021181926131248474, -0.03180011734366417, 0.013504158705472946, -0.005234676878899336, 0.008254962041974068, -0.024467213079333305, -0.003087442833930254, -0.012473196722567081, 0.012625662609934807, 0.0174682829529047, -0.042835772037506104, 0.003826178377494216,

-0.03996069356799126, 0.03354258835315704, 0.0016934651648625731, -0.01517402846366167, -0.03203244507312775, 0.01908007077872753, 0.006461667362600565, 0.015115945599973202, 0.06383256614208221, -0.01658252626657486, -0.027690786868333817, 0.0046502226032316685, -0.01187785156071186, 0.002163569675758481, -0.02286994643509388, 0.002617338439449668, -0.009692501276731491, -0.015101425349712372, -0.01719239167869091, -0.011551138013601303, -0.006330982316285372, 0.001923979609273374, 0.01057099737226963, 0.02080802246928215, -0.013017718680202961, -0.00838564708828926, 0.015740331262350082, 0.002421310171484947, 0.00792824849486351, -0.028228048235177994, 0.03551739081740379, 0.02423488348722458, -0.0041093300096690655, -0.03365875408053398, -0.005285498686134815, 0.010345928370952606, -0.002348707290366292, -0.015958141535520554, -0.027603663504123688, 0.016059784218668938, -0.01195045467466116, 0.0009465616894885898. -0.002953127259388566, 0.008313043974339962, 0.0012260832590982318, 0.006076871417462826, -0.03034805692732334, 0.005118512082844973, 0.003461348358541727, 0.0012569394893944263,

-0.023131318390369415, 0.0008798576891422272, 0.008951950818300247, -0.013475118204951286, -0.013417035341262817, -0.01473115012049675, 0.002539290115237236, -0.022681178525090218, 0.010011954233050346, 0.015929099172353745, -0.0040185763500630856, 0.010019214823842049, -0.024351047351956367, -0.005089470651000738. 0.021969670429825783, 0.0067702303640544415, -0.003746315138414502, 0.017424721270799637, -0.0102733252570033070.010512915439903736, 0.010011954233050346. 0.0023069605231285095, -0.030667509883642197, -0.017381159588694572, -0.022986112162470818, -0.00645440723747015, -0.00531454011797905, -0.005721116904169321, 0.0076160551980137825, -0.012879773043096066, -0.015449919737875462, -0.01229894906282425, -0.02378474548459053, 0.027356812730431557, -0.022289123386144638, -0.023363647982478142, -0.017961984500288963, -0.02512064017355442, 0.004043987486511469, -0.055178284645080566, 0.006559681612998247, 0.01950116828083992, -0.015028822235763073, -0.020996788516640663, -0.028939558193087578, -0.18760617077350616, 0.026078999042510986, 0.02041596546769142, -0.026863113045692444, 0.05047360807657242,

0.025323929265141487, 0.04376509040594101, -0.014462518505752087, 0.003036620793864131, -0.010244283825159073, -0.0077104391530156136, -0.0026863112580031157, -0.03362971171736717, -0.029694629833102226, -0.014498820528388023, 0.014266490936279297, -0.0011552952928468585, 0.01353320013731718, 0.025222284719347954. 0.016814855858683586, 0.022361725568771362, -0.022608576342463493, 0.012857992202043533, 0.01682937704026699, -0.018049107864499092, -0.008755922317504883. -0.027327772229909897, 0.009663459844887257, 0.001989322481676936, -0.009314965456724167, -0.02038692496716976, -0.003165491158142686, 0.019239796325564384, -0.025498175993561745, 0.0312773734331131, -0.0036501160357147455, 0.014375395141541958, -0.020328842103481293. -0.01239333301782608. 0.011986756697297096, 0.0038515895139425993, 0.0388861708343029, -0.003232648828998208, -0.0024249404668807983, -0.0054125539027154446, 0.014985260553658009, 0.024699542671442032, -0.02375570312142372, -0.0069481078535318375, -0.006218447349965572, 0.008523592725396156, -0.011202643625438213, -0.01072346419095993, -0.005256457719951868, 0.015362796373665333,

0.02278282307088375, -0.027719827368855476, 0.013896215707063675, 0.003198162419721484, -0.00101190444547683, 0.005695705767720938, 0.004363440442830324, -0.006312831304967403, -0.006806531921029091, 0.004428783431649208, -0.008705100044608116, -0.03508177399635315. 0.010338667780160904, 0.007155026309192181. 0.0006030587246641517, 0.009656200185418129, 0.023044195026159286, 0.004142001271247864, 0.018688013777136803, 0.013671145774424076, 0.01362032350152731, -0.012654704041779041, 0.0185282863676548, 0.013663886114954948, -0.01022250298410654, -0.015958141535520554, 0.05866323038935661, -0.0221729576587677, 0.011848810128867626, 0.01813623122870922, 0.0053762528114020824, 0.009736062958836555, -0.006566941738128662, 0.00838564708828926, -0.0014801938086748123, 0.01864445209503174, -0.011231685057282448, -0.0059425560757517815, -0.006614133715629578, 0.004755496978759766, 0.008087974973022938, 0.0013077616458758712, 0.003935082815587521, 0.01140593271702528, 0.0035756980068981647, -0.0007060642237775028, -0.0029004900716245174, -0.004014946054667234. 0.010418531484901905, 0.021998710930347443,

-0.012879773043096066, -0.023770224303007126, 0.020909665152430534, 0.03952507674694061, -0.03354258835315704-0.012052099220454693, 0.02314583770930767, 6.307386502157897e-05, 0.032874640077352524, 0.02016911469399929, 0.02706640027463436, -0.008893867954611778, -0.014339094050228596, 0.014418956823647022. 0.0077104391530156136, 0.05683363229036331, -0.009177019819617271, 0.004926113877445459, -0.004004055634140968, -0.0233926884829998, 0.0025592560414224863, -0.0805022120475769, -0.024917351081967354, -0.004221864975988865, 0.0074309175834059715, -0.023000631481409073, 0.0011108260368928313, 0.004290837794542313, 0.026195164769887924, -0.0028042912017554045, -0.007020710501819849, 0.002767989644780755, 0.009910310618579388, 0.012494977563619614, 0.018005546182394028, 0.015987182036042213, -0.014687588438391685, -0.006280160043388605, 0.002394084120169282, -0.019965827465057373, 0.03714369609951973, 0.014571423642337322, -0.010658121667802334, -0.007347424048930407, -0.01186333131045103, -0.0005490602343343198, 0.016393758356571198, -0.036011092364788055, 0.011122780852019787, 0.015696769580245018,

-0.023058714345097542, -0.003700938308611512, -0.027589142322540283, -0.013083062134683132, -0.00906811561435461, -0.01958829164505005, -0.0057755690068006516, 0.0018767877481877804, -0.007376465480774641, 0.03627246245741844, -0.042051661759614944, 0.02851846069097519, 0.007420027162879705, 0.0209532268345356, -0.0025247696321457624, -0.0050313882529735565, 0.02120007760822773, -0.005750157870352268, 0.03380395844578743, 0.003495834767818451, -0.008632497861981392, -0.03104504570364952, -0.007717699743807316, 0.002058295300230384, 0.004243645817041397, 0.026296809315681458, -0.006799271330237389, 0.007169547025114298, 0.015682248398661613, 0.0016571636078879237, -0.02907024323940277, 0.00010635206126607955, -0.02180994302034378, -0.008175098337233067, 0.012487716972827911, 0.015406358055770397, 0.00619666650891304, -0.0031237443909049034, -0.025599820539355278, 0.0021381585393100977. -0.008690579794347286, -0.018295956775546074, 0.0458560585975647, -0.023378167301416397, 0.008777703158557415, -0.013903475366532803, -0.02639845386147499, 0.004621181171387434, -0.03243902325630188, -0.0004351642564870417,

-0.006566941738128662, -0.015464439988136292, -0.011180862784385681, -0.0021073021925985813, 0.0018786027794703841, 0.018121710047125816, -0.0031909020617604256, 0.00331069715321064, -0.0013876250013709068, 0.028663666918873787, -0.0519547127187252040.019573770463466644, 0.0009701576782390475, 0.016103345900774002, -0.02025623805820942, 0.0009801405249163508, 0.030754633247852325, -0.0017860339721664786, -0.021025830879807472, 0.0021054872777312994, 0.01955924928188324. -0.06278707832098007, -0.013983339071273804, -0.0871816873550415, 0.04042535275220871, 0.0014783786609768867, -0.026950236409902573, 0.015987182036042213, -0.04460728541016579, -0.00505679938942194, -0.006908176001161337, 0.009409349411725998, 0.020880624651908875, -0.019268838688731194, 0.00977962464094162, 0.004407002590596676, -0.0032344639766961336, -0.013235528022050858, -0.01125346589833498, 0.032177653163671494, -0.014651286415755749, 0.024888310581445694, 0.030754633247852325, -0.013649364933371544, -0.034007247537374496, 0.005917144939303398, 0.02949134074151516, -0.019312400370836258, -0.004112960305064917, 0.009656200185418129,

0.01664060913026333, -0.0062220776453614235, -0.013308131136000156, -0.007303862366825342, -0.026892153546214104, 0.002377748489379883, 0.010157160460948944, 0.004152892157435417, -0.0021563093177974224, 0.012625662609934807, 0.010636340826749802, 0.034675195813179016, 0.010360448621213436, -0.019791578873991966, -0.023058714345097542, 0.03516889736056328, -0.029171887785196304, -0.014999780803918839, 0.0016508108237758279, 0.004998716991394758, -0.000693358713760972. 0.018426643684506416, 0.0013731044018641114, 0.034704238176345825, 0.01563868671655655, -0.016843898221850395, -0.01998034678399563. 0.013642105273902416, -0.025686943903565407, -0.001969356555491686, 0.004806318785995245, 0.015014301985502243, 0.019094590097665787, 0.042661525309085846, -0.005027757957577705, 0.013032239861786366, -0.015711290761828423, 0.028620105236768723, 0.0011607405031099916, -0.0030166548676788807, 0.004142001271247864, 0.002862373599782586, -0.0221729576587677, -0.007913727313280106, -0.0002359597710892558, 0.008893867954611778, -0.004105700179934502, 0.011674563400447369. 0.023770224303007126, 0.0012542168842628598,

-0.014542382210493088, 0.010854149237275124, 0.019965827465057373, 0.009293184615671635, -0.021737340837717056, -0.012959636747837067, 0.007884686812758446, 0.034094370901584625, 0.014310052618384361, -0.010186201892793179, -0.0051620737649500370.011101000010967255, -0.011326069012284279, -0.012371552176773548, 0.0022869945969432592, 0.011231685057282448, 0.03987357020378113, 0.013402515091001987, 0.01794746331870556, -0.023683100938796997, -0.011660043150186539. 0.023973513394594193, -0.006414475385099649, 0.014781972393393517, 0.0072348895482718945. 0.015508001670241356, -0.03113216906785965, -0.024409130215644836, 0.014506080187857151, -0.01844116300344467, -0.012828950770199299, 0.0033288479316979647, -0.005713856779038906. 0.010360448621213436. -0.01725047454237938, -0.0011062882840633392, 0.02047404833137989, -0.009358527138829231, 0.013961558230221272, -0.01193593442440033 -0.012015797197818756, -0.02205679379403591, 0.05761774629354477, 0.007543452549725771, 0.00993209145963192, 0.06313557177782059, -0.012734566815197468, 0.03429765999317169. 0.02790859527885914, -0.013170185498893261,

0.021374324336647987, 0.001773328403942287, 0.012516758404672146, -0.001728859031572938, 0.003985905088484287, -0.022521452978253365, -0.025774067267775536, -0.00914071872830391, -0.0014620430301874876, -0.035372182726860046, -0.012066619470715523, 0.004737345967441797. 0.1123894527554512, 0.020764458924531937. -0.029563944786787033, 0.011362370103597641, -0.02988339774310589, 0.018078148365020752, 0.008058933541178703, 0.0069481078535318375, 0.009198800660669804. -0.04028014838695526, -0.02968010865151882, -0.014760191552340984, -0.03789876773953438, -0.023639539256691933, -0.03850863501429558, 0.011442233808338642, -0.005350841674953699, 0.028605584055185318, 0.004711935296654701, -0.024380089715123177. 0.02284090593457222, 0.029288053512573242, 0.02047404833137989, -8.196198905352503e-05, -0.0247576255351305, -0.005855432245880365, 0.028503939509391785, -0.007979070767760277 -0.0004791798419319093, -0.013337172567844391, 0.012306209653615952, -0.017700612545013428, 0.0008149687200784683, 0.004675633739680052, 0.004145631566643715, 0.012429635040462017, -0.011006616055965424, -0.01552252285182476,

```
0.021650215610861778,
      -0.0073292735032737255,
      0.0031745664309710264,
      -0.0036101844161748886.
      -0.015566084533929825,
      -0.03908945992588997,
      0.04022206366062164,
      -0.004436043556779623,
      0.020052950829267502,
      -0.016538964584469795.
      -0.039350830018520355
    ]
  }
},
  "_index": "pdgithub_issues",
  "_id": "MjyfUZMBhjF0vW2DRbFb",
  " score": 1.0,
  " source": {
    "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28273",
    "_title": "api-docs: add standard tests package to build 2",
    "_createdAt": "2024-11-21T23:40:37Z",
    " closedAt": "2024-11-21T23:40:48Z",
    "_state": "closed",
    " body": "None",
    "GitHub Issue vector": [
      0.0007092204759828746,
      0.0012419006088748574,
      0.009564644657075405,
      -0.001148386625573039.
      -0.02939310297369957.
      0.016500409692525864,
      -0.005953431595116854,
      -0.028092646971344948,
      -0.014990203082561493,
      -0.0016675202641636133,
      0.02227555401623249,
      -0.00402721855789423
      0.0061806621961295605.
      0.00505849439650774,
      -0.005537425633519888
      -0.0011143020819872618,
      0.015591489151120186,
      -0.024415012449026108,
      0.019968291744589806,
      0.02223360352218151,
      0.013731696642935276,
      0.012095639482140541,
```

-0.0061457036063075066, 0.00987227912992239, -0.02644260600209236, 0.02571546845138073, 0.009410827420651913, -0.024415012449026108, 0.005977902561426163, 0.007725827395915985, 0.035098329186439514, -0.027001941576600075, -0.005313691217452288, -0.02526800148189068, -0.006065298803150654, -0.004604033660143614. 0.016542360186576843, 0.004170548636466265, 0.014137215912342072, -0.01638854295015335, 0.012487174943089485, 0.00960659421980381, 0.017395347356796265. -0.019408956170082092, -0.01876571960747242, -0.004705413710325956, 0.030036339536309242, -0.011256635189056396, -0.0033857303205877542, 0.015102069824934006, 0.012165556661784649, -0.004922156222164631, 0.0017610342474654317, 0.02121281437575817, 0.012067672796547413, 0.01005406305193901, -0.00044353591511026025, 0.022135719656944275, 0.007348275743424892, -0.01553555577993393, -0.005869531538337469, -0.004174044355750084, -0.029085468500852585, -0.0021901498548686504, -0.013584871776401997, -0.012179539538919926, 0.0022286041639745235, 0.009634560905396938, 0.006460329983383417, -0.031658414751291275. 0.0318821482360363, 0.01234734058380127,

0.0005790001014247537, -0.012941635213792324, 0.043348535895347595, -0.0010391413234174252, 0.002483801217749715, -0.02510019950568676, -0.008893441408872604, -0.012780825607478619, 0.02686210721731186, -0.0009762159897945821, -0.017758915200829506, 0.023981528356671333, 0.03246945142745972, 0.01255009975284338, 0.016010990366339684, 0.01933903992176056, 0.003175979247316718, -0.014752484858036041, 0.034035589545965195, 0.008264188654720783, 0.01676609367132187, 0.02031787671148777, -0.0008647858048789203, 0.04849442467093468, -0.01387852244079113, 0.04745965451002121, 0.035014428198337555, -0.05956927686929703, -0.007026657462120056, 0.007474126294255257, -0.02852613292634487, -0.0026446101255714893, -0.002160435076802969. -0.02174418419599533, 0.0029417574405670166, -0.0002436170179862529, 0.02157638408243656, 0.014976219274103642, -0.0274354275316, 0.03834247961640358, 0.014514767564833164, -0.055989526212215424, 0.02599513716995716, -0.0007743306923657656, -0.007572010159492493, -0.036608535796403885, 0.0017120923148468137, 0.0038244593888521194, 0.026400655508041382, 0.013535929843783379,

0.014864352531731129, 0.0018930025398731232, -0.0027320063672959805, 0.002665585372596979, -0.01679406128823757, -0.0318821482360363, -0.008816532790660858-0.0073622590862214565, 0.01655634306371212, 0.013312195427715778, -0.0020293407142162323, -0.010851116850972176. -0.01279480941593647, 0.0036531628575176, -0.009054250083863735, 0.020122110843658447, -0.014486800879240036, -0.026316754519939423, -0.004107623361051083, 0.03495849668979645, -0.020877214148640633. -0.021156881004571915, -0.026051070541143417, 0.030567709356546402, 0.008732631802558899, 0.00449566263705492, 0.02399551123380661, -0.03339235484600067, 0.0012480182340368629, -0.024387046694755554, -0.008487923070788383, -0.0018964983755722642, -0.011172735132277012, 0.022695055231451988, -0.01193483080714941, 0.012738876044750214, -0.03263724967837334, 0.008187280036509037, -0.005436046048998833, 0.01995430886745453, 0.004306886810809374, -0.03658057004213333, 0.007599976845085621, 0.028106629848480225, 0.018653852865099907, -0.009543669410049915, -0.010165930725634098, -0.008466947823762894, -0.00938285980373621, 0.0027320063672959805,

-0.04169849306344986, 0.029085468500852585, -0.00505849439650774, 0.0389297790825367, -0.0035535311326384544, 0.01961870677769184, -0.0173394139856100080.0038419386837631464, -0.028512148186564445, -0.0021167369559407234, 0.011102817952632904, 0.054059818387031555, -0.0005938574322499335, 0.011417444795370102, 0.011843938380479813, 0.005512954667210579, 0.02342219278216362, 0.007135028950870037, 0.0247785821557045, 0.019436923786997795, -0.008418005891144276. 0.006222612224519253, -0.614374577999115, -0.0072154332883656025, 0.0009360137046314776, -0.012487174943089485, 0.01148736197501421, 0.028749866411089897, 0.013619829900562763, -0.0017418070929124951, 0.002413884038105607, 0.012053688988089561, -0.02677820809185505, 0.026316754519939423, 0.02010812610387802, -0.007935578934848309, -0.002912042662501335, -0.016122858971357346, 0.03274912014603615, -0.00921505969017744, -0.02530995011329651, 0.00993520487099886, -0.04611724615097046, 0.02289082296192646, 0.004600537940859795, -0.008627756498754025, 0.023408208042383194, -0.0295329373329877850.01949285715818405, 0.006932269781827927,

0.0075090848840773106, 0.0026463582180440426, -0.022834889590740204, 0.02914140187203884, 0.010522507131099701, -0.0003640053328126669, 0.04346040263772011, 0.0074951015412807465, -0.009033274836838245, 0.008809540420770645. 0.007002186495810747, 0.011235660873353481, -0.024988332763314247, 0.0052018240094184875. 0.0001756664423737675, 0.007823711261153221, -0.007907611317932606, -0.014486800879240036, 0.02010812610387802, 0.007068607956171036, -0.010676324367523193. 0.009760412387549877, 0.0323016494512558, -0.015325804241001606, -0.005981398746371269, 0.008431988768279552, 0.0021796622313559055, -0.03269318491220474, 0.029281236231327057, -0.02342219278216362, 0.005775143392384052, 0.00829914677888155, 0.00595692778006196. 0.0061561912298202515, 0.007627943530678749, -0.019800491631031036, -0.008711657486855984, 0.008655723184347153, 0.004450216423720121, 0.025939203798770905, 0.012654975056648254, -0.04385193809866905, -0.006243587471544743, -0.018877588212490082, -0.00438379542902112, -0.007054624613374472, 0.013892506249248981, 0.02911343425512314. 0.01806654967367649. 0.00899132527410984,

-0.03470679372549057, 0.018863603472709656, -0.0010548726422712207, -0.011976780369877815, -0.019926343113183975, -0.009522694163024426, 0.020136093720793724, 0.01171109639108181, -0.01683601178228855, 0.0038419386837631464, -0.000533991027623415, -0.011676137335598469, 0.009068233892321587, 0.01003308780491352, 0.015171987004578114, -0.00807541236281395, 0.002768712816759944, 0.028386298567056656, 0.016626261174678802, 0.009250017814338207, 0.02391161024570465, -0.025771403685212135, -0.013214311562478542, 0.01798265054821968, -0.008005495183169842, 0.008851490914821625, 0.03062364272773266, -0.0046949260868132114, -0.026190904900431633, 0.0157313235104084, 0.011431427672505379, 0.002695299917832017, -0.01966065727174282, 0.007369250990450382, -0.006327487528324127, 0.019143272191286087, -0.0006310008466243744, -0.04320869967341423, -0.015871157869696617, -0.027337543666362762, 0.0018667837139219046, 0.0188076701015234, -0.020919164642691612, 0.0006344966823235154, -0.001989138312637806, 0.014032339677214622, 0.01721356250345707, 0.00663162674754858, -0.00991422962397337, -0.014878335408866405,

-0.006397404707968235, -0.0016343096503987908, -0.0072154332883656025, 0.022904805839061737, 0.014360950328409672, -0.009040267206728458, 0.018541986122727394, 0.01770298182964325, 0.015185970813035965, -0.009802361950278282, 0.015969039872288704, -0.0006851865327917039, -0.006603659596294165, 0.00018495229596737772. 0.006467321887612343, -0.0247785821557045, 0.01933903992176056, -0.04099932312965393, -0.026148954406380653, -0.0014595171669498086, -0.0038838889449834824, 0.0061561912298202515, -0.018947504460811615, -0.005589863285422325, -0.01691991090774536, -0.017199579626321793, -0.0018877587281167507, 0.0036636502481997013, 0.030036339536309242, -0.03160247951745987-0.0038489303551614285, -0.0008237095316872001, 0.024149328470230103, -0.011976780369877815, -0.02129671536386013, -0.012060681357979774, -0.019898375496268272, -0.0034381679724901915, -0.02214970253407955, 0.022009868174791336. -0.0074951015412807465, -0.03364405781030655, -0.0018755232449620962, -0.015409705229103565, -0.006397404707968235, -0.011983771808445454, 0.009683502838015556, 0.0062051331624388695, -0.010704291053116322, 0.002779200440272689,

-0.02730957604944706, -0.005027031525969505, -0.0033175612334161997, 0.006432363297790289, -0.025198083370923996, 0.008215246722102165, 0.03135078027844429, 0.008753607049584389, 0.027519328519701958, 0.004222986288368702, 0.008271180093288422, -0.003432924160733819, -0.02607903815805912, 0.010683315806090832, -0.011333543807268143, 0.0005894876085221767, -0.023729827255010605, 0.001999625936150551, -0.00033822344266809523, 0.006016356870532036, 0.007341283839195967, 0.026512522250413895, 0.001636931556276977, 0.01185792125761509, -0.006009365431964397, -0.013235286809504032, 0.00704064080491662, -0.016584310680627823, 0.005883514881134033, -0.029700737446546555, 0.009124167263507843, -0.011249643750488758, 0.01052949856966734, -0.019856425002217293, -0.02582733705639839, -0.010103004984557629, 0.005054998677223921, -0.005677259527146816, -0.004226482007652521, -0.0165982935577631, -0.014836385846138, 0.0044152578338980675, -0.013507962226867676, -0.002592172473669052, 0.000822398578748107, -0.0011894628405570984, 0.013815597631037235, -0.0165982935577631, 0.009641553275287151, 0.036272935569286346,

0.022289536893367767, 0.012291407212615013, -0.0022513270378112793, 0.018220368772745132, 0.006691055838018656, -0.008418005891144276, 0.022834889590740204, 0.015409705229103565, 0.02722567692399025, -0.015102069824934006, 0.029980406165122986, -0.023855676874518394, 0.022834889590740204, 0.01434696651995182. 0.01623472571372986, -0.014360950328409672, 0.03551783040165901, -0.0034556472674012184, 0.027687128633260727, 0.005072477739304304, 0.005792622920125723. -0.010354706086218357, 0.00783070269972086, -0.011962797492742538, -0.0037999884225428104, -0.011990764178335667, 0.014584684744477272, -0.0174932312220335, -0.024456962943077087, 0.03241351619362831, -0.0007227669120766222, 0.02265310473740101, 0.014990203082561493, -0.013773647136986256, 0.02661040611565113, 0.01676609367132187, 0.03070754185318947, -0.01279480941593647, -0.004236969631165266, -0.01843011938035488, 0.017395347356796265, -0.011333543807268143. 0.0029330176766961813, -0.007837695069611073, 0.0020345845259726048, -0.0175911150872707370.05179450660943985. 0.00834109727293253, 0.00584506057202816, 0.02076534554362297,

- 0.02616293728351593, -0.02093314751982689, -0.03070754185318947, -0.025044266134500504, 0.001556526985950768, 0.00942481029778719, -0.003925838973373175-0.0008674076525494456, -0.020136093720793724, -0.00036291289143264294, -0.025114182382822037, 0.017884766682982445. -0.002111493144184351, -0.006904303096234798, -0.01526987086981535, -0.024289162829518318, -0.017912732437253, -0.001830077264457941, 0.0219119843095541, -0.016206758096814156, 0.002392909023910761, 0.021450532600283623, 0.007404209580272436, 0.007072103675454855, 0.02686210721731186, -0.0023544547148048878, 0.018569953739643097, 0.01708771288394928, 0.00015731323219370097, -0.036608535796403885, -0.0002960547572001815, -0.0028508652467280626, 0.021492483094334602, 0.011389478109776974, 0.016360575333237648, -0.006981211714446545, -0.010389665141701698, 0.0009867035550996661, 0.0026760727632790804, -0.020541612058877945, 0.016458459198474884, 0.003210937837138772, -0.011941822245717049, -0.027029909193515778, 0.002515263855457306, 0.008313130587339401, 0.022331487387418747, 0.047152020037174225, 0.018248334527015686, 0.0066735767759382725,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.0169338956475257870.022303519770503044, -0.012074664235115051, 0.015563522465527058, -0.00020691059762611985, -0.01700381189584732, -0.018444102257490158, -0.008977341465651989, -0.0004334853438194841, 0.007033649366348982, 0.036161068826913834, 0.019325057044625282, -0.009795370511710644, -0.017605097964406013, -0.022499287500977516, 0.005603846628218889, -0.001019040122628212, -0.03179824724793434, 0.013011552393436432, 0.0071944585070014, 0.04908172786235809, -0.0034346722532063723, -0.024876466020941734, 0.011948813684284687, 0.026848124340176582, -0.015088086947798729, 0.01545165479183197, 0.002712779212743044, -0.0003980898763984442, 0.030679576098918915, -0.02461078017950058, 0.039181482046842575, -0.004597042221575975. 0.0005042763077653944, -0.0075300601311028, 0.02227555401623249, 0.008397030644118786, -0.002149947453290224, -0.0060583073645830154, -0.02301667258143425, 0.0150601202622056, 0.006785443983972073, -0.020737379789352417, 0.003513328731060028, -0.0014516515657305717, -0.01953480765223503, 0.025561651214957237, 0.02461078017950058, -0.038482312113046646, -0.0278828963637352,

0.04144679382443428, 0.023212440311908722, -0.0274354275316, 0.02159036695957184, -0.02718372642993927, -0.014906302094459534, -0.02854011580348015, 0.0027075354009866714, -0.024624764919281006, -0.027771029621362686, -0.026708289980888367, -0.009984145872294903, -0.02293277345597744, -0.010207880288362503, -0.03392372280359268, 0.0050794691778719425, 0.007844686508178711, -0.012053688988089561, -0.006603659596294165, 0.016752110794186592, 0.02375779300928116, 0.004775330424308777, 0.010347714647650719, -0.007928586564958096, 0.006827394012361765, 0.027029909193515778, -0.019325057044625282. -0.022862855345010757, 0.01389949768781662, 0.0005422936519607902, 0.02358999289572239, 0.010879083536565304, 0.0006117736920714378, -0.005254261661320925, -0.005390599835664034, 0.035825464874506, -0.01806654967367649, 0.015521571971476078, -0.009543669410049915, -0.03495849668979645, 0.01643049344420433, 0.0034311763010919094, 0.005586367566138506, 0.014892319217324257, -0.01712966337800026, 0.010061055421829224, -0.004971098154783249, -0.03171434625983238, -0.0210170466452837, -0.02371584251523018,

-0.0052262949757277966, -8.919878746382892e-05. -0.010830141603946686, 0.012578066438436508, -0.037922974675893784, 0.014263066463172436, 0.0021953934337943792, -0.016668209806084633, -0.005705226678401232, 0.007002186495810747, 0.008627756498754025, 0.019394973292946815, 0.012892693281173706, 0.016542360186576843, -0.010990951210260391, -0.008271180093288422, 0.015885140746831894, -0.0331965871155262, 0.015843190252780914, 0.02473663166165352, 0.005991885904222727, 0.019520824775099754, -0.01430501602590084, -0.013983398675918579, -0.02542181871831417, -0.002786192111670971, 0.010277797468006611, 0.013277236372232437, 0.01301854383200407, -0.0014769964618608356, 0.0026009120047092438, -0.03221774846315384, 0.007551034912467003, 0.001268119434826076, -0.009578627534210682, -0.0019157255301252007, -0.01823435164988041, 0.001964667346328497, -0.017241530120372772-0.019059371203184128, 4.8859958042157814e-05, -0.03837044537067413, -0.005411575082689524, 0.01169012114405632, 0.004111119080334902, 0.022345470264554024, -0.028582066297531128, -0.004443224985152483, 0.010676324367523193, 0.013172361068427563,

-0.014109249226748943, -0.02301667258143425, 0.006124728359282017, -0.006806419230997562, 0.03356015682220459, 0.036272935569286346. 0.026540489867329597, -0.008872466161847115, 0.016122858971357346, -0.011480369605123997, 0.02841426432132721, -0.009802361950278282, -0.027519328519701958, -0.0022583187092095613. -0.00920107588171959, -0.008823524229228497, 0.014990203082561493, 0.015130036510527134, 0.002431363333016634, 0.004149573389440775, -0.015759289264678955. 0.023002689704298973, -0.018500035628676414, 0.000616580480709672, -0.02084924653172493, -0.04622911289334297, -0.024498913437128067, 0.012200514785945415, -0.04320869967341423, 0.019814474508166313, -0.04206206277012825, -0.0179407000541687, 0.05288521200418472, -0.004079656209796667. -0.0008529872866347432, -0.0043173739686608315, 0.032273683696985245, -0.020122110843658447, 0.013969414867460728, 0.004593546502292156, 0.009229042567312717, -0.020793313160538673, 0.016360575333237648, -0.007537051569670439, -0.005883514881134033, 0.008900432847440243, 0.013088461011648178, 0.020387794822454453, -0.00357625400647521, 0.01054348237812519,

- -0.01933903992176056, 0.04206206277012825, -0.0327770859003067, -0.007257383782416582, -0.020219994708895683, -0.021184848621487617, -0.00035592119093053043, -0.020513644441962242, 0.013752671889960766, -0.02178613469004631, 0.02154841646552086, 0.01187889650464058, -0.0027407461311668158, 0.012319373898208141, -0.02902953512966633, 0.003527312306687236, 0.022387420758605003, -0.016849994659423828, 0.04278919845819473, 0.038202643394470215, 0.021772151812911034. 0.0219119843095541, 0.022415386512875557, -0.026582440361380577, -0.0024890447966754436, -0.0265684574842453, -0.007551034912467003, 0.02223360352218151, 0.019604723900556564, -0.009515702724456787-0.029253268614411354, 0.022709038108587265, 0.01263400074094534, -0.0038664096500724554, -0.03870604559779167, 0.003095574676990509, -0.0009631065768189728, 0.011207693256437778, -0.028064679354429245, 0.009068233892321587, -0.024820532649755478, 0.0073133171536028385, -0.00850190594792366, -0.011102817952632904, -0.010620390996336937, -0.008935391902923584, 0.014074290171265602, 0.013724705204367638, -0.008599789813160896, 0.036356836557388306,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...ker_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.02665235660970211, -0.028302397578954697, 0.004978089593350887, -0.001299582072533667 0.004254448693245649, 0.01912928931415081, 0.017814848572015762, 0.03867807984352112, 0.0009316438809037209, 0.003050128696486354, 0.015759289264678955, 0.0023631942458450794, -0.012878709472715855, -0.0002991136279888451, 0.020415760576725006, 0.03915351629257202, -0.020555594936013222, 0.00017446474521420896, 0.00728535046800971, -0.0146126514300704, -0.0008665337227284908, -0.01933903992176056, -0.012032713741064072, -0.022415386512875557, -0.015689373016357422, 0.003155004233121872, 0.012787817977368832, 0.023072607815265656, -0.008355080150067806, -0.01610887423157692, -0.013948439620435238, -0.005110932048410177, -0.03196604922413826, -0.013584871776401997, 0.010641366243362427, -0.020136093720793724, -0.03311268612742424, -0.0024890447966754436, -0.029504969716072083, 0.01531182136386633, -0.001247144304215908, 0.010739250108599663, -0.01585717312991619, 0.03859417885541916, -0.007711844053119421, 0.028973601758480072, -0.018961487337946892. -0.024876466020941734, -0.01455671712756157, 0.005729697644710541,

-0.012606033124029636, -0.014151198789477348, 0.008655723184347153, -0.019269121810793877-0.04751558601856232, -0.006729510612785816, 0.013969414867460728, 0.020080160349607468, -0.006215620320290327, -0.028624016791582108, 0.007893628440797329, 0.009347901679575443, 0.004789313767105341, -0.009340910241007805. -0.02333829179406166, 0.049529194831848145, -0.011102817952632904, 0.000983207719400525, -0.002020600950345397, -0.0061072492972016335, -0.023450158536434174, 0.0007765155751258135, 0.001629939884878695, 0.003918847534805536, -0.018248334527015686, -0.02742144465446472, 0.003618204267695546, 0.004233473911881447, 0.0036321876104921103, -0.02416331134736538, -0.011312569491565228, -0.038286544382572174, -0.02690405771136284, 0.028582066297531128, 0.015787256881594658, 0.004380299709737301, 0.004278919659554958, 0.003674137871712446, 0.030399907380342484, 0.032525382936000824, -0.023310324177145958, -0.01124265231192112, -0.02758924476802349, -0.015913106501102448, -0.014892319217324257, -0.030791442841291428, -0.01774493232369423, 0.023576010018587112, 0.029644804075360298, 0.009529685601592064,

-0.009515702724456787-0.014151198789477348, -0.0060478197410702705, 0.0010671081254258752, -0.0028648488223552704, -0.014088273979723454, 0.0074112010188400745, -0.0014936017105355859, -0.012487174943089485, 0.017241530120372772. -0.007732819300144911, 0.02150646597146988, -0.003604220924898982, -0.02391161024570465. -0.004076160490512848, -0.0018860108684748411, 0.011836946941912174, -0.02886173315346241, -0.00921505969017744, 0.0060478197410702705, 0.018541986122727394. 0.022457337006926537, 0.021156881004571915, 0.011697112582623959, -0.00811037141829729, -0.010452589951455593, -0.027029909193515778, -0.011557278223335743, -0.007676885463297367, 0.01526987086981535, 0.005547913257032633, -0.019520824775099754, -0.02166028320789337, 0.010760225355625153, 0.0078656617552042, 0.02714177593588829, -0.05668869614601135, 0.008047445677220821, 0.023701859638094902, 0.01819240115582943, -0.020863229408860207, -0.006453338079154491, -0.01455671712756157, -0.028064679354429245, 0.023030657321214676, -0.009173109196126461, 0.00983032863587141, 0.03135078027844429, -0.007774769328534603, 0.006219116505235434,

-0.02019202709197998, 0.029532937332987785, -0.028316380456089973, -0.006530247163027525, 0.026834141463041306, 0.004579562693834305, 0.0014245586935430765, -0.021688250824809074, -2.9223117962828837e-05, -0.016780078411102295, -0.01075323298573494, 0.012627008371055126, 0.026134971529245377, 0.0004854861181229353. -0.0015591488918289542, 0.003604220924898982, -0.04259343072772026, -0.03232961520552635, 0.007023161742836237, 0.023212440311908722, 0.018416134640574455. -0.009466760791838169. -0.01647244393825531, 0.021800117567181587, 0.016738127917051315, 0.0068938154727220535, -0.00715250801295042, -0.020989080891013145, -0.02105899713933468, 0.0037929967511445284, -0.008431988768279552, 0.016738127917051315, 0.19341836869716644, 0.020751362666487694, 0.02452688105404377, 0.03957301750779152, -0.009858295321464539, 0.024904431775212288, 0.004862726666033268, -0.004534116946160793, 0.008026470430195332, 0.03481866046786308, 0.02112891525030136, -0.002181410090997815, 0.010914042592048645, -0.009040267206728458, -0.010921034030616283, 0.01912928931415081, -0.04320869967341423, -0.03459492698311806,

-0.029001567512750626, -0.004873214289546013, -0.007320309057831764, -0.019940325990319252, -0.019157255068421364, -0.006554718129336834, 0.008802548982203007, -0.005348649807274342, -0.02363194338977337, 0.007935578934848309, 0.002069542882964015, 0.010809166356921196, -0.007935578934848309, 0.005932456813752651, 0.00438379542902112, -0.019884392619132996, -0.014332982711493969, -0.0045620836317539215, 0.02947700396180153, 0.007572010159492493, 0.029812604188919067. 0.0026830644346773624, 0.005086461082100868, -0.03515426442027092, 0.021184848621487617, -0.011522320099174976, 0.007159499917179346, 0.018569953739643097, -0.01385754719376564, -0.01117972657084465, 0.008872466161847115, 0.00025126419495791197, -0.015997007489204407, 0.0014595171669498086, 0.0469282828271389, 0.01230539008975029, 0.030232107266783714, 0.007579001598060131, 0.005027031525969505, -0.004597042221575975. 0.009550660848617554, 0.005247270222753286, -0.02633073925971985, -0.0004122917598579079, -0.013948439620435238, 0.02550571784377098, -0.04013235121965408, -0.01782883331179619, -0.025072233751416206, -0.010935017839074135,

- -0.018653852865099907, -0.012864726595580578, -0.006079282145947218, -0.03853824362158775, 0.022471321746706963, -0.009585619904100895, 0.007774769328534603, -0.02669430710375309, 0.011536303907632828, 0.014458834193646908, 0.022177670150995255, 0.03557376563549042, -0.004880206193774939, -0.019157255068421364, -0.005240278318524361, -0.023687876760959625, -0.006222612224519253, -0.03244148567318916, 0.012165556661784649, 0.007222425192594528, -0.017395347356796265. -0.014277049340307713, -0.030232107266783714, -0.02533791773021221, -0.0029959429521113634, -0.006481305230408907, 0.010914042592048645, 0.02117086574435234, -0.005904489662498236, 0.023687876760959625, 0.005740184802561998, -0.004275423940271139, -0.04186629503965378, 0.05000463128089905. 0.0035500351805239916, -0.011186718940734863, -0.012983584776520729, 0.0002704913495108485, -0.005422062706202269, -0.0039223432540893555. -0.004359324462711811, -0.025897253304719925, 0.004950122907757759, -0.02093314751982689, -0.004848743323236704, -0.0015206945827230811, 0.010403648018836975, 0.012927651405334473, 0.012130597606301308, -0.017031779512763023,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAI_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.010354706086218357, 0.02178613469004631, 0.020989080891013145, -0.00827817153185606, 0.01823435164988041, 0.009879270568490028, 0.00807541236281395, 0.0024470947682857513, -0.016626261174678802, -0.007606968749314547, 0.026764223352074623, -0.024876466020941734, -0.0034346722532063723, -0.0035430435091257095. -0.00017402776575181633, -0.01978650875389576, -0.0018877587281167507, 0.022093769162893295, -0.004076160490512848, -0.01322130300104618, 0.018010616302490234. -0.012494166381657124, 0.013389104045927525, 0.008536865003407001, -0.009732444770634174. -0.020080160349607468, -0.01279480941593647, -0.0101030049845576290.016668209806084633, 0.012046697549521923, 0.005292716436088085, -0.02694600820541382, -0.03151857852935791, -0.021450532600283623, -0.010061055421829224, -0.008942383341491222, 0.021898001432418823, -0.024680698290467262, -0.006932269781827927, -0.04060778766870499, -0.0034941015765070915, 0.016164807602763176, -0.03839841112494469, -0.002230352023616433, 0.020010242238640785, -0.007453151047229767, -0.05579375848174095, -0.012025722302496433, -0.17988243699073792, 0.007481118198484182,

0.0314067117869854, -0.01549360528588295, 0.005761160049587488, 0.0037475507706403732, 0.01634659245610237, -0.02276497147977352, -0.007271367125213146, -0.03470679372549057, 0.0425095297396183, -0.01712966337800026, -0.02358999289572239, -0.01261302549391985, -0.02537986822426319, 0.017800865694880486, -0.008536865003407001, 0.026834141463041306, 0.034566961228847504, 0.010438607074320316, 0.028805799782276154, -0.011983771808445454, 0.012172548100352287, -0.013305203057825565, 0.004097135737538338, -0.009152133949100971, -0.00987227912992239, 0.0327770859003067, 0.010725266300141811, -0.009466760791838169, -0.0037195838522166014, 0.023072607815265656, 0.01638854295015335, -0.013277236372232437, 0.03344829007983208, -0.005722705740481615, 0.012969601899385452, -0.011864913627505302, 0.006956740748137236, 0.011927838437259197, -0.0026148955803364515, 0.027533311396837234, 0.005034023430198431, -0.031378746032714844. -0.019436923786997795, 0.021324682980775833, 0.020793313160538673, -0.018178418278694153, 0.007107062265276909, -0.04242562875151634, 0.009319934993982315, -0.024093395099043846,

-0.011291594244539738, -0.008858482353389263, 0.012263440527021885, 0.019283106550574303, -0.007599976845085621, 0.013612838461995125, 0.010165930725634098, -0.005292716436088085, 0.004978089593350887, -0.021478500217199326, 0.0009508710936643183, -0.004310382530093193, 0.009662528522312641, -0.007935578934848309, -0.014179165475070477, 0.017353396862745285, -0.012165556661784649, 0.0038559220265597105, -0.02714177593588829, -0.01687796227633953, 0.033867791295051575. -0.003196954494342208, 0.03045584075152874, 0.009298959746956825, -0.009620578028261662, 0.019269121810793877, 0.020611528307199478, 0.008676698431372643, -0.01619277521967888, 0.02841426432132721, 0.0059988778084516525, 0.003478370374068618, 0.016696177423000336, 0.004796305671334267, -0.016849994659423828, -0.003985268529504538, 0.0010767217027023435, 0.017143646255135536, 0.03305675461888313, -0.008935391902923584, -0.00852288119494915, -0.009683502838015556, 0.010928025469183922, 0.0060478197410702705, 0.0024680697824805975, 0.013787630945444107, 0.0014359202468767762, -0.006414883770048618, 0.005726201459765434, 0.011165743693709373,

-0.021450532600283623, 0.013612838461995125, 0.03613309934735298, -0.00562132615596056, -0.025156132876873016, 0.03232961520552635, 0.0219119843095541, -0.019143272191286087, -0.02607903815805912, 0.02187003567814827, 0.008334104903042316, 0.015465638600289822, 0.012668958865106106, 0.04063575342297554, 0.010837133973836899, -0.03459492698311806, -0.013521946035325527-0.0014804922975599766, 0.03663650155067444, -0.01933903992176056, -0.02297472395002842. -0.002125476486980915, -0.000681690638884902, -0.013270244933664799, -0.060072679072618484, -0.030763475224375725, 0.012780825607478619, 0.011976780369877815, -0.01806654967367649, 0.0003491479728836566, -0.0006012861267663538, 0.03904164955019951, -0.0026271308306604624, -0.021226799115538597. 0.003716088132932782, 0.00987227912992239, -0.002420875709503889, 0.00011809416901087388, 0.018164433538913727, -0.0037929967511445284. -0.023841693997383118, 9.750142635311931e-05, -0.03168638050556183, 0.022918790578842163, 0.013892506249248981, -0.02157638408243656, 0.012249456718564034, -0.009795370511710644, 0.0007699608686380088, 0.015675390139222145,

-0.029672771692276, 0.018569953739643097 0.015339788049459457, -0.026400655508041382, 0.020611528307199478, -0.02023397758603096, 1.3331340369404643e-06, -0.014822402037680149, -0.0010041827335953712, 0.009928212501108646, -0.005348649807274342, -0.011613212525844574, 0.03521019592881203, -0.008222238160669804. 0.009243026375770569, 0.040943391621112823, 0.01708771288394928, -0.04922156035900116, -0.014332982711493969, -0.016374560073018074, 0.0018440606072545052, 0.00548848370090127, 0.005894002504646778, -0.015018169768154621, -0.033252522349357605. 0.0032826026435941458, -0.017996633425354958, 0.010914042592048645, -0.0069672283716499805, -0.00983032863587141, 0.013864539563655853, 0.023198457434773445, 0.00010968228161800653, -0.037671275436878204, -0.01117972657084465, -0.012871718034148216, -0.004348836839199066, 0.05020039901137352, 0.005048006772994995, -0.0021551912650465965. -0.0073622590862214565, -0.021408582106232643, 0.011004934087395668, -0.01522792037576437, -0.005425558425486088, -0.0076419273391366005, -0.0017129662446677685, -0.001426306669600308, -0.025897253304719925, 0.010068046860396862,

-0.012724892236292362, -0.006523255258798599, 0.007383234333246946, -0.01140346098691225, -0.024107377976179123, -0.010005121119320393, -0.01884962059557438, -0.0018353209597989917, 0.018164433538913727, 0.024708664044737816, 0.006586180534213781, 0.021884018555283546, 0.03081941045820713, -0.029504969716072083, 0.018611902371048927, -0.005607342813163996, 0.03624496981501579, -0.03755940869450569, -0.013004560023546219, 0.01434696651995182, 0.027197709307074547, -0.012515141628682613, 0.000878332182765007, 0.0023387232795357704, -0.06689658015966415, -0.0385102778673172, -0.0840681865811348, 0.025295967236161232, 0.010438607074320316, -0.0465087816119194, -0.014892319217324257, -0.029085468500852585, -0.0018195896409451962. -0.03344829007983208, -0.011102817952632904, 0.022023852914571762, -0.02174418419599533, 0.010886075906455517, 0.012039706110954285, -0.012417257763445377. -0.009131158702075481, -0.026624390855431557, 0.02484849840402603, -0.004775330424308777, 0.017367379739880562, 0.005338162183761597, 0.004785818047821522, -0.0256735198199749, 0.016416508704423904, 0.02526800148189068,

-0.0035360518377274275, 0.03196604922413826, -0.01455671712756157, 0.02575741894543171, -0.0005807480192743242, -0.014752484858036041, 0.01631862483918667, -0.022918790578842163, -0.02261115424335003, 0.010781199671328068, 0.018052566796541214, 0.004736876115202904, -0.004750859457999468, 0.02199588529765606. 0.015913106501102448, 0.003478370374068618, -0.027155758813023567, -0.015633439645171165, 0.01252912450581789, -0.0323016494512558, -0.015507588163018227, 0.011046884581446648, -0.0012384046567603946, -0.0014079534448683262, 0.01117972657084465, -0.012179539538919926, 0.025128167122602463, 0.015759289264678955, -0.03445509448647499, -0.03314065560698509, 0.004995569121092558, -0.023044640198349953, -0.002940009580925107, 0.016710160300135612, -0.0030536246486008167, 0.004866222385317087, 0.03937724977731705, 0.004565579351037741, 0.01942294090986252, 0.0018388169119134545, 0.016654226928949356, -0.005575879942625761-0.006708535365760326, 0.015395721420645714, 0.013375120237469673, -0.02265310473740101, -0.013619829900562763, -0.026764223352074623, -0.0030728518031537533, 0.012689934112131596,

0.01234734058380127, -0.0034171929582953453, -0.003918847534805536, -0.03364405781030655, 0.005240278318524361, 0.0416145920753479, 0.009718461893498898, -0.005582871846854687, -0.013193336315453053, 0.019143272191286087, 0.026218872517347336, 0.005498971324414015, -0.004114614799618721, -0.008928399533033371. -0.0013939699856564403, -0.013542921282351017, -0.03151857852935791, 0.02510019950568676, 0.004569075535982847, 0.020667461678385735, -0.0011711096158251166, 0.017465263605117798, -0.005159873981028795, 0.006201636977493763, 0.012431240640580654, -0.010005121119320393, -0.006215620320290327, 0.013787630945444107, 0.01946488954126835, -0.03878994658589363, -0.02031787671148777, -0.005838068667799234, -0.04885799437761307, -0.003378738649189472, -0.02080729603767395, 0.011697112582623959, 0.01647244393825531, -0.010501531884074211, 0.004436233080923557, 0.005135403014719486, -0.017605097964406013, 0.007236408535391092, 0.00023312946723308414, -0.002006617607548833, -0.03602123260498047, 0.025281984359025955, 0.00460752984508872, 0.001992634264752269, 0.04852239042520523, -0.0019349526846781373,

0.001352893770672381, 0.004841751419007778, 0.0008564831223338842, 0.006806419230997562, 0.018304267898201942, 0.0038629136979579926, -0.0003819215635303408, -0.0010706039611250162, -0.023701859638094902, -0.027812978252768517, -0.00788663700222969, -0.011829954572021961, -0.03442712500691414, -0.01630464196205139, 0.006670081056654453, 0.08775980770587921, 0.012585058808326721, -0.02010812610387802, 0.0219119843095541, -0.032525382936000824, 0.02019202709197998, -0.0005855548079125583, 0.010026096366345882, 0.0010950749274343252, -0.022904805839061737. -0.004579562693834305, -0.015647422522306442, 0.005680755712091923, -0.02930920198559761, -0.027463393285870552, 0.007774769328534603, -0.018695803359150887, 0.010235847905278206, 0.003401461523026228, 0.01778688281774521, 0.02427517995238304, 0.02412136271595955, 0.005467508919537067, 0.0018755232449620962, -0.030595675110816956, 0.0037755174562335014, 0.016668209806084633, -0.02276497147977352, 0.00539409602060914, -0.002174418419599533, 0.007096574641764164, 0.0074601429514586926, -0.02416331134736538, -0.019646674394607544, 0.008306138217449188,

```
0.007369250990450382,
      0.005404583178460598,
      -0.014710535295307636,
      0.01900343783199787,
      -0.015913106501102448,
      0.02031787671148777,
      0.008089396171271801,
      -0.04374007135629654,
      -0.029197335243225098.
      -0.0012392787029966712,
      -0.030064305290579796,
      -0.0015888636698946357,
      -0.024415012449026108,
      -0.022750988602638245
 }
},
 "_index": "pdgithub_issues",
 " id": "MzyfUZMBhjF0vW2DRbFb",
 " score": 1.0,
  " source": {
   "_type": "issue",
   "_repo": "langchain",
    " issueNumber": "28272",
   "_title": "api-docs: add standard tests package to build",
    " createdAt": "2024-11-21T23:33:36Z",
   "_closedAt": "2024-11-21T23:35:48Z",
    " state": "closed",
    "_body": "None",
    "GitHub Issue vector": [
      -0.00266593461856246,
      -0.00042508705519139767,
      0.010304286144673824,
      -0.0032703070901334286,
      -0.028544705361127853,
      0.018860649317502975,
      -0.003763672197237611,
      -0.030560454353690147,
      -0.01621057279407978,
      -0.0016104852547869086,
      0.023033110424876213,
      -0.003592756576836109,
      0.00851407554000616,
      0.007858604192733765,
      -0.007273613940924406,
      -0.0017250165110453963,
      0.01566082425415516,
      -0.029432762414216995,
      0.014927824027836323,
```

0.017761150375008583, 0.0171832088381052, 0.01380013208836317, -0.00849997904151678, 0.011615228839218616, -0.027952667325735092, 0.025175726041197777, 0.01018446870148182, -0.025767764076590538, 0.007421623449772596, 0.00681196479126811, 0.03340787813067436, -0.02600739896297455, -0.006269263103604317. -0.029066262766718864, -0.003021862357854843, -0.0018342616967856884, 0.018818361684679985, 0.00014327415556181222, 0.01386356446892023, -0.012348228134214878, 0.011876007542014122, 0.00811938289552927, 0.0162669587880373, -0.017042245715856552, -0.014899631962180138, -0.004221796989440918, 0.024499110877513885, -0.012355276383459568, -0.0009232978918589652, 0.01570311188697815, 0.017042245715856552, -0.0045706769451498985, 0.003562802216038108, 0.020425323396921158, 0.017803438007831573, 0.011798478662967682, 0.0011461932444944978, 0.02060857228934765, 0.00804890226572752. -0.020270265638828278, -0.006808441132307053, -0.008168719708919525, -0.0271350909024477, 0.001348825404420495, -0.01066373847424984, -0.013764891773462296. 0.0034817492123693228, 0.011749141849577427, 0.012002872303128242,

file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.030616840347647667, 0.030193954706192017, 0.012580814771354198, -0.0009144878131337464, -0.013447728008031845, 0.04784233495593071, -0.005959147587418556, 0.010297237895429134, -0.022582033649086952, -0.010614401660859585, -0.009028584696352482, 0.025091148912906647. 0.0036121385637670755, -0.019410399720072746. 0.02626112848520279, 0.0323929563164711, 0.00818986352533102, 0.013158757239580154, 0.019903765991330147, 0.00835196953266859, -0.01699995808303356. 0.029601916670799255, 0.006223450414836407, 0.014448554255068302, 0.018804265186190605, -0.00030416849767789245, 0.04600983485579491, -0.012002872303128242, 0.050097718834877014, 0.03602976351976395, -0.061797525733709335, -0.001755851786583662, 0.009965978562831879, -0.027882186695933342, -0.00262717017903924, -0.0005268436507321894, -0.020030630752444267, 0.0006444583996199071, 0.0010880467016249895, 0.023061303421854973, 0.012073352932929993, -0.028178205713629723, 0.039751145988702774, 0.0072524696588516235, -0.05390368029475212, 0.023625148460268974, -0.0035610401537269354, -0.009331651963293552, -0.03684733808040619, -0.003421840723603964,

0.00547987874597311, 0.029489148408174515, 0.015618535690009594, 0.014434458687901497. 0.002662410493940115, 0.0003094545681960881, 0.004443811718374491, -0.013743747025728226, -0.029489148408174515, -0.012757016345858574, -0.009550142101943493, 0.015562150627374649. 0.009254123084247112, -0.002803371986374259. -0.012552622705698013, -0.01608370803296566, 0.006008484400808811, -0.008246248587965965, 0.020030630752444267, -0.019664131104946136, -0.02627522498369217, -0.005737133324146271, 0.034479185938835144, -0.02200409211218357, -0.02128518745303154, -0.030645031481981277, 0.02717737853527069. 0.01057916134595871, -0.0005752991419285536, 0.022807572036981583, -0.0335206463932991, 0.0025108768604695797, -0.0223705917596817, -0.007407527416944504, -0.0009523712215013802, -0.015068785287439823, 0.01604142040014267, -0.011164151132106781, 0.012327084317803383, -0.03321053087711334, 0.01026199758052826, 0.001115357968956232, 0.02104555256664753, 0.008774854242801666, -0.03704468533396721, 0.005282532423734665, 0.029912032186985016, 0.018014881759881973, -0.007093887776136398, -0.004722210578620434,

-0.00559617206454277, -0.01074126735329628, 0.0028157061897218227, -0.04493853077292442, 0.024513207376003265, -0.008521122857928276, 0.04454383626580238, -0.0005616435082629323, 0.02197589911520481, -0.018169937655329704, 0.006463085301220417, -0.02595101296901703, -0.0005590004730038345, 0.012665391899645329, 0.05711760371923447, 0.003774244338274002, 0.012320036068558693, 0.009839113801717758, 0.0025531654246151447, 0.023399610072374344, 0.006501849740743637. 0.024203091859817505, 0.020115207880735397, -0.00828853715211153, 0.0009594192961230874, -0.6094048023223877, -0.010769459418952465. -0.0024368721060454845, -0.011291016824543476, 0.013891756534576416, 0.02765664830803871, 0.011868959292769432, -0.002873852849006653, 0.0001169540046248585, 0.012270699255168438, -0.02736062929034233, 0.02772712893784046, 0.019142573699355125, -0.011403786018490791, -0.0014272353146225214. -0.009916641749441624, 0.034535568207502365, -0.007470959797501564, -0.029263610020279884, 0.013088276609778404, -0.04600983485579491, 0.018494149670004845, 0.003326691687107086, -0.005271960515528917, 0.02180674485862255,

-0.029404571279883385, 0.022342398762702942, 0.007703546434640884, 0.008831238374114037, -0.0005616435082629323, -0.023822495713829994, 0.023653341457247734, 0.00673443591222167, -0.00042861109250225127, 0.045445989817380905. 0.004461431875824928, -0.009169545955955982, 0.010825843550264835, 0.009190690703690052. 0.01578768901526928, -0.02737472578883171, 0.006184686440974474, -0.0008845334523357451, 0.00819691177457571, -0.011143007315695286, -0.010001218877732754, 0.020270265638828278, -0.000212213140912354, -0.006938830483704805, 0.009458517655730247, 0.035691455006599426, -0.01639382354915142, -0.004080835729837418, 0.011650469154119492, -0.0019311726791784167, -0.034620147198438644, 0.025133436545729637, -0.029179032891988754, 0.006100109312683344, 0.008690277114510536, 0.007322950288653374, 0.005687796976417303, 0.0069775949232280254, -0.020383033901453018, -0.005560931749641895, 0.00841540191322565, 0.007365238852798939, 0.0260778795927763, 0.014427410438656807, -0.045756105333566666, -0.007358190603554249, -0.017577899619936943, -0.004669350106269121, -0.005701893009245396, 0.014688189141452312,

0.028953494504094124, 0.018522342666983604, 0.011650469154119492, -0.03608614578843117, 0.01582997664809227, 0.0010501632932573557. -0.014300544746220112-0.019946053624153137, -0.014124343171715736, 0.02597920596599579, 0.008739613927900791, -0.01604142040014267, 0.00397863844409585, 0.003774244338274002, -0.0111148152500391, 0.006255167070776224, 0.017056342214345932, 0.01582997664809227, -0.0059274313971400260.0007845389191061258, 0.023047206923365593. 0.014194823801517487, 0.008485882543027401, 0.020101111382246017, -0.025175726041197777, -0.009916641749441624, 0.023470090702176094, -0.0053917779587209225, 0.009282315149903297, 0.029122648760676384, -0.009056776762008667, -0.02754387818276882, 0.014025670476257801, 0.011720949783921242, 0.0025619755033403635, -0.017507418990135193, 0.004746878985315561, -0.002865042770281434, 0.018931129947304726, -0.0034095065202564, -0.04383902996778488, -0.017324170097708702, -0.02590872533619404, 0.004098455887287855, 0.018057169392704964, -0.020256169140338898, 0.003562802216038108, 0.0010915707098320127, 0.02228601463139057, 0.017070438712835312,

0.001057211309671402, -0.008655036799609661, -0.017267784103751183, -0.009923689998686314, 0.003155775833874941, -0.005113378632813692, 0.02158120647072792, 0.018804265186190605, -0.011072526685893536, 0.012651295401155949, 0.02239878475666046, 0.01659116894006729, -0.009409180842339993, 0.015590342693030834. -0.0002951381611637771, -0.006649859249591827, -0.003011290216818452, 0.004390951246023178, -0.022412879392504692, 0.014300544746220112, -0.040343184024095535. -0.029714686796069145, 0.0005277246236801147, -0.004711638670414686, 0.005962671712040901, -0.017084535211324692-0.0070163593627512455, -0.01691538095474243, -0.01592865027487278, -0.004271133802831173, 0.004426191560924053, 0.027698935940861702, -0.03848249092698097, -0.008091190829873085, -2.0166857211734168e-05, 0.023737918585538864, -0.009317555464804173, -0.019283534958958626, -0.012545574456453323, -0.01649249717593193, -0.008070046082139015, -0.01585816964507103, 0.02072134241461754, -0.006544138304889202, -0.03343607112765312, 0.0014950729673728347, -0.01633743941783905, -0.006815488915890455, -0.012094497680664062, 0.0037601483054459095,

0.002216619672253728, -0.013356102630496025, 0.0032861651852726936, -0.023103591054677963, -0.005856950767338276, -0.004278181586414576, 0.0016474876319989562, -0.02637389861047268, 0.01294026616960764, 0.03228018432855606, 0.015125170350074768, 0.025654993951320648, 0.011150055564939976, 0.012369372881948948, -0.005775897763669491, -0.024273572489619255, 0.00670976797118783, -0.012404613196849823, 0.0007946704863570631, -0.0213133804500103, 0.002986622042953968, -0.0011268110247328877, 0.005085186567157507, 0.00826034415513277, 0.023667437955737114, -0.004546008538454771, 0.0069775949232280254. -0.002498542657122016, -0.015519862063229084, 0.007569632958620787, -0.014645900577306747, 0.011150055564939976, -0.02744520641863346, 0.009070873260498047, -0.011805525980889797, 0.012771112844347954, -0.017352361232042313, -0.023512380197644234, -0.00788679625838995, 0.0005977649125270545. -0.006054296623915434, -0.007344094570726156, -0.020383033901453018, -0.01694357395172119, 0.0015082882018759847, -0.013433631509542465, -0.003883489640429616, 0.0038729174993932247, -0.0019346966873854399. 0.013856516219675541,

-0.0143921701237559320.010677834041416645, 0.03834152966737747, 0.02122880332171917, 0.008711420930922031, -0.002364629413932562, 0.023596957325935364, 0.005606743972748518, -0.007322950288653374, 0.023089494556188583, 0.015153362415730953, 0.024597782641649246, -0.017408747225999832, 0.024062128737568855, -0.025344880297780037, 0.019692322239279747, 0.017169112339615822, 0.01677441969513893, -0.01325742993503809, 0.03664999082684517, 0.0006070155068300664. 0.025429455563426018, 0.00836606603115797, 0.011713901534676552, -0.007287709973752499. 0.006914162077009678, -0.011516555212438107. -0.00020923973352182657, -0.009077921509742737, 0.014984208159148693, -0.017648380249738693, -0.029658300802111626, 0.034845683723688126. -0.0015902220038697124, 0.02128518745303154, 0.019128477200865746, -0.014067959040403366, 0.025387167930603027, 0.02111603319644928, 0.03354883939027786. -0.014237112365663052, -0.0078163156285882, -0.017620189115405083, 0.01611190102994442, -0.0072066569700837135, -7.246302266139537e-05, -0.007421623449772596, 0.004013878758996725, -0.019889669492840767, 0.05263502895832062,

- 0.011720949783921242, 0.0042922780849039555, 0.02626112848520279, 0.0271350909024477, -0.028121821582317352, -0.030081186443567276, -0.024329956620931625, -0.0003213481977581978, 0.008302632719278336, -0.004013878758996725, -0.004503720439970493, -0.024682359769940376, 0.0008299108594655991, -0.025387167930603027. 0.016901284456253052, -0.0015549816889688373, -0.008584556169807911, -0.011361497454345226, -0.022737091407179832, -0.015139265917241573, -0.0019311726791784167, 0.023145880550146103, -0.01643611118197441, 0.007315902505069971, 0.02083411067724228, 0.0020738961175084114, 0.003546943888068199. 0.029742877930402756, -0.007428671699017286, 0.022863956168293953, 0.015280227176845074, 0.00208270619623363, -0.03546591475605965, 0.0019117904594168067, -0.002216619672253728, 0.02125699631869793, 0.007851555943489075, 0.011756190098822117, -0.007485056295990944, -0.008683228865265846, 0.0031029151286929846, -0.0028350884094834328. -0.014279400929808617, 0.017535611987113953, 0.0017593757947906852, -0.0165488813072443, -0.0330977626144886, -0.003206874243915081, 0.0039997827261686325, 0.023822495713829994,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.04772956669330597, 0.011361497454345226, 0.004454383626580238, -0.01598503440618515, 0.02096097730100155, -0.011622276157140732, 0.009958930313587189, -0.001368207624182105, -0.018747881054878235, -0.019621841609477997, -0.006797868758440018, -0.00405616732314229, 0.006212878506630659, 0.03202645480632782. 0.02055218815803528, -0.012186122126877308, -0.017126822844147682, -0.025316687300801277-0.0007034860318526626, 0.0006669241702184081, -0.03244933858513832. 0.004686970263719559, 0.006487753242254257, 0.045192260295152664, -0.006026104558259249, -0.025232110172510147, 0.013743747025728226, 0.025584513321518898, -0.012869785539805889, 0.010290190577507019, 0.0026676966808736324, 0.0006629595882259309. 0.030560454353690147, -0.02643028274178505, 0.040963415056467056, -0.003044768702238798, 0.00034711771877482533, -0.003060626797378063, 0.02065086178481579, 0.0132503816857934, -0.001957603031769395, -0.00547987874597311, -0.02108784206211567, 0.017591996118426323, 0.005892191082239151, -0.01637972705066204, 0.00804890226572752, -0.0055855996906757355, -0.019128477200865746, 0.02717737853527069,

0.020227976143360138, -0.03915910795331001, -0.03149080276489258, 0.03729841485619545, 0.025697283446788788, -0.025767764076590538, 0.019410399720072746, -0.02074953354895115, -0.013666218146681786, -0.03205464780330658, 0.009691103361546993, -0.025232110172510147, -0.0206790529191494, -0.030785992741584778. -0.004827931523323059, -0.02180674485862255, -0.011206439696252346, -0.03735480085015297, 0.009148402139544487, 0.009832065552473068, -0.013292670249938965, -0.005028801970183849, 0.014053862541913986, 0.022722994908690453, -0.0007215467048808932, 0.01584407314658165, -0.011495411396026611, 0.009606527164578438, 0.02686726301908493, -0.022962629795074463, -0.02170807309448719, 0.011805525980889797, 0.0007554655894637108, 0.02146843820810318, 0.012277747504413128, -0.0012351751793175936, -0.004161888733506203, -0.0026254081167280674, 0.03580422326922417, -0.02156711183488369, 0.017338264733552933, -0.0056278882548213005, -0.035296760499477386, 0.012834545224905014, 0.00210208841599524, 0.003714335849508643, 0.017648380249738693, -0.018959322944283485. 0.011643420904874802, -0.0066392868757247925,

- -0.03247753158211708, -0.019635938107967377. -0.024414533749222755, -0.006551186088472605, -0.0018272135639563203, -0.012242507189512253, 0.0159145537763834, -0.033971723169088364, 0.017239592969417572, 0.003543419996276498, -0.018902938812971115, -0.007400479167699814, 0.0069670225493609905, 0.009099065326154232, 0.019762802869081497, 0.011460171081125736, 0.02149662934243679, -0.010445247404277325-0.008866478689014912, 0.012489189393818378, -0.03749576210975647. 0.018846554681658745, 0.03146260976791382, 0.0061106812208890915, 0.020044727250933647, -0.01071307435631752, -0.008767805993556976, -0.02662762999534607, -0.005398825742304325, 0.009846161119639874, 0.015252035111188889, 0.008965152315795422, -0.006847205106168985 -0.0005907168379053473, -0.03290041536092758, 0.006107157561928034, 0.0010096367914229631, -0.00533186923712492, -0.004450859501957893, -0.015181554481387138, 0.0031892540864646435, -0.018508246168494225, -0.02165168710052967, 0.0017858061473816633, -0.03882079944014549, 0.0016219383105635643, 0.009282315149903297, -0.0007352023967541754, 0.02136976458132267, -0.029855648055672646,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.004997085314244032, 0.010219709016382694, 0.012038112618029118, -0.015576247125864029-0.019988341256976128, 0.008619796484708786, -0.007104460150003433, 0.034450992941856384, 0.03304137662053108, 0.023667437955737114, -0.00789384450763464, 0.020185688510537148, -0.011495411396026611, 0.029150839895009995. -0.013926996849477291, -0.0266417246311903, -0.00021815995569340885, -0.00656175846233964, -0.00821100827306509, 0.017451034858822823, 0.01564672775566578, 0.0029883841052651405, 0.0054270182736217976, -0.018860649317502975, 0.025711379945278168, -0.0223705917596817, -0.0017003482207655907, -0.022708898410201073, -0.04491033777594566, -0.022948533296585083, 0.009077921509742737, -0.040286798030138016, 0.024400437250733376, -0.045389607548713684, -0.019339919090270996, 0.05813252553343773, -0.002117946743965149, 0.0028562326915562153, -0.009211834520101547, 0.0318291075527668, -0.023681534454226494, 0.0156326312571764, 0.0037953886203467846, 0.006385556422173977, -0.020030630752444267, 0.01324333343654871, -0.008605699986219406, -0.006995215080678463, 0.008929912000894547, 0.014223015867173672,

0.019635938107967377, -2.0318280803621747e-05, 0.013236286118626595, -0.024724649265408516, 0.0426267609000206, -0.02724785916507244, -0.0036473791114985943, -0.02121470682322979, -0.023568764328956604, -0.0022430499084293842, -0.019269438460469246, 0.01356754545122385, -0.022497456520795822, 0.02110193856060505, 0.010177421383559704, -4.3307121813995764e-05, 0.01590045914053917, -0.03292860835790634, 0.007513248361647129, 0.019748708233237267, -0.009500805288553238, 0.04195014387369156, 0.034084491431713104, 0.018860649317502975, 0.024033937603235245, 0.017747053876519203, -0.02624703384935856, -0.0037883406039327383, -0.02603559009730816, -0.008464738726615906, 0.02158120647072792, 0.016985861584544182, -0.009324603714048862, -0.031152494251728058, 0.019819188863039017, 0.011749141849577427, -0.008781902492046356, -0.040850646793842316, 0.005261388141661882, 0.003265020903199911, 0.012545574456453323, -0.02726195566356182, 0.012136786244809628, -0.025499936193227768, 0.012693583965301514, -0.009712248109281063, -0.007245421409606934, -0.011312161572277546, -0.01320104580372572, 0.012792256660759449,

0.015139265917241573, -0.007139700464904308, 0.03777768462896347, 0.023554667830467224, -0.030109377577900887, 0.007668306119740009, -0.0017919731326401234, -0.0016809660010039806, 0.019833283498883247, 0.019057996571063995, 0.039441030472517014, 0.0020809443667531013, 0.0020210356451570988, 0.01666164956986904, 0.005194431636482477, -0.007421623449772596, -0.002976049901917577, 0.019184861332178116, 0.040343184024095535, -0.02073543891310692, 0.006121253594756126. 0.008598651736974716, -0.01354640070348978, 0.002177855232730508, -0.018141746520996094, -0.0128627372905612, -0.020115207880735397, -0.012031064368784428, -0.0033090715296566486, 0.012059257365763187, 0.019198957830667496, -0.002117946743965149, -0.013208093121647835, -0.013588689267635345, -0.004260561428964138, -0.0265007633715868, -0.014504939317703247, 0.007703546434640884, -0.02200409211218357, -0.034817494451999664, -0.004412095062434673, -0.02719147503376007, 0.014547227881848812, 0.0017549707554280758, 0.008929912000894547, -0.015407092869281769, 0.040540531277656555, -0.000717582181096077, 0.029263610020279884, -0.020016534253954887,

-0.02630341798067093, -0.010191516950726509, 0.00828853715211153, -0.012707680463790894, -0.019283534958958626, 0.0072524696588516235, -0.015082881785929203, -0.04288049042224884, -0.005219100043177605, 0.01072012260556221, 0.023625148460268974, -0.007414575200527906, -0.028446031734347343, 0.007442767731845379, 0.01118529587984085, 0.009225931018590927, -0.006068393122404814, -0.024513207376003265, 0.04908279702067375, -0.019903765991330147, -0.0004546008713077754. -0.00032090768218040466, -0.008598651736974716, -0.025288494303822517, 0.0037460520397871733, -6.502951146103442e-05, 0.007449815981090069. -0.01656297780573368, -0.029996609315276146, 0.0033425497822463512, 0.0014219492441043258, 0.0008673538104631007, -0.029545532539486885. -0.014575419947504997, -0.039779338985681534, -0.025415360927581787, 0.028727956116199493, 0.01578768901526928, 0.003562802216038108, 0.001784925116226077, 0.007992517203092575, 0.03306956961750984, 0.034479185938835144, -0.028615185990929604, -0.006614618934690952, -0.028953494504094124, -0.008605699986219406. -0.014716381207108498, -0.029968416318297386, -0.018494149670004845,

0.023216361179947853, 0.035324953496456146, 0.009789776988327503, -0.0111148152500391, -0.012749968096613884, -0.007196085061877966, 0.0006043724715709686, -0.008154623210430145, -0.012700632214546204, 0.010064652189612389, -0.00788679625838995, -0.01348296832293272, 0.017225496470928192, -0.006191734224557877. 0.019692322239279747, 0.0008316729217767715, -0.023075399920344353, -0.00033588483347557485, 0.00018247908155899495, 0.014131391420960426, -0.0322519950568676, -0.0046164896339178085, 0.005564455408602953, 0.020087014883756638, 0.018959322944283485, 0.02239878475666046, 0.013743747025728226, -0.00405616732314229, -0.008464738726615906, -0.029517339542508125, -0.006847205106168985, -0.015040593221783638, 0.01608370803296566, 0.006075440905988216, -0.01687309332191944, -0.019819188863039017, 0.01629514992237091, 0.006945878267288208, 0.02774122543632984, -0.0530015267431736, 0.006653383374214172, 0.023653341457247734, 0.019368112087249756, -0.023033110424876213, -0.013158757239580154, -0.014547227881848812, -0.030673224478960037, 0.024527302011847496. -0.010769459418952465, 0.01036771945655346,

0.03298499435186386, -0.012510334141552448, 0.003936350345611572, -0.022328302264213562, 0.024964284151792526, -0.028925301507115364, -0.005257864482700825, 0.02136976458132267, 0.0007281543221324682, -0.0015267893904820085, -0.02194770611822605, 7.361935422522947e-05, -0.009430324658751488, -0.007936133071780205. 0.010614401660859585, 0.030785992741584778, 0.0017153254011645913, -0.0013990430161356926, 0.00812643114477396, -0.03743937611579895, -0.02626112848520279. 0.013081228360533714, 0.022525649517774582, 0.018085362389683723, -0.011699805036187172, -0.014342833310365677, 0.01701405458152294, 0.017422841861844063, 0.008464738726615906, -0.014843246899545193, -0.020326649770140648, -0.02210276387631893, 0.0045319125056266785. -0.004894888494163752, 0.012108593247830868, 0.191820427775383, 0.02210276387631893, 0.025866437703371048, 0.03732660785317421, -0.012813401408493519, 0.025514032691717148, 1.92996121768374e-05, -0.010247902013361454, 0.004419143311679363, 0.03304137662053108, 0.02146843820810318, -0.0009188928524963558, 0.01063554547727108, -0.008711420930922031, -0.012982554733753204,

0.018945226445794106, -0.044825758785009384, -0.03580422326922417, -0.02767074480652809, -0.008936959318816662, -0.007611921522766352, -0.02062266878783703, -0.017817534506320953, -0.002819230081513524, 0.0027998480945825577, -0.005560931749641895, -0.019509073346853256, 0.011608180589973927, 0.0018148794770240784, 0.012002872303128242, -0.007287709973752499, 0.01056506484746933, 0.007534392643719912, -0.023145880550146103, -0.009874354116618633, -0.008549315854907036, 0.025429455563426018, 0.007618969772011042, 0.02729014866054058, 0.006177638191729784, 0.002322340849786997, -0.03594518452882767, 0.028713859617710114, -0.01364507433027029, 0.0031222973484545946, 0.023907072842121124, -0.010522776283323765, -0.012686535716056824, 0.01112186349928379, -0.0008351969299837947, -0.014603612013161182, -0.0016430825926363468, 0.05288875848054886, 0.013856516219675541, 0.028262782841920853, 0.001650130725465715, 0.0030800090171396732, -0.0040033068507909775, 0.011868959292769432, 0.009958930313587189, -0.024188995361328125, 0.002517924876883626, -0.013313814997673035. 0.028671570122241974, -0.039976682513952255,

- -0.018310900777578354, -0.02665582112967968, -0.007062171585857868, -0.012453949078917503, -0.01080469973385334, -0.014124343171715736, -0.03811599314212799, 0.019706418737769127, -0.012369372881948948, 0.006551186088472605, -0.029038071632385254, 0.01578768901526928, 0.017535611987113953, 0.023484187200665474, 0.03927187621593475, 0.000467816018499434, -0.023752015084028244, -0.007590777240693569, -0.018339091911911964, -0.008168719708919525, -0.028431937098503113, 0.010036459192633629, 0.006914162077009678, -0.020397130399942398, -0.01064259372651577, -0.034845683723688126, -0.02638799510896206, -0.0023981076665222645, -0.008020710200071335, 0.008894671685993671, 0.024442724883556366, -0.0021003265865147114, 0.0166898425668478, 0.004472003784030676, 0.00020615621178876609, -0.040596913546323776, 0.04358530044555664, -0.002325864974409342, -0.012200218625366688, -0.009056776762008667, 0.0018606919329613447, -0.00346765317954123, -0.003989210817962885, -0.0076964981853961945, -0.03261849284172058, 0.006766152568161488, -0.02198999561369419, -0.0002872090844903141, -0.004912508651614189, 0.015604439191520214,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.013208093121647835, 0.01319399755448103, -0.017676573246717453, 0.009705199860036373, 0.024682359769940376, 0.020185688510537148, -0.009183642454445362, 0.020397130399942398, 0.004757450893521309, 0.011157103814184666, 0.005723037291318178, -0.017465131357312202, -0.008218055590987206, 0.028290975838899612. -0.024569591507315636, -0.0025514033623039722, -0.007922036573290825, -0.005229671951383352, -0.024259475991129875, -0.00826034415513277, 0.024118514731526375. -0.003559278091415763, -0.014786862768232822, 0.019156668335199356, -0.01372260320931673, 0.013849467970430851, 0.008683228865265846, -0.012305939570069313, -0.02182084135711193, -0.017267784103751183, -0.005772373639047146, 0.019100284203886986, 0.012644247151911259, 0.004323994275182486, -0.022680707275867462, -0.0325339175760746, -0.025499936193227768, -0.008901719003915787, -0.009846161119639874, 0.02626112848520279, -0.02707870677113533, -0.00836606603115797, -0.040174029767513275, -0.004059691447764635, 0.020566284656524658, -0.03786225989460945, -0.004109027795493603, 0.023145880550146103, -0.011453122831881046, -0.055567026138305664,

-0.009120210073888302, -0.18155843019485474, 0.010628498159348965, 0.030081186443567276, -0.017563804984092712, 0.0077881235629320145, 0.0017100393306463957, 0.018339091911911964, -0.020298456773161888, -0.010170373134315014, -0.03653722256422043, 0.04299325868487358, -0.01588636264204979, -0.029489148408174515. -0.008781902492046356, -0.02688135951757431, 0.011291016824543476, -0.008401306346058846, 0.02721966803073883, 0.03205464780330658, 0.01602732390165329, 0.02599330246448517, -0.012517382390797138, 0.007329998537898064, -0.011227584443986416, 0.00414074445143342, -0.009352795779705048, -0.012298891320824623, 0.03132164850831032, 0.011495411396026611, -0.009564238600432873, -0.002250098157674074, 0.02066495642066002, 0.01064964197576046, -0.018141746520996094, 0.03388714790344238, -0.001252795453183353, 0.012876833789050579, -0.012024017050862312, 0.006716815754771233, 0.012742920778691769, -0.0042922780849039555, 0.024541398510336876, 0.0033636940643191338, -0.03160357102751732, -0.017535611987113953, 0.017436938360333443, 0.02155301533639431, -0.018198130652308464, 0.006068393122404814,

-0.0437544509768486, 0.006945878267288208, -0.028544705361127853, -0.009000392630696297, -0.0083449212834239, 0.012009920552372932, 0.02184903435409069, -0.003085294971242547, 0.011495411396026611, 0.010191516950726509, -0.008944007568061352, 0.008302632719278336. -0.022835765033960342, 0.0020774202421307564, -0.002322340849786997, 0.011128910817205906, -0.004436763469129801, -0.013299718499183655, 0.017620189115405083, -0.012996651232242584, 0.0030236244201660156. -0.022849861532449722, -0.017775246873497963, 0.03137803077697754, -0.0005871927714906633, 0.02734653279185295, 0.014053862541913986. -0.007393431384116411, 0.017324170097708702, 0.02113012969493866, 0.011481314897537231, -0.01618238165974617, 0.03191368654370308, 0.0020245597697794437. 0.0006620786152780056, 0.017958495765924454, -0.00030394826899282634, -0.01580178551375866, -0.0066850995644927025, -7.169214222813025e-05. 0.015082881785929203. 0.03385895490646362, -0.005994388367980719, -0.011636372655630112, -0.005881619174033403, 0.012009920552372932, 0.008626844733953476, -0.002197237452492118, 0.00686482572928071, -0.001073950552381575,

-0.0063961283303797245, 0.0035081796813756227, 0.006589950527995825, -0.018000785261392593, 0.015195650979876518, 0.034930262714624405, -0.0045283883810043335, -0.02610607072710991, 0.0326748788356781, 0.023455996066331863, -0.02637389861047268, -0.029460955411195755, 0.020340746268630028, 0.005571503657847643. 0.018564630299806595, 0.009662911295890808, 0.03611433878540993, 0.011453122831881046, -0.03208284080028534, -0.014117294922471046, -0.002169045154005289, 0.03681914508342743, -0.018677400425076485, -0.024879707023501396, -0.0022536220494657755. -0.002056275960057974, -0.0168308038264513, -0.05869637429714203, -0.029658300802111626, 0.009994170628488064, 0.008781902492046356, -0.01580178551375866, 0.00021441567514557391. 0.0010589733719825745, 0.04434649273753166, 0.0003444746835157275, -0.027994954958558083, 0.0034940834157168865, 0.004556580912321806, -0.00650889752432704 -0.0015426474856212735, 0.009627670980989933, -0.009380988776683807, -0.024752840399742126, -0.004560105036944151, -0.03349245339632034, 0.022934436798095703, 0.017662476748228073, -0.023047206923365593, 0.012390516698360443,

-0.01073421910405159, -0.00024381936236750335. 0.01580178551375866, -0.029545532539486885, 0.019043900072574615, 0.020383033901453018, -0.024823321029543877, 0.02125699631869793, -0.018959322944283485, -0.0005396182532422245, -0.014674093574285507, -0.0008021590765565634, 0.009684056043624878, -0.007358190603554249, -0.006498325616121292, 0.03301318734884262, -0.009973026812076569, 0.012207266874611378, 0.04144268482923508, 0.01680261269211769, -0.04854714497923851. -0.012975506484508514, -0.019494976848363876, -0.00393987400457263, 0.0072595179080963135. 0.004623537417501211, -0.009303459897637367, -0.02754387818276882, 0.003802436636760831, -0.017888015136122704, 0.010846988297998905, -0.011319208890199661, -0.012186122126877308, 0.012841593474149704, 0.0206790529191494, -8.755031558393966e-06, -0.040033068507909775, -0.011706853285431862, -0.012193170376121998, -0.002900283085182309, 0.055764373391866684, 0.006188210099935532, -0.0005708941025659442, -0.0038588212337344885, -0.02142614871263504, 0.01118529587984085, -0.017747053876519203. -0.0008783664088696241, -0.007675354368984699, -0.0013021319173276424,

0.00023589027114212513, -0.02600739896297455. 0.006234022788703442, -0.011967631988227367, -0.007266565691679716, 0.00783746037632227, -0.00783746037632227, -0.02589462883770466, -0.008626844733953476, -0.017549708485603333, -0.001364683615975082, 0.012890930287539959. 0.030250340700149536, 0.009275266900658607, 0.0257254745811224, 0.028234589844942093, -0.02738882042467594, 0.018240420147776604, -0.0066780513152480125, 0.033802568912506104, -0.03746756911277771, -0.01614009216427803, 0.012390516698360443, 0.02659943699836731, -0.011608180589973927, 0.0004726615734398365, 0.005610268097370863, -0.06839452683925629, -0.03419726341962814, -0.08113744854927063, 0.02627522498369217, 0.00826739240437746, -0.040314991027116776, -0.017155015841126442, -0.0328158400952816, -0.0037284318823367357, -0.03763672336935997, -0.009951882995665073, 0.02163759246468544, -0.01692947745323181, 0.005508070811629295, 0.015096977353096008, -0.014589516445994377, -0.01056506484746933, -0.022835765033960342, 0.024710552766919136, -0.006568806245923042, 0.0165488813072443, 0.008781902492046356, 0.00539530161768198,

-0.022342398762702942, 0.015139265917241573. 0.02105964906513691, -0.002764607546851039, 0.024400437250733376, -0.013067131862044334, 0.02760026417672634, -0.0039610182866454124, -0.017408747225999832, 0.011988776735961437, -0.023864783346652985, -0.025034764781594276, 0.01081174798309803, 0.017324170097708702. 0.011777333915233612, -0.005592647939920425, 0.02148253470659256, 0.019875572994351387, 0.0007391669205389917, -0.028826627880334854, -0.008831238374114037, 0.010522776283323765, -0.03321053087711334, -0.013990430161356926, 0.012531477957963943, -0.001127692055888474, -0.0031152493320405483, 0.009881401434540749, -0.014032718725502491, 0.023145880550146103, 0.018254514783620834, -0.034281838685274124, -0.03335149213671684, 0.007238373626023531, -0.0199742466211318970.0015391234774142504. 0.019241245463490486, -0.007097411900758743, 0.0061987824738025665, 0.03898995369672775, 0.006984642706811428, 0.014716381207108498, 0.0004691375361289829, 0.0159145537763834, -0.006452512927353382, -0.009352795779705048, 0.018719688057899475, 0.0128627372905612, -0.02091868780553341, -0.01673213206231594,

-0.028121821582317352, -0.002399869728833437, 0.015054688788950443, 0.019015707075595856, -0.004429715219885111, -0.005416445899754763, -0.03349245339632034, 0.00850702729076147, 0.04352891445159912, 0.007428671699017286, -0.0027152709662914276, -0.009965978562831879, 0.017888015136122704, 0.02654305286705494, 0.0034271266777068377, -0.002798086032271385, -0.014476747252047062, -0.0009576572338119149, -0.014504939317703247, -0.035719648003578186, 0.020242072641849518, 0.005205003544688225, 0.025203917175531387, -0.0029690018855035305, 0.017944399267435074, -0.006244594696909189, 0.008253296837210655, 0.011720949783921242, -0.00509223435074091, -0.0032703070901334286, 0.01026199758052826, 0.020171592012047768, -0.03580422326922417, -0.02643028274178505, -0.0012677726335823536, -0.04366987571120262, -0.0014633566606789827, -0.022694803774356842, 0.006043724715709686, 0.017253689467906952, -0.007407527416944504, 0.008817142806947231, 0.0024421580601483583, -0.0141877755522727970.011854862794280052, 0.0038482490926980972, 0.0012536763679236174, -0.035578686743974686, 0.02683907188475132, 0.00811938289552927,

0.004979465156793594, 0.0443182997405529, -0.004447335842996836, 0.002017511520534754, 0.009359844028949738, -0.0005752991419285536, 0.003524037776514888, 0.019368112087249756, 0.0037284318823367357, 0.0004305933543946594, -0.004401523154228926, -0.023737918585538864, -0.024978378787636757, -0.01326447818428278. -0.012975506484508514, -0.030757801607251167, -0.0166898425668478, 0.00810528639703989, 0.0858173668384552, 0.005486926529556513, -0.01619647815823555. 0.024865610525012016, -0.02730424515902996, 0.019706418737769127, 2.6237561542075127e-05. 0.005303676705807447, -0.0021267568226903677, -0.02207457274198532, -0.0027804658748209476, -0.011629324406385422, 0.0030165764037519693, -0.03839791566133499, -0.029996609315276146, 0.00821100827306509, -0.014046814292669296, 0.015477573499083519, 0.00199284334667027, 0.01629514992237091, 0.03304137662053108, 0.02221553400158882. 0.005941527429968119, 0.004221796989440918, -0.030955146998167038, 0.008760757744312286, 0.014815054833889008, -0.020227976143360138, 0.008471786975860596, -0.0013162280665710568, 0.004718686453998089, 0.010128084570169449,

```
-0.01657707430422306,
          -0.017225496470928192.
          0.00803480576723814,
          0.006265738978981972,
          0.007872700691223145,
          -0.010205613449215889,
          0.01691538095474243,
          -0.018536439165472984,
          0.017704766243696213.
          0.00789384450763464.
          -0.040343184024095535,
          -0.028220493346452713,
          7.433517021127045e-05,
          -0.0322519950568676,
          0.0024721124209463596,
          -0.017239592969417572,
          -0.025767764076590538
      }
    },
      "_index": "pdgithub_issues",
      "_id": "NDyfUZMBhjF0vW2DRbFb",
      "_score": 1.0,
      " source": {
        "_type": "issue",
        "_repo": "langchain",
        "_issueNumber": "28271",
        "_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not
defined using ChatVertexAI",
        " createdAt": "2024-11-21T22:43:53Z",
        " closedAt": "2024-12-31T00:36:30Z",
        " state": "open",
        " body": "### Checked other resources\n\n- [X] I added a very descri
ptive title to this issue.\n- [X] I searched the LangChain documentation wit
h the integrated search.\n- [X] I used the GitHub search to find a similar q
uestion and didn't find it.\n- [X] I am sure that this is a bug in LangChain
rather than my code.\n- [X] The bug is not resolved by updating to the lates
t stable version of LangChain (or the specific integration package).\n\n###
Example Code\n\r\n\r\n Ensure your VertexAI credentials are
configured\r\n\r\nfrom langchain_google_vertexai import ChatVertexAI\r\n\r\n
model = ChatVertexAI(model=\"gemini-1.5-flash\")\r\n\r\nmodel.invoke(\"Hell
o, world!\")\r\n\r\n```\n\n### Error Message and Stack Trace (if applicable)
n\n```python\r\n--
       ----\r\nNameError
                                                                Traceback (mos
t recent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydanti
c/_internal/_generate_schema.py:815, in GenerateSchema._resolve_forward_ref(
self, obj)\r\n 814 try:\r\n--> 815 obj = _typing_extra.eval_type_back port(obj, *self._types_namespace)\r\n 816 except NameError as e:\r\n\r\nF
ile /opt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing_extr
```

a.py:534, in eval_type_backport(value, globalns, localns, type_params)\r\n return _eval_type_backport(value, globalns, localns, 533 try:\r\n--> 534 535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/py type_params)\r\n thon3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eval_typ e_backport(value, globalns, localns, type_params)\r\n 557 try:\r\n--> 558 return eval type(value, globalns, localns, type params)\r\n 559 except T ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ _internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type _params)\r\n 591 else:\r\n--> 592 return typing._eval_type(# type: value, globalns, localns\r\n ignore\r\n 593 594 $)\r\n\r\nF$ ile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globalns, loca lns, recursive_guard)\r\n 326 if isinstance(t, ForwardRef):\r\n--> 327 return t. evaluate(globalns, localns, recursive guard)\r\n 328 if isinsta nce(t, (GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con da/lib/python3.10/typing.py:699, in ForwardRef._evaluate(self, globalns, loc alns, recursive quard)\r\n $693 \text{ type}_= = \text{type}_\text{check}(\r\n$ elf.__forward_code__, globalns, localns),\r\n \"Forward reference 695 s must evaluate to types.\",\r\n 696 is_argument=self.__forward_is_ar qument__,\r\n 697 allow_special_forms=self.__forward_is_class__,\r\n 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n globalns, localns, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self.__forward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/ typing.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 28 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> ev_args = tuple(_eval_type(a, globalns, localns, recursive_guard) fo 329 330 r a in t.__args__)\r\n if ev_args == t.__args__:\r\n\r\nFile /op t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__ar if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/py qs)\r\n 330 thon3.10/typing.py:327, in _eval_type(t, globalns, localns, recursive_guard) 326 if isinstance(t, ForwardRef):\r\n--> 327 return t. evaluate(globalns, localns, recursive guard)\r\n 328 if isinstance(t, (GenericAli as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef._evaluate(self, globalns, localns, recursive_gua $693 \text{ type} = \text{_type_check(}r\n$ 694 eval(self. forward code _, globalns, localns),\r\n \"Forward references must evaluate to 695 types.\",\r\n is_argument=self.__forward_is_argument__,\r\n 696 allow_special_forms=self.__forward_is_class__,\r\n 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n type_, globalns, localn 700 s, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self.__f orward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32 9, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 if isinst ance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 rgs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__a if ev args == t. args :\r\n\r\nFile /opt/conda/lib/p rgs)\r\n 330 ython3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinstance(t, (_Gene ricAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev args = tuple(e val_type(a, globalns, localns, recursive_guard) for a in t.__args__)\r\n 330 if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/python3.10/typi

```
ng.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n
                                                                         328 i
f isinstance(t, (_GenericAlias, Generi",
        "GitHub_Issue_vector": [
          -0.0006835468229837716,
          -0.003785524284467101,
          0.006393408868461847,
          -0.007254402153193951
          -0.005251347552984953,
          0.03227657452225685,
          -0.00281779607757926,
          -0.029031839221715927,
          -0.02083461359143257.
          -0.01790296845138073,
          0.024776682257652283,
          0.003934952896088362,
          -0.01551211066544056,
          0.02352432906627655,
          0.012701429426670074,
          -0.020436137914657593,
          0.015995973721146584,
          -0.019126858562231064.
          0.013199524953961372,
          0.006592646706849337,
          0.007001796737313271,
          0.025360165163874626,
          -0.02823488786816597,
          -0.004251598846167326.
          -0.014501688070595264,
          0.011491769924759865,
          0.024975920096039772,
          -0.036830589175224304,
          -0.010588082484900951,
          -0.000776939676143229,
          0.01770372875034809,
          -0.022627757862210274,
          -0.010424423031508923,
          -0.03745676577091217,
          -0.025687485933303833,
          -0.009840940125286579,
          0.018899157643318176,
          -0.01787450537085533,
          0.04628016799688339,
          0.019069934263825417,
          0.02086307667195797,
          0.016437144950032234,
          0.0004998741787858307,
          -0.0170917846262455,
          -0.02271314524114132,
          0.04482857510447502,
          -0.00794106163084507,
```

-0.004084381274878979, -0.023296628147363663, 0.00932149775326252, 0.04129921644926071, 0.018884927034378052, -0.027480628341436386, -0.0025402859319001436, 0.00617638137191534, -0.002337489975616336, 0.012829511426389217, 0.0290460716933012, 0.010004599578678608, 0.007592395413666964, 0.0075781638734042645. -0.004685653373599052, -0.018557608127593994, 0.00518374890089035, -0.020635375753045082, 0.005799252074211836, 0.00018734164768829942, 0.02823488786816597, -0.0013697620015591383, 0.004806619603186846, 0.022058505564928055, 0.005308272782713175, 0.002122241770848632, -0.02641328051686287, 0.031650397926568985, -0.02066383883357048, -0.0015645528910681605, 0.0026061057578772306, -0.019980736076831818, 0.009620354510843754, 0.013669157400727272, -0.020165743306279182, -0.014010708779096603, 0.0015014015370979905, 0.03532207012176514, -0.0006742075202055275, 0.013718967325985432, 0.007542585954070091, 0.01874261349439621, -0.015341334976255894, 0.030312655493617058, 0.0045967078767716885, 0.028419893234968185, -0.0019888232927769423, 0.011698123998939991, 0.025630559772253036, -0.006229748949408531,

0.012338532134890556, 0.007254402153193951, -0.010652123019099236, -0.012530654668807983, 0.005710306577384472, -0.01999496854841709, -0.014231293462216854-0.020720763131976128, -0.02897491492331028, 0.012665851972997189, 0.021361172199249268, 0.008787823840975761, -0.0003795753000304103, -0.013740314170718193, 0.04895564913749695, -0.007300653960555792, -0.029971104115247726, 0.0020332960411906242, -0.010652123019099236, -0.003970530815422535, -4.427822568686679e-05. -0.009008409455418587, -0.007535470183938742, 0.031223459169268608, 0.018244517967104912, -0.018486451357603073, -0.01398224662989378, 0.023851647973060608, -0.004511320032179356, -0.0083110760897398, -0.002851595403626561, -0.0323619619011879, -0.017177172005176544, 0.023211240768432617, -0.005699633155018091, 0.019710341468453407, -0.0017958113458007574, -0.025089770555496216, 0.028547976166009903, -0.023268165066838264, -0.01669330708682537, -0.0046394020318984985, -0.022200819104909897, -0.001177639584057033, 0.04121382534503937, -0.01468669530004263, -0.002607884583994746. 0.013356069102883339, -0.004991626366972923, -0.02197311818599701,

-0.0025598539505153894, 0.04451548680663109, -0.0012292279861867428, 0.004724789410829544, 0.0009517177822999656, -0.010239415802061558, -0.02147502265870571, -0.029771866276860237, 0.014224178157746792, -0.00775605533272028, 5.4229010856943205e-05, -0.0025616330094635487, -0.02900337614119053, -0.0012701429659500718. 0.033130452036857605, -0.01605289988219738, -0.029743405058979988, -0.015611729584634304, 0.017291022464632988, 0.01965341717004776, -0.01770372875034809, -0.0145230358466506, 0.0006404082523658872, -0.03543592244386673, 0.03179271146655083, -0.004369007423520088 -0.0032447350677102804, -0.0071512251161038876, 0.022627757862210274, -0.006123014260083437, -0.00256519066169858, -0.02005189284682274, 0.010139796882867813, -0.017177172005176544, 0.013640695251524448, 0.027067920193076134, 0.04263695701956749, -0.010623660869896412, 0.009755551815032959, 0.024107811972498894, 0.007250844035297632, -0.007563932798802853, -0.006727844011038542, 0.005137497093528509, 0.03381355479359627, -0.0110790627077221870.004543340764939785, -0.5765382051467896. -0.038282182067632675, 0.007286422420293093,

-0.007386041339486837, -0.005258462857455015, 0.026100192219018936, -0.010773089714348316, 0.02234313078224659, -0.022300437092781067, 0.04337698221206665, -0.05686825141310692, 0.011619850993156433, 0.017077552154660225, 0.002663030754774809, 0.014010708779096603, -0.02002342976629734, 0.029401853680610657, -0.03574901074171066, -0.002260996727272868, 0.026270968839526176, -0.005813483614474535, 0.02863336354494095, -0.010794436559081078, -0.013327606953680515, 0.00747142918407917, 0.0034599832724779844, -0.0027644287329167128, 0.00465363310649991, 0.03398432955145836, -0.002602547872811556, -0.02917415276169777, 0.01696370169520378, 0.020848846063017845, 9.456028055865318e-05, 0.04730482026934624, -0.014587076380848885. -0.020535757765173912, 0.03742830455303192, 0.008602817542850971, 0.005873966496437788, -0.012765470892190933, 0.012018327601253986, 0.01108617801219225, 0.018358368426561356, 0.00023214798420667648, -0.016679076477885246, 0.006642456632107496, -0.007176130078732967, 0.0002855153288692236, 7.532579184044152e-05. 0.021716954186558723. -0.01521325297653675, -0.013953783549368382,

0.005226442590355873, 0.003646769095212221, -0.015170559287071228, 0.017006395384669304, -0.016878314316272736, 0.021517716348171234, -0.012302953749895096, 0.0008520987466908991, -0.00011840881052194163, -0.00804068148136139, -0.016166750341653824, 0.01682139001786709, 0.03455357998609543, 0.03267505019903183, 0.02806411124765873, -0.009691511280834675, -0.04201078042387962, 0.013256450183689594, -0.006236864719539881, -0.03526514768600464, 0.006265327334403992. 0.02019420638680458, 0.037570614367723465, 0.0010130902519449592, -0.005710306577384472, -0.004696326795965433, 0.03028419427573681, -0.005550204776227474, 0.0012203335063531995, -0.04184000566601753, -0.011207143776118755, 0.020436137914657593, -0.016679076477885246. -0.013498382642865181, 0.018087973818182945, 0.015597498044371605, 0.007528354413807392, 0.010154028423130512, 0.031109608709812164, -0.008254150860011578, -0.033528927713632584, 0.005792136769741774, 0.021859267726540565, -0.003475993638858199, -0.00844627246260643, -0.0012292279861867428, -0.05598590895533562, -0.022641988471150398. 0.003959857393056154, -0.0014827229315415025,

- 0.006859483662992716, 0.015384028665721416, 0.025417091324925423, -0.005564435850828886, -0.0020920000970363617, 0.01871415227651596, -0.003438636427745223, -0.007784517947584391, -0.010068640112876892, -0.011349457316100597, -0.018600301817059517, 0.009342844597995281, -0.04283619299530983, -0.008958599530160427, -0.018059512600302696, -0.02052152529358864, -0.0016214780043810606, 0.005105476826429367, 0.0263136625289917, 0.011228490620851517, 0.004440163727849722. 0.018685689195990562, 0.00569607550278306, -0.0030739593785256147, 0.009534967131912708, -0.000565249181818217, 0.030141880735754967. 0.021716954186558723, -0.004774598870426416, 0.009115143679082394, -0.017746424302458763, 0.004205347504466772, -0.01142772939056158, 0.04021763801574707. 0.024406669661402702, 0.015640191733837128, 0.004682095721364021, -0.015796735882759094, -0.019568029791116714, -2.2806203560321592e-05, 0.006386293098330498, -0.030170343816280365, -0.030682669952511787, -0.021489253267645836, -0.003767735091969371, -0.011947170831263065, -0.007727592717856169, -0.0072686332277953625, -0.0056604971177875996, -0.02446359395980835,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.021176164969801903, -0.006681592669337988, -0.012210450135171413, 0.00320915668271482, -0.021830804646015167, 0.012317185290157795, -0.026470206677913666, 0.010637892410159111, 0.03065420687198639, -0.02281276322901249, -0.009008409455418587, -0.023382015526294708, -0.0003789082111325115, -0.02285545878112316, 0.016380218788981438, -0.013903974555432796, -0.028391432017087936, -0.008851864375174046, -0.0415838398039341, -0.004187558311969042, -0.0018998776795342565, -0.002244986593723297, 0.00928591936826706, -0.01992381177842617, -0.0030810751486569643, 0.004603823646903038, 0.002892510499805212, -0.015554804354906082, -0.0020350751001387835, -0.025459785014390945, -0.016650613397359848, 0.04838639870285988, 0.014288218691945076, 0.04118536412715912, -0.003547149943187833, -0.0002071320341201499, 0.04149845242500305, 0.0031717997044324875, -0.019624954089522362, -0.008147415705025196, 0.004162653349339962, -0.031308844685554504, 0.002182724652811885, -0.006101667415350676, 0.015255946666002274, -0.004881334025412798, 0.020436137914657593, 0.007563932798802853, 0.040530726313591, 0.024420900270342827,

-0.009940559044480324, 0.0018082638271152973. -0.018287213519215584, 0.0023855206090956926, -0.026142887771129608, 0.003091748571023345, -0.0014133453369140625, 0.016465606167912483, 0.003413731697946787, -0.04926874116063118, -0.01807374320924282, 0.017106015235185623, 0.016906777396798134, -0.03028419427573681, 0.014430532231926918, -0.017575647681951523, 0.012544885277748108, 0.010239415802061558, 0.01844375766813755, 0.00986228697001934, -0.013064327649772167, -0.005358082242310047, -0.007414503954350948, 0.026057498529553413, -0.010744626633822918, -0.008844749070703983, -0.001042442279867828, -0.005329619627445936, -0.0013875511940568686, 0.011292532086372375, -0.008538776077330112, 0.017319485545158386, 0.003372816601768136, 0.05023646727204323, 0.005422122776508331, 0.042181555181741714, -0.028078343719244003, 0.002536728046834469, -0.009414001367986202, -0.013405879028141499. -0.007670667488127947, 0.03307352587580681, 0.008346653543412685, 0.03213426098227501, 0.014871702529489994, -0.014843239448964596, 0.011377919465303421, -0.0028942893259227276, -0.003902932396158576, -0.01468669530004263,

-0.006094551645219326, 0.006806116085499525, -0.022286206483840942, 0.010488463565707207, 0.023851647973060608, 0.007215266115963459, 0.0016570562729611993, 0.0076208580285310745, -0.003564939135685563, 0.01965341717004776, 0.046792495995759964, 0.0103674978017807, -0.014729388989508152, -0.03785524144768715. -0.0369444377720356, -0.0038993745110929012, -0.0037001364398747683, -0.011385034769773483, -0.026399049907922745, -0.020649608224630356, -0.026441743597388268, 0.05592898651957512, -0.0038993745110929012, 0.015113634057343006, 0.04104305058717728, 0.014700926840305328, -0.003991878125816584, 0.0028907316736876965, -0.03028419427573681, 0.01908416487276554, 0.021859267726540565, -0.007542585954070091, -0.007233055308461189, 0.005329619627445936, 0.007136994041502476, -0.02900337614119053, 0.01834413781762123, 0.008588586002588272, 0.012473729439079762, -0.01928340271115303, 0.012857973575592041, -0.022940846160054207, -0.013761661015450954, 0.013256450183689594, 0.002156041096895933, 0.0015814525540918112, 0.015469416044652462, -0.0013964456738904119, 0.027338314801454544, 0.010943865403532982,

0.03455357998609543, 0.04067303612828255, -0.012423919513821602, -0.011996980756521225, -0.008837633766233921, -0.01495708990842104, -0.040701501071453094, 0.032191187143325806, 0.013583770021796227, -0.005692517384886742, -0.025986341759562492, -0.0013822143664583564, 0.024477824568748474, -0.009705742821097374, -0.007016027811914682, 0.007293538190424442, -0.021845035254955292, -0.01618098095059395, -0.042722344398498535, -0.014039171859622002, -0.0018322791438549757, 0.014658233150839806, 0.023467402905225754, 0.012103715911507607, 0.003337238449603319, -0.0007351352833211422, 0.014024940319359303, 0.004820850677788258, 0.004739020951092243, -0.00206531654112041, -0.022698914632201195, -0.03176424652338028, 0.00797664001584053, 0.002280564745888114, 0.02796449325978756, 0.03065420687198639, 0.016949471086263657, 0.022556601092219353, -0.01955379731953144, 0.008126068860292435, -0.021105008199810982, 0.02355279214680195. -0.016465606167912483, 0.017646804451942444, 0.02789333648979664, 0.008937252685427666, 0.008553007617592812, 0.014629770070314407, 0.007421619724482298, 0.010595198720693588,

-0.02197311818599701, -0.007997986860573292, 0.017618341371417046, 0.007692014332860708, 0.018500681966543198, -0.011755048297345638, 0.032760437577962875, 0.008111837320029736, 0.005326061509549618, -0.006112340837717056, 0.0113067626953125, 0.04556860402226448. 0.029658015817403793, -6.320695683825761e-05, -0.028761444613337517, 0.003963415510952473, -0.021375402808189392, 0.003657442517578602, -0.01935455948114395, -0.01645137555897236, -0.026882914826273918. 0.03677366301417351, 0.013818586245179176, -0.02665521390736103, -0.03640364855527878, 0.02594364807009697, -0.006432544905692339. -0.020621145144104958, -0.017305253073573112, -0.015312871895730495, -0.007186803501099348, -0.00908668152987957, -0.025730179622769356, -0.013832817785441875, -0.007247286383062601, 0.0009775119833648205, 0.005863293074071407, 0.0009970800019800663, 0.018870696425437927, -0.02453475072979927, -0.013327606953680515, 0.026370586827397346, 0.0108371302485466, 0.0004149311571381986, -0.010054409503936768, 0.010901170782744884, -0.01837260089814663, 0.026740601286292076, -0.03338661417365074, -0.0023446057457476854,

0.02843412570655346, 5.395800599217182e-06, -0.03836756944656372, -0.018699919804930687 -0.024520520120859146, -0.008204340934753418, -0.016038667410612106, 0.018258750438690186, -0.01945417933166027, 0.006525048054754734, 0.04209616780281067, 0.011420613154768944, 0.013320490717887878, 0.00023437161871697754. -0.018130667507648468, 0.010573850944638252, -0.004443721380084753, -0.024178968742489815, 0.047333285212516785, -0.017077552154660225, 0.012345647439360619. 0.012850858271121979, -0.022428520023822784, -0.020179973915219307, -0.029999567195773125, 0.010068640112876892, -0.01955379731953144, -0.023040464147925377, 0.007563932798802853, 0.0011135987006127834, 0.002211187267675996, 0.006891503930091858, -0.023168547078967094. 8.160757715813816e-05, -0.01766103506088257, -0.0024050886277109385, -0.007314885035157204, 0.030967295169830322, 0.008631279692053795, -0.017447566613554955. -0.008424925617873669, 0.003397721331566572, -0.04004685953259468, 0.03025573119521141, 0.02493322640657425, -0.007663551717996597, 0.02335355244576931, 0.016550995409488678, -0.025801336392760277, -0.005578667391091585,

-0.015312871895730495, 0.01938302256166935. 0.01162696722894907, 0.008396463468670845. -0.03176424652338028, 0.0028338064439594746, -0.020080355927348137-0.012381225824356079, -0.010680586099624634, -0.01216775644570589, -0.009890749119222164 -0.013050096109509468, 0.018429525196552277, -0.015042477287352085. -0.0202653631567955, -0.004095054697245359, -0.046621717512607574-0.022001581266522408, 0.01006152480840683, 0.022428520023822784, 0.03287428990006447, -0.0032127145677804947, 0.019624954089522362, -0.008652626536786556, -0.005699633155018091, -0.025872493162751198, 0.003796197706833482, 0.011854668147861958, 0.02658405713737011, 0.017319485545158386, 0.0230831578373909, 0.059145256876945496, -0.026897145435214043, -0.002488697413355112, 0.011449076235294342, 0.01425264123827219, 0.00594868091866374, -0.012281606905162334, 0.009563429281115532, -0.015896355733275414, 0.006503701210021973, 0.004956047981977463, 0.0008854533080011606, 0.02668367512524128, 0.0045682452619075775, -0.014010708779096603, 0.036289799958467484, -0.001310168532654643, 0.011022137477993965, -0.026882914826273918,

-0.04445856064558029, -0.043633148074150085, 0.02742370404303074, -0.02436397597193718, 0.013299143873155117, -0.03768446668982506, 0.0009277024655602872, 0.0387660451233387, -0.013491266407072544, -0.0019087722757831216, 0.004184000194072723, -0.0025047077797353268, -0.01723409630358219, 0.018045280128717422, 0.006350714713335037, 0.030881907790899277, -0.001238122582435608, -0.02160310372710228, -0.013327606953680515, -0.016935240477323532, -0.005567993503063917, -0.012893551960587502, 0.02382318675518036, 0.006489470135420561, 0.02746639773249626, -0.029102995991706848, 0.05550204589962959, 0.011114640161395073, 0.01955379731953144, 0.008318191394209862, -0.010822898708283901, -0.024520520120859146, -0.04166922718286514, -0.02174541726708412, -0.02362394705414772, 0.025388628244400024, 0.0030775172635912895, 0.009414001367986202, 0.019966505467891693, -0.0212046280503273, -0.027409471571445465, 0.006610435899347067, -0.018358368426561356, 0.023410478606820107, 0.022086968645453453, 0.037542153149843216, 0.02934492751955986, -0.0012034338433295488, -0.01871415227651596, 0.013149715960025787,

0.01787450537085533, -0.007322000805288553, 0.0029263098258525133, -0.010161143727600574-0.01891339011490345, -0.0017646804917603731, 0.009250340983271599, 0.010481348261237144, -0.026470206677913666, -0.03153654560446739, 0.03640364855527878, 0.019639184698462486, 0.011000790633261204, -0.015298641286790371. -0.017205635085701942, -0.021076546981930733, 0.01208236813545227, 0.006937755737453699, -0.01415302138775587, 0.0258155670017004, -0.00373927247710526. 0.002440667012706399, 0.011207143776118755, -0.01494285836815834, 0.057864442467689514, 0.02197311818599701, 0.006507259327918291, 0.03492359444499016, -0.007464313413947821, 0.0005794804892502725, 0.024876302108168602, 0.010545388795435429, 0.03546438366174698, -0.018415294587612152, -0.013676273636519909, 0.024207431823015213, -0.007983756251633167, 0.0066958237439394, -0.006382735446095467, 0.010716164484620094, 0.03532207012176514, -0.010303456336259842, 0.0015245273243635893, -0.007627973333001137-0.016977934166789055, 0.014985552057623863, 0.0016846293583512306, 0.00751412333920598, -0.0030294866301119328, -0.02443513087928295,

-0.00489556510001421, 0.01420283131301403, 0.03722906485199928, 0.008617048151791096, -0.010467116720974445, 0.002412204397842288, -0.01773219183087349, 0.008723783306777477, -0.011925823986530304, 0.004625170491635799, -0.046564795076847076, -0.006955544929951429, -0.0009650596184656024, -0.02005189284682274. 0.0017806906253099442, -0.004863544832915068, -0.0007475876482203603, -0.02867605723440647, 0.035350535064935684, -0.007457198109477758, 0.0414699912071228, -0.032931212335824966, 0.007763170637190342, -0.028377199545502663, -0.008403578773140907, -0.0006835468229837716, 0.0013341838493943214, 0.010737511329352856, 0.006799000781029463, -0.021901961416006088, -0.028277581557631493, 0.03685905039310455, 0.019098395481705666, -0.003573833731934428, -0.017106015235185623, 0.03321583941578865, 0.0035756125580519438, 0.015156327746808529, -0.011264069005846977, 0.0007364694611169398. 0.05373736470937729, -0.008581469766795635. 0.0023357111494988203, 0.00694842915982008, -0.017589880153536797, -0.01608136296272278, -0.01689254492521286, 0.005841946229338646, -0.00962747074663639, -0.022898152470588684,

0.012338532134890556, -0.004803061485290527. -0.021958885714411736, -0.002321479842066765, -0.022030042484402657, -0.01716293953359127-0.03856680542230606, -0.029131459072232246, 0.001963918562978506, -0.007322000805288553, -0.02934492751955986, 0.020137280225753784, 0.021418096497654915, 0.0179741233587265, 0.004810177255421877, -0.028362968936562538, -0.006855926010757685, -0.004201789386570454, 0.0001722208980936557, -0.02463437058031559, -0.007571048568934202. -0.0030686226673424244, 0.03751369193196297, 0.032760437577962875, 0.002237871056422591, -0.027551785111427307, -0.024790914729237556, -0.014999783597886562, -0.018970314413309097, -0.0010700153652578592, -0.0003404392336960882, 0.02352432906627655, -0.004945374559611082. -0.032020412385463715, 0.018258750438690186, 0.006034068763256073, 0.015668654814362526, -0.008424925617873669, -0.028448356315493584, 0.0016063572838902473, 0.015255946666002274, 0.01396801508963108, -0.0018500682199373841, -0.020578451454639435, -0.006396966520696878, 0.004297850653529167, -0.0030810751486569643, -0.004308524075895548. 0.011214260011911392, -0.034980520606040955,

-0.007019585929811001, -0.017618341371417046, -0.011641198769211769, 0.0020546431187540293. 0.0029067418072372675, 0.000820967776235193. -0.03364278003573418, 0.007848558947443962. 0.005856177303940058, -0.007122762501239777, 0.002880058018490672, -0.016750233247876167. -0.003038381226360798, 0.007257959805428982. 0.02870452031493187, -0.01495708990842104, -0.008880327455699444, -0.009584776125848293, -0.030739594250917435, 0.049354128539562225, 0.021275784820318222. 0.005109034478664398, 0.00193901383318007, -0.0014507025480270386, 0.012238912284374237, -0.026142887771129608, 0.01056673564016819, -0.011363687925040722-0.011854668147861958, 0.003499119309708476, -0.01925494149327278, 0.012623157352209091, -0.027082152664661407. 0.017504490911960602, -0.025587866082787514-0.0018571838736534119, 0.01549787912517786, 0.0002299243351444602, -0.02493322640657425, 0.02093423344194889, -0.015526341274380684, -0.04838639870285988, -0.01108617801219225, 0.004486415535211563, 0.010637892410159111, 0.02991417981684208, -0.022015811875462532. 0.006187054794281721, -0.023382015526294708, -0.01854337565600872,

0.015440953895449638, 0.004048802889883518, -0.009463810361921787, 0.007948177866637707, 0.0015174116706475616, -0.02177388034760952, -0.019610723480582237, 0.20743533968925476, 0.010794436559081078, -0.004682095721364021, 0.01366204209625721, -0.002652357332408428, 0.00880205538123846, 0.001841173623688519, -0.0038887010887265205, 0.004874218255281448, 0.037001363933086395, 0.0063400412909686565, 0.0028818370774388313, 0.022528138011693954, -0.009172068908810616, -0.011776396073400974, 0.041413065046072006, -0.029401853680610657, -0.0488702617585659, -0.04007532447576523, -0.0028338064439594746, -0.0011198249412700534, -0.0009108028025366366, 0.0009615017916075885, -0.02258506417274475, 0.017390640452504158, -0.007599510718137026, 0.003182473126798868, -0.014409185387194157, -0.005044993478804827, -0.006503701210021973, -0.026427512988448143, 0.0019585818517953157, -0.0004811956314370036. -0.0017095342045649886, -0.02870452031493187, -0.030682669952511787, 0.00616570794954896, 0.0012532433029264212, 0.011135987006127834, 0.016679076477885246, 0.011940055526793003, -0.017547184601426125, 0.011491769924759865,

-0.015967512503266335, -0.02682598866522312, 0.004909796174615622, -0.005859735421836376, 0.003442194312810898, -0.010737511329352856, 0.020080355927348137, -0.026342125609517097, -0.020478831604123116, 0.01736217923462391, 0.016736000776290894, 0.0045682452619075775, -0.02029382437467575, 0.006066089030355215, 0.012061021290719509, -0.0029512145556509495, -0.006610435899347067, -0.029231077060103416, 0.009150722064077854, -0.005137497093528509, 0.021318478509783745, -0.036830589175224304, 0.00514817051589489, -0.0034190684091299772, 0.006884388625621796, 0.007464313413947821, -0.02254236862063408, -0.01723409630358219, -0.030711133033037186, 0.006834578700363636, 0.010310572572052479, -0.028249118477106094, -0.0262851994484663, -0.0037001364398747683, -0.01061654556542635, -0.003998993430286646, 0.03284582495689392, 0.0011509559117257595, 0.006375619675964117, -0.0023072485346347094, 0.010794436559081078, -0.02759447880089283, -0.017376409843564034, 0.0434054471552372, 0.005240674130618572, 0.01078732032328844, -0.013519729487597942, -0.02056421898305416. 0.011683892458677292, -0.008979946374893188,

0.02029382437467575, -0.007763170637190342, 0.026199812069535255, 0.025331703945994377, 0.0031700206454843283, 0.010182490572333336, 0.005101918708533049, -0.03307352587580681, 0.0341266430914402, 0.02258506417274475, -0.0023730683606117964, -0.021958885714411736, -0.008375116623938084, 0.00824703462421894, -0.0017344389343634248, -0.02207273617386818, -0.03560669720172882, -0.020549988374114037, -0.030682669952511787, 0.0011376140173524618, 0.013548191636800766. 0.003974088933318853, -0.007464313413947821, 0.004539782647043467, -0.0170206278562545780.022001581266522408, 0.007197476923465729, 0.02880413830280304, -0.026840221136808395, -0.006090993992984295, 0.029231077060103416, -0.0026345683727413416, -0.024876302108168602, -0.01736217923462391, 0.012978940270841122, -0.009734204970300198, -0.017390640452504158, 0.027437934651970863, -0.02126155234873295, 0.006080320104956627, 0.0018233845476061106, -0.023282397538423538, 0.021816574037075043, -0.0026096634101122618, -0.008908789604902267, 0.015825198963284492, -0.006012721452862024, 0.007869905792176723, 0.011043484322726727, 0.014124559238553047,

-0.03187809884548187, 0.004304966423660517, -0.03896528109908104, 0.0021115681156516075. -0.009549197740852833, -0.015995973721146584, -0.024591675028204918, -0.018087973818182945, -0.003047275822609663, 0.004233810119330883, -0.013235103338956833, 0.013420110568404198. -0.014394953846931458, -0.0006595315062440932. -0.036432113498449326, -0.029572628438472748, 0.013178178109228611, -0.03284582495689392, 0.018130667507648468, 0.014288218691945076, -0.010936749167740345. -0.026569826528429985, -0.03725752606987953, -0.18159131705760956, 0.014985552057623863, 0.025872493162751198, -0.03819679096341133, 0.01295759342610836, 0.030739594250917435, 0.03119499608874321, -0.004493530839681625, -0.015298641286790371, -0.02133270911872387, 0.04852871224284172. 0.0054078917019069195, -0.017006395384669304, -0.01208236813545227, -0.017789117991924286, 0.0052762520499527454, -0.035065907984972, -0.012850858271121979, 0.0332443043589592, 0.03341507911682129, 0.033699702471494675, -0.008097605779767036, 0.02278430201113224, 0.025417091324925423, 0.0037250411696732044. 0.010630776174366474, -0.021218858659267426,

0.020236900076270103, 0.0037143677473068237, -0.021290015429258347, 0.01992381177842617, -0.0052762520499527454, 0.03196348622441292, -0.005012973211705685, 0.02645597606897354, 0.008517429232597351, 0.02312585338950157, 0.0017522280104458332, -0.013199524953961372, 0.0103674978017807, -0.0022787859197705984, 0.01598174311220646, 0.005208653397858143, -0.024691294878721237, -0.031678859144449234, 0.00955631397664547, 0.002746639773249626, -0.018756845965981483. 0.02776525355875492, -0.007229497190564871, 0.014373607002198696, -0.024847839027643204. -0.013085674494504929, -0.002647020621225238, -0.004162653349339962, 0.02281276322901249, -0.010751742869615555, 0.0013581991661339998, -0.0005314498557709157. 0.006599762476980686, 0.009342844597995281, -0.007044490426778793, 0.021375402808189392, -0.015355566516518593, -0.008467620238661766, -0.00021658249897882342, -0.022200819104909897, 0.024107811972498894, -0.009043986909091473, 0.015398260205984116, -0.009534967131912708, 0.009840940125286579, 6.331814074655995e-05, 0.003027707803994417, 0.002684377832338214, 0.01341299433261156, -0.013676273636519909,

0.00466074887663126, -0.00037179255741648376, -0.009293034672737122, -0.003394163679331541, 0.016024436801671982, -0.002940541133284569, -0.005994932726025581, 0.015170559287071228, -0.0027324084658175707, 0.012032559141516685, 0.0010655681835487485, -0.03557823598384857, -0.01189736183732748, 0.013484151102602482, -0.00284803775139153, -0.008745130151510239, -0.026769064366817474, 0.004746136721223593, 0.013178178109228611, -0.01972457394003868, -0.01861453242599964, 0.00013330719957593828, -0.012943361885845661, 0.00233037443831563, 0.0022521023638546467. -0.010758858174085617, 0.010879823938012123, 0.00047096688649617136, 0.018685689195990562, 0.006976891774684191, 0.037542153149843216, 0.03341507911682129, -0.023766260594129562, 0.020535757765173912. 0.025459785014390945, 0.022826995700597763, 0.013092790730297565, -0.02288391999900341, 0.021517716348171234, -0.012196218594908714, -0.028761444613337517, -0.00947092566639185, 0.0024869185872375965, 0.06927794218063354, 0.011982749216258526, 0.035350535064935684, 0.011299647390842438, -0.005044993478804827, -0.020350750535726547, -0.08533083647489548,

file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.043690070509910583, 0.0033603643532842398, 0.007919714786112309, -0.0263136625289917, -0.004703442566096783, -0.013590885326266289, 0.038310643285512924, -0.020137280225753784, -0.0018803096609190106, 0.00670649716630578, 0.00873089861124754, 0.002150704385712743, -0.002702167024835944, -0.0069875651970505714. -0.013028749264776707, -0.0056604971177875996, 0.007247286383062601, -0.011833321303129196, 0.01605289988219738, -0.01396801508963108, -0.011683892458677292. 0.006937755737453699, -0.008609932847321033, 0.007485660724341869, -0.002293017227202654, -0.037570614367723465, -0.009634586051106453, -0.004098612815141678, 0.017205635085701942, 0.019738804548978806, -0.01635175757110119, -0.012139293365180492, -0.014053402468562126, -0.02086307667195797. -0.02382318675518036, -0.004262272734194994, -0.00647879671305418, 0.02012304961681366, -0.010225184261798859, 0.027366777881979942, 0.02278430201113224, 0.03025573119521141, -0.0011678555747494102, -0.008673973381519318, -0.007300653960555792, -0.003511571791023016, 0.040900737047195435, -0.009485157206654549, -0.017376409843564034, -0.03270351514220238,

-0.022841226309537888, -0.011221375316381454, -0.0033550276421010494, 0.0230831578373909, -0.0056569394655525684, 0.014053402468562126, 0.01783181168138981, 0.012950477190315723, -0.013996477238833904, 0.011463306844234467, -0.013078559190034866, -0.005005857441574335, -0.000877892947755754, 0.005731653422117233, 0.015540572814643383, -0.010943865403532982, -0.014466110616922379, 0.03785524144768715, -0.03372816741466522, 0.003838891629129648, -0.00935707613825798. 0.001424018875695765, 0.02194465510547161, -0.029971104115247726, -0.017106015235185623, 0.016010206192731857, -0.01834413781762123, 0.011328109540045261, -0.01240257266908884, -0.035919785499572754, 0.009065333753824234, 0.019411485642194748, 0.004159095697104931, 0.03819679096341133. 0.02396549843251705, 0.006624667439609766, 0.014003593474626541, 0.010068640112876892, -0.02604326792061329, 0.030739594250917435, 0.00016810715897008777, 0.026939839124679565, -0.012502191588282585, -0.014046287164092064, 0.013690505176782608, 0.0029102996923029423, -0.016977934166789055, -0.027352547273039818, 0.007848558947443962, -0.039221446961164474,

-0.025801336392760277, -0.0756535604596138, 0.028476819396018982, 0.010943865403532982, -0.01494285836815834, -0.011235606856644154, -0.05026492848992348, 0.010908287018537521, -0.011221375316381454, -0.019938042387366295, 0.020478831604123116, -0.008837633766233921, 0.013434341177344322, 0.01494285836815834. 0.0036396533250808716, 0.00217916676774621, -0.0007698240806348622, 0.022186586633324623, -0.0011233827099204063, 0.021318478509783745, -0.008432041853666306, 0.007869905792176723, 0.012210450135171413, 0.021716954186558723, 0.023296628147363663, -0.0035133506171405315, 0.011313878931105137, 0.009442463517189026, 0.010040177963674068, -0.010659239254891872-0.017404872924089432, 0.01468669530004263, -0.013718967325985432, 0.034781280905008316. 0.025957880541682243, -0.011235606856644154, 0.005358082242310047, 0.0470486581325531, 0.0008325306698679924, 0.05313965305685997, 0.007069395389407873, -0.008937252685427666, -0.0434054471552372, 0.02776525355875492, -0.03179271146655083, -0.013825701549649239, -0.024719757959246635, -0.022698914632201195, 0.0020670953672379255, 0.03278890252113342,

- 0.018970314413309097, 0.01142772939056158, 0.002883615903556347, -0.04408854991197586, -0.030568819493055344, -0.003385269083082676, -0.02386588044464588, 0.026939839124679565, 0.011918708682060242, 0.017760654911398888, -0.0020688744261860847, 0.029800329357385635, -0.013569538481533527, 0.012594695203006268, -0.007012470159679651, 0.006806116085499525, -0.018429525196552277, -0.02083461359143257, 0.01443764753639698, -0.003009918611496687, -0.025858260691165924, -0.033130452036857605, -0.012089484371244907, 0.015270178206264973, 0.012174871750175953, 0.01396801508963108, 0.014772082678973675, 0.0030152553226798773, 0.013811470940709114, -0.006293789949268103, 0.02046460099518299, 0.02769409865140915, -0.0005412339232861996. -0.002627452602609992, 0.01263738889247179, 0.04747559502720833, -0.001073573250323534, -0.028932221233844757, -0.0026701465249061584, -0.02086307667195797, -0.031109608709812164, -0.027850642800331116, -0.007635089103132486, -0.003584507154300809, 0.007507007569074631, -0.0005221106112003326, 0.018287213519215584, -0.016408681869506836, 0.009784014895558357, 0.0026790411211550236,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.005585782695561647, 0.02907453291118145, 0.006311578676104546, 0.009349959902465343, -0.001500512007623911, -0.028960682451725006, -0.01186178345233202, -0.03691597655415535, -0.030312655493617058, -0.01468669530004263, -0.019738804548978806, -0.006905735470354557, 0.0022876805160194635, -0.0015174116706475616. 0.017589880153536797, -0.008346653543412685, -0.005180190782994032, -0.009620354510843754, -0.02779371663928032, -0.01393243670463562, 0.023908574134111404. -0.0030294866301119328, 0.00439035426825285, 0.043092358857393265, -0.017490260303020477, 0.04414547234773636, 0.034212030470371246, -0.007542585954070091-0.00019323428568895906, -0.0019425716018304229, -0.00373927247710526, 0.001342188916169107, -0.004667864181101322. -0.021190397441387177, -0.008282613009214401, -0.01918378472328186, -0.022613525390625, -0.002908520633354783, -0.006123014260083437, -0.019667647778987885, 0.07468582689762115, -0.017447566613554955. -0.0014000035589560866, -0.0184722188860178, -0.010687701404094696, 0.029430314898490906, 0.02503284625709057, 0.016209444031119347, -0.0021435886155813932, -0.03919298201799393,

```
-0.014800545759499073,
    -0.01884223334491253,
    -0.004176884889602661,
    -0.030597282573580742,
    -0.02968647889792919,
    0.013199524953961372,
    -0.003764177206903696,
    0.03409818187355995,
    -0.0002546067407820374,
    0.005272694397717714,
    0.0020706532523036003,
    0.019980736076831818,
    0.027437934651970863,
    0.019240709021687508,
    -0.006144361104816198,
    0.0013911089627072215,
    0.014558613300323486,
    0.02241428755223751,
    -0.010929633863270283,
    -0.03253273665904999,
    0.007012470159679651.
    0.002481581876054406,
    -0.011918708682060242,
    -0.02453475072979927,
    -0.006471680942922831,
    -0.0007440298213623464,
    0.000239930726820603,
    -0.0020688744261860847,
    0.01736217923462391,
    -0.020706532523036003,
    0.027110615745186806,
    0.025289008393883705,
    -0.003927837125957012,
    -0.0479879230260849,
    -0.005457701161503792
    0.005386544857174158,
    -0.00435833353549242,
    -0.03919298201799393,
    -0.034952059388160706
  1
" index": "pdgithub issues",
"_id": "NTyfUZMBhjF0vW2DRbFb",
" score": 1.0,
"_source": {
  "_type": "issue",
 "_repo": "langchain",
  "_issueNumber": "28270",
```

} },

```
"_title": "core: add space at end of error message link",
"_createdAt": "2024-11-21T22:13:37Z",
"_closedAt": "2024-11-21T22:19:59Z",
"_state": "closed",
"_body": "None",
"GitHub Issue vector": [
  -0.014768942259252071,
 0.0032411953434348106,
 0.00551387807354331,
 -0.015006699599325657,
 -0.023342201486229897,
 0.008251586928963661,
 -0.008964859880506992,
 -0.03082457184791565,
 -0.017188474535942078,
 0.015817873179912567,
 0.01241234503686428,
 -0.012950795702636242,
 -0.007936907932162285,
 0.010321476496756077,
 -0.00702084181830287,
 -0.0004820709873456508,
 0.012307452037930489,
 -0.018307333812117577,
 0.01267108041793108,
 0.012153608724474907,
  0.00758726429194212,
 0.034796521067619324,
 -0.010657134465873241,
 0.0134053323417902,
 0.003748178482055664,
 0.015622071921825409,
  0.013034709729254246,
 -0.015915771946310997,
 0.004898505751043558,
 0.008412422612309456,
 0.012936810031533241,
 -0.00035488815046846867,
 0.008251586928963661,
 -0.016489187255501747
 -0.0037097176536917686,
 0.010272526182234287,
 0.015538157895207405,
 -0.015664029866456985,
 0.028446996584534645,
 -0.022419141605496407,
 0.011160620488226414,
  0.0211604256182909.
 0.012461294420063496.
 -0.025356147438287735,
```

-0.03225111588835716, 0.016489187255501747, 0.0016686737071722746, -0.02075483836233616, -0.0064788940362632275, 0.02157999761402607, 0.0319993756711483, -0.007412442471832037, -0.025985505431890488, 0.016139544546604156, 0.005017384421080351, 0.006265611853450537, 0.00462927995249629, 0.02212544158101082, 0.001353120431303978, -0.015580114908516407-0.0020978611428290606, -0.01267108041793108, -0.026670806109905243, 0.005555835552513599, -0.022419141605496407, -0.004660747945308685, -0.019594023004174232, 0.015132571570575237, 0.0222513135522604. -0.03311823308467865, 0.022545013576745987, 0.013999726623296738, 0.010083719156682491, -0.013985740020871162, 0.020153451710939407, -0.0016337092965841293, 0.014363355003297329, -0.0013574908953160048, 0.020545052364468575, 0.010608184151351452, 0.01963597908616066, -0.003561119083315134, -0.03885238617658615, 0.0342930369079113, 0.03935587406158447, -0.0012919327709823847, 0.002730715787038207, 0.015608086250722408, 0.0028740696143358946, -0.01836327649652958, 0.02355198748409748, 0.022768786177039146, 0.03387346491217613, 0.02128629758954048,

0.013384353369474411, 0.02995745651423931, -0.016167515888810158, 0.03700627014040947, 0.010622169822454453, -0.04338376596570015, -0.002131077228114009, 0.005615274887531996, -0.014824884943664074, -0.005797089543193579, -0.0068530128337442875, -0.016237445175647736. 0.0043285866267979145, 0.0026887585408985615. 0.014076647348701954, 0.012706045061349869, -0.00759425712749362, 0.04727180302143097, 0.0022744310554116964, -0.030069341883063316, -0.007216642145067453, -0.011803965084254742, 0.013824904337525368, -0.03216720372438431, 0.005318077746778727, -0.013747982680797577, 0.04162156209349632, 0.022293269634246826, -0.004433479625731707, -0.01297177467495203, 0.005174723919481039, -0.002837357111275196, -0.01354518998414278, -0.008440393954515457, 0.0032202168367803097, 0.0035471334122121334, 0.047131944447755814, 0.022545013576745987, 0.006157222203910351, 0.012873874045908451, -0.0017744408687576652, 0.007059302646666765, -0.013580153696238995, 0.008776051923632622, -0.016950717195868492, -0.026684792712330818, 0.005699189379811287, 0.034628693014383316. -0.02482469007372856, -0.002423029625788331,

-0.008216622285544872, 0.024936575442552567, -0.0217198543250560760.0027237229514867067, 0.028251195326447487, -0.006230647210031748, 0.014573141932487488, -0.024586930871009827, -0.005363531410694122, -0.014531183987855911, -0.004398515447974205, 0.01813950575888157, -0.023440100252628326, 0.0030838558450341225. -0.020768824964761734, -0.006734134163707495, 0.01518851425498724, 0.022447112947702408, 0.028377067297697067, -0.01762203313410282, 0.0044159977696835995, 0.04858646169304848, -0.001562906545586884, -0.018279362469911575, -0.013594139367341995. -0.014782927930355072, -0.03728598356246948, -0.003954468294978142, -0.02260095626115799, 0.02646102011203766, 0.0032429436687380075, 0.016852816566824913, 0.0016739183338358998, 0.030209198594093323, -0.006898466497659683, -0.005996386054903269, -0.04388725385069847, -0.0049579450860619545, 0.0007875720039010048, 0.03432100638747215, -0.007699150126427412, 0.005401992239058018, 0.03292243182659149, -0.014349369332194328, 0.030097313225269318, 0.0024090437218546867, 0.0245449747890234, 0.014531183987855911, -0.01169907208532095, 0.013202538713812828,

-0.6086594462394714, -0.02464287541806698, -0.01032846886664629, 0.012055708095431328, -0.0008299662731587887, 0.037090182304382324, -0.005167731083929539, 0.004968434106558561, -0.012629123404622078, 0.020600995048880577, -0.03924398869276047, 0.023118428885936737, 0.00690196268260479, -0.008391444571316242, -0.0012062700698152184, 0.012789960019290447, 0.038964271545410156, 0.0031555327586829662, -0.014391327276825905, 0.02364988625049591, -0.03627901151776314. 0.03264271840453148, 0.03633495420217514, -0.009055767208337784, -0.011335442773997784, -0.02750995196402073, 0.044642481952905655, -0.008412422612309456, -0.01120257843285799, 0.013510225340723991, -0.017705947160720825, -0.0028758179396390915, 0.01005574781447649, -0.00027709247660823166, 0.053145814687013626, -0.013594139367341995, -0.04688020050525665, 0.008531301282346249, 0.004618790931999683, 0.02071288228034973, -0.03191545978188515, -0.0036572711542248726, 0.03356577828526497, -0.0065767946653068066, 0.008433401584625244, -0.035719580948352814, 0.005237659905105829, -0.022069498896598816, 0.0068739913403987885, 0.014475241303443909,

0.012454302050173283, -0.015552143566310406, -0.013034709729254246, 0.023803729563951492, -0.0030471431091427803, -0.010824963450431824, 0.02706240862607956, -0.0256638340651989, 0.019747866317629814, -0.0011669351952150464, -0.001495600095950067, 0.007069791667163372, -0.007006856147199869, -0.017412247136235237.0.009538275189697742, -0.00811172928661108, 0.005108291748911142, -0.00040646057459525764, 0.017873777076601982, -0.05823662504553795, 0.002026184229180217. -0.007797050289809704, -0.02820923924446106, -0.020041566342115402, -0.009083738550543785, 0.03502029553055763, 0.01686680316925049, 0.016838831827044487, -0.02444707415997982, 0.00468522310256958, -0.022684870287775993, -0.025831662118434906, -0.01816747710108757, -0.01045434083789587, 0.023859674111008644, 0.012866880744695663, -0.01107670646160841, 0.010370426811277866, -0.023663872852921486, -0.009006816893815994, 0.02556593343615532, 0.0017228684155270457. -0.018726905807852745, -0.011405371129512787-0.0033425919245928526, 0.01727238856256008, 0.016950717195868492, 0.008901923894882202, 0.016055630519986153, -0.009776032529771328,

-0.005583806894719601, 0.012482273392379284, -0.009636174887418747, -0.005632756743580103, 0.02823721058666706, -0.0029842073563486338, -0.019552065059542656, -0.018796835094690323, 0.016726946458220482, 0.003832092974334955, -0.00379712856374681, 0.0047236839309334755. 0.0025069438852369785, 0.019454164430499077. -0.0022691863123327494, -0.03885238617658615, 0.016810860484838486, -0.007727121468633413, -0.003919503651559353, 0.02250305563211441, 0.001570773427374661, 0.01632135920226574, -0.010692098177969456, 0.017076589167118073, 0.02900642529129982. 0.005929953884333372, 0.0079718716442585. -0.03695032745599747-0.018433205783367157, 0.014740969985723495, -0.008594237267971039, 0.011796971783041954, 0.04092227667570114, -0.009104716591536999. 0.023356186226010323, 0.019006621092557907, 0.021985584869980812, 0.0017289872048422694, 0.018754877150058746, 0.003936985973268747, -0.00766418594866991, 0.014461255632340908, 0.008440393954515457, -0.0165451318025589, 0.01152424979954958, -0.03378954902291298, -0.03714612498879433, 1.4736927369085606e-05. -0.02364988625049591, -6.359141116263345e-05,

- -0.012915831059217453, -0.0099928118288517, -0.014936771243810654, 0.00992987584322691, -0.005943939555436373, -0.011824943125247955, 0.014964742586016655, -0.029202226549386978, -0.017803847789764404, -0.024586930871009827, 0.02613934874534607, 0.0021415664814412594. -0.02275479957461357, 0.015692001208662987, 0.0022954095620661974, -0.0019737377297133207, -0.01272003073245287, 0.0005476291407831013, -0.011657115072011948, -0.023957572877407074, -0.001984226983040571, -0.015356343239545822, -0.01966395042836666, -0.0050313700921833515, 0.004569840617477894, -0.014838870614767075, -0.02145412564277649, 0.00823760125786066, -0.02709037996828556, -0.002333870390430093, 0.008461372926831245, 0.037118155509233475, -0.014880827628076077. 0.01153823547065258, 0.008741088211536407, 0.0073215351440012455, 0.024782732129096985, 0.013685046695172787, 0.020503096282482147, -0.025873620063066483 -0.011685086414217949, 0.009824982844293118, -0.022684870287775993, 0.007265591993927956, -0.00487752677872777, -0.0019073053263127804, -0.024684831500053406, 0.003045395016670227, -0.0103214764967560770.030992399901151657,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.0007189544849097729, 0.014894813299179077, 0.029593827202916145, -0.015552143566310406, -0.009531281888484955, -0.01602765917778015, -0.0055768140591681, -0.032978374511003494, -0.008825002238154411, -0.009090730920433998, -0.006426447536796331, -0.007510342635214329, -0.004929973278194666, -0.017887761816382408, 0.024181345477700233, -0.013971754349768162-0.0002190735103795305, -0.007412442471832037, -0.03516015037894249, 0.01711854711174965, -0.03311823308467865. -0.01784580573439598, 0.011796971783041954, -0.007573278620839119, 0.011796971783041954, -0.006237640045583248, 0.006297079846262932. 0.031887486577034, -0.002863580361008644, -0.004150268621742725, 0.003929993137717247, 0.030544856563210487, 0.0011573199881240726. -0.005129270255565643, 0.0039474754594266415, -0.002050659153610468, 0.03974747285246849, -0.01506264228373766, 0.03560769557952881, -0.016517158597707750.0056607285514473915, 0.01829334907233715, 0.005276120733469725, -0.020153451710939407, 0.023733802139759064, 0.012622131034731865, 0.04411102458834648, 0.009873933158814907, 0.003821603488177061, 0.009643168188631535,

0.00046677410136908293, 0.0018443695735186338, -0.0017849301220849156, -0.002487713471055031, 0.01848914846777916, -0.007230627816170454, -0.02190166898071766, 0.008838987909257412, 0.002608340699225664, 0.01781783252954483, 0.012517238035798073, -0.019132493063807487. 0.006195683032274246, 0.014740969985723495, 0.03281054645776749, 0.0016372057143598795, -0.023118428885936737, -0.020852738991379738, 0.027202265337109566, 0.0037306961603462696, -0.003540140576660633, -0.015356343239545822, -0.00878304522484541, -0.025230275467038155, 0.026698779314756393, -0.0076082427985966206, 0.009783025830984116. 0.013901825994253159, 0.02534216083586216, -0.021314268931746483, -0.04777529090642929, -0.026083406060934067, 0.021468112245202065, 0.01411860529333353, -0.01829334907233715, -0.014251469634473324, -0.02237718552350998, 0.0376775860786438, -0.02310444414615631, 0.014559156261384487, 0.003720206907019019, -0.005534856580197811, -0.0026887585408985615, -0.019398221746087074, -0.013265474699437618, -0.03406926244497299, 0.01587381586432457. -0.013328410685062408, 0.02718827873468399, 0.03342591971158981,

- -0.0050523485988378525, 0.010139661841094494, 0.014810899272561073, 0.02120238170027733, 0.03404129296541214, 0.020223380997776985, 0.01664303056895733, -0.017761889845132828, -0.0054054888896644115, -0.010796991176903248, 0.014174547977745533, -0.02053106762468815, 0.00862220861017704, -0.00943338219076395. -0.0010672868229448795, 0.004034886136651039, 0.0028408535290509462, -0.01165012177079916, 0.014377341605722904, -0.004964937921613455, -0.013111631385982037. -0.025985505431890488, -0.00753132114186883, 0.00022256994270719588, 0.03247489035129547, 0.034404922276735306, 0.00828655157238245, 0.002706240862607956, -0.009608203545212746, 0.010755034163594246, -0.02756589464843273, -0.008894930593669415, 0.0038950287271291018, -0.031411971896886826, -0.019621994346380234, 0.0051922062411904335, -0.009824982844293118, -0.016181502491235733, 0.044894225895404816, -0.005394999403506517, 0.014034690335392952, -0.008335500955581665, -0.010559233836829662, -0.004646762274205685, 0.01903459243476391, -0.014768942259252071-0.004737669602036476, -0.0019912198185920715, 0.029062367975711823, -0.0019615001510828733,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.011964800767600536, 0.02173384092748165, 0.023342201486229897, -0.02948193997144699, 0.006643226835876703, 0.01388084702193737, 0.008083757944405079, 0.01216060109436512, -0.03566363826394081, 0.044166967272758484, 0.010803984478116035, -0.01518851425498724, 0.009769040159881115, 0.005559331737458706. 0.01724441722035408, 0.005143255926668644, -0.0024527492932975292, -0.014475241303443909, 0.009104716591536999, -0.009748061187565327, -0.01532837189733982. 0.03840484470129013, -0.0003780520346481353, -0.0170905739068985, 0.04181736335158348, 0.008818008936941624, -0.03261474519968033, -0.014188533648848534, 0.021398182958364487, 0.010650141164660454, -0.033929407596588135, 0.009810997173190117, -0.04324391111731529, -0.025635862722992897, -0.021887684240937233, -0.004856548272073269, -0.004083835985511541, -0.009300517849624157, -0.0046152942813932896, -0.012447308748960495. -0.0059054787270724770.017258403822779655, -0.025579920038580894, 0.006496376357972622, 0.018656978383660316, -0.025454048067331314, 0.012356401421129704, 0.009076745249330997, 0.009699110873043537, 0.001924787531606853,

0.03471260890364647, -0.007643206976354122, 0.005415977910161018, 0.017999647185206413, -0.01864299178123474, -0.022321240976452827, -0.0008540042908862233, -0.006024357862770557, -0.002783162286505103, -0.004335579462349415, 0.004143275786191225, -0.0061502293683588505, -0.008852973580360413, 0.02990151382982731, 0.0016441986663267016, -0.0008081135456450284, -0.017887761816382408, -0.023593943566083908, 0.011685086414217949, 0.003982439637184143, 0.003961461130529642. 0.01903459243476391, -0.002758687362074852, 0.014244476333260536, -0.009475339204072952, -0.038237012922763824, -0.034404922276735306, -0.019719893112778664, -0.025006504729390144, -0.013195546343922615, -0.004485926125198603, 0.03295040503144264, -0.01724441722035408, 0.02853091061115265, 0.0069474163465201855, -0.02364988625049591, 0.0036083210725337267, -0.006818048655986786, 0.00892290286719799, 0.005412481725215912, 0.03706221282482147, 0.030237169936299324, 0.008314522914588451, -0.02234921231865883, 0.0008037430234253407, -0.034125205129384995, 0.014796913601458073, 0.013754975982010365, 0.004908994771540165, 0.02467084676027298,

0.002080378821119666, -0.032586775720119476, -0.01669897325336933, 0.01055224146693945, -0.008454380556941032, 0.03169168904423714, 0.00812571495771408, -0.014671041630208492, -0.028167281299829483, -0.03471260890364647, -0.008181658573448658, 0.0021433148067444563, -0.007454399485141039, -0.012300458736717701, -0.029174255207180977, 0.0005179094732739031, -0.04089430347084999, -0.01973387971520424, 0.005835550371557474, -0.04276839271187782, -0.005992889869958162. 0.008342494256794453, 0.030209198594093323, 0.0233981441706419, -0.01727238856256008, 0.020055551081895828, -0.0025296707171946764, 0.002389813307672739, -0.002258697059005499, -0.006636234000325203, -0.015985701233148575, -0.014195526950061321, 0.0268386360257864, 0.02422330155968666. 0.025132374837994576, -0.009950853884220123, 0.035327982157468796, -0.007272584829479456, 0.010734056122601032, -0.009272545576095581-0.0026887585408985615, -0.023090457543730736, 0.0017613292438909411, 0.005884500220417976, 0.024335188791155815, 0.014167554676532745, 0.014097626321017742, -0.009342474862933159. 0.007880964316427708, 0.014545169658958912,

-0.01451719831675291, 0.007356499321758747, -0.014083640649914742, -0.03731395676732063, -0.015496199950575829, -0.00406285747885704, -0.035523779690265656, 0.00881101656705141, -0.024880632758140564, -0.019901707768440247, 0.048754289746284485, -0.0077690789476037025. -0.0050523485988378525, 0.009601211175322533. 0.011950815096497536, -0.006415958516299725, 0.03957964479923248, 0.0019422697369009256, 0.0033740599174052477, -0.009908896870911121, 0.008741088211536407. -0.015985701233148575, -0.009915890172123909, -0.014265455305576324, 0.0013067926047369838, 0.004975426942110062, -0.009279538877308369, 0.01893669180572033, -0.02412540279328823, 0.04816688969731331, -0.009020802564918995, -0.004129289649426937, -0.013069674372673035, -0.04218099266290665, -0.014824884943664074, -0.012531223706901073, 0.016055630519986153, -0.03289446234703064, 0.025286218151450157, 0.0049054985865950584, -0.005664224736392498, 0.02192964032292366, -0.04142576456069946, 0.002683514030650258, 0.0043495651334524155, 0.0019108017440885305, 0.01899263635277748, 0.05090809613466263, 0.0037796462420374155, 0.03616712614893913,

0.010943842120468616, -0.016293387860059738, 0.01609758660197258, -0.010587205179035664, 0.0036572711542248726, 0.03062877245247364, 0.003587342333048582, -0.0041817366145551205, -0.005940443370491266, 0.0004291874065529555, -0.0029789626132696867, -0.01899263635277748, -0.041481707245111465, 0.013650082983076572. -0.03085254319012165, 0.012775974348187447, -0.03146791458129883, 0.0006096908473409712, -0.017286375164985657, 0.01565004326403141, -0.019230393692851067. -0.01044035516679287, -0.005174723919481039, -0.01044035516679287, -0.003919503651559353, 0.029286140576004982, -0.009769040159881115, 0.05026474967598915, 0.01211165077984333, -0.017677975818514824, -0.009915890172123909, -0.0067166518419981, 0.003587342333048582, 0.021691882982850075, 0.008587244898080826, 0.0422089658677578, -0.027230236679315567, 0.011796971783041954, 0.021062524989247322, 0.001182669191621244, -0.0034632189199328423, -0.03792932629585266, 0.013650082983076572, 0.031020373106002808, -0.03244691714644432, -0.005943939555436373, 0.006587283685803413, -0.02875468321144581, 0.015034670941531658, -0.014740969985723495,

- -0.0045104012824594975, -0.036922354251146317, -0.020600995048880577, -0.0027866587042808533. 0.014824884943664074, 0.03725801408290863, 0.014922784641385078, -0.0211044829338789, -0.01874089241027832, -0.0055733174085617065, -0.014992713928222656, -0.008755073882639408, 0.0027919034473598003, -0.02766379527747631, -0.0525863841176033, -0.008964859880506992, -0.03541189432144165, 0.024391131475567818, -0.006849516183137894, -0.003664263989776373, -0.01606961525976658, 0.05639050528407097, -0.027775680646300316, 0.035551752895116806, -0.012482273392379284, -0.026656821370124817, -0.003381052752956748, 0.010125676169991493, 0.0029020411893725395, -0.019552065059542656, -0.01647520251572132, -0.007104756310582161, -0.042125049978494644, 0.0018915714463219047, 0.009601211175322533, 0.0062761008739471436, 0.01394378300756216, -0.02167789824306965, 0.010796991176903248, 0.0071397204883396626. 0.011873893439769745, -0.0037866393104195595, -0.02253102697432041, 0.06310366094112396, -0.022894656285643578, -0.006115265190601349, -0.001405566930770874, -0.02903439663350582, -0.0025401602033525705, 0.0009055766859091818,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- 0.00011942510900553316, 0.004594315774738789, -0.01232143770903349, -0.02023736573755741, -0.01223752275109291, -0.012300458736717701, -0.016740931198000908, -0.03219517320394516, -0.02013946697115898, -0.034376949071884155, -0.03250285983085632, 0.012957788072526455, 0.003909014631062746, 0.021845726296305656, 0.012013751082122326, 0.008041800931096077, 0.01062916312366724, 0.01941220834851265, 0.0012805693550035357, -0.017482176423072815, -0.02990151382982731, 0.015384314581751823, -0.0009667642880231142, -0.040055159479379654, -0.018475163727998734, 0.03806918486952782, 0.02374778687953949. 0.000383296690415591, 0.0037901357281953096, -0.02282472886145115, 0.0026415567845106125, -0.01405566930770874, 0.010587205179035664, -0.016740931198000908, 0.02100658230483532, -0.013055688701570034, -0.002681765705347061, 0.027929523959755898, -0.01102775614708662, 0.012307452037930489, 0.013622111640870571, -0.024335188791155815, -0.007943900302052498, 0.009713096544146538, 0.004209707956761122, -0.024782732129096985, -0.02046113833785057, 0.007150209974497557, -0.0021240843925625086, 0.032782576978206635,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.005985897034406662, 0.01704861782491207, -0.012069693766534328, -0.023244300857186317, -0.022964585572481155, -0.008978845551609993, 0.021887684240937233, 0.0010769020300358534, 0.007992850616574287, -0.03521609306335449, -0.014908798970282078, 0.018880749121308327, 0.0055698212236166, 0.018125519156455994. -0.02703443542122841, 0.011901864781975746, 0.01874089241027832, 0.03222314640879631, -0.012999746017158031, -0.007622228469699621, 0.003699228400364518. -0.02546803280711174, 0.02709037996828556, -0.003877546638250351, -0.013188553042709827. 0.012258501723408699, -0.0111396424472332. -0.012300458736717701, -0.022111454978585243, 0.03384549170732498, -0.005020880606025457, 0.011391385458409786, 0.02731415070593357, -0.0004252539074514061, -0.01337036769837141, -0.004293622449040413, 0.004863541107624769, -0.014335383661091328, 0.0012866881443187594, -0.00020148207840975374, 0.017873777076601982, -0.003667760407552123, 0.0032376989256590605, -0.001823390950448811, -0.03510420769453049, -0.03748178482055664, 0.004769137594848871, -0.0006595150916837156, -0.004443969111889601, 0.002996444934979081,

-0.011468307115137577, 0.0032289577648043633, -0.014195526950061321, 0.014223498292267323, -0.020195409655570984, -0.03180357441306114, 0.014587127603590488, -0.0014213009271770716, -0.0005852158064953983, 0.021370211616158485, 0.18539497256278992, 3.4691191103775054e-05. 0.017230432480573654, 0.038237012922763824, -0.011971794068813324, 0.009908896870911121, 0.005611778236925602, -0.002059400314465165, -0.0055768140591681, 0.033677663654088974, 0.017230432480573654. 0.006101279053837061, 0.0036223067436367273, -0.015664029866456985, -0.004237679298967123. 0.007783064618706703, -0.02597152069211006, -0.02377575822174549, -0.028055395931005478, -0.02033526636660099, -0.021845726296305656, 0.0027901551220566034, -0.028670767322182655, -0.011789979413151741, 0.02269885689020157, -0.02464287541806698, -0.027006464079022408, 0.011132649146020412, -0.011048735119402409, 0.023985544219613075, -0.015496199950575829, 0.006332044024020433, 0.023356186226010323, -0.005346049088984728, -0.01714651845395565, -0.01451719831675291, 0.02818126790225506, 0.0015192010905593634, 0.03569161146879196, 0.007999843917787075,

0.020964624360203743, -0.023216329514980316. 0.01532837189733982, -0.0025698798708617687, -0.010384412482380867, 0.03339794650673866, 0.00024387634766753763, -0.028349095955491066, -0.016307372599840164, 0.01714651845395565, -0.00820962991565466, 0.007999843917787075, 0.03493637964129448, 0.019132493063807487, 0.015230471268296242, 0.004290125798434019, 0.008552280254662037, 0.011405371129512787, -0.002475476125255227, 0.01518851425498724, -0.018810821697115898, 0.02900642529129982, 0.0017115049995481968, 0.016489187255501747, -0.035300008952617645, -0.006839027162641287, -0.013901825994253159, -0.01107670646160841, 0.0056817070581018925, -0.02718827873468399, 0.011782986111938953, -0.03244691714644432, 0.024489032104611397, 0.0071816775016486645. -0.027104364708065987, -0.011377399787306786, 0.012132629752159119, 0.005804082378745079, 0.018573062494397163, 0.0319434329867363, -0.0008448261069133878, -0.030740657821297646, -0.010041761212050915, -0.03149588778614998, -0.006279597524553537, -0.056558333337306976, 0.011817950755357742, 0.02967774122953415. 0.002807637443765998, -0.021691882982850075,

-0.019370250403881073, -0.0015017188852652907, 0.007713135797530413, 0.00690196268260479, 0.007915928959846497, -0.0016092342557385564, -0.000676560215651989, 0.015803886577486992, 0.007720128633081913, -0.01641925983130932, -0.0400271899998188, 0.042125049978494644, 0.010412383824586868, -0.007887957617640495. -0.019705908372998238, -0.024880632758140564, 0.010013789869844913, -0.00046240355004556477, -0.02269885689020157, -0.021076511591672897, -0.004108311142772436, -0.023132415488362312, -0.009027795866131783, 0.0044894227758049965, -0.014852856285870075. 0.014083640649914742, 0.024181345477700233, -0.015622071921825409, 0.01101377047598362, 0.01978982239961624, 0.026223262771964073, -0.003276159754022956, 0.006762105505913496, 0.00677259499207139. 0.009573238901793957, 0.016335343942046165, -0.030209198594093323, -0.006426447536796331, 0.0006761231343261898, -0.04355159401893616, 0.014978728257119656, -0.0024072956293821335, -0.0018566070357337594, -0.040558647364377975, -0.0066187516786158085, 0.022964585572481155, 0.001133719109930098, -0.015034670941531658, 0.009517296217381954, -0.013796932995319366,

0.011831936426460743, 0.006045336369425058, -0.005027873907238245, -0.015258442610502243, -0.009251567535102367, -0.022097470238804817, 0.013999726623296738, 0.005255141761153936, -0.017733918502926826, -0.015859829261898994, -0.021146439015865326, -0.004730676766484976, 0.009636174887418747, -0.012454302050173283. 0.025509990751743317, -0.029062367975711823, -0.027523936703801155, -0.04973329231142998, -0.02330024354159832, 0.013272468000650406, -0.04321593791246414. 0.010838949121534824, 0.01749616116285324, -0.009664146229624748, -0.038013242185115814, -0.005811075214296579, -0.17946502566337585, 0.007188670802861452, 0.02269885689020157, -0.013090653344988823, 0.006975388154387474, 0.010139661841094494, 0.0024037992116063833. -0.011104677803814411, -0.011517257429659367, -0.011349428445100784, 0.02948193997144699, -0.019677937030792236, -0.02942599728703499, 0.0014588875928893685 -0.0018391248304396868, 0.030293114483356476, 0.003512169001623988, -0.009776032529771328, 0.03860064223408699, 0.009209610521793365, 0.018601035699248314, -0.025873620063066483. 0.020642952993512154, 0.00411880062893033,

0.00411880062893033, -0.002157300477847457. -0.007006856147199869, 0.0170905739068985, 0.011755014769732952, 0.004751655273139477, -0.007859986275434494, 0.01520249992609024, 0.01337036769837141, -0.011810957454144955, 0.015524172224104404, 0.012377380393445492, -0.0067446231842041016, -0.030013399198651314. 0.008489344269037247, 0.024726789444684982, -0.014964742586016655, 0.02390163019299507, 0.01088789850473404, -0.004101318307220936, -0.013237503357231617, 0.025454048067331314, 0.02990151382982731, -0.0034195135813206434, 0.016559116542339325, -0.01217458676546812, 0.005982400383800268, -0.03695032745599747-0.007045316975563765, 0.00500339874997735, -0.003204482840374112, 0.022517042234539986, -0.012251508422195911, 0.0009728830773383379, 0.0067026661708951, 0.01058021280914545, -0.0025051957927644253, -0.013412324711680412, -0.012559195049107075, -0.0075033497996628284. -0.018629007041454315, 0.01298576034605503, -0.0014571393840014935, 0.019020607694983482, -0.019104521721601486, -0.0006297953659668565, -0.007003359496593475, -0.016013672575354576, 0.012727024033665657, 0.013286453671753407,

0.035775523632764816, -0.008692137897014618, -0.01848914846777916, 0.03583146631717682, -0.015440257266163826-0.0006289212615229189, -0.019831780344247818, 0.026600878685712814, -0.022712841629981995, 0.008706123568117619, -0.002494706539437175, 0.004132786300033331, -0.012391366064548492, -0.012587166391313076. 0.015622071921825409, -0.0085942372679710390.03157980367541313, -0.016167515888810158, 0.003141546854749322, -0.012706045061349869, 0.028726710006594658, 0.0006673820316791534, 0.00804879330098629, 0.012244516052305698, 0.01346826832741499. 0.010908877477049828, 0.005545346066355705, 0.0036048246547579765, -0.026922550052404404, 0.012202558107674122, 0.02728617936372757, 0.004653755109757185, -0.021845726296305656, 0.01577591523528099, 0.020405195653438568, -0.006856509484350681, 0.0005358287016861141, 0.01567801460623741, 0.005069830920547247, 0.02065693773329258, 0.01037741918116808, -0.010908877477049828, 0.01759406179189682, -0.0122864730656147, -0.00024016138922888786, 0.001053301035426557, 0.042880281805992126, -0.02055903896689415, -0.026377106085419655, 0.007887957617640495,

4.4415653974283487e-05, -0.006265611853450537, -0.07115944474935532, -0.023244300857186317, 0.0004329023649916053, 0.015468228608369827, -0.017831819131970406, 0.004031389486044645, 0.009741067886352539, 0.033006347715854645, 0.002608340699225664, 0.0004960567457601428, -0.0077900574542582035, -0.009020802564918995, -0.0039999219588935375, -0.004594315774738789, 0.01172704342752695, -0.011146634817123413, -0.008391444571316242, 0.0188387930393219, -0.03012528456747532. 0.023062486201524734, 0.00867115892469883, -0.024027502164244652, 0.016111573204398155, -0.0042341831140220165, 0.0042761401273310184, 0.022559000179171562, -0.032782576978206635, 0.001703638001345098, 0.014363355003297329, -0.014020704664289951, 0.01714651845395565, -0.035076238214969635. -0.0022517042234539986, 0.0013706025201827288, -0.019146477803587914, -0.00811172928661108, 0.0030086825136095285, -0.013251489028334618, 0.025579920038580894, -0.02384568750858307, 0.0036537747364491224, 0.030516885221004486, 0.014146576635539532, -0.05180318281054497, -0.02071288228034973. -0.016615059226751328, 0.014978728257119656, 0.017552103847265244,

- -0.007797050289809704, -0.019384237006306648, -0.03960761800408363, 0.01283191703259945, -0.022838713601231575 -0.00045366244739852846, 0.028922511264681816, -0.02282472886145115, 0.007866978645324707, 0.0245729461312294, -0.0165451318025589, -0.03742584213614464, -0.017160503193736076, -0.025188319385051727, -0.010482312180101871, 0.03250285983085632, 0.02476874552667141, -0.003174763172864914, -0.02013946697115898, -0.025188319385051727, 0.02744002267718315, -0.007992850616574287, 0.008398436941206455, 0.008118722587823868, -0.008461372926831245, -0.006681687664240599, -0.0353839248418808, -0.022111454978585243, -0.006160718854516745, -0.01587381586432457, -0.0005480662221089005, -0.0015113340923562646, -0.012741009704768658, 0.003964957315474749, -0.005227170418947935, 0.006059322040528059, 0.014545169658958912, 0.02584564872086048, 0.012810938060283661, 0.019468151032924652, 0.047607459127902985, -0.03681046888232231, 0.0061082723550498486, 0.0064579155296087265, 0.028055395931005478, -0.023733802139759064, -0.001285813981667161, 0.03202734515070915. 0.03261474519968033, -0.018125519156455994,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- -0.0009816241217777133, 0.006636234000325203, -0.05756530910730362, -0.01966395042836666, -0.07362093776464462, 0.017482176423072815, -0.014880827628076077, -0.03720207139849663, -0.022922629490494728, -0.03725801408290863, 0.006730637513101101, -0.029286140576004982. -0.013664068654179573, 0.027328137308359146. 0.016754917800426483, -0.0005030495813116431, 0.000714146881364286, -0.006517354864627123, -0.017412247136235237, -0.008496337570250034, 0.021076511591672897, -0.007279578130692244, 0.016754917800426483, -7.533725147368386e-05, -0.007950893603265285, -0.00014717807061970234, 0.007552299648523331, 0.007915928959846497, 0.010936848819255829, 0.025300204753875732, -0.011293485760688782, 0.007237620651721954, -0.0019090535352006555. -0.033929407596588135, 0.011741029098629951, -0.037817440927028656, -0.031887486577034, 0.018698934465646744, 0.007496356964111328, -0.008132708258926868, -0.0008758570183999836, 0.02297857217490673, 0.015104599297046661, 0.008076764643192291, 0.011300478130578995, 0.005108291748911142, 0.0013863365165889263, -0.01388084702193737. 0.014475241303443909, 0.0010865172371268272,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.003615313908085227, -0.0014116857200860977, -0.005961421877145767, -0.006346029695123434, 0.025384118780493736, 0.021538039669394493, -0.022768786177039146, -0.014111611992120743, -0.005216681398451328, -0.014922784641385078, 0.016111573204398155, 0.02100658230483532, 0.0018548588268458843, 0.006367008201777935, 0.03339794650673866, 0.0034195135813206434, 0.0032901454251259565, -0.016083601862192154, 0.029761655256152153, 0.001652939710766077, 0.0046712374314665794. 0.005727160722017288, 0.016335343942046165, -0.032754603773355484, -0.006258619017899036, -0.004335579462349415, 0.0036712568253278732, 0.02062896639108658, 0.03202734515070915, 0.002700996119529009, -0.005262135062366724, -0.017104560509324074, 0.006755112670361996, 0.028950482606887817, 0.003594335401430726, -0.011363414116203785, -0.01749616116285324, 0.0026590388733893633, 0.02636312134563923, 0.0015410537598654628, -0.008580251596868038, -0.004506904631853104, 0.011356420814990997, 0.0029230196960270405, -0.03862861543893814, 0.022614942863583565, 0.006167711690068245, 0.02531418949365616. 0.0014921036781743169, 0.020978610962629318,

-0.013747982680797577, 0.01960800774395466, 0.005860025063157082, -0.0007054057787172496, 0.026768706738948822, 0.0002628882066346705, 0.008915909565985203, -0.03454477712512016, -0.0423208512365818, 0.004286629613488913, -0.01599968783557415, -0.0002290164993610233, 0.009964840486645699, 0.023062486201524734, 0.01973387971520424, -0.005492899566888809, -0.0032079792581498623, 0.005436956416815519, -0.02123035490512848, 0.010125676169991493, -0.011992772109806538, -0.01507662795484066, -0.022642914205789566, 0.03994327411055565, 0.02285270020365715, 0.023006543517112732, 0.017202461138367653, -0.014671041630208492, -0.0068739913403987885, 0.0233981441706419, -0.009342474862933159, -0.027272194623947144, 0.026447035372257233, 0.0011127404868602753, -0.002814630279317498, -0.022195370867848396, -0.0025051957927644253, -0.0023723312187939882, -0.011356420814990997, -0.0007604746497236192. -0.01409063395112753, -0.009006816893815994, 0.017552103847265244, 0.09191428869962692, 0.0018566070357337594, 0.0032726633362472057, 0.01045434083789587, -0.03317417576909065, 0.022866684943437576, 0.020153451710939407,

```
0.019426193088293076,
    -0.005311084911227226,
    -0.03499232232570648,
    0.0015235715545713902,
    -0.016279401257634163,
    -0.008069772273302078
    -0.035327982157468796,
    -0.023789744824171066,
    0.01676890254020691,
    -0.012433323077857494,
    0.013608125038444996,
    0.010936848819255829,
    0.019901707768440247,
    0.03703423961997032.
    0.00872010923922062,
    -0.0027744213584810495,
    0.0035488817375153303,
    -0.028698738664388657,
    0.00820962991565466,
    0.007776071783155203,
    0.0005096053937450051.
    0.0032551810145378113,
    0.003950971644371748,
    -0.004992909263819456,
    -0.008041800931096077
    -0.010146655142307281,
    -0.0035803494974970818,
    -0.008153686299920082,
    0.0002735960588324815,
    -0.006374001037329435,
    0.01988772302865982,
    0.02664283476769924,
    -0.001143334317021072
    -0.00024234666489064693,
    0.010076725855469704,
    -0.029202226549386978,
    -0.02327227219939232,
    0.009713096544146538,
    -0.020279323682188988,
    0.007412442471832037,
    -0.01781783252954483,
    -0.03569161146879196
  1
"_index": "pdgithub_issues",
"_id": "NjyfUZMBhjF0vW2DRbFb",
"_score": 1.0,
" source": {
```

} },

```
"_type": "issue",
        "_repo": "langchain",
        "_issueNumber": "28269",
        " title": "docs: correct HuggingFaceEmbeddings documentation model p
aram",
        "_createdAt": "2024-11-21T22:12:02Z",
        "_closedAt": "2024-12-31T00:36:30Z",
        " state": "open",
        "_body": "- **Description:** Corrected the parameter name in the Hug
gingFaceEmbeddings documentation under integrations/text_embedding/ from mod
el to model_name to align with the actual code usage in the langchain_huggin
gface package.\r\n- **Issue:** Fixes #28231\r\n- **Dependencies:** None",
        "GitHub Issue vector": [
          -0.01945115253329277,
          0.010854997672140598,
          0.010074162855744362,
          -0.017429348081350327,
          -0.013978336937725544,
          0.011747380718588829.
          0.011259358376264572,
          -0.015226278454065323.
          -0.01593739539384842,
          -0.023020682856440544,
          0.0021682109218090773,
          0.010081134736537933,
          0.0014126485912129283,
          0.006243192125111818,
          -0.015644581988453865,
          -0.020287761464715004,
          0.005901576951146126,
          -0.0037229086738079786,
          0.010848025791347027,
          -0.022058581933379173,
          0.013811015523970127.
          0.004378252197057009,
          -0.0164811909198761,
          0.0025185407139360905,
          -0.01735963113605976,
          0.03187479078769684,
          0.028305260464549065.
          -0.041746772825717926,
          0.00043704090057872236,
          0.003733366262167692,
          -0.007459760643541813,
          0.0009969586972147226,
          -0.0014021910028532147,
          -0.010095078498125076.
          -0.008624041453003883,
          0.0072506084106862545,
          0.01836356148123741,
```

-0.017959199845790863, 0.0214032381772995. 0.01138485036790371, 0.01431995164602995, 0.011949560604989529, 0.006874134764075279, -0.002682376652956009, -0.016648512333631516, 0.014682482928037643, -0.001096306019462645, -0.022923078387975693, -0.00629548029974103, 0.0128628583624959, 0.024219822138547897. 0.03725697472691536, 0.008282425813376904, 0.012967434711754322, -0.000586933281738311, -0.004817471839487553, 0.008651928044855595, 0.021933091804385185. -0.012130825780332088, 0.009279384277760983, 0.0065673780627548695, -0.002114179776981473, -0.010241484269499779, 0.007912923581898212, -0.027078233659267426, 0.011810125783085823, -0.004263218492269516, 0.019297773018479347, -0.0018370532197877765, 0.014110799878835678, 0.03279506042599678. 0.0049987370148301125, 0.00787806510925293, -0.004671065136790276, 0.01666245609521866, -0.014989239163696766, 0.002063634805381298, -0.019939173012971878, 0.004587404429912567, -0.004726839251816273, 0.005486758425831795, 0.0025586283300071955, -0.0034370673820376396, 0.010213597677648067, 0.015491204336285591, -0.008505521342158318, -0.0064453729428350925,

-0.0006017482373863459, 0.017331743612885475, -0.005856260657310486, 0.035277001559734344, 0.023522647097706795, 0.007871093228459358, -0.007843206636607647, 0.02678542211651802, 0.02728738635778427, -0.013999251648783684, 0.024819390848279, 0.024428972974419594, -0.01384587399661541, -6.465198384830728e-05. 0.036504026502370834, -0.04473067820072174, -0.0018405391601845622, -0.02085944265127182, 0.0017228910000994802, 0.010931686498224735, -0.011092036962509155, -0.0006287636933848262, 0.011621888726949692, -0.011280274018645287, 0.03552798181772232, -0.006229248829185963, -0.04478645324707031, 0.01514261681586504, -0.00638611288741231, 0.005343838129192591, -0.01049943920224905, 0.002244899980723858, 0.005758656654506922, 0.01231906283646822. 0.03524911403656006, -0.009593113325536251, -0.021347464993596077, 0.022964907810091972, -0.018391447141766548, -0.015588808804750443, -0.025837264955043793, -0.015630638226866722, -0.024345312267541885, 0.018335673958063126, 0.015045013278722763, 0.015268108807504177, 0.008045386523008347. -0.014640651643276215. 0.03583473712205887, -0.01786159537732601,

0.0014997953549027443, -0.009899869561195374, -0.010604015551507473, 0.005120742134749889, 0.04328055679798126, -0.0006440143915824592. 0.006842761766165495, -0.012326034717261791, 0.005472815129905939, -0.011573086492717266, 0.012848915532231331, 0.026590213179588318, -0.012040193192660809, 0.0239130649715662, -0.02076183818280697, -0.020301703363656998, 0.006393084768205881, 0.009091148152947426, 0.023564478382468224, -0.010262399911880493, -0.01625809632241726, -0.01268856506794691, -0.0014004480326548219, -0.00038911018054932356, 0.01776399090886116, -0.0013185301795601845, -0.0014265921199694276, 0.012444553896784782, 0.025711772963404655, 0.008136019110679626, -0.023215891793370247, -0.0019015418365597725, -0.015825847163796425, 0.0013568747090175748, 0.007271524053066969, -0.03229309618473053, 0.011391821317374706, -0.00025621140957809985, 0.024401087313890457, 0.00796869769692421, -0.011370906606316566, -0.0021420668344944715, -0.01478008646517992, -0.025474734604358673, 0.007020541466772556, 0.007871093228459358, 0.04467490315437317, -0.005253205541521311, 0.011621888726949692, -0.009446706622838974,

-0.0009812723146751523, 0.016244152560830116, -0.000671901332680136, 0.007466732524335384, 0.02467995695769787, -0.00985803920775652, -0.002703291829675436, -0.5929882526397705, -0.03028523363173008, 0.008909882977604866, -0.004552545491605997, 0.013873760588467121, 0.0013237589737400413, -0.0038588575553148985. 0.0008074145298451185, -0.008073274046182632, 0.03661557286977768, -0.04208141565322876, -0.00412378367036581, -0.008958684280514717, 0.00088410364696756. -0.01780582219362259, -0.01762455701828003, 0.010255428031086922, -0.026353172957897186, -0.00443054037168622, 0.029169756919145584, -0.006232734769582748, 0.013692495413124561, -0.016774004325270653, 0.0016618883237242699, 0.02176576852798462, -0.01070161908864975, 0.004312020726501942, -0.005044053308665752, 0.03170746937394142, -0.003674106439575553, -0.03176324442028999, 0.02244899980723858, 0.03106606937944889. -0.005988724064081907, 0.03985046222805977, -0.0007459760527126491, -0.02686908282339573, 0.020789725705981255, 0.0092445258051157, -0.0028252971824258566, -0.029086096212267876. -0.007320325821638107, 0.005399611778557301,

-0.0003122031921520829, -0.004461912903934717, 0.01784765161573887, 0.024150103330612183, 0.005981752183288336, -0.005821402184665203, -0.0022989308927208185, 0.013546088710427284, 0.0011058921227231622, 0.00036601629108190536, 0.012054136954247952, -0.009851067326962948, -0.037145424634218216, 0.023885177448391914, -0.02897454798221588, 0.04040820151567459, -0.0007873707800172269, 0.01022754143923521, 0.013908619061112404, -0.014403613284230232, -0.0016218008240684867. 0.0024941395968198776, 0.011231471784412861, 0.026855139061808586, 0.014250234700739384, 0.005312465131282806, -0.049666669219732285. -0.0038065696135163307, 0.001803937484510243, -0.03307393193244934, 0.011719493195414543, 0.003977376967668533, 0.02272786945104599. 0.009460650384426117, 0.02646472118794918, -0.02341110073029995, 0.020231986418366432, 0.013406653888523579, -0.021960977464914322, -0.01006719097495079, 0.0001751649397192523, 0.03946004435420036, 0.015965282917022705, -0.011182669550180435, 0.004618776962161064, -0.02419193461537361, -0.02555839531123638, 0.0022344423923641443. 0.0160768311470747, -0.01935354806482792,

-0.030619878321886063, 0.007051913999021053, 0.029309190809726715, -0.0037507957313209770.012667650356888771, -0.017875539138913155, -0.013922562822699547, 0.008261511102318764, 0.01671823114156723, 0.018795808777213097, 0.027259500697255135, 0.029978478327393532, 0.005992209538817406, -0.03173535689711571. -0.006215305533260107, 0.012988350354135036, -0.019018903374671936, -0.0028200685046613216, -0.009732548147439957, -0.019981004297733307, 0.007682856637984514. -0.03608572110533714, -0.03971102461218834, 0.0028235542122274637, -0.004922047723084688, 0.014347839169204235, 0.0004762569151353091, 0.0071739195846021175, 0.002678890712559223, -0.025335300713777542, 0.015700357034802437, 0.014187488704919815, 0.005211375188082457. 0.00024205006775446236, -0.017011042684316635, -0.014975295402109623, 0.014473330229520798, 0.03971102461218834, -0.01611866056919098, 0.02546079084277153, -0.012737367302179337, 0.006609208416193724, 0.02158450335264206, 0.04827232286334038, -0.0044131106697022915, 0.028667790815234184, 0.026353172957897186, -0.017819765955209732. 0.013490315526723862, 0.01821018196642399,

- -0.02723161317408085, -0.019339604303240776, -0.04127269610762596, -0.03990623354911804, -0.001274085370823741, 0.003942518495023251, -0.010283315554261208, 0.000719396339263767, -0.027301330119371414, -0.00605844147503376, 0.0016392301768064499, 0.013037151657044888, -0.0153238829225301740.00877044815570116, -0.026938799768686295, 0.0004923790693283081, -0.03508179262280464, 0.014173545874655247, 0.045344192534685135, -0.033548008650541306, -0.010206625796854496, -0.016634568572044373, -0.010415778495371342, -0.005403097718954086, 0.02268603816628456, -0.018837638199329376, -0.032404642552137375, 0.020524799823760986, -0.02536318637430668, -0.003646219614893198, -0.0010344317415729165, 0.00634079659357667, -0.003344691824167967. -0.01722019538283348, -0.002548170741647482, -0.03151226043701172, -0.01676006056368351, 0.005999181419610977, 0.013469399884343147, -0.009662830270826817. 0.005880661774426699. 0.027120064944028854, -0.0030518788844347, 0.02759414352476597, 0.014738256111741066, -0.00571682583540678, -0.003018762916326523, -0.02336926944553852, -0.0018719119252637029, -0.024944882839918137,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.0033394629135727882, -0.004820957779884338, 0.011733436957001686, 0.018112577497959137, -0.011377878487110138, -0.007306382525712252, 0.025265581905841827, 0.011642804369330406, 0.028444696217775345, 0.02276970073580742, -0.008805306628346443, -0.02845863811671734. -0.012577016837894917, -0.001845767954364419. -0.031540147960186005, 0.010262399911880493, 0.005235775839537382, 0.020608460530638695, 0.015546978451311588, -0.011196613311767578, -0.0064105140045285225, -1.673489714448806e-05, -0.00625016400590539, -0.005106798838824034, -0.005448414012789726, -0.023257721215486526, 0.007034484762698412, -0.010276343673467636, 0.0026893483009189367, 0.006842761766165495, 0.01539359986782074, 0.009809236973524094, 0.005699396599084139, 0.01213779766112566, -0.0015355255454778671, 0.03179113194346428, -0.009286356158554554, 0.0189910177141428, 0.028402864933013916, 0.007731658406555653, 0.009035374037921429, 0.007090258412063122, -0.008672843687236309, 0.03619726747274399, -0.002746865153312683, 0.038149356842041016, -0.018140465021133423, 0.027538368478417397. 0.018572712317109108, -0.011419708840548992,

-0.009739519096910954, 0.021807599812746048, 0.009293328039348125, 0.038651321083307266, 0.025851208716630936, -0.01152428425848484, -0.018001031130552292-0.0056157358922064304, -0.010262399911880493, -0.008352143689990044, 0.0044932859018445015, 0.0063338251784443855, 0.0004636206431314349, -0.011057178489863873, 0.03675500676035881, 0.020120438188314438, 0.02891877293586731, 0.015421486459672451, -0.010729506611824036, 0.0209988784044981, 0.023327438160777092. 0.026883026584982872, -0.021389296278357506, -0.00877044815570116, -0.050810035318136215, -0.017973143607378006, -0.015463316813111305. -0.00024727886193431914, -0.015100786462426186, -0.026980631053447723, -0.0418025478720665, 0.00995564367622137, 0.0042562466114759445. 0.012270260602235794, -0.002044462598860264, 0.022574491798877716, 0.012653706595301628, -0.028040334582328796, -0.03912540152668953, 0.03639247640967369, 0.008470662869513035, -0.0038065696135163307, 0.01940932124853134, -0.011991390958428383, 0.011977448128163815, -0.027343161404132843, 0.013225388713181019, 0.01836356148123741, 0.012284204363822937, -0.002595229772850871,

0.004618776962161064, -0.0012348692398518324, 0.011705550365149975, 0.025223752483725548, -0.020608460530638695, 0.008484606631100178, 0.02131957747042179, -0.01040880661457777, 0.02554445154964924, -0.008289397694170475, 0.017024986445903778, 0.054993078112602234, 0.00221527018584311, 0.007815319113433361. -0.028486525639891624, -0.010478523559868336, -0.008066302165389061, 0.005835345480591059, 0.006957795470952988, -0.008352143689990044, -0.018781865015625954. 0.0060619269497692585, 0.020482968538999557, -0.008665871806442738, -0.00988592579960823, 0.037507954984903336, -0.022853361442685127. -0.0029089581221342087, -0.024080386385321617, 0.013037151657044888, 0.004594375845044851, 0.0035032988525927067, 0.042973801493644714, 0.008094188757240772, -0.003911145497113466, -0.011642804369330406, 0.00733426958322525, -0.012709480710327625-0.019297773018479347, -0.005253205541521311, 0.0039006879087537527, -0.028068222105503082, -0.027747521176934242, -0.006494175177067518, 0.0009045831393450499, 0.03056410327553749, 0.024889107793569565, 0.010332116857171059, -0.008526436984539032. -0.010896828025579453,

-0.018098633736371994, -0.0030623364727944136, -0.02313223108649254, 0.0008967399480752647, 0.007146032527089119, 0.021152256056666374, 0.019339604303240776, -0.006201361771672964, 0.0034231238532811403, 0.007044942118227482, -0.03229309618473053, -0.01798708736896515, 0.0014719084138050675, 0.020566631108522415. 0.010088106617331505, -0.01867031678557396, 0.032544076442718506, 0.009376988746225834, -0.00906326062977314, -0.015728242695331573, -0.007731658406555653, 0.01575613021850586, 0.018600599840283394, -0.015309939160943031, 0.008840165100991726, 0.0036322760861366987, -0.013699467293918133, -0.009620999917387962, 7.407472730847076e-05, -0.00018671188445296139, -0.01341362576931715, 0.008993543684482574, -0.0010170023888349533, -0.041244808584451675, -0.0397946871817112, 0.04328055679798126, 0.011977448128163815, 0.011015348136425018, -0.025488678365945816, -0.023606307804584503, -0.0016950040590018034, -0.02058057300746441, -0.030954521149396896, -0.0072854673489928246, -0.017554838210344315, -0.0011137353722006083, 0.01503106951713562, -0.004594375845044851, 0.01359489094465971, -0.04007355496287346,

0.005476301070302725, -0.014096856117248535. -0.01689949631690979, -0.0021908690687268972, 0.005957351066172123, 0.0007150389719754457, 0.005587848834693432, -0.0023669053334742785, -0.03176324442028999, 0.022518716752529144, 0.02587909623980522, -0.01393650658428669, -0.0055564758367836475, 0.014375725761055946. -0.018698204308748245, 0.014807973988354206, -0.017136534675955772-0.0065360055305063725, -0.01780582219362259, -0.02809610776603222, 0.009809236973524094. 0.021779712289571762, 0.0193953774869442, -0.02104070782661438, -0.02226773463189602, 0.013859816826879978, 0.014947408810257912, -0.009481565095484257, 0.03360378369688988, -0.013002293184399605, 0.008512493222951889, -0.006989168468862772, -0.010171767324209213, -0.016313869506120682, -0.014863748103380203, -0.015407543629407883, -0.007794404402375221, -0.011231471784412861, 0.024401087313890457, -0.006372169591486454, 0.018196238204836845, 0.0037717109080404043, -0.016160491853952408, -0.001868426101282239, -0.0115033695474267, 0.02741287834942341, 0.003013534238561988, 0.022839417681097984, -0.012284204363822937, -0.01653696596622467,

-0.01872609183192253, 0.0048418729566037655. -0.009349102154374123, 0.021110426634550095, 0.03589051216840744, -0.015923451632261276, 0.013783128000795841, -0.008010528050363064, -0.015979226678609848, -0.018823696300387383, 0.0017176622059196234, 0.0013725610915571451, 0.02845863811671734, 0.0146685391664505. -0.009307271800935268, -0.001580841839313507, -0.04216507822275162, -0.012381808832287788, 0.004409625194966793, -0.01991128735244274, -0.002590001095086336, 0.0025795435067266226, -0.0160768311470747, -0.018516939133405685, -0.006595265120267868, -0.0035695303231477737, -0.03142860159277916, -0.012639762833714485, 0.03324125334620476, 0.032683514058589935, 0.04969455674290657, 0.004005264025181532, -0.005772599950432777 -0.004510715138167143, -0.017275968566536903, 0.004444483667612076, 0.005497216247022152, -0.0033795505296438932, 0.021849431097507477, 0.014529104344546795, 0.03357589617371559. 0.06603631377220154, -0.01070161908864975, 0.020441139116883278, -0.016230208799242973, 0.020343534648418427, 0.021556617692112923, -0.02463812567293644, -0.027622031047940254, -0.018656373023986816,

-0.010980488732457161, 0.0064767454750835896, 0.007933839224278927, 0.029002433642745018, -0.007417930290102959, -0.0026109162718057632, -0.007313354406505823, -0.01903284713625908, 0.0024714814499020576, -0.007989613339304924, -0.03957159072160721, -0.016774004325270653, 0.009502480737864971, -0.029866930097341537. 0.00593294994905591, -0.04102171212434769, -0.01766638644039631, 0.0008422732353210449, -0.002989133121445775, -0.006752129178494215, 0.0026091733016073704, 0.015198390930891037, -0.025293469429016113, 0.011872871778905392, -0.000324621592881158, 0.0020601488649845123, -0.008902911096811295, -0.006989168468862772, -0.02381546050310135, -0.03471926227211952, 0.0010893342550843954, -0.007529478054493666, 0.015505148097872734, -0.012256316840648651, -0.001845767954364419, -0.031317051500082016, 0.029337078332901, 0.0010649331379681826, -0.016090773046016693, -0.009293328039348125, -0.02606036141514778, -0.017819765955209732-0.04718473181128502, 0.014166573993861675, -0.015686413273215294, 0.007187862880527973, 0.012918632477521896, -0.002061891835182905. 0.02077578194439411, -0.002924644621089101,

-0.005824888125061989, 0.003010048298165202, 0.0015093814581632614, 0.034998130053281784, 0.0029612460639327765, 0.02942073903977871, 0.03156803548336029, -0.015379656106233597, -0.019702134653925896, 0.03410574793815613, -0.010199653916060925, 0.013852845877408981. 0.03223732113838196, 0.0035730162635445595, 0.0009002258302643895, -0.03248830512166023, 0.007905951701104641, -0.006999625824391842, -0.022699981927871704, -0.015965282917022705, 0.060235824435949326. 0.014891634695231915, -0.011398793198168278, -0.0034405533224344254, -0.005469329189509153, -0.022978851571679115, -0.0024540522135794163, -0.025767548009753227, 0.018977073952555656, 0.016732173040509224, -0.02696668729186058, -0.0029194157104939222, 0.029030321165919304, 0.017791878432035446, 0.013992280699312687, 0.0010274600936099887, -0.009390932507812977, 6.2330341279448476e-06, 0.030034251511096954, -0.01671823114156723, 0.0030483929440379143, 0.009328186511993408, 0.02897454798221588, -0.015839790925383568, 0.014626708813011646, 0.0080872168764472, -0.013044123537838459, 0.004880217369645834. 0.005992209538817406, 0.0007320325821638107,

0.03669923543930054, -0.04330844432115555, 0.0009612285066395998, 0.002793924417346716, -0.010095078498125076, 0.012054136954247952, -0.018014973029494286, -0.015323882922530174, -0.017289912328124046, -0.020050721243023872, -0.010366976261138916, 0.02624162659049034, 0.011691606603562832, -0.006926422938704491, -0.0008148219785653055, -0.00814996287226677, -0.01708076149225235, -0.004193501081317663, -0.022379282861948013, 0.024470804259181023, -0.027900900691747665. -0.022602377459406853, 0.009662830270826817, -0.00614907406270504, 0.01703893020749092, -0.0024209364783018827, 0.006361711770296097, -0.0004041430074721575, 0.04905315488576889, -0.005298521835356951, 0.03803780674934387, -0.02126380428671837, -0.012625819072127342, -0.020329590886831284, -0.013197502121329308, -0.014473330229520798, -0.015533034689724445, 0.00840094592422247, -0.00025533995358273387, -0.03360378369688988, 0.0004902004147879779, 0.004263218492269516, 0.03212577477097511, 0.016425417736172676, -0.014431499876081944, 0.012012306600809097, -0.004127269610762596, -0.0029351022094488144, -0.025906981900334358, -0.023397156968712807,

0.06018005311489105, -0.01131513249129057, -0.004580432549118996, 0.0044793421402573586, -0.002018318511545658, -0.0025638570077717304, -0.03193056583404541, 0.009105090983211994, -0.008833193220198154, -0.04213719069957733, -0.004008749965578318, 0.004092410672456026. -0.008073274046182632, -0.033046044409275055, -0.0049185617826879025, -0.0343567319214344, -0.037647392600774765, -0.014710369519889355, 0.030006365850567818, 0.016160491853952408, 0.007801375817507505. 0.0004710281209554523, 0.020231986418366432, 0.03625304251909256, 0.021988864988088608, -0.007459760643541813, -0.014654595404863358, -0.019018903374671936, -0.016871608793735504, -0.03424518182873726, -0.01204716507345438, -0.027482595294713974, 0.02759414352476597, 0.020441139116883278, -0.02145901322364807, -0.0005250591202639043, -0.010213597677648067, -0.0239130649715662, -0.02058057300746441, -0.008393974043428898, 0.008665871806442738, 0.003362121060490608, 0.0034405533224344254, -0.012618848122656345, 0.024066442623734474, -0.0025586283300071955, 0.014292065054178238, -0.03042466938495636, 0.0015433687949553132, 0.0008923825807869434,

0.0029333592392504215, -0.0035799879115074873, -0.011454567313194275, -0.025349242612719536, 0.004991765134036541, 0.015114730224013329, 0.03187479078769684, 0.011796182952821255, 0.03237675502896309, -0.003939032554626465, -0.020064665004611015, -0.012702508829534054, 0.013525173999369144, 0.0026091733016073704. -0.013183558359742165, 0.0021281233057379723, 0.0119565324857831, -0.015784017741680145, 0.019479038193821907, -0.016021056100726128, -0.020301703363656998, -0.04724050313234329, 0.008261511102318764, 0.03385476395487785, 0.03179113194346428, -0.02787301316857338, 0.0006501146708615124, -0.012102939188480377, -0.012360893189907074, 0.019869456067681313, 0.005340352188795805, -0.019562700763344765, 0.022755756974220276, 0.008317284286022186, 0.031010296195745468, 0.005134685896337032, 0.02700851671397686, -0.006197875831276178, -0.00849855039268732, 0.04032453894615173, 0.020566631108522415, 0.0008265867945738137, -0.021696051582694054, 0.008268482983112335, -0.02505643106997013, -0.015351769514381886, -0.00611421512439847, 0.00364970532245934. -0.02449869178235531, 0.0009708146681077778,

-0.022964907810091972, -0.08053752779960632, -0.011991390958428383, -0.01250032801181078, 0.028123995289206505, 0.02536318637430668, -0.01395742129534483, -0.01917228288948536, 0.008693758398294449, -0.01268159318715334, 0.015170504339039326, -0.004632720723748207, -0.005141657777130604, -0.00045664890785701573, 0.03990623354911804, -0.009181780740618706, 0.009112062864005566, 0.16241362690925598, -0.014863748103380203, 0.009662830270826817, 0.025516565889120102. 0.0042248740792274475, -0.0052218325436115265, -0.01293257623910904, 0.013455456122756004, -0.019186226651072502, 0.015477260574698448, 0.029030321165919304, 0.002455795183777809, -0.003449267940595746, -0.0014762657228857279, -0.011984419077634811, 0.010917743667960167, -0.0418025478720665, -0.031595923006534576, -0.05761445313692093, 0.004977821838110685, 0.00024074286920949817, -0.016843721270561218, -0.01143365167081356, -0.010555213317275047, 0.019841568544507027, -0.030257347971200943, -0.018377503380179405, 0.015979226678609848, -0.0022710440680384636, 0.024610238149762154, -0.020915217697620392, 0.021166199818253517, 0.026673873886466026,

-0.012165684252977371, -0.03410574793815613, -0.020008891820907593, 0.011210556142032146, 0.027705691754817963, 0.02186337299644947, 0.007703771814703941, 0.013908619061112404, -0.038456112146377563, 0.016550907865166664, -0.011858928017318249, 0.0038205129094421864, 0.02905820868909359, -0.021737882867455482, -0.012186599895358086, -0.006002667360007763, 0.02131957747042179, -0.018781865015625954, 0.007030998822301626, 0.04715684428811073, 0.049527235329151154. 0.028263431042432785, -0.020245930179953575, 0.0019991460721939802, 0.032181546092033386, 0.014459386467933655, 0.006675440352410078, -0.033408574759960175, -0.010827111080288887, 0.0035032988525927067, 0.014905578456819057, -0.02455446496605873, -0.014361782930791378, -0.023355325683951378, -0.0022780157160013914, -0.003583473851904273, -0.03142860159277916, 0.005566933657974005, -0.027761464938521385, 0.002309388481080532, 0.014891634695231915, -0.048300206661224365, -0.023564478382468224, 0.021305633708834648, 0.006438401062041521, 0.007320325821638107, 0.0703309029340744, -0.0049081044271588326, -0.017777934670448303, -0.026659930124878883,

-0.012834971770644188, -0.007271524053066969, -0.019548757001757622, 0.0012671136064454913, 0.004196987021714449, -0.014501216821372509, -0.021486900746822357, -0.01042972132563591, -0.018642431125044823, -0.0011346505489200354, 0.024944882839918137, -3.888923311023973e-05. 0.03399420157074928, 0.004901132546365261. 0.006351254414767027, 0.005493730306625366, 0.001652302104048431, -0.015993168577551842, 0.04364308714866638, 0.011029290966689587, -0.032320983707904816. -0.03538854792714119, 0.016341757029294968, 0.011545199900865555, -0.006783502176403999. -0.01748512126505375, -0.002705034799873829, 0.010380919091403484, -0.034635599702596664, -0.012639762833714485, 0.012346950359642506, 0.007843206636607647, 0.005974780302494764, 0.021486900746822357, -0.018698204308748245, 0.015909507870674133, 0.002834012033417821, -0.018684260547161102, 0.005619221832603216, 0.033910539001226425, 0.021194087341427803, -0.00553556066006422, -0.0030083053279668093, -0.031317051500082016, 0.0038344564381986856, -0.009349102154374123, 0.0014832374872639775, 0.00715300440788269, 0.0057272836565971375, 0.021194087341427803,

- -0.012577016837894917, -0.0006357354577630758, -0.012563074007630348, -0.006807903293520212, 0.0019085136009380221, 0.010513382963836193, -0.011984419077634811, -0.012312090955674648, -0.015825847163796425, -0.011099008843302727, -0.019060734659433365, -0.025948813185095787, -0.0389859639108181, 0.012667650356888771, 0.013811015523970127, 0.004782612901180983, 0.008847136981785297, -0.02536318637430668, -0.027663860470056534, 0.01822412572801113, -0.007431874051690102, 0.013734325766563416, -0.0014753942377865314, -0.010834082961082458, -0.042611267417669296, -0.00733426958322525, 0.0001050662831403315, -0.042471833527088165, -0.0007390043465420604, 0.007431874051690102, -0.02983904257416725, -0.027942730113863945, -0.021696051582694054, -0.1770264059305191, 0.0115033695474267, 0.029588060453534126, -0.06140707805752754, 0.004406139254570007, -0.002703291829675436, 0.022964907810091972, -0.004217902198433876, -0.014250234700739384, -0.018781865015625954, 0.029225530102849007, 0.006888078060001135, -0.025906981900334358, -0.019381433725357056, -0.0033307482954114676, 0.042109303176403046, -0.029615947976708412,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.008122076280415058, 0.008275453932583332, 0.006372169591486454, 0.039599478244781494, -0.04272281751036644, 0.01484980434179306, 0.009195723570883274, -0.02956017293035984, -0.008875023573637009, -0.00824756734073162, 0.03374321758747101, 0.0025655999779701233. -0.014766143634915352-0.013239332474768162, -0.011280274018645287, 0.05716826021671295, -0.0074458173476159570.020984934642910957, 0.013364823535084724, 0.023857291787862778, -0.006438401062041521. -0.02801244705915451, 0.02122197300195694, -0.0022536145988851786, 0.011998362839221954, -0.010966545902192593, -2.8213757104822434e-05, -0.024624181911349297, 0.019102565944194794, 0.03145648539066315, -0.0005673252744600177, 0.006326853297650814, -0.020524799823760986. 0.028667790815234184, 0.002879328327253461, -0.005518131423741579, 0.0010858483146876097, -0.004186529200524092, 0.005650594364851713, -0.0096976887434721, 0.003757767379283905, -0.0016470733098685741, -0.017680330201983452, -0.000594340730458498, -0.0031982853543013334, 0.0056471084244549274, -0.005546018481254578, 0.010325145907700062. -0.007146032527089119, -0.011552171781659126,

0.012326034717261791, -0.013678551651537418, 0.012158713303506374, -0.014724313281476498, -0.006832304410636425, 0.0007189605967141688, -0.0017751790583133698, 0.021919148042798042, 0.026576269418001175, -0.0286399032920599, 0.011468511074781418, 0.018252013251185417, -0.011900758370757103, -0.020566631108522415. 0.05028018355369568, -0.022504772990942, 0.012451525777578354, 0.015240221284329891, -0.012214486487209797, -0.016369642689824104, -0.007738630287349224, 0.016188377514481544, 0.018154408782720566, 0.019939173012971878, -0.025628112256526947. 0.02724555693566799, -0.01131513249129057, 0.0060305544175207615, 0.009927756153047085, 0.01699710078537464, -0.014794030226767063, 0.022114356979727745, 0.015616695396602154, -0.00018333495245315135, -0.003670620732009411, -0.012618848122656345, 0.037507954984903336, 0.024401087313890457, 0.007940811105072498, -0.01880975253880024, 0.011691606603562832, 0.04517686739563942, -0.039599478244781494, -0.00877044815570116, 0.02678542211651802, 0.014103827998042107, 0.009648886509239674, -6.988079258007929e-05. 0.0198973435908556, -0.01422931905835867,

-0.021556617692112923, 0.005085883662104607, 0.017917368561029434, 0.041244808584451675, -0.020873386412858963, 0.00634079659357667, 0.005549504421651363, -0.022937022149562836, -0.03251619264483452, -0.0769679993391037, -0.021068595349788666, 0.014131715521216393, -0.0026736620347946882, -0.015630638226866722, 0.015003182925283909, 0.004824443254619837, 0.02017621323466301, -0.0006780016119591892, -0.0019015418365597725, -0.017513008788228035, 0.011426680721342564, 0.010757393203675747, -0.0027451221831142902, 0.027635972946882248, 0.006807903293520212, 0.001934657571837306, -0.008052358403801918, -0.03299026936292648, 0.037870485335588455, -0.01766638644039631, -0.027259500697255135, 0.004050580319017172, -0.026297399774193764, 0.010471551679074764, -0.00842883251607418, -0.041830435395240784, -0.010081134736537933, 0.01913045160472393, -0.0020130896009504795, -0.0008514236542396247, -0.04213719069957733, -0.00602358253672719, -0.006654525175690651, -0.02554445154964924, -0.010450636968016624, -0.00629548029974103, 0.0022326994221657515. 0.0011180926812812686, -0.02518192119896412, 0.020915217697620392,

0.015100786462426186, 0.00821968074887991, -0.005479787010699511, -0.01940932124853134, 0.007675884757190943, -0.0239130649715662, 0.0311497300863266, -0.0038518859073519707, -0.03128916397690773, -0.044200826436281204, 0.010471551679074764, -0.02919764257967472, 0.014570934697985649, 0.0036601629108190536. 0.021919148042798042, -0.01165674813091755, 0.0164811909198761, 0.005936435889452696, -0.03767527639865875, -0.036643460392951965, 0.005507674068212509. -0.013106869533658028, 0.0008688530069775879, 0.009913813322782516, -0.00831031333655119, -0.0025411988608539104, -0.0282355435192585, 0.004280647728592157, -0.01088288426399231, 0.00184751080814749, 0.014361782930791378, -0.011140839196741581, 0.0038762870244681835, -0.03625304251909256, -0.023285608738660812, 0.003004819620400667, -0.029030321165919304, 0.003193056443706155, -0.0162023212760686870.0025638570077717304, 0.003072794061154127, 0.007668912876397371, -0.009279384277760983, 0.0007712486549280584, 0.024164047092199326, 0.020733952522277832, 0.0019172282190993428, -0.008916853927075863, -0.03457982465624809, 0.0024505662731826305,

-0.0016984898829832673, 0.02700851671397686, -0.03271140158176422, 0.007271524053066969, 0.031623806804418564, 0.0012069822987541556, -0.018572712317109108, -0.006389598827809095, 0.008986571803689003, -0.04286225140094757, -0.008324256166815758, -0.07300805300474167, 0.02877933904528618, -0.014989239163696766, -0.024526577442884445, 0.007529478054493666, -0.028361033648252487, 0.019981004297733307, -0.009844095446169376, 0.006529033649712801, 0.023480817675590515. -0.007201806642115116, 0.02095704711973667, -0.008847136981785297, 0.023160116747021675, -0.027078233659267426, -0.002046205336228013, 0.028723565861582756, -0.023160116747021675, 0.03524911403656006, 0.020566631108522415, -0.02437319979071617, -0.0014692939585074782, 0.008631013333797455, 0.022839417681097984, -0.007801375817507505, -0.016774004325270653, 0.0035085277631878853, -0.0030937092378735542, 0.014347839169204235, -0.004542088136076927, 0.006846247706562281, -0.02136140875518322, -0.018740033730864525, 0.03271140158176422, 0.013727353885769844, -0.0013603605329990387, 0.013078982941806316. 0.01006719097495079, 0.03589051216840744,

-0.008554323576390743, -0.017345687374472618, -0.020929161459207535, 0.029225530102849007, -0.023243777453899384, -0.0031756272073835135, 0.01024845615029335, 0.008979599922895432, 0.0021403238642960787, 0.011203584261238575, 0.021235916763544083, 0.047575145959854126, 0.016634568572044373, -0.014515160582959652, -0.01699710078537464, 0.0059050628915429115, -0.018600599840283394, 0.03173535689711571, 0.03293449431657791, 0.013525173999369144, 0.0019398863660171628, 0.04710106924176216, -0.02505643106997013, 0.011719493195414543, -0.016160491853952408, 0.011935616843402386, 0.004765183664858341, -0.01876792125403881, -0.00015871599316596985, 0.022839417681097984, -0.02232350781559944, -0.004277161788195372, -0.023425042629241943, -0.013838902115821838, -0.004137726966291666, 0.02035747841000557, 0.028807226568460464, 0.0035538440570235252, -0.032265208661556244, 0.014821916818618774, 0.014501216821372509, 0.010757393203675747, -0.020984934642910957, -0.023341381922364235, -0.0030152772087603807, 0.01671823114156723, 0.019144395366311073, -0.002370391273871064. 0.003538157558068633, 0.010750421322882175,

-0.0228115301579237, -0.007982641458511353, 0.020329590886831284, 0.0007943425443954766. 0.031902678310871124, 0.014766143634915352, -0.006211819592863321, 0.02401066944003105, 0.03034100867807865, 0.022699981927871704, -0.006089814007282257, 0.014710369519889355. 0.01649513468146324, 0.002901986474171281. -0.03957159072160721, -0.048579078167676926, 0.008784390985965729, -0.036587685346603394-0.025572339072823524, -0.006546462886035442, 0.0029786755330860615, 0.005113770719617605, -0.021612390875816345, -0.006354740355163813, 0.011844984255731106, -0.01802891679108143, 0.004789584781974554, -0.02654838189482689, -0.015546978451311588, -0.03181901574134827, 0.04442392289638519, 0.011810125783085823, -0.025990642607212067. 0.07278495281934738, 0.002590001095086336, 0.026395004242658615, 0.017526952549815178, -0.004095896612852812, 0.007146032527089119, 0.02797061763703823. 0.02527952566742897, -0.0006544719799421728, -0.0006806160090491176, -0.017415404319763184, -0.022992795333266258, -0.013873760588467121, -0.018293842673301697, -0.021291691809892654, 0.010436693206429482, 0.01402713917195797,

```
0.06977316737174988,
6.323584966594353e-05.
-0.018684260547161102,
0.013831930235028267,
-0.034412503242492676,
0.020259873941540718,
0.013176586478948593,
0.014863748103380203,
0.0018614543369039893,
-0.013518202118575573,
-0.024387143552303314,
-0.011677662841975689,
-0.04790979251265526,
-0.028179768472909927,
-0.03753584250807762
0.005852775182574987,
0.0023895634803920984,
0.03042466938495636,
0.019506925716996193,
0.02258843369781971,
0.03212577477097511.
0.003733366262167692,
0.004960392136126757,
0.010889856144785881,
0.00861009769141674,
0.011280274018645287,
0.021974921226501465,
-0.01213779766112566,
-0.022100413218140602,
0.002236185362562537,
-0.003712451085448265,
0.01514261681586504,
-0.022797586396336555
-0.0020793210715055466,
0.006895049940794706,
0.014752199873328209,
-0.009467621333897114,
-0.010206625796854496,
0.009488536976277828,
0.0030449070036411285.
0.010011416859924793,
0.0009568711975589395.
-0.028068222105503082,
-0.03544432297348976,
0.024401087313890457,
-0.0049987370148301125,
0.013260248117148876,
-0.02956017293035984,
-0.03187479078769684
```

]

```
}
},
  "_index": "pdgithub_issues",
  "_id": "NzyfUZMBhjF0vW2DRbFb",
  "_score": 1.0,
  " source": {
    "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28268",
    "_title": "standard-tests: troubleshooting docstrings",
    "_createdAt": "2024-11-21T21:41:43Z",
    " closedAt": "2024-11-21T22:05:32Z",
    "_state": "closed",
    "_body": "None",
    "GitHub Issue vector": [
      -0.016303295269608498,
      0.002488586585968733,
      0.035421960055828094,
      -0.011929415166378021,
      -0.01394039485603571.
      0.01287026610225439,
      0.0039429557509720325,
      -0.029417751356959343,
      -0.03947264701128006,
      -0.013976304791867733,
      0.0254963431507349,
      -0.0022892842534929514,
      -0.009868161752820015,
      0.013250916264951229,
      -0.01183604821562767,
      0.008869854733347893,
      0.01126148272305727,
      -0.03013595938682556,
      0.021675482392311096,
      0.009221775457262993,
      0.003565897000953555,
      0.018716469407081604,
      -0.03088289313018322,
      0.025654347613453865.
      -0.012970815412700176,
      0.02206331305205822,
      0.0037562218494713306,
      -0.018860111013054848,
      0.009832251816987991,
      0.012489616870880127,
      0.026659836992621422,
      -0.016533121466636658,
      -0.009817887097597122,
      -0.02016724832355976,
```

0.01091674342751503, -0.0009053894900716841, 0.020368345081806183, -0.009106862358748913, 0.020784905180335045, -0.0113620320335030560.006180169992148876, 0.005476327147334814, 0.014881245791912079, -0.02928847447037697, -0.015139800496399403, 0.011886322870850563. 0.024203570559620857, -0.009889707900583744. -0.0001699007989373058, 0.01194377988576889, 0.025453250855207443, -0.012970815412700176, 0.0004428194079082459, 0.012590166181325912, 0.014076854102313519. 0.004416971933096647, 0.012575801461935043, 0.03203202411532402, -0.0011913256021216512, -0.01532653346657753, -0.01321500539779663, -0.01194377988576889, -0.02019597589969635, 0.0014418002683669329, -0.023025711998343468, -0.004388243891298771, -0.016777312383055687. 0.01901811733841896, 0.011268665082752705, -0.011225572787225246, 0.02321244403719902, 0.01381111703813076, -0.006840920075774193, -0.017294419929385185, 0.0304232407361269, -0.016561849042773247, 0.005023856647312641, -0.003352230414748192, -0.014163038693368435, 0.001791028305888176, 0.02696148492395878, -0.0007756633567623794, -0.02110091596841812, 0.022120770066976547,

0.02996358834207058, 0.012374703772366047, 0.01646129973232746, 0.02528087981045246, 0.0069845616817474365, -0.01624583825469017, 0.01832863874733448, 0.010485819540917873, 0.022005857899785042, 0.01529780589044094, 0.015613816678524017, 0.04174217954277992, -0.005720517598092556, 0.05030320584774017, 0.03231930732727051, -0.047258008271455765, -0.011555948294699192, 0.006693687755614519, -0.02322680875658989, -0.004973582457751036, -0.01832863874733448. -0.025180332362651825, 0.00916431937366724, -0.00018549936066847295, 0.03085416555404663, 0.007426258642226458, -0.010507365688681602, 0.04185709357261658, -0.0012828969629481435, -0.048349685966968536, 0.02572616934776306, -0.0033899361733347178, -0.007548353634774685, -0.021991493180394173, 0.00976043101400137, 0.005515828263014555, 0.0395013764500618, 0.0015504290349781513, 0.006320219952613115, -0.015398354269564152, -0.005066949408501387, -0.00203252537176013, -0.007174886297434568, -0.026300733909010887, -0.011397942900657654, -0.009911254048347473, 0.03217566758394241, 0.01427076943218708, 0.006880421657115221, -0.015383990481495857,

-0.010033349506556988, 0.016418207436800003, -0.009006313979625702, 0.014823788776993752, -0.01739496923983097, -0.012949269264936447, -0.006819373928010464, 0.03901299461722374, -0.020267797634005547, -0.016073469072580338, -0.02439030446112156, 0.026315098628401756, -0.01854410022497177, -0.002610681811347604, 0.03269277513027191, -0.015843642875552177, 0.005745654460042715, -0.024921776726841927, -0.00869030226022005, -0.009322324767708778, -0.01042836345732212, 0.02576926164329052, -0.018917568027973175, 0.009868161752820015, -0.036341264843940735. -0.0013592063914984465, 0.00857538916170597, 0.02023906819522381, 0.006805009674280882, -0.028254257515072823, 0.0012918745633214712, 0.037289299070835114, 0.011864776723086834, 0.0046288431622087955, -0.004075823817402124, -0.0008268356323242188, -0.014809424988925457, 0.007885911501944065, -0.035680513828992844, 0.026056544855237007, -0.011871959082782269, 0.03223312273621559, 0.0021061415318399668, 0.0030972668901085854, -0.00987534411251545, 0.007778179831802845, -0.03499103710055351, 0.00823064986616373, 0.0027417545206844807, 0.03740421310067177,

-0.012123331427574158, 0.009293596260249615, 0.014313862659037113, 0.009559333324432373, 0.022580422461032867, 0.01311445701867342, 0.014967430382966995, 0.018931932747364044, -0.028239892795681953, 0.009228957816958427, -0.599846363067627, -0.013839845545589924, -0.012037146836519241, -0.004880215507000685. 0.005325503647327423, 0.017596067860722542, -0.007857182994484901, 0.0028638497460633516, -0.012532709166407585, 0.015154164284467697, -0.013796753250062466. 0.01185041293501854, 0.016375115141272545, -0.02131637930870056, -0.00880521535873413, -0.007505261339247227, 0.021675482392311096, -0.007027653977274895-0.016145288944244385, 0.018414823338389397, -0.03433028608560562, 0.02092854678630829, 0.02342790737748146, -0.007871546782553196, 0.006140668410807848, -0.020827997475862503, 0.026573652401566505, 0.006277127657085657, 0.000917060358915478, -0.0020917775109410286, -0.030279600992798805, 0.010945471934974194, 0.01854410022497177, 0.0012730215676128864, 0.051682163029909134, 0.002738163573667407, -0.013408921658992767. 0.023499727249145508, -0.004011185374110937, 0.01877392642199993,

-0.021431291475892067, -0.0037274935748428106, 0.01903248205780983, 9.280579251935706e-05. -0.0069881523959338665, -0.00893449317663908, 0.005878522992134094, 0.0021653936710208654, -0.0033127290662378073, 0.008352745324373245, 0.018630284816026688, -0.0038962720427662134, -0.003249885980039835, 0.004937672056257725, 0.0248643197119236, -0.02365773357450962, 0.01336582936346531, -0.02782333269715309, 0.02226441167294979, -0.011527219787240028-0.003201406914740801. -0.000895514152944088, 0.02066999301314354, 0.012898994609713554, -0.002343149855732918, 0.030250871554017067, 0.022221319377422333, 0.020784905180335045, 0.006194533780217171, -0.05498591437935829, 0.015915462747216225, -0.00673318887129426, -0.024203570559620857. -0.013674657791852951, 0.020526351407170296, 0.029992317780852318, 0.01241061370819807, 0.01929103583097458, -0.011936597526073456, 0.008905764669179916, -0.009494693949818611, -0.015455811284482479, -0.025352701544761658, -0.007228751666843891, 0.037260569632053375, 0.0076129925437271595, -0.003262454643845558, 0.0058821141719818115. -0.00834556296467781, -0.00030456457170657814,

-1.6117572158691473e-05, 0.006115531083196402. 0.004251784645020962, -0.015671273693442345, 0.005716926418244839, 0.02643001079559326, 0.002070231130346656, 0.009731702506542206, 0.014529324136674404, -0.020483259111642838, -0.018716469407081604, 0.018026990815997124, -0.006262763403356075, 0.00695942435413599. 0.011455398984253407, -0.0004174577188678086, -0.03812241926789284, -0.00353896408341825, 0.012144877575337887, 0.0055625117383897305, -0.022680971771478653, 0.007548353634774685, 0.0007011494017206132, 0.022853340953588486, 0.014127128757536411, -0.04381061717867851, 0.004395425785332918, -0.009501876309514046, 0.00018875373643822968, 0.009810705669224262, -0.011814502067863941, 0.005357822868973017, 0.0010943677043542266. 0.022393688559532166, 0.01626020297408104, -0.0025604073889553547, -0.003680810099467635, -0.021689847111701965, -0.01715077832341194, 0.006553637329488993, -0.018213724717497826, 0.01947776973247528, 0.02066999301314354, -0.005566102918237448-5.456688813865185e-05, 0.023571548983454704, 0.028196800500154495, -0.0021366653963923454, 0.026573652401566505, 0.01929103583097458,

-0.007850000634789467, -0.008905764669179916, 0.01765352487564087, -0.01996614970266819, -0.005788747221231461, -0.041943278163671494, -0.01763916015625, -0.0005314730806276202, -0.011792955920100212, -0.0009237935300916433, -0.016662398353219032, -0.011462581343948841, -0.018012627959251404, -0.0003784052387345582, 0.002574771409854293, -0.008180376142263412, 0.022106407210230827, -0.04197200760245323, -0.009918436408042908, -0.010686918161809444, 0.00895603932440281. -0.005038220901042223, -0.021531840786337852, -0.0016913771396502852, -0.015398354269564152, -0.011290211230516434, -0.027248768135905266, 0.019765052944421768, -0.012209516018629074, -0.03200329840183258, -0.008094190619885921, -0.02156056836247444, -0.005684607196599245. -0.019133029505610466, -0.006284310016781092, 0.013444831594824791, -0.013775207102298737, 0.00521777244284749, -0.02154620550572872, -0.00423742039129138, -0.013523834757506847, 0.005512237548828125, -0.014601144939661026, 0.0010010007536038756, 0.017596067860722542, 0.01670549064874649, 0.027952609583735466, 0.00626994576305151, 0.013681840151548386. -0.019765052944421768,

-0.01693531684577465, -0.001781152910552919, -0.016992773860692978, 0.021747302263975143, -0.017840256914496422, 0.000832222169265151, -0.007957731373608112, 0.01486688107252121, -0.00214743847027421, 0.04849332571029663, 0.006420769263058901, 0.01761043071746826. 0.02740677259862423, -0.017754072323441505. 0.0017892328323796391, -0.011534402146935463, 0.0074047124944627285, -0.027277495712041855, 0.0018709287978708744, -0.009932800196111202, 0.018486643210053444. -0.01162058673799038, -0.01692095212638378, -0.00869030226022005, 0.007634538691490889, -0.009106862358748913, -0.011570312082767487, -0.008798033930361271, -0.00964551791548729, -0.0018251431174576283, -0.014191767200827599, 0.014780696481466293, 0.0032247486524283886. 0.00778536219149828, 0.006119122263044119, -0.01394039485603571, 0.013329918496310711, 0.02019597589969635, 0.028498446568846703, 0.001391525729559362, 0.007300572469830513, 0.02667420171201229, 0.018845748156309128, -0.005602013319730759, 0.026042180135846138, 0.015929827466607094, 0.03855334222316742, -0.01696404628455639, 0.03226185217499733, -0.028972463682293892,

- 0.014435957185924053, 0.024519581347703934, 0.008008006028831005, -0.030279600992798805, 0.030049774795770645, 0.003077516332268715. 0.028972463682293892, 0.0075555359944701195, 0.0019086346728727221, 0.011419489048421383, 0.01116093434393406, -0.011218390427529812, -0.019808145239949226, -0.014924338087439537, 0.012597347609698772, -0.011103477329015732-0.03456011414527893, 0.026990212500095367, 0.004567795433104038, 0.025122875347733498, 0.017323149368166924. -0.01451496034860611, 0.02457703836262226, 0.030250871554017067, 0.040736690163612366, -0.009702973999083042, -0.015671273693442345. -0.015628181397914886, 0.002160007134079933, -0.007447804789990187 -0.00019627246365416795, -0.009063770063221455, -0.0025927266106009483. -0.039846114814281464, 0.054411351680755615, 0.017538610845804214, 0.014924338087439537, 0.018960660323500633, 0.018716469407081604, -0.017323149368166924, -0.03895553946495056, -0.020986003801226616, 0.02457703836262226, 0.012209516018629074, 0.004833532031625509, -0.01299954392015934, -0.02413174882531166, 0.013222187757492065, -0.03734675422310829, -0.0012631462886929512,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.012446524575352669, -0.009839433245360851, -0.0012083830079063773, -0.022451145574450493, -0.008654392324388027, -0.010536094196140766, 0.034904852509498596, -0.0120802391320467, 0.015139800496399403, 0.028929371386766434, 0.0018745198613032699, 0.005928797647356987. 0.03456011414527893, -0.0004910739371553063, 0.029791219159960747, 0.020023606717586517, -0.00973888486623764, -0.026085272431373596, -0.018199361860752106, -0.010615097358822823, 0.027492957189679146. 0.008762123063206673, -0.001852973597124219, -0.020267797634005547, -0.010514548048377037. 0.013243733905255795, 0.0023754690773785114, -0.008532296866178513, 0.012575801461935043, 0.006305856164544821, -0.01834300346672535, -0.04067923501133919, 0.005648696795105934, 0.0005615479894913733, 0.029762491583824158, 0.046309977769851685, 0.02439030446112156, -0.001852973597124219, -0.020483259111642838, 0.001791028305888176, -0.008632846176624298, -0.013847027905285358, 0.002723799319937825, -0.009487512521445751, -0.017696617171168327, -0.012152059935033321, 0.009473147802054882, 0.00985379796475172. 0.025438886135816574, 0.013085728511214256,

-0.005005901679396629, -0.008166011422872543, -0.013021090067923069, -0.0012389067560434341, 0.010758738033473492, -0.016346387565135956, -0.00047940306831151247, 0.017825894057750702, 0.03826605901122093, 0.002905146684497595, -0.019089937210083008, 0.01056482270359993, 0.013638747856020927, -0.02085672691464424, -0.00046548779937438667, 0.008381473831832409, 0.0008012495236471295, 0.03599652647972107, -0.031486187130212784, 0.04225929081439972, 0.011871959082782269. -0.005303957499563694, 0.007627356797456741, 0.007383166346698999, 0.010866469703614712, -0.003172678640112281, -0.007160522043704987, -0.028455354273319244, 0.005361414048820734, -0.014996158890426159, -0.028886279091238976, 0.020368345081806183, 0.0011428466532379389. -0.013760843314230442, 0.032348036766052246, 0.016317659988999367, -0.02829734981060028, -0.029302839189767838, 0.03338225185871124, 0.01289181225001812, -0.01219515223056078, 0.006320219952613115, -0.02181912399828434, -0.014529324136674404, -0.024749407544732094, -0.0019912284333258867, -0.00963115319609642, -0.007171295117586851, -0.010241629555821419, -0.016332022845745087,

-0.018687741830945015, -0.002355718519538641, -0.037490397691726685, 0.022149499505758286, 0.020310889929533005, -0.012740989215672016, -0.01033499650657177, 0.006108349189162254, 0.012231062166392803, -0.004047095309942961, 0.014780696481466293, -0.01832863874733448, 0.009616789408028126, 0.01946340501308441, -0.02462013065814972, -0.03114144876599312, 0.028598995879292488, -0.01858719252049923, 0.019319763407111168, 0.004413381218910217, 0.002976967254653573. -0.011268665082752705, -0.010694099590182304, 0.03967374563217163, -0.020942911505699158, 0.00510285934433341, -0.016389479860663414, -0.02181912399828434, 0.01927667111158371, -0.005260865204036236, 0.0035192135255783796, 0.032606590539216995, -0.01555635966360569, 0.0036700370255857706, 0.0012622484937310219, -0.046740900725126266, -0.02019597589969635, -0.028728272765874863, -0.013301190920174122, -0.011541583575308323, -0.030509427189826965, 0.010306267999112606, -0.037002015858888626, 0.02295389026403427, 0.015024887397885323, -0.005278820171952248, -0.004908943548798561, -0.011002928949892521, 0.009336688555777073, 0.009013495407998562,

0.017251327633857727, 0.02276715636253357. -0.014809424988925457, -0.008331199176609516, 0.005221363622695208, -0.02249423786997795, 0.030480697751045227, 0.036772191524505615, -0.0036951741203665733, 0.028024431318044662, -0.003824451472610235, -0.034244101494550705, -0.021201465278863907, -0.0026771160773932934, 0.0032193621154874563, 0.010694099590182304, 0.018299909308552742, -0.018386095762252808, -0.00801518838852644, -0.035393234342336655, 0.004438518080860376, 0.004373879637569189, -0.018615921959280968, -0.003978865686804056, -0.013394557870924473, 0.0005440416862256825, -0.012259790673851967. -0.026631109416484833, 0.010406817309558392, -0.03651363402605057, -0.018184997141361237, 0.0007451396086253226. 0.008525115437805653, 0.020770542323589325, -0.016145288944244385, -0.009121227078139782, 0.01066537108272314, 0.005835430696606636, -0.00678705470636487, -0.0009107760270126164, 0.009437237866222858, 0.006923513952642679, 0.035364504903554916, 0.020497623831033707, 0.03185965493321419, 0.0034545748494565487, 0.01946340501308441, -0.010945471934974194, 0.019535226747393608, 0.0034348242916166782,

- -0.024792499840259552, -0.019492132589221, -0.010945471934974194, -0.011814502067863941, 0.018457915633916855, 0.0026124774012714624, 0.005900069139897823, -0.0068696485832333565, -0.004797621630132198, 0.010176991112530231, -0.014795061200857162, 0.0038172693457454443, -0.021503113210201263, -0.04151235520839691, -0.026975849643349648, -0.0036448996979743242, -0.027119489386677742, 0.021416928619146347, -0.034014277160167694, -0.01854410022497177, 0.05808856710791588. -0.00856820773333311, -0.011326122097671032, 0.001365490723401308, 0.024921776726841927, -0.015470175072550774, 0.02206331305205822, 0.007426258642226458, 0.015628181397914886, -0.026616744697093964, 0.015168528072535992, -0.023284265771508217, -0.02762223407626152, -0.012489616870880127, 0.010507365688681602, 0.021890943869948387, -0.005892887245863676, 0.010579186491668224, -0.031428731977939606, 0.04668344557285309, -0.007957731373608112, -0.0007209001341834664, -0.017955170944333076, -0.025812353938817978, -0.008503569290041924, -0.01715077832341194, 0.014924338087439537, -0.02858463115990162, 0.020353982225060463, -0.001348433317616582,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.014593962579965591, 0.008697484619915485, -0.051222510635852814, 0.0016752174124121666, 0.007121020928025246, -0.006611093878746033, 0.03763403743505478, 0.03800750523805618, 0.03016468696296215, 0.020368345081806183, 0.020986003801226616, -0.01996614970266819, 0.005127996671944857, -0.03295132890343666, -0.0075196255929768085, 0.032807689160108566, 0.006952241994440556, -0.012690714560449123, -0.028656452894210815, 0.00713179400190711, 0.011060385033488274. -0.020368345081806183, -0.04036322236061096, 0.020152883604168892, 0.0020217522978782654, 0.007770997937768698, -0.02828298509120941, 0.005874931812286377, -0.027220038697123528, 0.01369620393961668, -0.01834300346672535, 0.005411688704043627, -0.014349772594869137. -0.011498491279780865, 0.004219464957714081, 0.025927266106009483, -0.0028836005367338657, 0.03708820044994354, 0.004553431179374456, -0.016791675239801407. -0.01090956199914217, 0.007598628289997578, -0.017280057072639465, 0.00964551791548729, 0.017122050747275352, 0.048148587346076965, -0.008252196945250034, 0.003479712177067995. 0.016332022845745087, 0.008561025373637676,

-0.017840256914496422, -0.02693275548517704, 0.003558714874088764, 0.0375765822827816, -0.033985547721385956, 0.011002928949892521, 0.009358234703540802, -0.02576926164329052, -0.0036125804763287306, -0.024763772264122963, -0.004621660802513361, -0.014687329530715942, -0.013847027905285358, -0.0072897993959486485, 0.013746478594839573, 0.026975849643349648, -0.012087421491742134, -0.020612535998225212, -0.013653111644089222, -0.002630432602018118, -0.027521686628460884, -0.028426626697182655, 0.011771409772336483, -0.041627269238233566, -0.03559432923793793, -0.014471868053078651, -0.035192135721445084, 0.01603037677705288, -0.008970403112471104, 0.01577182300388813, -0.0009534195996820927, 0.045850325375795364, -0.0057312906719744205. 0.029389023780822754, -0.02880009450018406, -0.026401283219456673, -0.02365773357450962, 0.0010099783539772034, -0.014550870284438133, -0.004140462260693312, 0.0029213062953203917, -0.012159241363406181, -0.024433396756649017, -6.665856926701963e-05, 0.0082450145855546, 0.01696404628455639, -0.009128408506512642, -0.03392809256911278, 0.001092572114430368, 0.023370450362563133,

0.012647622264921665, -0.014543688856065273, -0.01231006532907486, 0.05895041674375534, -0.020957276225090027, 0.000309053371893242, -0.006316629238426685, -0.00661468505859375, -0.02160366252064705, 0.003957319539040327, 0.022364960983395576, 0.0031026534270495176, -0.007128202822059393, -0.016174018383026123, -0.002163598081097007, -0.0034258465748280287, -0.02278152108192444, -0.03013595938682556, -0.02648746781051159, -0.039530105888843536, -0.02737804502248764, 0.016533121466636658, 0.009516241028904915, 0.00504181208088994, 0.0011850412702187896, 0.0027615053113549948, 0.026042180135846138, 0.02878572978079319, -0.023111896589398384, -0.02041143737733364, -0.035852886736392975, -0.006180169992148876, -0.002975171897560358, -0.026990212500095367, -0.015901099890470505, 0.018845748156309128, 0.039846114814281464, 0.00632740231230855, -0.010069259442389011, -0.019377220422029495, -0.018299909308552742, -0.021689847111701965. -0.014909974299371243, -0.007893092930316925, 0.013064182363450527, -0.0011284825159236789, -0.017294419929385185. 0.020152883604168892. -0.003350434824824333, 0.020310889929533005,

-0.006126304157078266, -0.02691839262843132, 0.006532091181725264, 0.02087108977138996, 0.0058857048861682415, -0.02973376214504242, -0.0006401018472388387, -0.008769305422902107, 0.03200329840183258, 0.017955170944333076, 0.005666651763021946, 0.011340485885739326, -0.005178271327167749, -0.009710156358778477. -0.037691496312618256, -0.010442727245390415, 0.009078134782612324, 0.0007586059509776533, 0.013308372348546982, -0.017524246126413345, -0.032405491918325424, 0.005727699492126703, 0.006320219952613115, 0.020483259111642838, -0.03838097304105759, 0.014313862659037113, 0.018730834126472473, 0.03461756929755211, -0.03550814464688301, -0.003233726369217038, -0.006783463526517153, -0.03295132890343666, 0.01578618586063385. -0.006632640026509762, 8.281822374556214e-05, 0.0334971658885479, -0.01217360608279705, 0.002307239454239607, -0.012130513787269592, 0.0281249787658453, -0.02482122741639614, -0.0025622029788792133, 0.010837741196155548, 0.010018985718488693, 8.887809235602617e-05, -0.009437237866222858, -0.00014902792463544756, -0.016576213762164116. -0.011053203605115414, -0.008467658422887325,

0.007634538691490889, -0.010988564230501652, -0.0021797576919198036, -0.005239319056272507-0.043982986360788345, -0.02993486076593399, 0.015010522678494453, 0.02206331305205822, 0.02762223407626152, -0.008812397718429565, -0.021876581013202667, -0.005038220901042223, 0.007627356797456741, 0.012726625427603722. -0.014227677136659622, -0.027966974303126335, -0.0046647535637021065, 0.003910636063665152, -0.028670817613601685, 0.021732939407229424, 0.17558720707893372. 0.008079826831817627, 0.026746023446321487, 0.035393234342336655, -0.011699588969349861, 0.03257786110043526, 0.006255581509321928, -0.023557184264063835, 0.01043554488569498, 0.0352783203125, 0.030566882342100143, 0.0019517270848155022, 0.005440416745841503, -0.01254707295447588, 0.0021653936710208654, 0.015613816678524017, -0.028455354273319244, -0.03266404569149017, -0.02950393594801426, -0.013509470969438553, -0.012187969870865345, -0.018170632421970367, -0.017481153830885887, -0.01463705487549305, 0.008762123063206673, -0.0027489366475492716, -0.015484539791941643, 0.005472735967487097, -0.006090393755584955, 0.014112764038145542,

-0.008166011422872543, -0.0034653479233384132, 0.01717950776219368, -0.019879965111613274, -0.019089937210083008, -0.010406817309558392, 0.018888840451836586, 0.004316423088312149, 0.030337056145071983, -0.00918586552143097, 0.02039707452058792, -0.026559289544820786, 0.03088289313018322, -0.009035041555762291, 0.013746478594839573, 0.02668856643140316, -0.010751556605100632, -0.017940806224942207, -0.0024742225650697947, -0.008970403112471104, -0.02115837298333645. 0.0029159197583794594, 0.05737036094069481, 0.01880265586078167, 0.024893049150705338, -0.01858719252049923, 0.010184172540903091, 0.009537787176668644, 0.011283029802143574, 0.003960910718888044, -0.023528456687927246, -0.0008798033813945949, 0.0008842921815812588, 0.02740677259862423, -0.038151148706674576, -0.010967018082737923, -0.02625764161348343, -0.012159241363406181, -0.006399223115295172, -0.0058282483369112015. -0.0025604073889553547, -0.03243422135710716, 0.012812810018658638, -0.0029787628445774317, -0.0015665886458009481, -0.03272150456905365, 0.028211165219545364, 0.013301190920174122, 0.023097531870007515, 0.01791207864880562,

- -0.008280924521386623, -0.02041143737733364, -0.016648033633828163, -0.013997850939631462, -0.014127128757536411, -0.031227633357048035, -0.0023305811919271946, 0.015944192185997963, -0.0105432765558362, -0.013911666348576546, -0.030222143977880478, -0.010622278787195683, 0.008051098324358463, 0.002608886221423745. 0.018860111013054848, 0.02295389026403427, -0.002364696003496647, 0.024778135120868683, 0.0031870428938418627, -0.01486688107252121, -0.03904172405600548, 0.055129557847976685, -0.0009426464675925672, -0.008058280684053898, -0.012446524575352669, 2.2934926164452918e-05, 0.010478638112545013. -0.00869030226022005, -0.013387375511229038, -0.01811317726969719, 0.012934905476868153, -0.02370082587003708, -0.0004030935815535486, 0.0057348813861608505, 3.1337385735241696e-05, 0.013358647003769875, 0.014651419594883919, -0.03125636279582977, 0.021014731377363205, 0.0077063594944775105. 0.022652244195342064, -0.006862466223537922, -0.004592932760715485, 0.008237832225859165, -0.01336582936346531, -0.003348639467731118, -0.01713641546666622, -0.0024526764173060656, 0.020483259111642838, -0.01252552680671215,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

0.008316835388541222, -0.015197256579995155. -0.0021941219456493855, -0.027564778923988342, -0.0011904278071597219, 0.014471868053078651, -0.012618893757462502-0.004032731521874666, 0.0187882911413908, -0.01906120963394642, 0.01440722867846489, 0.0027704827953130007, -0.01694968156516552, -0.014809424988925457. -0.019908692687749863, -0.014134310185909271, 0.01254707295447588, -5.6025743106147274e-05, -0.005472735967487097, -0.019161758944392204, -0.018529735505580902, -0.023327358067035675, 0.0006369596812874079, 0.003925000317394733, 0.03717438504099846, -0.026631109416484833, -0.021732939407229424, -0.03318115696310997, -0.0162027459591627120.01577182300388813, -0.037748951464891434, 0.011225572787225246, 0.028843186795711517, -0.006539273075759411, -0.049096617847681046, -0.0034132779110223055, -0.18546973168849945, 0.010859287343919277, 0.03651363402605057, -0.02788078971207142, 0.02881445735692978, 0.005806702189147472, 0.016992773860692978, -0.017782801762223244, -0.011527219787240028, -0.01883138343691826, 0.030078502371907234, -0.023528456687927246, -0.014593962579965591, -0.011017292737960815,

-0.026272006332874298, 0.016662398353219032, -0.011936597526073456, 0.012719443067908287, 0.03430155664682388, 0.009932800196111202, 0.033525895327329636, -0.019089937210083008, 0.01947776973247528, -0.006427951157093048, 0.0033989138901233673, -0.02046889439225197, -0.008367110043764114, 0.019176121801137924, 0.008122919127345085, -0.013265280053019524, 0.0031241998076438904, 0.014098400250077248, 0.0019786597695201635, -0.014256405644118786, 0.034473929554224014, 0.009149954654276371, 0.00032207087497226894, -0.014780696481466293, 0.0039824568666517735, 0.023384815081954002, -0.029173562303185463, 0.03206075355410576, 0.011311757378280163, -0.02133074216544628, -0.015283441171050072, 0.013861391693353653, 0.015455811284482479, -0.012015600688755512, 0.008000824600458145, -0.03622635453939438, 0.004298468120396137, -0.029647577553987503, -0.016432572156190872, 0.0017658910946920514, 0.013430467806756496, 0.01809881255030632, -0.006047301460057497, 0.014026579447090626, 0.013408921658992767, -0.021675482392311096, 0.0047258008271455765, -0.03065306693315506. 0.0010791057720780373, 0.01101011037826538,

0.004704254679381847, 0.004614478908479214, -0.03059561178088188, 0.02296825498342514, 0.003249885980039835, 0.013473560102283955, -0.016116561368107796, -0.01857282966375351, 0.03019341453909874, 0.011936597526073456, 0.016849132254719734, 0.009911254048347473, 0.002161802491173148, 0.02413174882531166. 0.010234447196125984, -0.0009938187431544065, -0.020296525210142136, 0.02898682840168476, -0.01427076943218708, 0.007806908339262009, 0.023600276559591293. -0.007153340149670839, -0.027291860431432724, -0.015369626693427563, -0.007770997937768698, 0.016403844580054283, 0.03602525591850281, -0.0030757207423448563, -0.005953934509307146, -0.014428775757551193, 0.01811317726969719, 0.005167498253285885, 0.0018233476439490914, 0.003616171423345804. 0.015915462747216225, 0.0017066389555111527, -0.0029643988236784935, -0.0016940704081207514, -0.02667420171201229, 0.01600164920091629, 0.03685837611556053, 0.002723799319937825, -0.01903248205780983, 0.030538154765963554, 0.024189205840229988, -0.026056544855237007, -0.02066999301314354, 0.019161758944392204, 0.003057765541598201, 0.014967430382966995,

0.000889678718522191, 0.03108399175107479, 0.016202745959162712, -0.019592681899666786. 0.0027633009012788534, -0.0003986047813668847. 0.04148362576961517, -0.01577182300388813, -0.014321044087409973, -0.003763403743505478, -0.0017829485004767776, -0.008855490013957024, -0.07365929335355759, -0.04441390931606293, 0.006370494607836008, 0.007318527437746525, -0.011814502067863941, -0.01229570060968399, 0.0019660911057144403, 0.04720055311918259, 0.005472735967487097. -0.02368646115064621, 0.0038675437681376934, 0.015599452890455723, -0.0004987048450857401, 0.00353896408341825, 0.016102196648716927, -0.029317203909158707, -0.01692095212638378, 0.005961116869002581, -0.02131637930870056, 0.0250510536134243, 0.009523422457277775, -0.02364336885511875, 0.005914433393627405, -0.0007823965861462057, -0.001996614970266819, 0.024088656529784203, -0.03384190425276756, 0.02016724832355976, 0.018156269565224648, -0.002242600778117776, 0.012417796067893505, -0.016389479860663414, -0.0029446480330079794, -0.014479049481451511, 0.006582365836948156, 0.012231062166392803, 0.006830147001892328, -0.015872370451688766,

0.03315242752432823, -0.01429231557995081, -0.0028800093568861485, 0.03881189599633217, 0.011541583575308323, -0.05863440781831741, -0.01786898635327816, 0.004337969236075878, -0.007207205519080162. 0.023772645741701126, -0.01644693687558174, -0.010227265767753124, -0.04300622642040253, 0.020497623831033707, -0.028871914371848106, 0.0033252977300435305, 0.006654186174273491, -0.00941569171845913, 0.0031672921031713486, 0.016791675239801407, 0.002328785602003336. -0.04056432098150253, -0.004021958447992802, -0.024217935279011726, -0.0030398103408515453, 0.046108879148960114, 0.01598728448152542, 0.016073469072580338, 0.0029877403285354376, -0.020813634619116783, 0.006553637329488993, -0.021287649869918823, 0.007656084839254618, 0.009257686324417591, -0.012187969870865345, 0.02572616934776306, -0.029302839189767838, 0.004287694580852985, -0.003792132018133998, -0.013179095461964607. 0.0005862363032065332, -0.008295289240777493, -0.013703386299312115, -0.00787872914224863, -0.003082902869209647, -0.0018978615989908576, 0.014852517284452915, 0.02970503456890583. 0.016877859830856323, 0.03266404569149017,

0.033583350479602814, -0.03780640661716461, 0.01693531684577465, -0.007483715191483498, 0.02671729400753975, -0.033296067267656326, -0.017538610845804214, 0.007056382019072771, 0.0276078712195158, -0.017064593732357025, -0.001650080201216042, 0.003989638760685921, -0.06119122356176376, -0.021029096096754074, -0.08153083920478821, 0.02463449351489544, 0.0032732277177274227, -0.04596523568034172, -0.004323604982346296, -0.030078502371907234, 0.007828454487025738, -0.02410302124917507, -0.005167498253285885, 0.017021501436829567, -0.011792955920100212, 0.01736624166369438, 0.01417740248143673, -0.007314936723560095, -0.00999025721102953, -0.02572616934776306, 0.028254257515072823, -0.029762491583824158, 0.021258922293782234, 0.00615503266453743. -0.0067762816324830055, -0.01809881255030632, 0.012331611476838589, 0.010485819540917873, -0.006751144304871559, 0.02598472312092781, -0.002154620597139001, 0.023772645741701126, 0.00021478872804436833, -0.021934036165475845, 0.006596729625016451, -0.02368646115064621, -0.010356542654335499. 0.016619306057691574. 0.01429231557995081, 0.0032319307792931795,

0.008661574684083462, 0.029992317780852318, 0.02713385410606861, 0.021215829998254776, -0.01650439389050007, -0.018874475732445717, 0.02388755977153778, -0.029647577553987503, -0.01969323121011257, 0.02230750396847725, -0.011046021245419979, 0.01195096131414175, 0.020842362195253372, -0.004546249285340309. 0.025625620037317276, 0.017797164618968964, -0.03088289313018322, -0.019865600392222404, 0.009085316210985184, -0.029073012992739677, 0.014277951791882515. 0.014076854102313519, -0.003285796381533146, 0.006639822386205196, 0.02533833682537079, -0.00048434073687531054, 0.007735087536275387, 5.150889774085954e-05, 0.013279644772410393, -0.0127266254276037220.0017102300189435482, 0.010758738033473492, 0.0008420975063927472, -0.03151491656899452, -0.00481557659804821, -0.02576926164329052, -0.003553328337147832, 0.019592681899666786, 0.028886279091238976, 0.0005440416862256825, -0.011929415166378021, -0.015168528072535992, 0.006769099272787571, 0.047028183937072754, 0.010241629555821419, -0.0028638497460633516, -0.013373011723160744, 0.01449341420084238. 0.0334971658885479, 0.012001235969364643,

-0.006172987632453442, -0.0039034541696310043, 0.006101167295128107, -0.02436157502233982, -0.027306223288178444, 0.021244557574391365, 7.529949652962387e-05, 0.011132205836474895, -0.0026771160773932934, 0.02065562829375267, -0.01831427402794361, 0.012137695215642452, 0.014823788776993752, -0.007235934026539326. 0.005013083573430777, 0.018903203308582306, 0.02528087981045246, -0.035881612449884415, -0.02668856643140316, -0.0009152648271992803, -0.03019341453909874. 0.0032983648125082254, -0.010270358063280582, 0.018012627959251404, 0.009616789408028126, -0.013193459250032902, 0.007052791304886341, -0.0014319248730316758, -0.007095883600413799, 0.021991493180394173, -0.010399634949862957, -0.012051510624587536, -0.030825437977910042, 0.034014277160167694, 0.0038172693457454443, 0.007483715191483498, 0.04984355345368385, -0.0032534769270569086, 0.0040973699651658535, 0.016533121466636658, 0.0003483303007669747, -0.006348948460072279, 0.024792499840259552, -0.000569178897421807, 0.008862672373652458, 0.004083005711436272, -0.019578319042921066, -0.02510851062834263, -0.004086596891283989. -0.019449040293693542,

-0.045160844922065735, -0.014134310185909271, 0.004862260073423386, 0.09221775829792023, 0.0001850504777394235 -0.0067798723466694355, 0.01521162036806345, -0.02393065206706524, 0.022163862362504005, 0.015111071988940239, 0.011979689821600914, -0.0050489939749240875, -0.012683533132076263, -0.009918436408042908, -0.01623147539794445, -0.018041355535387993, -0.04803367331624031, -0.02556816302239895, 0.010076441802084446, -0.010011803358793259, 0.021632390096783638, 0.0035407596733421087, -0.004973582457751036, 0.030940350145101547, 0.020842362195253372, 0.0033540260046720505, 0.005250092130154371, -0.026372555643320084, 0.005189044401049614, 0.02069872058928013, -0.007641720585525036, -0.004226647317409515, -0.005189044401049614, 0.011642132885754108, -0.0027704827953130007, -0.01952086202800274, -0.011792955920100212, 0.007699177134782076, 0.00823064986616373, -0.0017416515620425344, -0.0022013038396835327, 0.029647577553987503, -0.011096295900642872, 0.0046288431622087955, 0.021517476066946983, -0.039357732981443405, -0.017725344747304916, -0.0022318277042359114, -0.027478594332933426, 0.0018287341808900237,

```
-0.01102447509765625,
          -0.03682964667677879
        1
      }
    },
      "_index": "pdgithub_issues",
      " id": "ODyfUZMBhjFOvW2DRbFb",
      "_score": 1.0,
      " source": {
        "_type": "issue",
        "_repo": "langchain",
        " issueNumber": "28267",
        "_title": "core[patch]: support final AIMessage responses in `tool_e
xample_to_messages`",
        "_createdAt": "2024-11-21T20:47:32Z",
        " closedAt": "2024-12-31T00:36:30Z",
        " state": "open",
        "_body": "We have a test [test_structured_few_shot_examples](http
s://github.com/langchain-ai/langchain/blob/ad4333ca032033097c663dfe818c5c892
c368bd6/libs/standard-tests/langchain tests/integration tests/chat models.p
y#L546) in standard integration tests that implements a version of tool-call
ing few shot examples that works with ~all tested providers. The formulation
supported by ~all providers is: `human message, tool call, tool message, AI
reponse`.\r\n\r\n Here we update `langchain_core.utils.function_calling.tool
_example_to_messages` to support this formulation.\r\n\r\nThe `tool_example_
to_messages` util is undocumented outside of our API reference. IMO, if we a
re testing that this function works across all providers, it can be helpful
to feature it in our guides. The structured few-shot examples we document at
the moment require users to implement this function and can be simplified.",
        "GitHub Issue vector": [
          -0.03979385271668434.
          0.005043520592153072,
          0.01196878869086504.
          -0.009051350876688957,
          -0.01035690400749445,
          0.009598370641469955,
          0.0009235513862222433,
          -0.012916956096887589,
          -0.03947293385863304.
          -0.020465826615691185.
          0.0261402428150177.
          -0.0029302015900611877,
          0.004613198339939117,
          -0.0009116993169300258,
          -0.005616067908704281,
          0.0010092511074617505,
          0.010240206494927406.
          0.0003307189326733351,
          0.005561365745961666,
```

-0.01487163919955492, 0.011735393665730953, 0.03492173179984093, -0.00236130109988153, -0.0005260505131445825, -0.008059421554207802, 0.007993779145181179, 0.024127209559082985, -0.03856852650642395, -0.015739576891064644, 0.003318585455417633, 0.018263161182403564, 0.005112809594720602, -0.02285812422633171, -0.008949240669608116, -0.016541872173547745, -0.030895665287971497, 0.023208217695355415, 0.01607508212327957, 0.040639907121658325, -0.004536615684628487, 0.0269425380975008, 0.012829432263970375, 0.006535060703754425, -0.017008662223815918, -0.030516399070620537, 0.014040169306099415, 0.021559864282608032, -0.026315288618206978, -0.037518247961997986, 0.01715453341603279, 0.03200429305434227, 0.0002509452460799366, -0.026913363486528397, 0.005831228569149971, 0.011538466438651085, 0.030458049848675728, -0.003395168110728264, 0.0195905938744545, 0.0008579090354032815, -0.00034690159372985363, -0.02253720723092556, 0.01272002886980772, -0.011210254393517971, 0.024273082613945007, -0.012530394829809666, -0.01576875150203705, -0.017781782895326614, 0.014390261843800545, 0.012085486203432083,

- 0.003517335979267955, 0.0245356522500515, 0.030195480212569237, 0.020567936822772026, -0.02382087893784046, 0.0293202493339777, 0.005809348076581955, 0.01484975777566433, 0.0010356904240325093, -0.003931247163563967, 0.0013292576186358929, 0.03710980713367462, -0.010466308332979679, -0.005761939566582441. 0.029816213995218277, 0.015797926113009453, 0.008518918417394161, -0.0011450942838564515, 0.018729951232671738, 0.0015945620834827423, -0.012989891692996025, 0.02011573314666748, -0.0038874857127666473, 0.0073993513360619545, 0.031595852226018906, -0.005648888647556305, 0.010779932141304016, -0.004168289247900248, 0.04723331704735756, -0.0003143083304166794, -0.009788003750145435, -0.014725767076015472-0.007464993745088577, -0.018058938905596733, -0.008847130462527275, -0.009824471548199654, 0.005750999320298433, -0.00839492678642273, -0.006768455728888512, 0.0019145684782415628, 0.016804441809654236, -0.0054300809279084206, 0.038976967334747314, -0.009824471548199654, -0.027511438354849815, -0.0012070898665115237, 0.0029520823154598475, -0.00530973682180047. -0.03705145791172981, -0.009591076523065567,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.015126914717257023, 0.01747545227408409, 0.012712734751403332, 0.0023357735481113195. -0.013325396925210953, 0.02936401031911373, 0.011793741956353188, -0.01603132113814354, -0.019838577136397362, -0.04148596525192261. -0.03865605220198631, 0.012464752420783043, -0.0058494629338383675, 0.01969270408153534. -0.006549648009240627, -0.0015571824042126536, 0.024652348831295967, -0.005134690552949905, -0.018481967970728874, -0.012027136981487274, 0.0014660124434158206, -0.019721878692507744, 0.025790149345993996, -0.01296071708202362, 0.014842464588582516, -0.04603716731071472, 0.02065545879304409. 0.023645833134651184, 0.0017139946576207876, 0.02544005773961544, -0.021807847544550896, 0.011545759625732899, -0.0309248398989439, -0.004649666603654623, -0.00677939597517252, 0.013040946796536446, 0.0238938145339489, 0.010604886338114738, 0.026184003800153732, -0.01711077243089676 -0.0045183817856013775, 0.007140428759157658, 0.025527579709887505, 0.01457260176539421, -0.004824712872505188, 0.013930764980614185, 0.030633095651865005, 0.030633095651865005, -0.02490033209323883, -0.011290484108030796,

-0.014390261843800545, -0.022347573190927505. 0.00011117033136542886, -0.01797141693532467, 0.0142589770257473, 0.0015097740106284618, 0.004412624519318342, 0.03976467624306679, -0.0007963693351484835, -0.0028080339543521404, -0.010925804264843464, 0.02679666504263878, 0.017986003309488297, 0.025425469502806664, 0.03390062600374222, -0.012362642213702202, 0.010954978875815868, 0.010349610820412636, -0.03576778620481491, 0.012654386460781097, 0.00677939597517252. 0.04084412753582001, 0.026650793850421906, 0.0018115465063601732, 0.004711661953479052, -0.5755521059036255, -0.020101146772503853, -0.026213178411126137, 0.005787467118352652, 0.028970157727599144, 0.027905292809009552, -0.013376452028751373, -0.00671010697260499, -0.028007403016090393, 0.04119422286748886, -0.03066227026283741, 0.016585633158683777, 0.0045074415393173695, -0.01849655620753765, -0.012515808455646038, -0.003796315984800458, 0.0006295283674262464, -0.027088409289717674, 0.0031216584611684084, 0.01737334206700325, -0.04921717569231987, 0.024944093078374863, 0.022580968216061592, -0.020188668742775917-0.009058644063770771,

-0.023251978680491447, 0.010181858204305172, -0.02345619909465313, 0.014434023760259151, -0.0067502218298614025, -0.019605182111263275, 0.001269085449166596, 0.014630950056016445, -0.003052369225770235, 0.04904212802648544, 0.012049018405377865, -0.04002724587917328, -0.015579117462038994, 0.0129096619784832, 6.5065414673881605e-06, -0.02571721374988556, 0.005145630799233913, 0.006407422479242086, 0.0030231948476284742, 0.01893417164683342, -0.0032018879428505898, 0.01651269756257534, 0.009620251134037971, 0.01010892167687416, -0.02053876221179962, 0.008234468288719654, -0.02355830930173397, -0.004106293432414532, 0.0022537207696586847, 0.0035574506036937237, 0.005426434334367514, 0.03722650557756424, -0.036555495113134384. 0.01492269430309534, -0.006505886092782021, -0.034454941749572754, -0.010393371805548668, -0.01466012466698885, -0.008723138831555843, -0.01236993633210659, 0.009000295773148537, 0.02560051716864109, 0.0017395222093909979 -0.0027296277694404125, -0.04764175787568092, 0.01331080961972475, 0.023470787331461906 -0.001368460594676435. -0.02484198287129402, -0.010860161855816841,

0.019328026100993156, -0.004985171835869551, 0.004321454558521509, -0.025936022400856018, 0.018306922167539597, 0.011560346931219101, 0.0010201914701610804, -0.01791306771337986, -0.01591462269425392, 0.017927655950188637, 0.0027496851980686188, 0.006859625689685345, -0.005874990485608578, -0.0032675303518772125. -0.008825249038636684, 0.012311587110161781, 0.027205107733607292, -0.019867751747369766, -0.04075660556554794, -0.007687448523938656, 0.028445018455386162, -0.00930662639439106, -0.01296071708202362, 0.028167862445116043, -0.03632210195064545, -0.023747943341732025, 0.02457941323518753, 0.016643982380628586, 0.008008366450667381, 0.025615103542804718, -0.008628321811556816, -0.027205107733607292, 0.01124672219157219. 0.0024506477639079094, -0.009153461083769798, 0.01339833252131939, 0.004974231589585543, -0.005699944216758013, -0.023106107488274574, -0.01819022372364998, -0.031158234924077988, 0.01623554155230522, 0.007950018160045147, 0.013339984230697155, -0.003559274133294821, -1.9302384316688403e-05, -0.01715453341603279, -0.013040946796536446. 0.0334630124270916, 0.035476043820381165,

0.014514252543449402, 0.0076436870731413364, -0.03868522495031357, 0.006954442244023085, 0.025323359295725822, -0.008022953756153584, -0.021486928686499596, 0.021020138636231422, -0.023310327902436256, 0.021311882883310318, 0.000345989887136966, 0.028795110061764717, -0.009941169060766697, 0.019065456464886665, -0.008927359245717525, 0.00012490279914345592, 0.01889040879905224, 0.015301961451768875, -0.03807256370782852, -0.013332691043615341, -0.04061073437333107, -0.0315375030040741, 0.0013037299504503608, 0.018802886828780174, -0.009693186730146408, 0.003674148116260767, -0.018248572945594788, -0.0078114396892488, 0.0023540076799690723, -0.00895653385668993, -0.012100073508918285, -0.00034393856185488403, -0.029787039384245872, -0.002671279013156891, -0.01779637113213539, 0.00570359081029892, 0.029130615293979645, 0.001527096377685666, 0.03778081759810448, -0.021107662469148636. 0.005743705667555332, -0.02033454179763794, 0.03915201500058174, -0.014995629899203777, -0.03498007729649544, -0.005732765421271324, -0.030808143317699432, -0.02609647996723652. 0.02436060458421707, -0.0019528599223122,

0.006815863773226738, -0.03130410611629486, 0.014995629899203777, -0.015797926113009453, -0.02017408236861229, -0.0009290215675719082. 0.012078192085027695, -0.02592143416404724, 0.014397555030882359, 0.004408977925777435, 0.013463974930346012, 0.021166011691093445, 0.00671010697260499, -0.014638244174420834, 0.012997184880077839, -0.03807256370782852, 0.018044352531433105, -0.033813104033470154, 0.02743850275874138, -0.025585928931832314, 0.025425469502806664. -0.004923176020383835, -0.010962272062897682, -0.004026064183562994, 0.03500925377011299, 0.016906552016735077, 0.027511438354849815, 0.014280857518315315, -0.0038838391192257404, -0.01517067663371563, -0.032937873154878616, -0.003378757508471608, -0.026227764785289764, 0.005692650564014912. -0.006502239499241114, -0.003590271808207035, -0.024273082613945007, -0.007614512462168932, 0.003499101847410202, 0.0038838391192257404. -0.014981042593717575, 0.011677044443786144, -0.020640872418880463, -0.011837503872811794, -0.0014705709181725979, -0.011523879133164883, -0.013784893788397312, 0.005014345981180668. -0.014295444823801517, 0.013252461329102516,

-0.00986823346465826, 0.005550425499677658, 0.01715453341603279, 0.021384818479418755, 0.00874501932412386, 0.0018817473901435733, 0.0036285631358623505, 0.005758292973041534, 0.008548093028366566, 0.02549840696156025, 0.021822433918714523, 0.028445018455386162, -0.012566863559186459, 0.06068270653486252, -0.026592444628477097, -0.021341057494282722, -0.02403968758881092, 0.004339688457548618, -0.010882043279707432, 0.053972598165273666, 0.00020706970826722682, 0.03258778154850006, 0.019605182111263275, 0.00017345079686492682, -0.006892446894198656, -0.003088837256655097, -0.027248868718743324, -0.002474352018907666, -0.003076073480769992, -0.0009153460850939155, 0.015301961451768875, -0.008176119066774845, 0.0037124394439160824, 0.024010512977838516, 0.02393757738173008, 0.0024014159571379423, 0.008876304142177105, 0.022172527387738228, -0.010852868668735027, 0.0226393174380064, -0.011465530842542648, 0.017927655950188637, -0.021909957751631737, -0.03926871344447136, 0.0059515731409192085, -0.003528276225551963, -0.016162605956196785, -0.006877859588712454, -0.01807352714240551, 0.049946535378694534,

0.013194112107157707, 0.012406404130160809, 0.010400665923953056, 0.020772157236933708, -0.015039391815662384, -0.041865233331918716, -0.03544686734676361, 0.020567936822772026, -0.012873194180428982, 0.0007421232294291258, -0.021209772676229477, -0.02764272317290306. 0.025936022400856018, -0.036234576255083084, -0.01255956944078207, -0.0026621620636433363, -0.006597056053578854, -0.026986299082636833, 0.008030247874557972, 0.0036103292368352413, 0.0211951844394207, -0.0052331541664898396, -0.009664013050496578, 0.00846786331385374, -0.0012836726382374763, -0.014784116297960281, 0.015374897047877312, -0.009569196030497551, 0.014798702672123909, 0.021341057494282722, -0.006225083023309708, 0.002235486637800932, -0.03247108310461044, -0.015389484353363514, -0.0032055347692221403, -0.01226782612502575, -0.0015599174657836556, 0.0056598293595016, -0.01619177870452404, 0.017723433673381805, 0.015214437618851662, -0.029232725501060486, 0.010765345767140388, 0.04244871810078621, -0.00890547875314951, -0.009780710563063622, -0.03054557368159294, -0.010531950742006302, 0.014193334616720676, 0.01126860361546278,

- 0.0439949631690979, 0.014703886583447456, -0.011480117216706276, -0.035738613456487656, -0.011429062113165855, -0.05400177463889122, -0.03588448464870453, 0.016439761966466904, -0.009423323906958103. -0.01554994285106659, -0.003993242979049683, 0.005276915617287159, -0.01086745597422123, 0.03629292547702789, 0.020961789414286613, -0.0024287670385092497, -7.322085002670065e-05, -0.0011934144422411919, -0.005488429684191942, 0.0012909661745652556, 0.009919288568198681. 0.006801276933401823, 0.01705242320895195, 0.014915400184690952, 0.01759214885532856, 0.011655163951218128, 0.029670342803001404, -0.007300888188183308, -0.04819607362151146, 0.001574504654854536, 0.00633448688313365, 0.011421768926084042, 0.03156667575240135. -0.04151513800024986, 0.030458049848675728, 0.004697074647992849, 0.012070898897945881, 0.005550425499677658, 0.007326415739953518, -0.005178452003747225, 0.001592738670296967, -0.005889577325433493. 0.006068270653486252, -0.007731209974735975, -0.014696592465043068, -0.0008957445388659835, -0.003650444094091654, 0.006939854938536882. -0.0281970351934433, 0.00047818629536777735,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.0066699921153485775, -0.04139844328165054, -0.024302257224917412, 0.032616954296827316, 0.031975116580724716, -0.019269676879048347, 0.009999518282711506, -0.02399592474102974, -0.01517067663371563, -0.0033149386290460825, -0.016600221395492554, 0.004201110452413559. -0.012588744051754475, -0.016337651759386063. -0.015885448083281517, -0.039677154272794724, 0.0010402488987892866, -0.02560051716864109, 0.010721583850681782, -0.0012544982600957155, -0.015156089328229427, -0.028415843844413757, 0.002793446648865938, 0.013974526897072792, 0.020524173974990845, 0.024389779195189476, -0.0019291556673124433, 0.013566086068749428, 0.008110476657748222, -0.023208217695355415, -0.01061947364360094, 0.018263161182403564, -0.017067011445760727. -0.012165715917944908. -0.0019236855441704392, -0.008263642899692059, -0.011188373900949955, -0.020144907757639885, 0.026315288618206978, -0.02221628837287426. 0.0015234495513141155, -0.03238355740904808, 0.0011159199057146907, 0.00951814092695713, 0.014434023760259151, 0.022785188630223274, 0.02420014701783657, -0.004646019544452429, -0.00720607116818428, 0.011429062113165855,

-0.02409803681075573, -0.025629689916968346, -0.03865605220198631, -0.0173879284411668780.0036942055448889732, 0.008577266708016396, 0.03072061948478222, -0.013164937496185303, 0.015637466683983803, 0.021866196766495705, -0.020159494131803513, 0.01145823672413826, -0.004587670788168907, -0.0035683910828083754. -0.0057218247093260290.0245356522500515, 0.011625989340245724, 0.002467058366164565, -0.029816213995218277-0.00039886843296699226, -0.05837792903184891. 0.031712546944618225, -0.006961735896766186, -0.03673054277896881, 0.03498007729649544, 0.02017408236861229, -0.025089964270591736. -0.026767492294311523, -0.01967811770737171, -0.013427507132291794, 0.0035337465815246105, 0.02743850275874138, -0.01591462269425392, -0.01185938436537981, -0.02055334858596325, 0.0005862226244062185, 0.000770385900977999, 0.0032474729232490063, 0.004999759141355753, 0.013515030033886433, -0.005036226939409971, -0.021880783140659332, -0.028430430218577385, -0.008358458988368511, -0.03255860507488251, -0.012348054908216, 0.03775164484977722. 0.013624434359371662. 0.0160896684974432, 0.0076655675657093525,

0.00796460546553135, -0.00965671893209219, -0.03810173645615578, -0.02490033209323883, -0.01061947364360094, 0.0054191406816244125, 0.00044764435733668506, 0.019867751747369766, -0.0022117826156318188, 0.04857533797621727, -0.03582613542675972, -0.01021832600235939, 0.004569436889141798, 0.0026202236767858267, 0.009401443414390087, 0.018642427399754524, 0.003426166018471122, 0.000989193795248866, -0.023281153291463852, 0.009503553621470928, 0.0017832837766036391. 0.0015699461800977588, -0.010590299032628536, 0.0004339688748586923, -0.0018498378340154886. -0.0017513743368908763, 0.028970157727599144, -0.011516585946083069, -0.01765049807727337, -0.024389779195189476, -0.003417049068957567, -0.02323739230632782, -0.008198000490665436, -0.04805019870400429, -0.00012923337635584176, 0.04023146629333496, 0.0035246293991804123, 0.009693186730146408, 0.03180007264018059, 0.030487224459648132, -0.008511624298989773, -0.007341002579778433, -0.012224064208567142, 0.005765586160123348, -0.024127209559082985, -0.00034576194593682885, -0.03778081759810448, -0.004011476878076792. 0.003185477340593934, 0.00825634878128767,

0.021180598065257072, 0.023003997281193733, 0.010495482012629509, -0.014835171401500702, 0.01657104678452015, -0.0497131384909153, 0.008176119066774845, -0.01667315699160099, -0.024812808260321617, -0.031449977308511734, -0.006298018619418144, 0.005007052794098854, -0.03480503335595131, 0.012472046539187431. -0.0022646610159426928, 0.002441530814394355, 0.011844797059893608, -0.03136245533823967, -0.012501221150159836, 0.003898426191881299, 0.012800258584320545. 0.02592143416404724, 0.01925508864223957, 0.003814549883827567, 0.021880783140659332, 0.0055941869504749775, -0.0031052478589117527, 0.005842169281095266, 0.002472528489306569, 0.009430618025362492, 0.022508032619953156, 0.02297482267022133, -0.0022537207696586847, -0.01417145412415266, 0.007413938641548157, 0.017840132117271423, -0.0484294667840004, -0.03372558206319809, 0.02560051716864109, 0.016921138390898705, 0.015856273472309113, -0.02952446974813938, 0.0026731023099273443, -0.03419237211346626, 0.017519213259220123, -0.007526989560574293, 8.222387987188995e-05. 0.02109307423233986, -0.0008574532112106681, -0.006363661028444767,

0.03034135326743126, 0.025936022400856018, 0.034513287246227264, -0.0007991044549271464, -0.004868474323302507, 0.014754941686987877, -0.009532728232443333, -0.004554849583655596, 0.014630950056016445, -0.00941603071987629, 0.036555495113134384, -0.009372268803417683, -0.00935768149793148, 0.037080634385347366. -0.006024509202688932, -0.00572911836206913, -0.009014883078634739, -0.0010320435976609588, 0.04084412753582001, -0.03340466320514679, 0.009904701262712479. 0.006837744731456041, -0.02059711143374443, 0.021282708272337914, -0.04250706732273102, 0.002328480128198862, -0.021982893347740173. -0.034017324447631836, 0.004274046514183283, 0.037839166820049286, 0.004496500827372074, 0.008737726137042046, -0.00500340573489666, 0.005707237403839827, 0.0004663341969717294, 0.02291647344827652, -0.011560346931219101, 0.020932616665959358, -0.022872712463140488, -0.020363716408610344, -0.012515808455646038, -0.013653608970344067, 0.01261062454432249, -0.012413697317242622, -0.021151423454284668, 0.009029469452798367, 0.05216378718614578, -0.028868047520518303, 0.010087041184306145, -0.0159292109310627,

- -0.011305071413516998, -0.035738613456487656, -0.003916660323739052, -0.008562679402530193, -0.008577266708016396, 0.017898481339216232, -0.029334837570786476, -0.02898474410176277, -0.017767196521162987, 0.03769329562783241, 0.017708847299218178, -0.005145630799233913, 0.006338133476674557, -0.005889577325433493, -0.004580377135425806, 0.012953423894941807, -0.006556941196322441, 0.015739576891064644, 0.015331135131418705, -0.030253829434514046, -0.005331617314368486. 0.031187409535050392, -0.013850536197423935, -0.014382967725396156, -0.011100850999355316, 0.012348054908216, -0.009729654528200626, -0.03147915378212929, 0.011151906102895737, 0.01693572662770748, -0.023091519251465797-0.030166305601596832, -0.022332986816763878, -0.01070699654519558, -0.013405626639723778, -0.018365271389484406, -0.00941603071987629, 0.013099296018481255, 0.0031508328393101692, -0.0008807015256024897, 0.04320725426077843, 0.020188668742775917, -0.011589521542191505, -0.01775260828435421, -0.007326415739953518, -0.020319953560829163, 0.01145823672413826, 0.0045183817856013775, -0.012865900993347168, -0.009408736601471901,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- 0.02485656924545765, -0.0015599174657836556, -0.004941410385072231, -0.004729895852506161, -0.014302738942205906, -0.027453089132905006, -0.025644278153777122, -0.025410883128643036, 0.005831228569149971, 0.004821065813302994, -0.002611106727272272-0.013325396925210953, 0.006626230664551258, -0.010444426909089088. 0.012253238819539547, -0.017781782895326614, -0.006469418294727802, -0.005543131846934557, 0.0024032392539083958, 0.022610142827033997, -0.0019875045400112867, -0.035417694598436356, -0.005991687998175621, 0.008285523392260075, -0.004259459208697081, 0.010772638954222202, 0.026927949860692024, 0.0129096619784832, -0.0218370221555233, -0.013945352286100388, -0.009408736601471901, -0.005568659398704767, -0.00598439434543252, -0.0026329876855015755, 0.001115008257329464, -0.015331135131418705, 0.020611697807908058, -0.01851114258170128, -0.004295927006751299, -0.011560346931219101, 0.005364438518881798, 0.016425173729658127. 0.009481673128902912, -0.01011621579527855, -0.0012462929589673877, 0.004201110452413559, -0.030137132853269577 0.022245462983846664. 0.012654386460781097, 0.0018689836142584682,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

-0.015126914717257023, 0.002913790987804532, 0.023003997281193733, -0.0004927734844386578, 0.03565108776092529, -0.008489743806421757, -0.00044399756006896496, 0.014609069563448429, 0.002882793080061674, 0.0038656049873679876, -0.009343094192445278, 0.006731987465173006, -0.024666937068104744, 0.006648111157119274, 0.006050036754459143, -0.01414957270026207, -0.007840613834559917, 0.0012389993062242866, -0.00976612325757742, -0.023602072149515152-0.0016583810793235898. -0.00874501932412386, -0.0030250183772295713, -0.0012526748469099402, -0.020684633404016495, 0.016658568754792213, -0.00142589770257473, -0.0031690667383372784, 0.010758051648736, 0.0007959135109558702, -0.011356126517057419, 0.008453276008367538, 0.006370954681187868, -0.026607032865285873, -0.0016829968662932515, 0.18636591732501984, -0.02554216794669628, 0.007446759846061468, 0.035913657397031784, -0.03168337419629097, 0.016804441809654236, 0.0003115732397418469. -0.0019729172345250845, 0.0017769018886610866, 0.025673452764749527, -0.0002370418224018067, 0.011013327166438103, -0.01683361642062664, -0.011436356231570244, -0.014696592465043068,

0.0014113105135038495, -0.016556458547711372, -0.010254793800413609, -0.018817473202943802, 0.018204811960458755, 0.016804441809654236, -0.008774193935096264, 0.0001449601841159165, -0.02075756900012493, 0.022085003554821014, -0.011793741956353188, -0.012727322056889534, 0.0013958116760477424, 0.005083635449409485, -0.005017993040382862, -0.025483818724751472, 0.012690854258835316, 0.008103183470666409, 0.004872120916843414, 0.01277108397334814, -0.004463679622858763, 0.021472342312335968, -0.0004351084935478866, 0.006060977000743151, -0.005306089762598276, 0.028226209804415703, -0.041544314473867416, 0.006473064888268709, -0.030312178656458855, 0.003909366670995951, 0.03136245533823967, -0.015447832643985748, -0.0242147333920002, -0.009547315537929535. 0.016746092587709427, -0.003913013264536858, 0.026534097269177437, 0.010043279267847538, 0.022026654332876205, 0.03054557368159294, -0.01769426092505455, -0.021122248843312263, 0.006093798205256462, 0.009671306237578392, 0.02651950903236866, -0.0357094369828701, 0.01576875150203705. 0.0033149386290460825, 0.01709618605673313, -0.02695712447166443,

0.022070417180657387, -0.012063604779541492, -0.02259555459022522, -0.020451238378882408, 0.006418363191187382, 0.004926823079586029, -0.02910144254565239, 0.0058822836726903915, 0.0024488242343068123, -0.02775941975414753, -0.05017992854118347, 0.018379857763648033, 0.006910680793225765, 0.01080910675227642, 0.023470787331461906, 0.006757515016943216, -0.037080634385347366, 0.001423162641003728, 0.007169603370130062, -0.02221628837287426, -0.020961789414286613. 0.008869010955095291, 0.005134690552949905, 0.009547315537929535, -0.006939854938536882, -0.008569973520934582, -0.007614512462168932, -0.004408977925777435, 0.025162899866700172, 0.023062344640493393, 0.017679672688245773, 0.007359236944466829, 0.009189928881824017, -0.00900758896023035, -0.015039391815662384, -0.06348344683647156, 0.038160085678100586, -0.0185257289558649060.002000268315896392, -0.00010672579810488969, -0.00353009975515306, -0.01861325278878212, -0.007898963056504726, -0.017169121652841568, -0.01677526719868183, 0.0019656235817819834, -0.035096775740385056, -0.006374601740390062, -0.005565012339502573, 0.0009285657433792949,

-0.01765049807727337, 0.025731801986694336, -0.014842464588582516, 0.026052718982100487, -0.005149277858436108, 0.002720510819926858, 0.007235245779156685, 0.006834098137915134, 0.04346982389688492, -0.0017668732907623053, -0.027774007990956306, -0.05362250655889511, 0.005466549191623926, -0.00021162819757591933, -0.0030724266543984413, 0.02544005773961544, 0.012807551771402359, 0.013675489462912083, -0.02065545879304409, -0.01967811770737171, 0.005736412014812231, -0.0036942055448889732, -0.014375674538314342, 0.012092779390513897, 0.004817419219762087, 0.00037926691584289074, 0.00018530288070905954, -0.007191483862698078, 0.0054082004353404045, 0.026811253279447556, -0.010699703358113766, -0.010079747065901756, 0.017256643623113632, -0.020611697807908058, -0.0010037809843197465, -0.03734320402145386, 0.0013146704295650125, 0.004591317847371101, -0.009080525487661362, 0.02097637765109539, -0.021268121898174286, -0.017402516677975655, -0.028649238869547844, 0.007337355986237526, -0.020947203040122986, -0.04735001549124718, -0.0010657764505594969, 0.01749003864824772, 0.011370713822543621, -0.036117877811193466,

-0.006793983280658722, -0.1868327111005783, 0.02996208518743515, 0.023485373705625534, -0.04195275530219078, 0.024331431835889816, -0.011538466438651085, 0.007227952126413584, -0.020305367186665535, -0.01769426092505455. -0.01110814418643713, 0.03594283387064934, -0.004131821449846029, -0.02473987266421318. 0.009131580591201782, -0.007723916321992874, 0.014025582000613213, -0.02049500122666359, 0.011071676388382912, 0.021443167701363564, 0.03398815169930458, 0.04831276834011078, -0.024929504841566086, 0.02215793915092945, 0.016643982380628586, 0.01667315699160099, -0.01011621579527855, 0.0002823988616000861, 0.0134712690487504, -0.0025837558787316084, -0.01963435672223568, -0.017242057248950005, 0.01452154666185379, -0.0022865417413413525, -0.034338243305683136, 0.03865605220198631, 0.0013985467376187444, 0.020042797550559044, -0.03206264227628708, -0.011305071413516998, 0.016045907512307167, 0.018117288127541542, 0.007322768680751324, -0.02011573314666748, -0.001725846785120666, -0.022420508787035942, 0.006753868423402309, 0.02409803681075573. -0.012413697317242622, 0.01737334206700325,

-0.010590299032628536, 0.010189151391386986, -0.023645833134651184, -0.0008583649178035557. 0.010641354136168957, 0.016366826370358467. 0.002417826559394598, -0.011020621284842491, 0.0238938145339489, 0.014492372050881386, -0.0052368007600307465, 0.010123508982360363, -0.02333950251340866, 0.009299333207309246, 0.0028135040774941444, 0.013040946796536446, -0.003438929794356227, -0.03471750766038895, 0.03054557368159294, 0.010240206494927406, 0.013814067468047142. -0.01845279335975647, -0.010079747065901756, 0.01215842179954052, -0.015535356476902962, 0.04481184482574463, 0.037897516041994095, 0.001454160432331264, 0.013347277417778969, 0.009189928881824017, -0.004737189505249262, -0.025688039138913155, 0.03818926215171814, -0.014390261843800545, 0.03608870506286621, -0.014747647568583488, -0.007402998395264149, -0.005543131846934557, 0.009248278103768826, -0.04087330400943756, 0.0025254071224480867, 0.02657785825431347. -0.008562679402530193, -0.005138337146490812, -0.009240983985364437, 0.01995527371764183, 0.010772638954222202, 0.005455608479678631, -0.006793983280658722, 0.009576489217579365,

0.0056598293595016, 0.01417145412415266, 0.05012157931923866, 0.011006033979356289, -0.0006938031874597073, 0.0010530126746743917, -0.006370954681187868, -0.03535934537649155, 0.017008662223815918, 0.04895460605621338, -0.01645434834063053, -0.017387928441166878, 0.013843242079019547, -0.0020932615734636784, 0.016702331602573395, -0.01527278684079647, 0.022449683398008347, 0.011582228355109692, -0.01867160201072693, 0.011538466438651085, -0.012756496667861938. 0.04805019870400429, -0.02033454179763794, -0.02339785173535347, 0.016921138390898705, -0.0360303558409214, 0.002514466643333435, -0.11062923818826675, -0.008081302978098392, -0.0022117826156318188, 0.0016337651759386063, -0.015695815905928612, -0.0024342371616512537. -9.396200766786933e-05. 0.03500925377011299, -0.036672193557024, 0.01379948016256094, -0.013850536197423935, -0.003112541511654854, -0.03454246371984482, 0.003619446186348796, 0.01957600750029087, -0.016104256734251976, -0.029991259798407555, -0.005313383415341377, -0.020480412989854813, 0.04901295527815819, -0.003362347139045596, -0.019999036565423012, 0.02738015353679657,

-0.010123508982360363, 0.004624139051884413, 0.021880783140659332, -0.024564826861023903, 0.016483522951602936, 0.02915978990495205, 0.014040169306099415, 0.027248868718743324. -0.046241387724876404, 0.014463197439908981, -0.008074008859694004, 0.0023722415789961815, 0.0055832467041909695, -0.007421232294291258, -0.0202324315905571, 0.03320044279098511, -0.025571342557668686, 0.0034352829679846764, 0.012625211849808693, -0.010283968411386013, -0.025892259553074837, -0.0020148553885519505, -0.007169603370130062, -0.022012067958712578, 0.018423618748784065, 0.008241761475801468, -0.007723916321992874, -0.04072743281722069, 0.016848202794790268, -0.026855014264583588, -0.013617141172289848, 0.03565108776092529, 0.007144075818359852, -0.0014578071422874928, 0.0008063980494625866, -0.008227174170315266, -0.028488779440522194, 0.00427769310772419, -0.018700776621699333, 0.000107694482721854, 0.01851114258170128, 0.021122248843312263, -0.0032602366991341114, -0.018029766157269478, -0.0024925859179347754, 0.004339688457548618, -0.015637466683983803. 0.0037324968725442886, 0.0369931124150753, -0.013814067468047142,

0.0033459365367889404, -0.01457260176539421, -0.001506127300672233, 0.012165715917944908, -0.01159681472927332, -0.022887298837304115, 0.006593409460037947, -1.1374872883607168e-05, -0.007592631969600916, -0.014689299277961254, -0.01619177870452404, 0.00023248331854119897, 0.015579117462038994, 0.017125358805060387. -0.01000681146979332, 0.012690854258835316, -0.02920355275273323, 0.013938059099018574, 0.0038583113346248865. 0.007366530131548643, 0.006728340871632099. 0.019459309056401253, 0.029539057984948158, 0.0027588021475821733, 0.017183708027005196, 0.019065456464886665, 0.004923176020383835, -0.07124383002519608, -0.0006236023036763072, -0.057794440537691116, 0.036117877811193466, 0.011523879133164883, -0.01409851759672165, -0.02021784335374832, -0.02506078965961933, 0.012617918662726879, -0.02850336767733097, 0.007173249963670969, 0.038218434900045395, 0.030166305601596832, 0.024725284427404404, -0.011480117216706276-0.005090929102152586, -0.015477007254958153, -0.008074008859694004, 0.04247789457440376, -0.025089964270591736, 0.027307217940688133, 0.00846786331385374, 0.013617141172289848,

0.0004166465951129794, 0.01639600098133087, -0.0012946130009368062, -0.0028481485787779093, 0.009452498517930508, -0.04180688410997391, 0.02587767317891121, -0.004117234144359827, -0.013427507132291794, 0.014003701508045197, -0.019138392060995102, -0.008781488053500652, 0.03597200661897659, 0.03022465482354164, -0.01823398657143116, 0.02765730954706669, 0.021647388115525246, 0.025352533906698227, -0.006615289952605963, 0.010320436209440231, -0.01785471849143505. 0.009853646159172058, -0.022610142827033997, -0.006374601740390062, 0.02189536951482296, 0.020670047029852867, 0.03419237211346626. 0.017256643623113632, -0.00021641462808474898, 0.01935719884932041, 0.010954978875815868, -0.031158234924077988, -0.021122248843312263, -0.0053170304745435715, -0.017840132117271423, 0.0030979542061686516, 0.0014842464588582516, -0.007235245779156685, 0.04819607362151146, 0.037138983607292175. 0.0018471027724444866, 0.03238355740904808, -0.015345722436904907, 0.0027788595762103796, 0.007512402255088091, -0.007884375751018524, 0.007782265078276396, 0.010021398775279522, -0.02349996194243431, 0.008438688702881336,

-0.010590299032628536, -0.018540317192673683, 0.011954201385378838, 0.011086263693869114, -0.012479339726269245, 0.017358753830194473, 0.01951765827834606, 0.012151128612458706, 0.014886226505041122, 0.010575711727142334, -0.0055139572359621525, -0.013872416689991951, -0.0017550211632624269, 0.02862006425857544, 0.016439761966466904, -0.036876413971185684, 0.004142761696130037, -0.006721047218888998, -0.03360888361930847, -0.02597978338599205, 0.02770107239484787, -0.0025418177247047424, 0.02275601401925087, 0.013587966561317444, 0.018467381596565247, 0.024608587846159935, 0.02609647996723652, 0.020465826615691185, -0.008037541061639786, 0.0023521841503679752, 0.0007393881096504629, -0.001940096146427095, -0.005364438518881798, -0.015506181865930557, 0.008125063963234425, -0.030312178656458855, -0.005149277858436108, 0.004325101617723703, 0.003982302732765675, 0.03028300404548645, 0.007614512462168932, -0.00472260219976306, 0.01613343134522438, -0.025848498567938805, 0.026184003800153732, 0.01226782612502575, 0.01661480776965618, -0.022887298837304115. 0.03877274692058563, 0.022449683398008347,

0.006746574770659208, 0.06284160912036896, -0.014353794045746326, 0.004624139051884413, 0.021107662469148636, 0.0022136059124022722, -0.01331080961972475, 0.020670047029852867, 0.004996112082153559, -0.006527767051011324, -0.001420427463017404, -0.014689299277961254, -0.0077457972802221775, 0.0006181321223266423, -0.0063089593313634396, -0.01763591170310974, -0.0007010967819951475, 0.000883892469573766, 0.09201598912477493, 0.022726839408278465, -0.000578473205678165, -0.020888853818178177, -0.030166305601596832, 0.022522618994116783, -0.011903146281838417. 0.02059711143374443, 0.018919583410024643, -0.02808033861219883, -0.02249344438314438, -0.0022646610159426928, -0.023251978680491447, -0.029086854308843613, -0.010211031883955002, 0.027992814779281616, -0.0357094369828701, 0.015141502022743225, -0.003112541511654854, -0.008008366450667381, 0.027307217940688133, 0.005988040938973427, 0.01331080961972475, 0.005451961886137724, 0.0021899016574025154, -0.01861325278878212, 0.02781776897609234, -0.008489743806421757, -0.008409514091908932, -0.01096956618130207, 0.004284986760467291, 0.005492076743394136,

```
-0.018117288127541542,
                  -0.01995527371764183.
                  -0.016162605956196785,
                  -0.003920306917279959,
                  0.00014062962145544589,
                  -0.010524656623601913,
                  -0.006031802389770746,
                  0.007282653823494911,
                  0.00605368334800005,
                  -0.003674148116260767,
                  -0.04489936679601669,
                  -0.03331713750958443,
                  0.00965671893209219,
                  -0.0010438957251608372,
                  0.013055534102022648,
                  -0.018657013773918152,
                  -0.05029662698507309
              }
            }
        }
 In [ ]:
In [15]: # Define model and embedding function
         from openai import OpenAI
         EMBEDDING MODEL = "text-embedding-ada-002"
         client = OpenAI(api_key="sk-proj-b_EAft00QZDKM8-lKhXuEhXlc5GLUSIYw7T7kZ9WD36
         def get_embedding(text, model="text-embedding-ada-002"):
            text = text.replace("\n", " ")
            return client.embeddings.create(input = [text], model=model).data[0].embe
In [16]: # Pretty print function for GitHub Issues
         def pretty_response_Issue(response):
             for hit in response['hits']['hits']:
                 type = hit['_source']['_type']
                  repo =hit[' source'][' repo']
                 issueNumber = hit['_source']['_issueNumber']
                 title = hit['_source']['_title']
                 createdAt = hit['_source']['_createdAt']
                 closedAt = hit['_source']['_closedAt']
                 state = hit['_source']['_state']
                 body = hit['_source']['_body']
                 pretty output = (
                     f"\nType: {type}\nRepo:{repo}\nIssue Number: {issueNumber}\nTitl
                     f"State: {state}\nBody: {body}\n"
```

print(pretty_output) In [17]: hits['hits'][5]['_source'] # Choose an Issue from Issues in repository Out[17]: {'_type': 'issue', '_repo': 'langchain', __issueNumber': '28271', '_title': "PydanticUndefinedAnnotation: name 'SafetySetting' is not define d using ChatVertexAI", '_createdAt': '2024-11-21T22:43:53Z', '_closedAt': '2024-12-31T00:36:30Z', '_state': 'open', '_body': '### Checked other resources\n\n- [X] I added a very descriptive title to this issue. $\n-$ [X] I searched the LangChain documentation with the integrated search.\n- [X] I used the GitHub search to find a similar questi on and didn\'t find it.\n- [X] I am sure that this is a bug in LangChain ra ther than my code. \n - [X] The bug is not resolved by updating to the latest stable version of LangChain (or the specific integration package).\n\n### E xample Code\n\n\r\n```python\r\n# Ensure your VertexAI credentials are configured\r\n\r\nfrom langchain google vertexai import ChatVertexAI\r\n\r\ nmodel = ChatVertexAI(model="gemini-1.5-flash")\r\n\r\nmodel.invoke("Hello, $world!")\r\n\r\n```\n\m### Error Message and Stack Trace (if applicable)\n\$ n```python\r\n-------\r\nNameError Traceback (most recent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ internal/ generate schema.py:815, in GenerateSchema. resolve forward ref(s elf, obj)\r\n 814 try:\r\n--> 815 obj = _typing_extra.eval_type_back port(obj, *self._types_namespace)\r\n 816 except NameError as e:\r\n\r\n File /opt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing ext ra.py:534, in eval_type_backport(value, globalns, localns, type_params)\r\n 533 try:\r\n--> 534 return _eval_type_backport(value, globalns, localn s, type_params)\r\n 535 except TypeError as e:\r\n\r\nFile /opt/conda/li b/python3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eva l_type_backport(value, globalns, localns, type_params)\r\n 557 try:\r\nreturn eval type(value, globalns, localns, type params)\r\n -> 558 559 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packa ges/pydantic/_internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type_params)\r\n 591 else:\r\n--> 592 return typing._eval_t ype(# type: ignore\r\n 593 value, globalns, localns\r\n)\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, glo balns, localns, recursive quard)\r\n 326 if isinstance(t, ForwardRef):\r return t. evaluate(globalns, localns, recursive guard)\r\n 328 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n\r \nFile /opt/conda/lib/python3.10/typing.py:699, in ForwardRef._evaluate(sel f, globalns, localns, recursive_guard)\r\n 693 type_ = _type_check(\r\n 694 eval(self.__forward_code__, globalns, localns),\r\n 695 "For ward references must evaluate to types.",\r\n 696 is argument=self.

697

forward is argument ,\r\n

s class ,\r\n

allow special forms=self. forward i

698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n

700 type, globalns, localns, recursive guard | {self. forward arg }\ 702 self.__forward_evaluated__ = True\r\n\r\nFile /opt/ r\n conda/lib/python3.10/typing.py:329, in _eval_type(t, globalns, localns, rec 328 if isinstance(t, (_GenericAlias, GenericAlias, typ ursive quard)\r\n ev_args = tuple(_eval_type(a, globalns, loca es.UnionType)):\r\n--> 329 if ev args == t. lns, recursive quard) for a in t. args)\r\n 330 _args__:\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:329, in <genexpr> 328 if isinstance(t, (GenericAlias, GenericAlias, types.UnionT $vpe)):\r\n--> 329$ ev_args = tuple(_eval_type(a, globalns, localns, recu rsive_guard) for a in t.__args__)\r\n 330 if ev_args == t.__args__:\ r\n\r\nFile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globa lns, localns, recursive_guard)\r\n 326 if isinstance(t, ForwardRef):\r\n return t. evaluate(globalns, localns, recursive guard)\r\n --> 327 28 if isinstance(t, (GenericAlias, GenericAlias, types.UnionType)):\r\n\r\ nFile /opt/conda/lib/python3.10/typing.py:699, in ForwardRef._evaluate(sel f, globalns, localns, recursive quard)\r\n 693 type = type check($\r\n$ eval(self.__forward_code__, globalns, localns),\r\n 694 ward references must evaluate to types.",\r\n 696 is_argument=self._ _forward_is_argument__,\r\n 697 allow_special_forms=self.__forward_i s_{class} , \r\n 698 \\r\n--> 699 $self_{class}$ forward_value_ = _eval_type(\r\n type_, globalns, localns, recursive_guard | {self.__forward_arg__}\ 700 702 self.__forward_evaluated__ = True\r\n\r\nFile /opt/ conda/lib/python3.10/typing.py:329, in _eval_type(t, globalns, localns, rec 328 if isinstance(t, (_GenericAlias, GenericAlias, typ ursive_guard)\r\n es.UnionType)):\r\n--> 329 ev_args = tuple(_eval_type(a, globalns, loca lns, recursive_guard) for a in t.__args__)\r\n 330 if ev_args == t._ _args__:\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:329, in <genexpr> 328 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionT $(.0)\r\n$ ev_args = tuple(_eval_type(a, globalns, localns, recu ype)):\r\n--> 329 rsive_guard) for a in t.__args__)\r\n 330 if ev_args == t.__args__:\ r\n\r\nFile /opt/conda/lib/python3.10/typing.py:329, in eval type(t, globa lns, localns, recursive_guard)\r\n 328 if isinstance(t, (_GenericAlias, Generi',

'GitHub Issue vector': [-0.0006835468229837716, -0.003785524284467101, 0.006393408868461847, -0.007254402153193951, -0.005251347552984953, 0.03227657452225685, -0.00281779607757926, -0.029031839221715927, -0.02083461359143257, -0.01790296845138073, 0.024776682257652283, 0.003934952896088362, -0.01551211066544056, 0.02352432906627655. 0.012701429426670074, -0.020436137914657593, 0.015995973721146584,

-0.019126858562231064, 0.013199524953961372, 0.006592646706849337, 0.007001796737313271, 0.025360165163874626, -0.02823488786816597, -0.004251598846167326, -0.014501688070595264, 0.011491769924759865, 0.024975920096039772, -0.036830589175224304, -0.010588082484900951-0.000776939676143229, 0.01770372875034809, -0.022627757862210274, -0.010424423031508923, -0.03745676577091217, -0.025687485933303833, -0.009840940125286579, 0.018899157643318176, -0.01787450537085533. 0.04628016799688339, 0.019069934263825417, 0.02086307667195797, 0.016437144950032234, 0.0004998741787858307, -0.0170917846262455, -0.02271314524114132, 0.04482857510447502, -0.00794106163084507, -0.004084381274878979, -0.023296628147363663, 0.00932149775326252, 0.04129921644926071, 0.018884927034378052, -0.027480628341436386, -0.0025402859319001436, 0.00617638137191534, -0.002337489975616336, 0.012829511426389217, 0.0290460716933012, 0.010004599578678608, 0.007592395413666964, 0.0075781638734042645, -0.004685653373599052, -0.0185576081275939940.00518374890089035, -0.020635375753045082, 0.005799252074211836, 0.00018734164768829942,

- 0.02823488786816597, -0.0013697620015591383, 0.004806619603186846, 0.022058505564928055, 0.005308272782713175, 0.002122241770848632, -0.02641328051686287, 0.031650397926568985, -0.02066383883357048, -0.0015645528910681605, 0.0026061057578772306, -0.019980736076831818, 0.009620354510843754, 0.013669157400727272. -0.020165743306279182-0.014010708779096603, 0.0015014015370979905, 0.03532207012176514, -0.0006742075202055275, 0.013718967325985432, 0.007542585954070091, 0.01874261349439621, -0.015341334976255894, 0.030312655493617058, 0.0045967078767716885, 0.028419893234968185, -0.0019888232927769423, 0.011698123998939991, 0.025630559772253036, -0.006229748949408531, 0.012338532134890556, 0.007254402153193951, -0.010652123019099236. -0.012530654668807983, 0.005710306577384472, -0.01999496854841709, -0.014231293462216854, -0.020720763131976128, -0.02897491492331028, 0.012665851972997189, 0.021361172199249268, 0.008787823840975761, -0.0003795753000304103, -0.013740314170718193, 0.04895564913749695, -0.007300653960555792, -0.029971104115247726, 0.0020332960411906242, -0.010652123019099236, -0.003970530815422535,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- -4.427822568686679e-05, -0.009008409455418587. -0.007535470183938742, 0.031223459169268608, 0.018244517967104912, -0.018486451357603073, -0.01398224662989378, 0.023851647973060608, -0.004511320032179356, -0.0083110760897398, -0.002851595403626561, -0.0323619619011879, -0.017177172005176544, 0.023211240768432617. -0.005699633155018091, 0.019710341468453407, -0.0017958113458007574, -0.025089770555496216, 0.028547976166009903, -0.023268165066838264, -0.01669330708682537, -0.0046394020318984985, -0.022200819104909897, -0.001177639584057033, 0.04121382534503937, -0.01468669530004263, -0.002607884583994746, 0.013356069102883339, -0.004991626366972923, -0.02197311818599701, -0.0025598539505153894, 0.04451548680663109, -0.0012292279861867428, 0.004724789410829544, 0.0009517177822999656, -0.010239415802061558, -0.02147502265870571, -0.029771866276860237, 0.014224178157746792, -0.007756055332720285.4229010856943205e-05, -0.0025616330094635487, -0.02900337614119053, -0.0012701429659500718, 0.033130452036857605, -0.01605289988219738, -0.029743405058979988, -0.015611729584634304, 0.017291022464632988, 0.01965341717004776,

- -0.01770372875034809, -0.0145230358466506, 0.0006404082523658872, -0.03543592244386673, 0.03179271146655083, -0.004369007423520088, -0.0032447350677102804, -0.0071512251161038876, 0.022627757862210274, -0.006123014260083437, -0.00256519066169858, -0.02005189284682274, 0.010139796882867813, -0.017177172005176544. 0.013640695251524448, 0.027067920193076134, 0.04263695701956749, -0.010623660869896412, 0.009755551815032959, 0.024107811972498894, 0.007250844035297632, -0.007563932798802853, -0.006727844011038542, 0.005137497093528509, 0.03381355479359627, -0.0110790627077221870.004543340764939785, -0.5765382051467896, -0.038282182067632675, 0.007286422420293093, -0.007386041339486837, -0.005258462857455015, 0.026100192219018936, -0.010773089714348316, 0.02234313078224659, -0.022300437092781067, 0.04337698221206665, -0.05686825141310692, 0.011619850993156433, 0.017077552154660225, 0.002663030754774809, 0.014010708779096603, -0.02002342976629734, 0.029401853680610657, -0.03574901074171066, -0.002260996727272868, 0.026270968839526176, -0.005813483614474535, 0.02863336354494095, -0.010794436559081078,

- -0.013327606953680515, 0.00747142918407917, 0.0034599832724779844, -0.00276442873291671280.00465363310649991, 0.03398432955145836, -0.002602547872811556, -0.02917415276169777, 0.01696370169520378, 0.020848846063017845, 9.456028055865318e-05, 0.04730482026934624, -0.014587076380848885, -0.0205357577651739120.03742830455303192, 0.008602817542850971, 0.005873966496437788, -0.012765470892190933, 0.012018327601253986, 0.01108617801219225, 0.018358368426561356. 0.00023214798420667648, -0.016679076477885246, 0.006642456632107496, -0.0071761300787329670.0002855153288692236, 7.532579184044152e-05. 0.021716954186558723, -0.01521325297653675, -0.013953783549368382, 0.005226442590355873, 0.003646769095212221, -0.0151705592870712280.017006395384669304, -0.016878314316272736, 0.021517716348171234, -0.012302953749895096, 0.0008520987466908991, -0.00011840881052194163, -0.00804068148136139, -0.016166750341653824, 0.01682139001786709. 0.03455357998609543, 0.03267505019903183, 0.02806411124765873, -0.009691511280834675, -0.04201078042387962, 0.013256450183689594, -0.006236864719539881, -0.03526514768600464,

- 0.006265327334403992, 0.02019420638680458, 0.037570614367723465, 0.0010130902519449592, -0.005710306577384472, -0.004696326795965433, 0.03028419427573681, -0.005550204776227474, 0.0012203335063531995, -0.04184000566601753, -0.011207143776118755, 0.020436137914657593, -0.016679076477885246, -0.013498382642865181. 0.018087973818182945, 0.015597498044371605, 0.007528354413807392, 0.010154028423130512, 0.031109608709812164, -0.008254150860011578, -0.033528927713632584.0.005792136769741774, 0.021859267726540565, -0.003475993638858199, -0.00844627246260643, -0.0012292279861867428, -0.05598590895533562, -0.022641988471150398, 0.003959857393056154, -0.0014827229315415025, 0.006859483662992716, 0.015384028665721416, 0.025417091324925423, -0.005564435850828886, -0.0020920000970363617, 0.01871415227651596, -0.003438636427745223, -0.007784517947584391, -0.010068640112876892, -0.011349457316100597-0.018600301817059517, 0.009342844597995281, -0.04283619299530983, -0.008958599530160427, -0.018059512600302696, -0.02052152529358864, -0.0016214780043810606, 0.005105476826429367, 0.0263136625289917, 0.011228490620851517,

0.004440163727849722, 0.018685689195990562, 0.00569607550278306, -0.0030739593785256147, 0.009534967131912708, -0.000565249181818217, 0.030141880735754967, 0.021716954186558723, -0.004774598870426416, 0.009115143679082394, -0.017746424302458763, 0.004205347504466772, -0.01142772939056158, 0.04021763801574707, 0.024406669661402702, 0.015640191733837128, 0.004682095721364021, -0.015796735882759094, -0.019568029791116714, -2.2806203560321592e-05, 0.006386293098330498. -0.030170343816280365, -0.030682669952511787, -0.021489253267645836, -0.003767735091969371, -0.011947170831263065, -0.007727592717856169, -0.0072686332277953625, -0.0056604971177875996, -0.02446359395980835, 0.021176164969801903, -0.006681592669337988, -0.012210450135171413, 0.00320915668271482, -0.021830804646015167, 0.012317185290157795, -0.026470206677913666, 0.010637892410159111, 0.03065420687198639, -0.02281276322901249. -0.009008409455418587, -0.023382015526294708, -0.0003789082111325115, -0.02285545878112316, 0.016380218788981438, -0.013903974555432796, -0.028391432017087936, -0.008851864375174046, -0.0415838398039341, -0.004187558311969042,

-0.0018998776795342565, -0.002244986593723297, 0.00928591936826706, -0.01992381177842617, -0.0030810751486569643, 0.004603823646903038, 0.002892510499805212, -0.015554804354906082, -0.0020350751001387835, -0.025459785014390945, -0.016650613397359848, 0.04838639870285988, 0.014288218691945076, 0.04118536412715912, -0.003547149943187833, -0.0002071320341201499, 0.04149845242500305, 0.0031717997044324875, -0.019624954089522362, -0.008147415705025196, 0.004162653349339962. -0.031308844685554504, 0.002182724652811885, -0.006101667415350676, 0.015255946666002274, -0.004881334025412798, 0.020436137914657593, 0.007563932798802853, 0.040530726313591, 0.024420900270342827, -0.009940559044480324, 0.0018082638271152973, -0.0182872135192155840.0023855206090956926, -0.026142887771129608, 0.003091748571023345, -0.0014133453369140625, 0.016465606167912483, 0.003413731697946787, -0.04926874116063118, -0.01807374320924282, 0.017106015235185623, 0.016906777396798134, -0.03028419427573681, 0.014430532231926918, -0.017575647681951523, 0.012544885277748108, 0.010239415802061558, 0.01844375766813755, 0.00986228697001934,

-0.013064327649772167, -0.005358082242310047-0.007414503954350948, 0.026057498529553413, -0.010744626633822918, -0.008844749070703983, -0.001042442279867828, -0.005329619627445936, -0.0013875511940568686, 0.011292532086372375, -0.008538776077330112, 0.017319485545158386, 0.003372816601768136, 0.05023646727204323, 0.005422122776508331, 0.042181555181741714, -0.028078343719244003, 0.002536728046834469, -0.009414001367986202, -0.013405879028141499, -0.007670667488127947, 0.03307352587580681, 0.008346653543412685, 0.03213426098227501, 0.014871702529489994, -0.014843239448964596, 0.011377919465303421, -0.0028942893259227276, -0.003902932396158576, -0.01468669530004263, -0.006094551645219326, 0.006806116085499525, -0.022286206483840942. 0.010488463565707207, 0.023851647973060608, 0.007215266115963459, 0.0016570562729611993, 0.0076208580285310745, -0.003564939135685563, 0.01965341717004776. 0.046792495995759964, 0.0103674978017807, -0.014729388989508152, -0.03785524144768715, -0.0369444377720356, -0.0038993745110929012, -0.0037001364398747683, -0.011385034769773483-0.026399049907922745, -0.020649608224630356,

- -0.026441743597388268, 0.05592898651957512, -0.0038993745110929012, 0.015113634057343006, 0.04104305058717728, 0.014700926840305328, -0.003991878125816584, 0.0028907316736876965, -0.03028419427573681, 0.01908416487276554, 0.021859267726540565, -0.007542585954070091, -0.007233055308461189, 0.005329619627445936, 0.007136994041502476, -0.02900337614119053, 0.01834413781762123, 0.008588586002588272, 0.012473729439079762, -0.01928340271115303, 0.012857973575592041. -0.022940846160054207, -0.013761661015450954, 0.013256450183689594, 0.002156041096895933, 0.0015814525540918112, 0.015469416044652462, -0.0013964456738904119, 0.027338314801454544, 0.010943865403532982, 0.03455357998609543, 0.04067303612828255, -0.012423919513821602. -0.011996980756521225, -0.008837633766233921, -0.01495708990842104, -0.040701501071453094, 0.032191187143325806, 0.013583770021796227, -0.005692517384886742, -0.025986341759562492, -0.0013822143664583564, 0.024477824568748474, -0.009705742821097374, -0.007016027811914682, 0.007293538190424442, -0.021845035254955292. -0.01618098095059395, -0.042722344398498535. -0.014039171859622002,

- -0.0018322791438549757, 0.014658233150839806, 0.023467402905225754, 0.012103715911507607, 0.003337238449603319, -0.0007351352833211422, 0.014024940319359303, 0.004820850677788258, 0.004739020951092243, -0.00206531654112041, -0.022698914632201195, -0.03176424652338028, 0.00797664001584053, 0.002280564745888114. 0.02796449325978756, 0.03065420687198639, 0.016949471086263657, 0.022556601092219353, -0.01955379731953144, 0.008126068860292435, -0.021105008199810982. 0.02355279214680195, -0.016465606167912483, 0.017646804451942444, 0.02789333648979664, 0.008937252685427666, 0.008553007617592812, 0.014629770070314407, 0.007421619724482298, 0.010595198720693588, -0.02197311818599701, -0.007997986860573292, 0.017618341371417046, 0.007692014332860708, 0.018500681966543198, -0.011755048297345638, 0.032760437577962875, 0.008111837320029736, 0.005326061509549618, -0.006112340837717056, 0.0113067626953125, 0.04556860402226448, 0.029658015817403793, -6.320695683825761e-05, -0.028761444613337517, 0.003963415510952473, -0.021375402808189392. 0.003657442517578602, -0.01935455948114395, -0.01645137555897236,

- -0.026882914826273918, 0.03677366301417351, 0.013818586245179176, -0.02665521390736103, -0.03640364855527878, 0.02594364807009697, -0.006432544905692339-0.020621145144104958, -0.017305253073573112, -0.015312871895730495, -0.007186803501099348, -0.00908668152987957, -0.025730179622769356, -0.013832817785441875, -0.007247286383062601, 0.0009775119833648205, 0.005863293074071407, 0.0009970800019800663, 0.018870696425437927, -0.02453475072979927-0.013327606953680515. 0.026370586827397346, 0.0108371302485466, 0.0004149311571381986, -0.010054409503936768, 0.010901170782744884, -0.01837260089814663, 0.026740601286292076, -0.03338661417365074, -0.0023446057457476854, 0.02843412570655346, 5.395800599217182e-06, -0.03836756944656372, -0.018699919804930687, -0.024520520120859146, -0.008204340934753418, -0.016038667410612106, 0.018258750438690186, -0.01945417933166027, 0.006525048054754734, 0.04209616780281067, 0.011420613154768944, 0.013320490717887878, 0.00023437161871697754, -0.018130667507648468, 0.010573850944638252, -0.004443721380084753, -0.024178968742489815, 0.047333285212516785, -0.017077552154660225,

- 0.012345647439360619, 0.012850858271121979, -0.022428520023822784, -0.020179973915219307, -0.029999567195773125, 0.010068640112876892, -0.01955379731953144, -0.023040464147925377, 0.007563932798802853, 0.0011135987006127834, 0.002211187267675996, 0.006891503930091858, -0.023168547078967094, 8.160757715813816e-05. -0.01766103506088257, -0.0024050886277109385, -0.007314885035157204, 0.030967295169830322, 0.008631279692053795, -0.017447566613554955, -0.008424925617873669. 0.003397721331566572, -0.04004685953259468, 0.03025573119521141, 0.02493322640657425. -0.007663551717996597, 0.02335355244576931, 0.016550995409488678, -0.025801336392760277-0.005578667391091585, -0.015312871895730495, 0.01938302256166935, 0.01162696722894907. 0.008396463468670845, -0.03176424652338028, 0.0028338064439594746, -0.020080355927348137, -0.012381225824356079-0.010680586099624634, -0.01216775644570589, -0.009890749119222164, -0.013050096109509468, 0.018429525196552277, -0.015042477287352085, -0.0202653631567955, -0.004095054697245359, -0.046621717512607574, -0.022001581266522408, 0.01006152480840683, 0.022428520023822784,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- 0.03287428990006447, -0.0032127145677804947, 0.019624954089522362, -0.008652626536786556, -0.005699633155018091, -0.025872493162751198, 0.003796197706833482, 0.011854668147861958, 0.02658405713737011, 0.017319485545158386, 0.0230831578373909, 0.059145256876945496, -0.026897145435214043, -0.002488697413355112. 0.011449076235294342, 0.01425264123827219, 0.00594868091866374, -0.012281606905162334, 0.009563429281115532, -0.015896355733275414, 0.006503701210021973, 0.004956047981977463, 0.0008854533080011606, 0.02668367512524128, 0.0045682452619075775, -0.014010708779096603, 0.036289799958467484, -0.001310168532654643, 0.011022137477993965, -0.026882914826273918, -0.04445856064558029, -0.043633148074150085, 0.02742370404303074, -0.02436397597193718, 0.013299143873155117, -0.03768446668982506, 0.0009277024655602872, 0.0387660451233387, -0.013491266407072544, -0.0019087722757831216, 0.004184000194072723, -0.0025047077797353268, -0.01723409630358219, 0.018045280128717422, 0.006350714713335037, 0.030881907790899277, -0.001238122582435608, -0.02160310372710228, -0.013327606953680515, -0.016935240477323532,
- file:///Users/purneshsv/Desktop/HW5_ShiavrudrappaVidhyadhara_Purn...er_OpenAl_Purnesh/Pull_GitHub_Issues/Pull_Analytics_Purnesh.html

- -0.005567993503063917, -0.012893551960587502, 0.02382318675518036, 0.006489470135420561, 0.02746639773249626, -0.029102995991706848, 0.05550204589962959, 0.011114640161395073, 0.01955379731953144, 0.008318191394209862, -0.010822898708283901, -0.024520520120859146, -0.04166922718286514, -0.02174541726708412, -0.02362394705414772, 0.025388628244400024, 0.0030775172635912895, 0.009414001367986202, 0.019966505467891693, -0.0212046280503273, -0.027409471571445465, 0.006610435899347067, -0.018358368426561356, 0.023410478606820107, 0.022086968645453453, 0.037542153149843216, 0.02934492751955986. -0.0012034338433295488, -0.01871415227651596, 0.013149715960025787, 0.01787450537085533, -0.007322000805288553, 0.0029263098258525133, -0.010161143727600574, -0.01891339011490345, -0.0017646804917603731, 0.009250340983271599, 0.010481348261237144, -0.026470206677913666, -0.03153654560446739, 0.03640364855527878, 0.019639184698462486, 0.011000790633261204, -0.015298641286790371, -0.017205635085701942, -0.021076546981930733, 0.01208236813545227, 0.006937755737453699, -0.01415302138775587, 0.0258155670017004,

-0.003739272477105260.002440667012706399. 0.011207143776118755, -0.01494285836815834, 0.057864442467689514, 0.02197311818599701, 0.006507259327918291, 0.03492359444499016, -0.007464313413947821, 0.0005794804892502725, 0.024876302108168602, 0.010545388795435429, 0.03546438366174698, -0.018415294587612152. -0.013676273636519909, 0.024207431823015213, -0.007983756251633167, 0.0066958237439394, -0.006382735446095467, 0.010716164484620094, 0.03532207012176514, -0.010303456336259842, 0.0015245273243635893, -0.007627973333001137, -0.016977934166789055, 0.014985552057623863, 0.0016846293583512306, 0.00751412333920598, -0.0030294866301119328, -0.02443513087928295, -0.00489556510001421, 0.01420283131301403, 0.03722906485199928. 0.008617048151791096, -0.010467116720974445, 0.002412204397842288, -0.01773219183087349, 0.008723783306777477, -0.011925823986530304, 0.004625170491635799, -0.046564795076847076, -0.006955544929951429, -0.0009650596184656024, -0.02005189284682274, 0.0017806906253099442, -0.004863544832915068, -0.0007475876482203603, -0.02867605723440647, 0.035350535064935684, -0.007457198109477758,

0.0414699912071228, -0.032931212335824966, 0.007763170637190342, -0.028377199545502663, -0.008403578773140907, -0.0006835468229837716, 0.0013341838493943214, 0.010737511329352856, 0.006799000781029463, -0.021901961416006088, -0.028277581557631493, 0.03685905039310455, 0.019098395481705666, -0.003573833731934428. -0.017106015235185623, 0.03321583941578865, 0.0035756125580519438, 0.015156327746808529, -0.011264069005846977, 0.0007364694611169398, 0.05373736470937729, -0.008581469766795635, 0.0023357111494988203, 0.00694842915982008, -0.017589880153536797-0.01608136296272278, -0.01689254492521286, 0.005841946229338646, -0.00962747074663639, -0.022898152470588684, 0.012338532134890556, -0.004803061485290527, -0.021958885714411736, -0.002321479842066765, -0.022030042484402657, -0.01716293953359127, -0.03856680542230606, -0.029131459072232246, 0.001963918562978506, -0.007322000805288553, -0.02934492751955986, 0.020137280225753784, 0.021418096497654915, 0.0179741233587265, 0.004810177255421877, -0.028362968936562538, -0.006855926010757685, -0.004201789386570454, 0.0001722208980936557, -0.02463437058031559,

-0.007571048568934202, -0.0030686226673424244, 0.03751369193196297, 0.032760437577962875, 0.002237871056422591, -0.027551785111427307-0.024790914729237556, -0.014999783597886562, -0.018970314413309097, -0.0010700153652578592-0.0003404392336960882, 0.02352432906627655, -0.004945374559611082, -0.032020412385463715, 0.018258750438690186, 0.006034068763256073, 0.015668654814362526, -0.008424925617873669, -0.028448356315493584, 0.0016063572838902473, 0.015255946666002274, 0.01396801508963108, -0.0018500682199373841, -0.020578451454639435, -0.006396966520696878, 0.004297850653529167, -0.0030810751486569643, -0.004308524075895548, 0.011214260011911392, -0.034980520606040955, -0.007019585929811001, -0.017618341371417046, -0.011641198769211769, 0.0020546431187540293, 0.0029067418072372675, 0.000820967776235193, -0.03364278003573418, 0.007848558947443962, 0.005856177303940058, -0.0071227625012397770.002880058018490672, -0.016750233247876167-0.003038381226360798, 0.007257959805428982, 0.02870452031493187, -0.01495708990842104, -0.008880327455699444. -0.009584776125848293, -0.030739594250917435, 0.049354128539562225,

- 0.021275784820318222, 0.005109034478664398, 0.00193901383318007, -0.0014507025480270386, 0.012238912284374237, -0.026142887771129608, 0.01056673564016819, -0.011363687925040722-0.011854668147861958, 0.003499119309708476, -0.01925494149327278, 0.012623157352209091, -0.027082152664661407, 0.017504490911960602. -0.025587866082787514, -0.0018571838736534119, 0.01549787912517786, 0.0002299243351444602, -0.02493322640657425, 0.02093423344194889, -0.015526341274380684. -0.04838639870285988, -0.01108617801219225, 0.004486415535211563, 0.010637892410159111, 0.02991417981684208, -0.022015811875462532, 0.006187054794281721, -0.023382015526294708, -0.01854337565600872, 0.015440953895449638, 0.004048802889883518, -0.009463810361921787, 0.007948177866637707, 0.0015174116706475616, -0.02177388034760952, -0.019610723480582237, 0.20743533968925476, 0.010794436559081078, -0.004682095721364021, 0.01366204209625721, -0.002652357332408428, 0.00880205538123846, 0.001841173623688519, -0.0038887010887265205, 0.004874218255281448, 0.037001363933086395. 0.0063400412909686565, 0.0028818370774388313, 0.022528138011693954,

```
-0.009172068908810616,
            -0.011776396073400974,
            0.041413065046072006,
            -0.029401853680610657,
            -0.0488702617585659,
            -0.04007532447576523,
            -0.0028338064439594746,
            -0.0011198249412700534,
            -0.0009108028025366366,
            0.0009615017916075885,
            -0.02258506417274475,
            0.017390640452504158,
            -0.007599510718137026,
            0.003182473126798868.
            -0.014409185387194157,
            -0.005044993478804827,
            -0.006503701210021973,
            -0.026427512988448143,
            0.0019585818517953157,
            -0.0004811956314370036,
            -0.0017095342045649886.
            -0.02870452031493187,
            -0.030682669952511787,
            0.00616570794954896,
            0.0012532433029264212,
            0.011135987006127834,
            0.016679076477885246,
            0.011940055526793003.
            -0.017547184601426125,
            0.011491769924759865,
            -0.015967512503266335,
            -0.02682598866522312,
            0.004909796174615622,
            ...]}
In [18]: import requests
         from datetime import datetime, timedelta
         # GitHub repository information
          repositories = [
              {"owner": "langchain-ai", "name": "langchain"},
             {"owner": "langchain-ai", "name": "langgraph"},
             {"owner": "microsoft", "name": "autogen"},
              {"owner": "openai", "name": "openai-cookbook"},
             {"owner": "elastic", "name": "elasticsearch"},
             {"owner": "milvus-io", "name": "pymilvus"}
         ]
```

```
# Accessing repository information
for repo in repositories:
    repo_owner = repo["owner"]
    repo_name = repo["name"]
    repo url = f"https://github.com/{repo owner}/{repo name}"
    print(repo url)
# Get the current date and date 2 months ago
current_date = datetime.now()
two_months_ago = current_date - timedelta(days=60)
# Format dates in ISO 8601 format
current date str = current date.strftime("%Y-%m-%dT%H:%M:%SZ")
two_months_ago_str = two_months_ago.strftime("%Y-%m-%dT%H:%M:%SZ")
# GitHub API endpoint to retrieve commits
commits_url = f"{repo_url}/repos/{repo_owner}/{repo_name}/commits"
# Parameters for the GitHub API request
params = {
    "since": two_months_ago_str,
    "until": current date str
}
# Make the GET request to the GitHub API
response = requests.get(commits_url, params=params)
# Check if the request was successful
if response.status_code == 200:
   # Parse the JSON response
    commits_data = response.json()
```

```
https://github.com/langchain-ai/langchain
https://github.com/langchain-ai/langgraph
https://github.com/microsoft/autogen
https://github.com/openai/openai-cookbook
https://github.com/elastic/elasticsearch
https://github.com/milvus-io/pymilvus
```

Part 2

REQUIREMENT 2

- 1. https://github.com/langchain-ai/langchain
- 2. https://github.com/langchain-ai/langgraph
- 3. https://github.com/microsoft/autogen
- 4. https://github.com/openai/openai-cookbook
- 5. https://github.com/elastic/elasticsearch
- 6. https://github.com/milvus-io/pymilvus

Use vector embeddings, score, and semantic search to identify and list the Top 5 most similar issues for every repollisted above.

```
In [19]: import json
          # List of repositories
          repositories = [
              {"owner": "langchain-ai", "name": "langchain"},
              {"owner": "langchain-ai", "name": "langgraph"},
              {"owner": "microsoft", "name": "autogen"},
              {"owner": "openai", "name": "openai-cookbook"},
{"owner": "elastic", "name": "elasticsearch"},
              {"owner": "milvus-io", "name": "pymilvus"}
          1
          responses = [] # Define responses list here
          # Loop through each repository
          for repo_info in repositories:
              repo_owner = repo_info["owner"]
              repo_name = repo_info["name"]
              # Perform semantic search for the current repository
              # Perform semantic search for the current repository
              response = es.search(
                   index="pdgithub_issues",
                   bodv={
                       "query": {
                           "bool": {
                                "must": {
                                    "match all": {}
                               },
                                "filter": {
                                    "term": {
                                        " repo": f"{repo owner}/{repo name}" # Filter b
                                }
                           }
                       },
```

```
"knn": {
                 "field": "GitHub_Issue_vector",
                 "query_vector": hits['hits'][5]['_source']["GitHub_Issue vec
                 "k": 5, # Retrieve top 5 most similar issues
                 "num_candidates": 10000
            }
         }
     )
     # Extract and format the top 5 most similar issues
     similar_issues = []
     for hit in response["hits"]["hits"]:
         similar issue = {
             "_score": hit["_score"],
             "_type": hit["_source"]["_type"],
             "_repo": hit["_source"]["_repo"],
             "_issueNumber": hit["_source"]["_issueNumber"],
             " title": hit["_source"]["_title"],
             "_createdAt": hit["_source"]["_createdAt"],
             "_closedAt": hit["_source"]["_closedAt"],
             "_body": hit["_source"]["_body"],
         similar issues.append(similar issue)
 # Store the top 5 most similar issues for the current repository
     responses.extend(similar_issues)
     # Print or store the top 5 most similar issues for the current repositor
     print(f"Top 5 most similar issues for {repo owner}/{repo name}:")
     for issue in similar issues:
         # print(issue)
         print(json.dumps(issue, indent=4))
Top 5 most similar issues for langchain—ai/langchain:
{
    "_score": 1.0,
    "_type": "issue",
    "_repo": "langchain",
    " issueNumber": "28271",
    "_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not defi
ned using ChatVertexAI",
    "_createdAt": "2024-11-21T22:43:53Z",
    "_closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\r\n```python\r\n# Ensure your VertexAI credentials are con
```

----\r\nNameError Traceback (most re cent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ in ternal/_generate_schema.py:815, in GenerateSchema._resolve_forward_ref(self, 814 try:\r\n--> 815 obj = typing extra.eval type backport(o bj, *self._types_namespace)\r\n 816 except NameError as e:\r\n\r\nFile /o pt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing_extra.py:53 4, in eval_type_backport(value, globalns, localns, type_params)\r\n $ry:\r\n--> 534$ return _eval_type_backport(value, globalns, localns, type 535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python params)\r\n 3.10/site-packages/pydantic/ internal/ typing extra.py:558, in eval type ba ckport(value, globalns, localns, type_params)\r\n 557 try:\r\n--> 558 return _eval_type(value, globalns, localns, type_params)\r\n 559 except T ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ _internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type _params)\r\n 591 else:\r\n--> 592 return typing._eval_type(# type: ignore\r\n value, globalns, localns\r\n 594 593 ile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globalns, loca lns, recursive_guard)\r\n 326 if isinstance(t, ForwardRef):\r\n--> 327 return t._evaluate(globalns, localns, recursive_guard)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con da/lib/python3.10/typing.py:699, in ForwardRef._evaluate(self, globalns, loc alns, recursive_guard)\r\n 693 type_ = _type_check(\r\n 694 elf.__forward_code__, globalns, localns),\r\n 695 \"Forward reference s must evaluate to types.\",\r\n 696 is_argument=self.__forward_is_ar allow_special_forms=self.__forward_is_class__,\r\n gument ,\r\n 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n 700 type_, globalns, localns, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self.__forward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/ typing.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 28 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> ev_args = tuple(_eval_type(a, globalns, localns, recursive_guard) fo 329 raint.args)\r\n 330 if ev_args == t.__args__:\r\n\r\nFile /op t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__ar if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/py 330 thon3.10/typing.py:327, in _eval_type(t, globalns, localns, recursive_guard) 326 if isinstance(t, ForwardRef):\r\n--> 327 return t._evaluate(globalns, localns, recursive_guard)\r\n 328 if isinstance(t, (_GenericAli as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef._evaluate(self, globalns, localns, recursive_gua $693 \text{ type} = \text{type check(}r\n$ 694 eval(self. forward code _, globalns, localns),\r\n 695 \"Forward references must evaluate to types.\",\r\n is_argument=self.__forward_is_argument__,\r\n 698)\r\n--> 699 allow_special_forms=self.__forward_is_class__,\r\n self.__forward_value__ = _eval_type(\r\n 700 type_, globalns, localn

```
s, recursive_guard | {self.__forward_arg__}\r\n
                                                  701 )\r\n
                                                                702 self. f
orward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32
9, in _eval_type(t, globalns, localns, recursive_guard)\r\n
ance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329
rgs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__a
              330
                     if ev args == t. args :\r\n\r\nFile /opt/conda/lib/p
ython3.10/typing.py:329, in <genexpr>(.0)\r\n
                                                328 if isinstance(t, ( Gene
ricAlias, GenericAlias, types.UnionType)):\r\n--> 329
                                                         ev args = tuple( e
val_type(a, globalns, localns, recursive_guard) for a in t.__args__)\r\n
        if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/python3.10/typi
ng.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n
f isinstance(t, (_GenericAlias, Generi"
}
{
    "_score": 0.9323593,
   "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28255",
    "_title": "Can't import ChatOpenAI: The `__modify_schema__` method is no
t supported in Pydantic v2. ",
    "_createdAt": "2024-11-21T10:40:40Z",
    " closedAt": "2024-12-31T00:36:30Z",
    " body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code (n-[X]) The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\nThe following code straight from the docs fails already at the
import statement:\r\n```\r\nfrom typing import Optional\r\n\r\nfrom pydantic
import BaseModel, Field\r\n\r\nfrom langchain openai import ChatOpenAI\r\n\r
\n = ChatOpenAI(model=\"gpt-4o-mini\")\r\n\r\n# Pydantic\r\nclass Jok
                    \"\"\Joke to tell user.\"\"\r\n\r\n
e(BaseModel):\r\n
                                                               setup: str =
Field(description=\"The setup of the joke\")\r\n
                                                   punchline: str = Field(d
escription=\"The punchline to the joke\")\r\n rating: Optional[int] = Fie
ld(default=None, description=\"How funny the joke is, from 1 to 10\")\r\n\r\
n\r\nstructured_llm = llm.with_structured_output(Joke)\r\n\r\nstructured_ll
m.invoke(\"Tell me a joke about cats\")\r\n```\n\n### Error Message and Stac
k Trace (if applicable)\n\n```\r\nC:\\Users\\Egor\\Dropbox\\Code\\langchain\
\libs\\partners\\openai\\langchain_openai\\chat_models\\__init__.py:1: LangC
hainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydantic
v2 internally. The langchain_core.pydantic_v1 module was a compatibility shi
m for pydantic v1, and should no longer be used. Please update the code to i
mport from Pydantic directly.\r\n\r\nC:\\Users\\Egor\\Dropbox\\Code\\langcha
in\\libs\\partners\\openai\\langchain_openai\\chat_models\\__init__.py:1: La
ngChainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydant
ic v2 internally. The langchain_core.pydantic_v1 module was a compatibility
shim for pydantic v1, and should no longer be used. Please update the code t
o import from Pydantic directly.\r\n\r\nFor example, replace imports like:
```

from langchain_core.pydantic_v1 import BaseModel`\r\nwith: `from pydantic im

port BaseModel`\r\nor the v1 compatibility namespace if you are working in a code base that has not been fully upgraded to pydantic 2 yet. \tfrom pydanti c.v1 import BaseModel\r\n\r\n from langchain_openai.chat_models.azure impor t AzureChatOpenAI\r\nC:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\sit e-packages\\pydantic_internal_config.py:345: UserWarning: Valid config k eys have changed in V2:\r\n* 'allow population by field name' has been renam ed to 'populate by name'\r\n warnings.warn(message, UserWarning)\r\nTraceba ck (most recent call last):\r\n File \"<frozen importlib. bootstrap>\", lin e 1176, in _find_and_load\r\n File \"<frozen importlib._bootstrap>\", line 1147, in _find_and_load_unlocked\r\n File \"<frozen importlib._bootstrap> \", line 690, in _load_unlocked\r\n File \"<frozen importlib._bootstrap_ext ernal>\", line 940, in exec_module\r\n File \"<frozen importlib._bootstrap> \", line 241, in call with frames removed\r\n File \"C:\\Users\\Egor\\Drop box\\Code\\langchain\\libs\\partners\\openai\\langchain openai\\ init .py \", line 1, in <module>\r\n from langchain_openai.chat_models import Azur eChatOpenAI, ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchai n\\libs\\partners\\openai\\langchain_openai\\chat_models__init__.py\", lin from langchain_openai.chat_models.azure import Azure e 1, in <module>\r\n ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\part ners\\openai\\langchain_openai\\chat_models\\azure.py\", line 41, in <module from langchain openai.chat models.base import BaseChatOpenAI\r\n F ile \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\partners\\openai\\lan gchain_openai\\chat_models\\base.py\", line 353, in <module>\r\n seChatOpenAI(BaseChatModel):\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motl eycrew3.11\\Lib\\site-packages\\pydantic_internal_model_construction.py \Egor\\.conda\\envs\\motleycrew3.11\\Lib\\site-packages\\pydantic_internal _model_construction.py\", line 658, in complete_model_class\r\n = cls. get pydantic core schema (cls, handler)\r\n ^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\env s\\motleycrew3.11\\Lib\\site-packages\\pydantic\\main.py\", line 697, in __g et_pydantic_core_schema__\r\n return handler(source)\r\n ^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\si te-packages\\pydantic_internal_schema_generation_shared.py\", line 84, i schema = self._handler(source_type)\r\n $n _call_{r\n}$ ^^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3. 11\\Lib\\site-packages\\pydantic_internal_generate_schema.py\", line 61 schema = self._generate_schema_inner(obj)\r\n 2, in generate schema\r\n ^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\ motleycrew3.11\\Lib\\site-packages\\pydantic_internal_generate_schema.py \", line 881, in _generate_schema_inner\r\n return self._model_schema(ob ^^^^^\r\n File \"C:\\Users\\Egor\\.conda j)\r\n \\envs\\motleycrew3.11\\" } { " score": 0.9279109, "_type": "issue", " repo": "langchain", "_issueNumber": "27960", "_title": "dict[str, pydantic_model] annotation not working with structu

red output",
 "_createdAt": "2024-11-07T13:10:32Z",
 " closedAt": "2024-12-31T00:36:30Z",

"_body": "### Checked other resources\n\n- [X] I added a very descriptiv e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it. \n - [X] I am sure that this is a bug in LangChain rat her than my code. $\n-$ [X] The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa mple Code\n\n```python \r\nfrom __future__ import annotations\r\n\r\nfrom ty ping import Optional\r\nfrom unittest import TestCase\r\n\r\nfrom dotenv imp ort load_dotenv\r\nfrom langchain_openai import ChatOpenAI\r\nfrom pydantic import Field, BaseModel\r\n\r\nload dotenv()\r\nclass CustomTestExtractorPro pertiesCreation(TestCase):\r\n def test with structured output dict(sel f):\r\n class Joke(BaseModel):\r\n \"\"\"Joke to tell use setup: str = Field(description=\"The setup of th r.\"\"\"\r\n\r\n e joke\")\r\n punchline: str = Field(description=\"The punchline to the joke\")\r\n rating: Optional[int] = Field(\r\n default=None, description=\"How funny the joke is, from 1 to 10\"\r\n class MultipleJokes(BaseModel):\r\n name_joke_pairs: dict[str, Joke] = Field(description=\"Dictionary of joke_name and joke pairs \")\r\n\r\n ChatOpenAI(name=\"gpt-4o-mini\").with_structured_output(\ r\n MultipleJokes).invoke(\"Generate a number of name-joke pairs \")\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\nError\r\n Traceback (most recent call last):\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/tests/integration/conversations/custom_test_extracto r_properties_creation.py\", line 25, in test_with_structured_output_dict\r\n MultipleJokes).invoke(\"Generate a number of name-joke pairs\")\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/ site-packages/langchain_core/runnables/base.py\", line 3024, in invoke\r\n input = context.run(step.invoke, input, config)\r\n File \"/home/filip/wor k/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/lan gchain_core/output_parsers/base.py\", line 193, in invoke\r\n f._call_with_config(\r\n File \"/home/filip/work/llm-bot-framework/llm-botframework/.venv/lib/python3.10/site-packages/langchain_core/runnables/base.p y\", line 1927, in _call_with_config\r\n context.run(\r\n File \"/home/f ilip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-pack ages/langchain_core/runnables/config.py\", line 396, in call_func_with_varia return func(input, **kwargs) # type: ignore[call-arg]\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python 3.10/site-packages/langchain_core/output_parsers/base.py\", line 194, in <la lambda inner_input: self.parse_result(\r\n File \"/home/filip/ work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/ langchain_core/output_parsers/openai_tools.py\", line 298, in parse_result\r raise e\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framewo rk/.venv/lib/python3.10/site-packages/langchain core/output parsers/openai t ools.py\", line 293, in parse_result\r\n pydantic_objects.append(name_dic t[res[\"type\"]](**res[\"args\"]))\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/.venv/lib/python3.10/site-packages/pydantic/main.py \", line 212, in __init__\r\n validated_self = self.__pydantic_validator_

_.validate_python(data, self_instance=self)\r\npydantic_core._pydantic_core. ValidationError: 1 validation error for MultipleJokes\r\nname_joke_pairs\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n rther information visit https://errors.pydantic.dev/2.9/v/missing\n\n### Des cription\n\nI am trying to create MultipleJokes Pydantic Model (example). \r \n**Expected result:**\r\nMultipleJokes object is created no error is return ed\r\n**Actual result:**\r\nMissing field exception is raised on Pydantic va lidation \n\n### System Info\n\nSystem Information\r\n----\r\ n> OS: Linux\r\n> OS Version: #48-Ubuntu SMP PREEMPT_DYNAMIC Fri Sep 27 1 4:04:52 UTC 2024\r\n> Python Version: 3.10.15 (main, Sep 7 2024, 18:35:38) [GCC 13.2.0]\r\n\r\nPackage Information\r\n-----\r\n> langchai n_core: 0.3.15\r\n> langchain: 0.3.7\r\n> langsmith: 0.1.134\r\n> langchain_ anthropic: 0.2.3\r\n> langchain google genai: 2.0.1\r\n> langchain grog: 0. 2.0\r\n> langchain nvidia: Installed. No version info available.\r\n> langch ain_nvidia_ai_endpoints: 0.3.0\r\n> langchain_openai: 0.2.2\r\n> langchain_t ext splitters: 0.3.0\r\n> langgraph: 0.2.38\r\n\r\nOptional packages not ins talled\r\n----\r\n> langserve\r\n\r\nOther Depend encies\r\n-----\r\n> aiohttp: 3.10.10\r\n> anthropic: 0.36.0\r\ n> async-timeout: 4.0.3\r\n> defusedxml: 0.7.1\r\n> google-generativeai: 0. 8.3\r\n> groq: 0.11.0\r\n> httpx: 0.26.0\r\n> jsonpatch: 1.33\r\n> langgraph -checkpoint: $2.0.1\r$ \n> langgraph-sdk: $0.1.33\r$ \n> numpy: $1.26.4\r$ \n> opena i: $1.51.2\r\n>$ or json: $3.10.7\r\n>$ packaging: $24.1\r\n>$ pillow: $10.4.0\r\n>$ pydantic: 2.9.2\r" } { "_score": 0.92669773, "_type": "issue", "_repo": "langchain", " issueNumber": "28106", "_title": "LangChain incorrectly applies strict (OpenAIs Structured Outp ut) in schema generation from Pydantic model with union, causing OpenAI vali dation errors", " createdAt": "2024-11-14T13:13:41Z", " closedAt": "2024-12-31T00:36:30Z", "_body": "### Checked other resources\r\n\r\n- [X] I added a very descri ptive title to this issue. $\r\n-$ [X] I searched the LangChain documentation w

ith the integrated search.\r\n- [X] I used the GitHub search to find a simil ar question and didn't find it.\r\n- [X] I am sure that this is a bug in Lan gChain rather than my code.\r\n- [X] The bug is not resolved by updating to the latest stable version of LangChain (or the specific integration packag e).\r\n\r\n### Example Code\r\n\r\n```python\r\nimport getpass\r\nimport os\ r\nfrom typing import Union\r\nfrom langchain_openai import ChatOpenAI\r \nfrom openai import OpenAI\r\nfrom pydantic import BaseModel, Field\r\n\r\n \r\nclass Cooked(BaseModel):\r\n cooked recipe name: str = Field(\r\n description='Recipe name.'\r\n)\r\n\r\n\r\nclass Baked(BaseModel):\r\n baked recipe name: str = Field(\r\n description='Recipe name.'\r\n)\r\n\r\n\r\nclass Recipes(BaseModel):\r\n recipes: list[Union[Cooked, Ba $ked]] = Field(\r\n$ description='A list of recipes or tables represent ing the data sources.'\r\n)\r\n\r\nif \"OPENAI_API_KEY\" not in os.e nviron:\r\n os.environ[\"OPENAI_API_KEY\"] = getpass.getpass(\"Enter your

OpenAI API key: \")\r\n\r\nclient = OpenAI()\r\nmodel = \"qpt-4o-2024-08 -06\"\r\nrecipe_names = \"Garlic Butter Lobster Tail, Pumpkin Spice Muffins, Spicy Korean Beef Bulgogi, Raspberry Almond Scones\"\r\n\r\ncompletion = cli ent.beta.chat.completions.parse(\r\n model=model,\r\n $messages=[\r\n]$ {\"role\": \"user\", \"content\": recipe_names},\r\n],\r\n ormat=Recipes,\r\n)\r\nprint(\"OpenAI:\", completion.choices[0].message.pars ed)\r\n\r\nllm = ChatOpenAI(model=model)\r\nllm = llm.with structured outpu t(Recipes, strict=True)\r\nresponse = llm.invoke(recipe names)\r\nprint(\"La ngchain:\", response)\r\n```\r\n### Error Message and Stack Trace (if applic able)\r\n\r\nopenai.BadRequestError: Error code: 400 - {'error': {'message': \"Invalid schema for function 'Recipes': In context=('properties', 'recipe s', 'items', 'anyOf', '0'), 'additionalProperties' is required to be supplie d and to be false.\", 'type': 'invalid_request_error', 'param': 'tools[0].fu nction.parameters', 'code': 'invalid_function_parameters'}}\r\n\r\n### Descr $iption\r\n\r\n$ problem is that LangChain incorrectly applies the strict k eyword to the schema generated from the Pydantic model for the specific case in the example code above. The culprit here is the union. The same Pydantic class works when I feed it directly to OpenAI. When I injected 'additionalPr operties': False into the schema for the `Baked` and `Cooked` classes, the i ssue disappeared. \r\nI encountered the same problem when I had a Pydantic t ool schema with a union similar to the one above.\r\n\r\nOpenAI only threw e rror when `cooked_recipe_name` and `baked_recipe_name` were `recipe_name`, s o I guess that is something to be careful about.\r\n\r\nOpenAI schema before calling API:\r\n```\r\n{'\$defs': {'Baked': {'properties': {'baked_recipe_nam e': {'description': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 's tring'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'obje ct', 'additionalProperties': False}, 'Cooked': {'properties': {'cooked_recip e_name': {'description': 'Recipe name.', 'title': 'Cooked Recipe Name', 'typ e': 'string'}}, 'required': ['cooked_recipe_name'], 'title': 'Cooked', 'typ e': 'object', 'additionalProperties': False}}, 'properties': {'recipes': {'d escription': 'A list of recipes or tables representing the data sources.', ' items': {'anyOf': [{'\$ref': '#/\$defs/Cooked'}, {'\$ref': '#/\$defs/Baked'}]}, 'title': 'Recipes', 'type': 'array'}}, 'required': ['recipes'], 'title': 'Re cipes', 'type': 'object', 'additionalProperties': False}\r\n``\r\n\r\nLangC hain schema before calling API:\r\n```\r\n{'name': 'Recipes', 'description': '', 'parameters': {'properties': {'description': 'A list of reci pes or tables representing the data sources.', 'items': {'anyOf': [{'propert ies': {'cooked_recipe_name': {'description': 'Recipe name.', 'title': 'Cooke d Recipe Name', 'type': 'string'}}, 'required': ['cooked_recipe_name'], 'tit le': 'Cooked', 'type': 'object'}, {'properties': {'baked_recipe_name': {'des cription': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 'string'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'object'}]}, 't ype': 'array'}}, 'required': ['recipes'], 'type': 'object', 'additionalPrope rties': False}, 'strict': True}\r\n``\r\n\r\n### System Info\r\n\r\naiohapp yeyeballs==2.4.3\r\naiohttp==3.11.0\r\naiosignal==1.3.1\r\nannotated-types== 0.7.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r\nattrs==24.2.0\r\ncert ifi==2024.8.30\r\ncharset-normalizer==3.4.0\r\ndistro==1.9.0\r\nexceptiongro $up==1.2.2\r\nfrozenlist==1.5.0\r\ngreenlet==3.1.1\r\nh11==0.14.0\r\nhttpcore$ ==1.0.6\r\nhttpx==0.27.2\r\nidna==3.10\r\njiter==0.7.1\r\njsonpatch==1.33\r\ njsonpointer==3.0.0\r\nlangchain==0.3.7\r\nlangchain-core==0.3.18\r\nlangcha

```
in-openai==0.2.8\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\
nmultidict==6.1.0\r\nnumpy==1.26.4\r\nopenai==1.54.4\r\norison==3.10.11\r\np
ackaging==24.2\r\npropcache==0.2.0\r\npydantic==2.9.2\r\npydantic_core==2.2
3.4\r\nPvYA''
}
{
    "_score": 0.92288905,
   "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28021",
    "_title": "\u5728langgraph \u4e2d\u8fd0\u884c\u4f7f\u7528RAG\u7684\u793a
\u4f8b\u4ee3\u7801\uff0c\u51fa\u73b0pydantic\u62a5\u9519",
    " createdAt": "2024-11-11T13:54:06Z",
    "_closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\u6211\u8fd0\u884c\u5b98\u65b9\u6587\u6863\u7ed9\u51fa\u7684\u7
93a\u4f8b\u4ee3\u7801\u51fa\u73b0\u62a5\u9519\uff0c\u4ee3\u7801\u94fe\u63a5\
ufflahttps://langchain-ai.github.io/langgraph/tutorials/code_assistant/langg
raph\_code\_assistant/\#code\_solution\r\n\u73af\u5883\u4fe1\u606f\uff1a\r\nlang
chain
                     0.3.7\r\nlanggraph
                                                       0.2.45\r\npydantic
2.9.2\r\npydantic_core
                                  2.23.4\r\npydantic-settings
                                                                     2.6.1\r
\n\r\n\n\ Error Message and Stack Trace (if applicable)\n\nTraceback (mo
st recent call last):\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 202
3.3.2\\plugins\\python-ce\\helpers\\pydev\\pydevconsole.py\", line 364, in r
uncode\r\n
              coro = func()\r\n File \"<input>\", line 1, in <module>\r\n
File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\python-ce\\h
elpers\\pydev\\_pydev_bundle\\pydev_umd.py\", line 197, in runfile\r\n
dev imports.execfile(filename, global_vars, local_vars) # execute the scrip
t\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\pytho
n-ce\\helpers\\pydev\_pydev_imps\\_pydev_execfile.py\", line 18, in execfil
         exec(compile(contents+\"\\n\", file, 'exec'), glob, loc)\r\n File
\"D:\\codes\\AIGC\\scientificProject\\llm.py\", line 56, in <module>\r\n
solution = code_gen_chain_oai.invoke(\r\n File \"C:\\Users\\anaconda3\\envs
\\langchain_env2\\lib\\site-packages\\langchain_core\\runnables\\base.py\",
line 3024, in invoke\r\n
                            input = context.run(step.invoke, input, config)\
r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\
langchain_core\\output_parsers\\base.py\", line 193, in invoke\r\n
self._call_with_config(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_en
v2\\lib\\site-packages\\langchain core\\runnables\\base.py\", line 1927, in
_call_with_config\r\n
                         context.run(\r\n File \"C:\\Users\\anaconda3\\envs
\\langchain env2\\lib\\site-packages\\langchain core\\runnables\\config.py
\", line 396, in call_func_with_variable_args\r\n
                                                     return func(input, **kw
args) # type: ignore[call-arg]\r\n File \"C:\\Users\\anaconda3\\envs\\lang
chain_env2\\lib\\site-packages\\langchain_core\\output_parsers\\base.py\", l
ine 194, in < lambda > \r\n
                           lambda inner_input: self.parse_result(\r\n File
```

\"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\langchain_ core\\output_parsers\\openai_tools.py\", line 298, in parse_result\r\n ise e\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-pack ages\\langchain_core\\output_parsers\\openai_tools.py\", line 293, in parse_ result\r\n pydantic_objects.append(name_dict[res[\"type\"]](**res[\"args \"]))\r\n File \"C:\\Users\\anaconda3\\envs\\langchain env2\\lib\\site-pack ages\\pydantic\\main.py\", line 212, in __init__\r\n validated self = sel f. pydantic validator .validate python(data, self instance=self)\r\npydant ic_core._pydantic_core.ValidationError: 3 validation errors for code\r\npref ix\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n For further information visit https://errors.pydantic.dev/2.9/v/missing\r\ni mports\r\n Field required [type=missing, input_value={}, input_type=dict]\r For further information visit https://errors.pydantic.dev/2.9/v/missin q\r\ncode\r\n Field required [type=missing, input value={}, input type=dic For further information visit https://errors.pydantic.dev/2.9/v/mi $ssing\n\m^{##}$ Description\n\u6211\u60f3\u8981\u5b66\u4e60\u8fd0\u884c\u5b98 \u7f51\u4e2d\u7ed9\u51fa\u7684langgrapg RAG\u76f8\u5173\u4ee3\u7801\uff0c\u4 f46\u51fa\u73b0\u4e86pydantic\u76f8\u5173\u7684\u5305\u7684\u62a5\u9519\u8bf $7\u95ee\u6211\u8981\u5982\u4f55\u89e3\u51b3\r\n\n\m## System Info\n\naiohap$ pyeyeballs==2.4.3\r\naiohttp==3.10.10\r\naiosignal==1.3.1\r\nannotated-types ==0.7.0\r\nanthropic==0.38.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r \nattrs==24.2.0\r\nbeautifulsoup4==4.12.3\r\nbs4==0.0.2\r\ncertifi==2024.8.3 0\r\ncharset-normalizer==3.4.0\r\ncolorama==0.4.6\r\ndataclasses-json==0.6.7 \r\ndefusedxml==0.7.1\r\ndistro==1.9.0\r\nexceptiongroup==1.2.2\r\nfilelock= $=3.16.1\r\nfrozenlist==1.5.0\r\nfsspec==2024.10.0\r\ngreenlet==3.1.1\r\nh11=$ $=0.14.0\r\nhttpcore==1.0.6\r\nhttpx==0.27.2\r\nhttpx-sse==0.4.0\r\nhuggingfa$ ce-hub==0.26.2\r\nidna==3.10\r\njiter==0.7.0\r\njsonpatch==1.33\r\njsonpoint er==3.0.0\r\nlangchain==0.3.7\r\nlangchain-anthropic==0.2.4\r\nlangchain-com munity==0.3.5\r\nlangchain-core==0.3.15\r\nlangchain-openai==0.2.5\r\nlangch ain-text-splitters==0.3.2\r\nlanggraph==0.2.45\r\nlanggraph-checkpoint==2.0. $2\r\n\log ph-sdk==0.1.35\r\n\log mith==0.1.139\r\nmarshmallow==3.23.1\r\nm$ sgpack==1.1.0\r\nmultidict==6.1.0\r\nmypy-extensions==1.0.0\r\nnumpy==1.26.4 \r\nopenai==1.53.0\r\norjson==3.10.11\r\npackaging==24.1\r\npropcache==0.2.0 \r\npydantic==2.9.2\r\npydantic-settings==2.6.1\r\npydantic_core==2.23.4\r\n python-dotenv==1.0.1\r\nPyYAML==6.0.2\r\nregex==2024.9.11\r\nrequests==2.32. 3\r\nrequests-toolbelt==1.0.0\r\nsniffio==1.3.1\r\nsoupsieve==2.6\r\nSQLAlch $emy==2.0.35\r\ntenacity==9.0.0\r\ntiktoken==0.8.0\r\ntokenizers==0.20.1\r\nt$ qdm==4.66.6\r\ntyping-inspect==0.9.0\r\ntyping_extensions==4.12.2\r\nurllib3 $==2.2.3\r\nyarl==1.17.1\r\n''$ Top 5 most similar issues for langchain-ai/langgraph: "_score": 1.0, "_type": "issue", "_repo": "langchain", " issueNumber": "28271", "_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not defi ned using ChatVertexAI", "_createdAt": "2024-11-21T22:43:53Z", "_closedAt": "2024-12-31T00:36:30Z",

----\r\nNameError Traceback (most re cent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ in ternal/ generate schema.py:815, in GenerateSchema. resolve forward ref(self, 814 try:\r\n--> 815 obj = typing extra.eval type backport(o obj)\r\n bj, *self._types_namespace)\r\n 816 except NameError as e:\r\n\r\nFile /o pt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing_extra.py:53 4, in eval_type_backport(value, globalns, localns, type_params)\r\n 533 t ry: $\r\n--> 534$ return _eval_type_backport(value, globalns, localns, type _params)\r\n 535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python 3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eval_type_ba ckport(value, globalns, localns, type_params)\r\n 557 try:\r\n--> 558 return _eval_type(value, globalns, localns, type_params)\r\n 559 except T ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ _internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type _params)\r\n 591 else:\r\n--> 592 return typing._eval_type(# type: ignore\r\n value, globalns, localns\r\n 594 $)\r\n\r\nF$ 593 ile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globalns, loca 326 if isinstance(t, ForwardRef):\r\n--> 327 lns, recursive quard)\r\n return t._evaluate(globalns, localns, recursive_guard)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con da/lib/python3.10/typing.py:699, in ForwardRef._evaluate(self, globalns, loc alns, recursive_guard)\r\n 693 type_ = _type_check(\r\n 694 elf.__forward_code__, globalns, localns),\r\n 695 \"Forward reference s must evaluate to types.\",\r\n is_argument=self.__forward_is_ar 696 gument__,\r\n 697 allow_special_forms=self.__forward_is_class__,\r\n 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n type_, globalns, localns, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self.__forward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/ typing.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 28 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev_args = tuple(_eval_type(a, globalns, localns, recursive_guard) fo raint. args)\r\n 330 if ev_args == t.__args__:\r\n\r\nFile /op t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__ar gs__)\r\n 330 if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/py thon3.10/typing.py:327, in _eval_type(t, globalns, localns, recursive_guard) 326 if isinstance(t, ForwardRef):\r\n--> 327 return t._evaluate(globalns, localns, recursive_guard)\r\n 328 if isinstance(t, (_GenericAli

as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef._evaluate(self, globalns, localns, recursive_gua eval(self.__forward_code_ 693 type_ = _type_check(\r\n 694 _, globalns, localns),\r\n 695 \"Forward references must evaluate to is_argument=self.__forward_is_argument__,\r\n types.\",\r\n 696 allow special forms=self. forward is class ,\r\n 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n 700 type_, globalns, localn s, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self. f orward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32 9, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 if isinst ance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 rgs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__a rgs__)\r\n if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/p 330 ython3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinstance(t, (Gene ricAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev args = tuple(e val type(a, globalns, localns, recursive quard) for a in t. args)\r\n if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/python3.10/typi ng.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 i f isinstance(t, (_GenericAlias, Generi" { "_score": 0.9323593,

"_score": 0.9323593,
 "_type": "issue",
 "_repo": "langchain",
 "_issueNumber": "28255",
 "_title": "Can't import ChatOpenAI: The `__modify_schema__` method is no
t supported in Pydantic v2. ",
 "_arastedAt": "2024 11 21710:40:407"

"_createdAt": "2024-11-21T10:40:40Z", "closedAt": "2024-12-31T00:36:30Z",

"_body": "### Checked other resources\n\n- [X] I added a very descriptiv e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it. \n - [X] I am sure that this is a bug in LangChain rat her than my code.\n- [X] The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa mple Code\n\nThe following code straight from the docs fails already at the import statement:\r\n```\r\nfrom typing import Optional\r\n\r\nfrom pydantic import BaseModel, Field\r\n\r\nfrom langchain openai import ChatOpenAI\r\n\r $\nll = ChatOpenAI(model=\"gpt-4o-mini\")\r\n\r\n\# Pydantic\r\nclass Jok$ \"\"\Joke to tell user.\"\"\r\n\r\n e(BaseModel):\r\n setup: str = Field(description=\"The setup of the joke\")\r\n punchline: str = Field(d escription=\"The punchline to the joke\")\r\n rating: Optional[int] = Fie ld(default=None, description=\"How funny the joke is, from 1 to 10\")\r\n\r\ n\r\nstructured_llm = llm.with_structured_output(Joke)\r\n\r\nstructured_ll m.invoke(\"Tell me a joke about cats\")\r\n```\n\n### Error Message and Stac k Trace (if applicable)\n\n```\r\nC:\\Users\\Eqor\\Dropbox\\Code\\langchain\ \libs\\partners\\openai\\langchain_openai\\chat_models__init__.py:1: LangC hainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydantic v2 internally. The langchain_core.pydantic_v1 module was a compatibility shi m for pydantic v1, and should no longer be used. Please update the code to i

mport from Pydantic directly.\r\n\r\nC:\\Users\\Egor\\Dropbox\\Code\\langcha in\\libs\\partners\\openai\\langchain openai\\chat models\\ init .py:1: La ngChainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydant ic v2 internally. The langchain_core.pydantic_v1 module was a compatibility shim for pydantic v1, and should no longer be used. Please update the code t o import from Pydantic directly.\r\n\r\nFor example, replace imports like: ` from langchain_core.pydantic_v1 import BaseModel`\r\nwith: `from pydantic im port BaseModel`\r\nor the v1 compatibility namespace if you are working in a code base that has not been fully upgraded to pydantic 2 yet. \tfrom pydanti c.v1 import BaseModel\r\n\r\n from langchain_openai.chat_models.azure impor t AzureChatOpenAI\r\nC:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\sit e-packages\\pydantic_internal_config.py:345: UserWarning: Valid config k eys have changed in V2:\r\n* 'allow population by field name' has been renam ed to 'populate by name'\r\n warnings.warn(message, UserWarning)\r\nTraceba ck (most recent call last):\r\n File \"<frozen importlib._bootstrap>\", lin e 1176, in _find_and_load\r\n File \"<frozen importlib._bootstrap>\", line 1147, in _find_and_load_unlocked\r\n File \"<frozen importlib._bootstrap> \", line 690, in _load_unlocked\r\n File \"<frozen importlib._bootstrap_ext ernal>\", line 940, in exec_module\r\n File \"<frozen importlib._bootstrap> \", line 241, in _call_with_frames_removed\r\n File \"C:\\Users\\Egor\\Drop box\\Code\\langchain\\libs\\partners\\openai\\langchain openai\\ init .py \", line 1, in <module>\r\n from langchain_openai.chat_models import Azur eChatOpenAI, ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchai n\\libs\\partners\\openai\\langchain_openai\\chat_models__init__.py\", lin from langchain_openai.chat_models.azure import Azure e 1, in <module>\r\n ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\part ners\\openai\\langchain_openai\\chat_models\\azure.py\", line 41, in <module from langchain openai.chat models.base import BaseChatOpenAI\r\n F ile \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\partners\\openai\\lan gchain_openai\\chat_models\\base.py\", line 353, in <module>\r\n seChatOpenAI(BaseChatModel):\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motl eycrew3.11\\Lib\\site-packages\\pydantic_internal_model_construction.py $\$ line 226, in new $\$ complete model class(\r\n File \"C:\\Users\ \Egor\\.conda\\envs\\motleycrew3.11\\Lib\\site-packages\\pydantic_internal _model_construction.py\", line 658, in complete_model_class\r\n = cls. get pydantic core schema (cls, handler)\r\n ^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\env s\\motleycrew3.11\\Lib\\site-packages\\pydantic\\main.py\", line 697, in __g et_pydantic_core_schema__\r\n return handler(source)\r\n ^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\si te-packages\\pydantic_internal_schema_generation_shared.py\", line 84, i schema = self._handler(source_type)\r\n ^^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3. 11\\Lib\\site-packages\\pydantic_internal_generate_schema.py\", line 61 schema = self._generate_schema_inner(obj)\r\n 2, in generate schema\r\n ^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\ motleycrew3.11\\Lib\\site-packages\\pydantic_internal_generate_schema.py \", line 881, in _generate_schema_inner\r\n return self. model schema(ob ^^^^^\r\n File \"C:\\Users\\Egor\\.conda i)\r\n \\envs\\motleycrew3.11\\"

```
}
{
    "_score": 0.9279109,
   "_type": "issue",
    "_repo": "langchain",
    " issueNumber": "27960",
    " title": "dict[str, pydantic model] annotation not working with structu
red output",
    "_createdAt": "2024-11-07T13:10:32Z",
    "_closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n```python \r\nfrom __future__ import annotations\r\n\r\nfrom ty
ping import Optional\r\nfrom unittest import TestCase\r\n\r\nfrom dotenv imp
ort load_dotenv\r\nfrom langchain_openai import ChatOpenAI\r\nfrom pydantic
import Field, BaseModel\r\n\r\nload_dotenv()\r\nclass CustomTestExtractorPro
pertiesCreation(TestCase):\r\n
                                  def test with structured output dict(sel
f):\r\n
               class Joke(BaseModel):\r\n
                                                     \"\"\"Joke to tell use
                            setup: str = Field(description=\"The setup of th
r.\"\"\"\r\n\r\n
e joke\")\r\n
                         punchline: str = Field(description=\"The punchline
to the joke\")\r\n
                              rating: Optional[int] = Field(\r\n
default=None, description=\"How funny the joke is, from 1 to 10\"\r\n
             class MultipleJokes(BaseModel):\r\n
                                                            name joke pairs:
)\r\n
dict[str, Joke] = Field(description=\"Dictionary of joke_name and joke pairs
                   ChatOpenAI(name=\"gpt-4o-mini\").with structured output(\
\")\r\n\r\n
              MultipleJokes).invoke(\"Generate a number of name-joke pairs
r\n
\")\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\nError\r\n
Traceback (most recent call last):\r\n File \"/home/filip/work/llm-bot-fram
ework/llm-bot-framework/tests/integration/conversations/custom test extracto
r_properties_creation.py\", line 25, in test_with_structured_output_dict\r\n
MultipleJokes).invoke(\"Generate a number of name-joke pairs\")\r\n File
\"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/
site-packages/langchain_core/runnables/base.py\", line 3024, in invoke\r\n
input = context.run(step.invoke, input, config)\r\n File \"/home/filip/wor
k/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/lan
gchain_core/output_parsers/base.py\", line 193, in invoke\r\n
f._call_with_config(\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-
framework/.venv/lib/python3.10/site-packages/langchain_core/runnables/base.p
y\", line 1927, in _call_with_config\r\n context.run(\r\n File \"/home/f
ilip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-pack
ages/langchain_core/runnables/config.py\", line 396, in call_func_with_varia
                return func(input, **kwarqs) # type: ignore[call-arg]\r\n
File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python
3.10/site-packages/langchain_core/output_parsers/base.py\", line 194, in <la
             lambda inner_input: self.parse_result(\r\n File \"/home/filip/
work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/
```

langchain_core/output_parsers/openai_tools.py\", line 298, in parse_result\r raise e\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framewo rk/.venv/lib/python3.10/site-packages/langchain_core/output_parsers/openai_t ools.py\", line 293, in parse_result\r\n pydantic_objects.append(name_dic t[res[\"type\"]](**res[\"args\"]))\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/.venv/lib/python3.10/site-packages/pydantic/main.py \", line 212, in __init__\r\n validated_self = self.__pydantic_validator_ _.validate_python(data, self_instance=self)\r\npydantic_core._pydantic_core. ValidationError: 1 validation error for MultipleJokes\r\nname_joke_pairs\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n rther information visit https://errors.pydantic.dev/2.9/v/missing\n\n### Des cription\n\nI am trying to create MultipleJokes Pydantic Model (example). \r \n**Expected result:**\r\nMultipleJokes object is created no error is return ed\r\n**Actual result:**\r\nMissing field exception is raised on Pydantic va n> OS: Linux\r\n> OS Version: #48-Ubuntu SMP PREEMPT_DYNAMIC Fri Sep 27 1 4:04:52 UTC 2024\r\n> Python Version: 3.10.15 (main, Sep 7 2024, 18:35:38) [GCC 13.2.0]\r\n\r\nPackage Information\r\n----\r\n> langchai n_core: 0.3.15\r\n> langchain: 0.3.7\r\n> langsmith: 0.1.134\r\n> langchain_ anthropic: 0.2.3\r\n> langchain_google_genai: 2.0.1\r\n> langchain_groq: 0. 2.0\r\n> langchain nvidia: Installed. No version info available.\r\n> langch ain_nvidia_ai_endpoints: 0.3.0\r\n> langchain_openai: 0.2.2\r\n> langchain_t ext_splitters: 0.3.0\r\n> langgraph: 0.2.38\r\n\r\nOptional packages not ins talled\r\n----\r\n> langserve\r\n\r\nOther Depend encies\r\n-----\r\n> aiohttp: 3.10.10\r\n> anthropic: 0.36.0\r\ n> async-timeout: 4.0.3\r\n> defusedxml: 0.7.1\r\n> google-generativeai: 0. 8.3\r\n> groq: 0.11.0\r\n> httpx: 0.26.0\r\n> jsonpatch: 1.33\r\n> langgraph -checkpoint: 2.0.1\r\n> langgraph-sdk: 0.1.33\r\n> numpy: 1.26.4\r\n> opena i: $1.51.2\r\n>$ or json: $3.10.7\r\n>$ packaging: $24.1\r\n>$ pillow: $10.4.0\r\n>$ pydantic: 2.9.2\r" } { "_score": 0.92669773,

"_score": 0.92669773,
"_type": "issue",
"_repo": "langchain",
"_issueNumber": "28106",

"_title": "LangChain incorrectly applies strict (OpenAIs Structured Outp ut) in schema generation from Pydantic model with union, causing OpenAI validation errors",

"_createdAt": "2024-11-14T13:13:41Z", "_closedAt": "2024-12-31T00:36:30Z",

"_body": "### Checked other resources\r\n\r\n- [X] I added a very descriptive title to this issue.\r\n- [X] I searched the LangChain documentation with the integrated search.\r\n- [X] I used the GitHub search to find a similar question and didn't find it.\r\n- [X] I am sure that this is a bug in LangChain rather than my code.\r\n- [X] The bug is not resolved by updating to the latest stable version of LangChain (or the specific integration package).\r\n\r\n### Example Code\r\n\r\n``python\r\nimport getpass\r\nimport os\r\nfrom typing import Union\r\n\r\nfrom langchain_openai import ChatOpenAI\r\nfrom openai import OpenAI\r\nfrom pydantic import BaseModel, Field\r\n\r\n

\r\nclass Cooked(BaseModel):\r\n cooked recipe name: str = Field(\r\n)\r\n\r\n\r\nclass Baked(BaseModel):\r\n description='Recipe name.'\r\n baked_recipe_name: str = Field(\r\n description='Recipe name.'\r\n)\r\n\r\n\r\nclass Recipes(BaseModel):\r\n recipes: list[Union[Cooked, Ba description='A list of recipes or tables represent $ked]] = Field(\r\n$)\r\n\r\nif \"OPENAI API KEY\" not in os.e ing the data sources.'\r\n nviron:\r\n os.environ[\"OPENAI_API_KEY\"] = getpass.getpass(\"Enter your OpenAI API key: \")\r\n\r\n\r\nclient = OpenAI()\r\nmodel = \"qpt-4o-2024-08 -06\"\r\nrecipe_names = \"Garlic Butter Lobster Tail, Pumpkin Spice Muffins, Spicy Korean Beef Bulgogi, Raspberry Almond Scones\"\r\n\r\ncompletion = cli ent.beta.chat.completions.parse(\r\n model=model,\r\n messages=[\r\n {\"role\": \"user\", \"content\": recipe_names},\r\n],\r\n ormat=Recipes,\r\n)\r\nprint(\"OpenAI:\", completion.choices[0].message.pars ed)\r\n\r\nllm = ChatOpenAI(model=model)\r\nllm = llm.with structured output(Recipes, strict=True)\r\nresponse = llm.invoke(recipe_names)\r\nprint(\"La ngchain:\", response)\r\n``\r\n### Error Message and Stack Trace (if applic able)\r\n\r\nopenai.BadRequestError: Error code: 400 - {'error': {'message': \"Invalid schema for function 'Recipes': In context=('properties', 'recipe s', 'items', 'anyOf', '0'), 'additionalProperties' is required to be supplie d and to be false.\", 'type': 'invalid_request_error', 'param': 'tools[0].fu nction.parameters', 'code': 'invalid_function_parameters'}}\r\n\r\n### Descr iption\r\nThe problem is that LangChain incorrectly applies the strict k eyword to the schema generated from the Pydantic model for the specific case in the example code above. The culprit here is the union. The same Pydantic class works when I feed it directly to OpenAI. When I injected 'additionalPr operties': False into the schema for the `Baked` and `Cooked` classes, the i ssue disappeared. \r\nI encountered the same problem when I had a Pydantic t ool schema with a union similar to the one above.\r\n\r\nOpenAI only threw e rror when `cooked recipe name` and `baked recipe name` were `recipe name`, s o I guess that is something to be careful about.\r\n\r\nOpenAI schema before calling API:\r\n```\r\n{'\$defs': {'Baked': {'properties': {'baked_recipe_nam e': {'description': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 's tring'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'obje ct', 'additionalProperties': False}, 'Cooked': {'properties': {'cooked_recip e_name': {'description': 'Recipe name.', 'title': 'Cooked Recipe Name', 'typ e': 'string'}}, 'required': ['cooked_recipe_name'], 'title': 'Cooked', 'typ e': 'object', 'additionalProperties': False}}, 'properties': {'recipes': {'d escription': 'A list of recipes or tables representing the data sources.', ' items': {'anyOf': [{'\$ref': '#/\$defs/Cooked'}, {'\$ref': '#/\$defs/Baked'}]}, 'title': 'Recipes', 'type': 'array'}}, 'required': ['recipes'], 'title': 'Re cipes', 'type': 'object', 'additionalProperties': False}\r\n```\r\n\r\nLangC hain schema before calling API:\r\n``\r\n{'name': 'Recipes', 'description': '', 'parameters': {'properties': {'description': 'A list of reci pes or tables representing the data sources.', 'items': {'anyOf': [{'propert ies': {'cooked_recipe_name': {'description': 'Recipe name.', 'title': 'Cooke d Recipe Name', 'type': 'string'}}, 'required': ['cooked_recipe_name'], 'tit le': 'Cooked', 'type': 'object'}, {'properties': {'baked_recipe_name': {'des cription': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 'string'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'object'}]}, 't ype': 'array'}}, 'required': ['recipes'], 'type': 'object', 'additionalPrope

```
rties': False}, 'strict': True}\r\n```\r\n\r\n### System Info\r\n\r\naiohapp
yeyeballs==2.4.3\r\naiohttp==3.11.0\r\naiosignal==1.3.1\r\nannotated-types==
0.7.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r\nattrs==24.2.0\r\ncert
ifi==2024.8.30\r\ncharset-normalizer==3.4.0\r\ndistro==1.9.0\r\nexceptiongro
up==1.2.2\r\nfrozenlist==1.5.0\r\ngreenlet==3.1.1\r\nh11==0.14.0\r\nhttpcore
==1.0.6\r\nhttpx==0.27.2\r\nidna==3.10\r\njiter==0.7.1\r\njsonpatch==1.33\r\
njsonpointer==3.0.0\r\nlangchain==0.3.7\r\nlangchain-core==0.3.18\r\nlangcha
in-openai==0.2.8\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\
nmultidict==6.1.0\r\nnumpy==1.26.4\r\nopenai==1.54.4\r\norjson==3.10.11\r\np
ackaging==24.2\r\npropcache==0.2.0\r\npydantic==2.9.2\r\npydantic_core==2.2
3.4\r\nPyYA''
}
{
    "_score": 0.92288905,
    "_type": "issue",
    "_repo": "langchain",
    " issueNumber": "28021",
    "_title": "\u5728langgraph \u4e2d\u8fd0\u884c\u4f7f\u7528RAG\u7684\u793a
\u4f8b\u4ee3\u7801\uff0c\u51fa\u73b0pydantic\u62a5\u9519"
    "_createdAt": "2024-11-11T13:54:06Z",
    " closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\u6211\u8fd0\u884c\u5b98\u65b9\u6587\u6863\u7ed9\u51fa\u7684\u7
93a\u4f8b\u4ee3\u7801\u51fa\u73b0\u62a5\u9519\uff0c\u4ee3\u7801\u94fe\u63a5\
uff1ahttps://langchain-ai.github.io/langgraph/tutorials/code_assistant/langg
raph code assistant/#code-solution\r\n\u73af\u5883\u4fe1\u606f\uff1a\r\nlang
chain
                     0.3.7\r\nlanggraph
                                                       0.2.45\r\npydantic
                                  2.23.4\r\npydantic-settings
2.9.2\r\npydantic core
                                                                     2.6.1\r
\n\r\n\n### Error Message and Stack Trace (if applicable)\n\nTraceback (mo
st recent call last):\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 202
3.3.2\\plugins\\python-ce\\helpers\\pydev\\pydevconsole.py\", line 364, in r
uncode\r\n
              coro = func()\r\n File \"<input>\", line 1, in <module>\r\n
File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\python-ce\\h
elpers\\pydev\\_pydev_bundle\\pydev_umd.py\", line 197, in runfile\r\n
dev_imports.execfile(filename, global_vars, local_vars) # execute the scrip
t\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\pytho
n-ce\\helpers\\pydev\\_pydev_imps\\_pydev_execfile.py\", line 18, in execfil
        exec(compile(contents+\"\\n\", file, 'exec'), glob, loc)\r\n File
\"D:\\codes\\AIGC\\scientificProject\\llm.py\", line 56, in <module>\r\n
solution = code_gen_chain_oai.invoke(\r\n File \"C:\\Users\\anaconda3\\envs
\\langchain env2\\lib\\site-packages\\langchain core\\runnables\\base.py\",
line 3024, in invoke\r\n
                            input = context.run(step.invoke, input, config)\
r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\
langchain_core\\output_parsers\\base.py\", line 193, in invoke\r\n
self._call_with_config(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_en
```

v2\\lib\\site-packages\\langchain_core\\runnables\\base.py\", line 1927, in _call_with_config\r\n context.run(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain_env2\\lib\\site-packages\\langchain_core\\runnables\\config.py \", line 396, in call_func_with_variable_args\r\n return func(input, **kw args) # type: ignore[call-arg]\r\n File \"C:\\Users\\anaconda3\\envs\\lang chain env2\\lib\\site-packages\\langchain core\\output parsers\\base.py\", l ine 194, in $< lambda > \r\n$ lambda inner input: self.parse result(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\langchain_ core\\output_parsers\\openai_tools.py\", line 298, in parse_result\r\n ise e\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-pack ages\\langchain_core\\output_parsers\\openai_tools.py\", line 293, in parse_ pydantic_objects.append(name_dict[res[\"type\"]](**res[\"args result\r\n \"]))\r\n File \"C:\\Users\\anaconda3\\envs\\langchain env2\\lib\\site-pack ages\\pydantic\\main.py\", line 212, in __init__\r\n validated self = sel f.__pydantic_validator__.validate_python(data, self_instance=self)\r\npydant ic_core._pydantic_core.ValidationError: 3 validation errors for code\r\npref ix\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n For further information visit https://errors.pydantic.dev/2.9/v/missing\r\ni mports\r\n Field required [type=missing, input_value={}, input_type=dict]\r For further information visit https://errors.pydantic.dev/2.9/v/missin q\r\ncode\r\n Field required [type=missing, input value={}, input type=dic For further information visit https://errors.pydantic.dev/2.9/v/mi ssing\n\n### Description\n\u6211\u60f3\u8981\u5b66\u4e60\u8fd0\u884c\u5b98 $\u7f51\u4e2d\u7ed9\u51fa\u7684\langgrapg\ RAG\u76f8\u5173\u4ee3\u7801\uff0c\u4$ f46\u51fa\u73b0\u4e86pydantic\u76f8\u5173\u7684\u5305\u7684\u62a5\u9519\u8bf $7\u95ee\u6211\u8981\u5982\u4f55\u89e3\u51b3\r\n\n\m## System Info\n\naiohap$ pyeyeballs==2.4.3\r\naiohttp==3.10.10\r\naiosignal==1.3.1\r\nannotated-types $==0.7.0\r\nanthropic==0.38.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r$ \nattrs==24.2.0\r\nbeautifulsoup4==4.12.3\r\nbs4==0.0.2\r\ncertifi==2024.8.3 0\r\ncharset-normalizer==3.4.0\r\ncolorama==0.4.6\r\ndataclasses-json==0.6.7 \r\ndefusedxml==0.7.1\r\ndistro==1.9.0\r\nexceptiongroup==1.2.2\r\nfilelock= $=3.16.1\r\nfrozenlist==1.5.0\r\nfsspec==2024.10.0\r\ngreenlet==3.1.1\r\nh11=$ =0.14.0\r\nhttpcore==1.0.6\r\nhttpx==0.27.2\r\nhttpx-sse==0.4.0\r\nhuggingfa ce-hub==0.26.2\r\nidna==3.10\r\njiter==0.7.0\r\njsonpatch==1.33\r\njsonpoint er==3.0.0\r\nlangchain==0.3.7\r\nlangchain-anthropic==0.2.4\r\nlangchain-com munity==0.3.5\r\nlangchain-core==0.3.15\r\nlangchain-openai==0.2.5\r\nlangch ain-text-splitters==0.3.2\r\nlanggraph==0.2.45\r\nlanggraph-checkpoint==2.0. 2\r\nlanggraph-sdk==0.1.35\r\nlangsmith==0.1.139\r\nmarshmallow==3.23.1\r\nm sgpack==1.1.0\r\nmultidict==6.1.0\r\nmypy-extensions==1.0.0\r\nnumpy==1.26.4 \r\nopenai==1.53.0\r\norjson==3.10.11\r\npackaging==24.1\r\npropcache==0.2.0 \r\npydantic==2.9.2\r\npydantic-settings==2.6.1\r\npydantic_core==2.23.4\r\n python-dotenv==1.0.1\r\nPyYAML==6.0.2\r\nregex==2024.9.11\r\nrequests==2.32. 3\r\nrequests-toolbelt==1.0.0\r\nsniffio==1.3.1\r\nsoupsieve==2.6\r\nSQLAlch $emy==2.0.35\r\ntenacity==9.0.0\r\ntiktoken==0.8.0\r\ntokenizers==0.20.1\r\nt$ qdm==4.66.6\r\ntyping-inspect==0.9.0\r\ntyping_extensions==4.12.2\r\nurllib3 $==2.2.3\r\nyarl==1.17.1\r\n''$ Top 5 most similar issues for microsoft/autogen: { "_score": 1.0,

"_type": "issue", "_repo": "langchain", "_issueNumber": "28271",

"_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not defined using ChatVertexAI",

"_createdAt": "2024-11-21T22:43:53Z", "closedAt": "2024-12-31T00:36:30Z",

----\r\nNameError Traceback (most re cent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/_in ternal/_generate_schema.py:815, in GenerateSchema._resolve_forward_ref(self, 814 try:\r\n--> 815 obj = _typing_extra.eval_type_backport(o bj, *self._types_namespace)\r\n 816 except NameError as e:\r\n\r\nFile /o pt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing_extra.py:53 4, in eval_type_backport(value, globalns, localns, type_params)\r\n $ry:\r\n--> 534$ return _eval_type_backport(value, globalns, localns, type _params)\r\n 535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python 3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eval_type_ba ckport(value, globalns, localns, type_params)\r\n 557 try:\r\n--> 558 return _eval_type(value, globalns, localns, type_params)\r\n 559 except T ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ _internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type _params)\r\n 591 else:\r\n--> 592 return typing. eval type(# type: ignore\r\n value, globalns, localns\r\n 594 593 ile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globalns, loca lns, recursive_guard)\r\n 326 if isinstance(t, ForwardRef):\r\n--> 327 return t._evaluate(globalns, localns, recursive_guard)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con da/lib/python3.10/typing.py:699, in ForwardRef._evaluate(self, globalns, loc alns, recursive_guard)\r\n 693 type_ = _type_check(\r\n 694 elf.__forward_code__, globalns, localns),\r\n 695 \"Forward reference s must evaluate to types.\",\r\n 696 is_argument=self.__forward_is_ar gument__,\r\n allow_special_forms=self.__forward_is_class__,\r\n 697 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n 700 type_, globalns, localns, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self. forward evaluated = $True \r \n \r \$ typing.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 28 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> ev_args = tuple(_eval_type(a, globalns, localns, recursive_guard) fo 329 r a in t.__args__)\r\n 330 if ev_args == t.__args__:\r\n\r\nFile /op

t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__ar $gs_{})\r\n$ 330 if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/py thon3.10/typing.py:327, in _eval_type(t, globalns, localns, recursive_guard) 326 if isinstance(t, ForwardRef):\r\n--> 327 return t. evaluate(globalns, localns, recursive_guard)\r\n 328 if isinstance(t, (GenericAli as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef._evaluate(self, globalns, localns, recursive_gua $693 \text{ type}_= \text{_type_check(}r\n$ 694 eval(self.__forward_code_ _, globalns, localns),\r\n \"Forward references must evaluate to 695 types.\",\r\n 696 is_argument=self.__forward_is_argument__,\r\n allow special forms=self. forward is class ,\r\n 698)\r\n--> 699 self.__forward_value__ = _eval_type(\r\n type_, globalns, localn 700 s, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n orward evaluated = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32 9, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 if isinst ance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 rgs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__a 330 if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/p ython3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinstance(t, (Gene ricAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev args = tuple(e val_type(a, globalns, localns, recursive_guard) for a in t.__args__)\r\n if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/python3.10/typi 330 ng.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 i f isinstance(t, (_GenericAlias, Generi" } {

"_score": 0.9323593,

"_type": "issue",

"_repo": "langchain",

"_issueNumber": "28255",

"_title": "Can't import Cha

"_title": "Can't import ChatOpenAI: The `__modify_schema__` method is no t supported in Pydantic v2. ",

"_createdAt": "2024-11-21T10:40:40Z", "_closedAt": "2024-12-31T00:36:30Z",

"_body": "### Checked other resources\n\n- [X] I added a very descriptiv e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat her than my code.\n- [X] The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa mple Code\n\nThe following code straight from the docs fails already at the import statement:\r\n```\r\nfrom typing import Optional\r\n\r\nfrom pydantic import BaseModel, Field\r\n\r\nfrom langchain_openai import ChatOpenAI\r\n\r \n = ChatOpenAI(model=\"gpt-4o-mini\")\r\n\r\n# Pydantic\r\nclass Jok e(BaseModel):\r\n \"\"\Joke to tell user.\"\"\r\n\r\n setup: str = Field(description=\"The setup of the joke\")\r\n punchline: str = Field(d escription=\"The punchline to the joke\")\r\n rating: Optional[int] = Fie ld(default=None, description=\"How funny the joke is, from 1 to 10\")\r\n\r\

n\r\nstructured_llm = llm.with_structured_output(Joke)\r\n\r\nstructured_ll m.invoke(\"Tell me a joke about cats\")\r\n```\n\n### Error Message and Stac k Trace (if applicable)\n\n```\r\nC:\\Users\\Egor\\Dropbox\\Code\\langchain\ \libs\\partners\\openai\\langchain_openai\\chat_models__init__.py:1: LangC hainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydantic v2 internally. The langchain core.pydantic v1 module was a compatibility shi m for pydantic v1, and should no longer be used. Please update the code to i mport from Pydantic directly.\r\n\r\nC:\\Users\\Egor\\Dropbox\\Code\\langcha in\\libs\\partners\\openai\\langchain_openai\\chat_models__init__.py:1: La ngChainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydant ic v2 internally. The langchain_core.pydantic_v1 module was a compatibility shim for pydantic v1, and should no longer be used. Please update the code t o import from Pydantic directly.\r\n\r\nFor example, replace imports like: ` from langchain_core.pydantic_v1 import BaseModel`\r\nwith: `from pydantic im port BaseModel`\r\nor the v1 compatibility namespace if you are working in a code base that has not been fully upgraded to pydantic 2 yet. \tfrom pydanti c.v1 import BaseModel\r\n\r\n from langchain_openai.chat_models.azure impor t AzureChatOpenAI\r\nC:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\sit e-packages\\pydantic_internal_config.py:345: UserWarning: Valid config k eys have changed in V2:\r\n* 'allow_population_by_field_name' has been renam ed to 'populate by name'\r\n warnings.warn(message, UserWarning)\r\nTraceba ck (most recent call last):\r\n File \"<frozen importlib._bootstrap>\", lin e 1176, in _find_and_load\r\n File \"<frozen importlib._bootstrap>\", line 1147, in _find_and_load_unlocked\r\n File \"<frozen importlib._bootstrap> \", line 690, in _load_unlocked\r\n File \"<frozen importlib._bootstrap_ext ernal>\", line 940, in exec_module\r\n File \"<frozen importlib._bootstrap> \", line 241, in _call_with_frames_removed\r\n File \"C:\\Users\\Egor\\Drop box\\Code\\langchain\\libs\\partners\\openai\\langchain_openai__init__.py \", line 1, in <module>\r\n from langchain openai.chat models import Azur eChatOpenAI, ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchai n\\libs\\partners\\openai\\langchain openai\\chat models\\ init .py\", lin e 1, in <module>\r\n from langchain_openai.chat_models.azure import Azure ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\part ners\\openai\\langchain_openai\\chat_models\\azure.py\", line 41, in <module from langchain_openai.chat_models.base import BaseChatOpenAI\r\n F ile \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\partners\\openai\\lan gchain_openai\\chat_models\\base.py\", line 353, in <module>\r\n seChatOpenAI(BaseChatModel):\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motl eycrew3.11\\Lib\\site-packages\\pydantic_internal_model_construction.py \", line 226, in __new__\r\n complete_model_class(\r\n File \"C:\\Users\ \Egor\\.conda\\envs\\motleycrew3.11\\Lib\\site-packages\\pydantic_internal _model_construction.py\", line 658, in complete_model_class\r\n schema = cls.__get_pydantic_core_schema__(cls, handler)\r\n ^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\env s\\motleycrew3.11\\Lib\\site-packages\\pydantic\\main.py\", line 697, in __g et pydantic core schema \r\n return handler(source)\r\n ^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\si te-packages\\pydantic_internal_schema_generation_shared.py\", line 84, i schema = self._handler(source_type)\r\n $n = call = \r\n$ ^^^^^^^\\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.

```
11\\Lib\\site-packages\\pydantic\\_internal\\_generate_schema.py\", line 61
2, in generate_schema\r\n
                            schema = self._generate_schema_inner(obj)\r\n
^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\
motleycrew3.11\\Lib\\site-packages\\pydantic\\_internal\\_generate_schema.py
\", line 881, in _generate_schema_inner\r\n return self._model_schema(ob
                 ^^^^^^\r\n File \"C:\\Users\\Egor\\.conda
j)\r\n
\\envs\\motleycrew3.11\\"
}
{
    "_score": 0.9279109,
    "_type": "issue",
    "_repo": "langchain",
    " issueNumber": "27960",
    "_title": "dict[str, pydantic_model] annotation not working with structu
red output",
    "_createdAt": "2024-11-07T13:10:32Z",
    "_closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n```python \r\nfrom __future__ import annotations\r\n\r\nfrom ty
ping import Optional\r\nfrom unittest import TestCase\r\n\r\nfrom dotenv imp
ort load_dotenv\r\nfrom langchain_openai import ChatOpenAI\r\nfrom pydantic
import Field, BaseModel\r\n\r\nload_dotenv()\r\nclass CustomTestExtractorPro
pertiesCreation(TestCase):\r\n
                                 def test with structured output dict(sel
              class Joke(BaseModel):\r\n
                                                    \"\"\"Joke to tell use
f):\r\n
                           setup: str = Field(description=\"The setup of th
r.\"\"\"\r\n\r\n
e joke\")\r\n
                        punchline: str = Field(description=\"The punchline
to the joke\")\r\n
                             rating: Optional[int] = Field(\r\n
default=None, description=\"How funny the joke is, from 1 to 10\"\r\n
            class MultipleJokes(BaseModel):\r\n
dict[str, Joke] = Field(description=\"Dictionary of joke_name and joke pairs
                  ChatOpenAI(name=\"gpt-4o-mini\").with_structured_output(\
\")\r\n\r\n
              MultipleJokes).invoke(\"Generate a number of name-joke pairs
r\n
\")\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\nError\r\n
Traceback (most recent call last):\r\n File \"/home/filip/work/llm-bot-fram
ework/llm-bot-framework/tests/integration/conversations/custom_test_extracto
r_properties_creation.py\", line 25, in test_with_structured_output_dict\r\n
MultipleJokes).invoke(\"Generate a number of name-joke pairs\")\r\n File
\"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/
site-packages/langchain_core/runnables/base.py\", line 3024, in invoke\r\n
input = context.run(step.invoke, input, config)\r\n File \"/home/filip/wor
k/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/lan
gchain_core/output_parsers/base.py\", line 193, in invoke\r\n
f._call_with_config(\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-
framework/.venv/lib/python3.10/site-packages/langchain_core/runnables/base.p
y\", line 1927, in _call_with_config\r\n
                                           context.run(\r\n File \"/home/f
```

ilip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-pack ages/langchain_core/runnables/config.py\", line 396, in call_func_with_varia return func(input, **kwargs) # type: ignore[call-arg]\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python 3.10/site-packages/langchain_core/output_parsers/base.py\", line 194, in <la lambda inner input: self.parse result(\r\n File \"/home/filip/ work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/ langchain_core/output_parsers/openai_tools.py\", line 298, in parse_result\r raise e\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framewo rk/.venv/lib/python3.10/site-packages/langchain_core/output_parsers/openai_t ools.py\", line 293, in parse_result\r\n pydantic_objects.append(name_dic t[res[\"type\"]](**res[\"args\"]))\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/.venv/lib/python3.10/site-packages/pydantic/main.py validated_self = self.__pydantic_validator_ \", line 212, in __init__\r\n _.validate_python(data, self_instance=self)\r\npydantic_core._pydantic_core. ValidationError: 1 validation error for MultipleJokes\r\nname_joke_pairs\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n rther information visit https://errors.pydantic.dev/2.9/v/missing\n\n### Des cription\n\nI am trying to create MultipleJokes Pydantic Model (example). \r \n**Expected result:**\r\nMultipleJokes object is created no error is return ed\r\n**Actual result:**\r\nMissing field exception is raised on Pydantic va lidation \n\n### System Info\n\nSystem Information\r\n----\r\ n> OS: Linux\r\n> OS Version: #48-Ubuntu SMP PREEMPT_DYNAMIC Fri Sep 27 1 4:04:52 UTC 2024\r\n> Python Version: 3.10.15 (main, Sep 7 2024, 18:35:38) [GCC 13.2.0] $\r\n\r\n$ Package Information $\r\n$ -----\r\n> langchai $n_{core}: 0.3.15\r\n> langchain: 0.3.7\r\n> langsmith: 0.1.134\r\n> langchain_$ anthropic: 0.2.3\r\n> langchain_google_genai: 2.0.1\r\n> langchain_groq: 0. 2.0\r\n> langchain nvidia: Installed. No version info available.\r\n> langch ain_nvidia_ai_endpoints: 0.3.0\r\n> langchain_openai: 0.2.2\r\n> langchain_t ext_splitters: 0.3.0\r\n> langgraph: 0.2.38\r\n\r\nOptional packages not ins talled\r\n----\r\n> langserve\r\n\r\nOther Depend encies\r\n-----\r\n> aiohttp: 3.10.10\r\n> anthropic: 0.36.0\r\ n> async-timeout: 4.0.3\r\n> defusedxml: 0.7.1\r\n> google-generativeai: 0. 8.3\r\n> groq: 0.11.0\r\n> httpx: 0.26.0\r\n> jsonpatch: 1.33\r\n> langgraph -checkpoint: $2.0.1\r\n> \nggraph-sdk: 0.1.33\r\n> \numpy: 1.26.4\r\n> \nggraph-sdk: 0.1.33\r\n> \numpy: 1.26.4\r\n> \numpy:$ i: $1.51.2\r\n>$ or json: $3.10.7\r\n>$ packaging: $24.1\r\n>$ pillow: $10.4.0\r\n>$ pydantic: 2.9.2\r" } { "_score": 0.92669773, "_type": "issue", "_repo": "langchain", " issueNumber": "28106", " title": "LangChain incorrectly applies strict (OpenAIs Structured Outp ut) in schema generation from Pydantic model with union, causing OpenAI vali dation errors", "_createdAt": "2024-11-14T13:13:41Z", " closedAt": "2024-12-31T00:36:30Z",

"_body": "### Checked other resources\r\n\r\n- [X] I added a very descriptive title to this issue.\r\n- [X] I searched the LangChain documentation w

ith the integrated search.\r\n- [X] I used the GitHub search to find a simil ar question and didn't find it.\r\n- [X] I am sure that this is a bug in Lan gChain rather than my code. $\r\n-$ [X] The bug is not resolved by updating to the latest stable version of LangChain (or the specific integration packag e).\r\n\r\n### Example Code\r\n\r\n```python\r\nimport getpass\r\nimport os\ r\nfrom typing import Union\r\nfrom langchain openai import ChatOpenAI\r \nfrom openai import OpenAI\r\nfrom pydantic import BaseModel, Field\r\n\r\n \r\nclass Cooked(BaseModel):\r\n cooked recipe name: str = Field(\r\n)\r\n\r\n\r\nclass Baked(BaseModel):\r\n description='Recipe name.'\r\n baked_recipe_name: str = Field(\r\n description='Recipe name.'\r\n)\r\n\r\n\r\nclass Recipes(BaseModel):\r\n recipes: list[Union[Cooked, Ba $ked]] = Field(\r\n$ description='A list of recipes or tables represent)\r\n\r\nif \"OPENAI API KEY\" not in os.e ing the data sources.'\r\n os.environ[\"OPENAI API KEY\"] = getpass.getpass(\"Enter your OpenAI API key: \")\r\n\r\n\r\nclient = OpenAI()\r\nmodel = \"qpt-4o-2024-08 -06\"\r\nrecipe_names = \"Garlic Butter Lobster Tail, Pumpkin Spice Muffins, Spicy Korean Beef Bulgogi, Raspberry Almond Scones\"\r\n\r\ncompletion = cli ent.beta.chat.completions.parse(\r\n model=model,\r\n messages=[\r\n {\"role\": \"user\", \"content\": recipe_names},\r\n],\r\n ormat=Recipes,\r\n)\r\nprint(\"OpenAI:\", completion.choices[0].message.pars ed)\r\n\r\nllm = ChatOpenAI(model=model)\r\nllm = llm.with structured outpu t(Recipes, strict=True)\r\nresponse = llm.invoke(recipe_names)\r\nprint(\"La ngchain:\", response)\r\n```\r\n### Error Message and Stack Trace (if applic able)\r\n\r\nopenai.BadRequestError: Error code: 400 - {'error': {'message': \"Invalid schema for function 'Recipes': In context=('properties', 'recipe s', 'items', 'anyOf', '0'), 'additionalProperties' is required to be supplie d and to be false.\", 'type': 'invalid_request_error', 'param': 'tools[0].fu nction.parameters', 'code': 'invalid_function_parameters'}}\r\n\r\n### Descr $iption\r\n\r\n$ problem is that LangChain incorrectly applies the strict k eyword to the schema generated from the Pydantic model for the specific case in the example code above. The culprit here is the union. The same Pydantic class works when I feed it directly to OpenAI. When I injected 'additionalPr operties': False into the schema for the `Baked` and `Cooked` classes, the i ssue disappeared. \r\nI encountered the same problem when I had a Pydantic t ool schema with a union similar to the one above.\r\n\r\nOpenAI only threw e rror when `cooked_recipe_name` and `baked_recipe_name` were `recipe_name`, s o I guess that is something to be careful about.\r\n\r\nOpenAI schema before calling API:\r\n```\r\n{'\$defs': {'Baked': {'properties': {'baked_recipe_nam e': {'description': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 's tring'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'obje ct', 'additionalProperties': False}, 'Cooked': {'properties': {'cooked_recip e_name': {'description': 'Recipe name.', 'title': 'Cooked Recipe Name', 'typ e': 'string'}}, 'required': ['cooked_recipe_name'], 'title': 'Cooked', 'typ e': 'object', 'additionalProperties': False}}, 'properties': {'recipes': {'d escription': 'A list of recipes or tables representing the data sources.', ' items': {'anyOf': [{'\$ref': '#/\$defs/Cooked'}, {'\$ref': '#/\$defs/Baked'}]}, 'title': 'Recipes', 'type': 'array'}}, 'required': ['recipes'], 'title': 'Re cipes', 'type': 'object', 'additionalProperties': False}\r\n```\r\n\r\nLangC hain schema before calling API:\r\n```\r\n{'name': 'Recipes', 'description': '', 'parameters': {'properties': {'recipes': {'description': 'A list of reci

```
pes or tables representing the data sources.', 'items': {'anyOf': [{'propert
ies': {'cooked_recipe_name': {'description': 'Recipe name.', 'title': 'Cooke
d Recipe Name', 'type': 'string'}}, 'required': ['cooked_recipe_name'], 'tit
le': 'Cooked', 'type': 'object'}, {'properties': {'baked_recipe_name': {'des
cription': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 'string'}},
'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'object'}]}, 't
ype': 'array'}}, 'required': ['recipes'], 'type': 'object', 'additionalPrope
rties': False}, 'strict': True}\r\n```\r\n\r\n### System Info\r\n\r\naiohapp
yeyeballs==2.4.3\r\naiohttp==3.11.0\r\naiosignal==1.3.1\r\nannotated-types==
0.7.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r\nattrs==24.2.0\r\ncert
ifi==2024.8.30\r\ncharset-normalizer==3.4.0\r\ndistro==1.9.0\r\nexceptiongro
up==1.2.2\r\nfrozenlist==1.5.0\r\ngreenlet==3.1.1\r\nh11==0.14.0\r\nhttpcore
==1.0.6\r\nhttpx==0.27.2\r\nidna==3.10\r\njiter==0.7.1\r\njsonpatch==1.33\r\
njsonpointer==3.0.0\r\nlangchain==0.3.7\r\nlangchain-core==0.3.18\r\nlangcha
in-openai==0.2.8\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\
nmultidict==6.1.0\r\nnumpy==1.26.4\r\nopenai==1.54.4\r\norjson==3.10.11\r\np
ackaging==24.2\r\npropcache==0.2.0\r\npydantic==2.9.2\r\npydantic_core==2.2
3.4\r\nPyYA"
}
{
    "_score": 0.92288905,
   "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28021",
    "_title": "\u5728langgraph \u4e2d\u8fd0\u884c\u4f7f\u7528RAG\u7684\u793a
\u4f8b\u4ee3\u7801\uff0c\u51fa\u73b0pydantic\u62a5\u9519",
    " createdAt": "2024-11-11T13:54:06Z",
    " closedAt": "2024-12-31T00:36:30Z",
    " body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\u6211\u8fd0\u884c\u5b98\u65b9\u6587\u6863\u7ed9\u51fa\u7684\u7
93a\u4f8b\u4ee3\u7801\u51fa\u73b0\u62a5\u9519\uff0c\u4ee3\u7801\u94fe\u63a5\
ufflahttps://langchain-ai.github.io/langgraph/tutorials/code_assistant/langg
raph\_code\_assistant/\#code\_solution\r\n\u73af\u5883\u4fe1\u606f\uff1a\r\nlang
chain
                     0.3.7\r\nlanggraph
                                                       0.2.45\r\npydantic
2.9.2\r\npydantic core
                                  2.23.4\r\npydantic-settings
\n\r\n\n\n### Error Message and Stack Trace (if applicable)\n\nTraceback (mo
st recent call last):\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 202
3.3.2\\plugins\\python-ce\\helpers\\pydev\\pydevconsole.py\", line 364, in r
              coro = func()\r\n File \"<input>\", line 1, in <module>\r\n
uncode\r\n
File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\python-ce\\h
elpers\\pydev\\ pydev bundle\\pydev umd.py\", line 197, in runfile\r\n
dev_imports.execfile(filename, global_vars, local_vars) # execute the scrip
t\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\pytho
n-ce\\helpers\\pydev\\_pydev_imps\\_pydev_execfile.py\", line 18, in execfil
e\r\n
         exec(compile(contents+\"\\n\", file, 'exec'), glob, loc)\r\n File
```

\"D:\\codes\\AIGC\\scientificProject\\llm.py\", line 56, in <module>\r\n solution = code_gen_chain_oai.invoke(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain_env2\\lib\\site-packages\\langchain_core\\runnables\\base.py\", line 3024, in invoke\r\n input = context.run(step.invoke, input, config)\ langchain core\\output parsers\\base.py\", line 193, in invoke\r\n self._call_with_config(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_en v2\\lib\\site-packages\\langchain_core\\runnables\\base.py\", line 1927, in _call_with_config\r\n context.run(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain_env2\\lib\\site-packages\\langchain_core\\runnables\\config.py \", line 396, in call_func_with_variable_args\r\n return func(input, **kw args) # type: ignore[call-arg]\r\n File \"C:\\Users\\anaconda3\\envs\\lang chain env2\\lib\\site-packages\\langchain core\\output parsers\\base.py\", l lambda inner input: self.parse result(\r\n File ine 194, in $< lambda > \r\n$ \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\langchain_ core\\output_parsers\\openai_tools.py\", line 298, in parse_result\r\n ise e\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-pack ages\\langchain_core\\output_parsers\\openai_tools.py\", line 293, in parse_ pydantic_objects.append(name_dict[res[\"type\"]](**res[\"args result\r\n \"]))\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-pack ages\\pydantic\\main.py\", line 212, in __init__\r\n validated self = sel f.__pydantic_validator__.validate_python(data, self_instance=self)\r\npydant ic_core._pydantic_core.ValidationError: 3 validation errors for code\r\npref ix\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n For further information visit https://errors.pydantic.dev/2.9/v/missing\r\ni mports\r\n Field required [type=missing, input_value={}, input_type=dict]\r For further information visit https://errors.pydantic.dev/2.9/v/missin g\r\ncode\r\n Field required [type=missing, input_value={}, input_type=dic For further information visit https://errors.pydantic.dev/2.9/v/mi ssing\n\n### Description\n\u6211\u60f3\u8981\u5b66\u4e60\u8fd0\u884c\u5b98 \u7f51\u4e2d\u7ed9\u51fa\u7684langgrapg RAG\u76f8\u5173\u4ee3\u7801\uff0c\u4 f46\u51fa\u73b0\u4e86pydantic\u76f8\u5173\u7684\u5305\u7684\u62a5\u9519\u8bf $7\u95ee\u6211\u8981\u5982\u4f55\u89e3\u51b3\r\n\n\m## System Info\n\naiohap$ pyeyeballs==2.4.3\r\naiohttp==3.10.10\r\naiosignal==1.3.1\r\nannotated-types $==0.7.0\r\nanthropic==0.38.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r$ \nattrs==24.2.0\r\nbeautifulsoup4==4.12.3\r\nbs4==0.0.2\r\ncertifi==2024.8.3 0\r\ncharset-normalizer==3.4.0\r\ncolorama==0.4.6\r\ndataclasses-json==0.6.7 \r\ndefusedxml==0.7.1\r\ndistro==1.9.0\r\nexceptiongroup==1.2.2\r\nfilelock= =3.16.1\r\nfrozenlist==1.5.0\r\nfsspec==2024.10.0\r\ngreenlet==3.1.1\r\nh11= $=0.14.0\r\nhttpcore==1.0.6\r\nhttpx==0.27.2\r\nhttpx-sse==0.4.0\r\nhuggingfa$ $ce-hub==0.26.2\r\nidna==3.10\r\njiter==0.7.0\r\njsonpatch==1.33\r\njsonpoint$ er==3.0.0\r\nlangchain==0.3.7\r\nlangchain-anthropic==0.2.4\r\nlangchain-com munity==0.3.5\r\nlangchain-core==0.3.15\r\nlangchain-openai==0.2.5\r\nlangch ain-text-splitters==0.3.2\r\nlanggraph==0.2.45\r\nlanggraph-checkpoint==2.0. 2\r\nlanggraph-sdk==0.1.35\r\nlangsmith==0.1.139\r\nmarshmallow==3.23.1\r\nm sgpack==1.1.0\r\nmultidict==6.1.0\r\nmypy-extensions==1.0.0\r\nnumpy==1.26.4 \r\nopenai==1.53.0\r\norjson==3.10.11\r\npackaging==24.1\r\npropcache==0.2.0 \r\npydantic==2.9.2\r\npydantic-settings==2.6.1\r\npydantic_core==2.23.4\r\n python-dotenv==1.0.1\r\nPyYAML==6.0.2\r\nregex==2024.9.11\r\nrequests==2.32. 3\r\nrequests-toolbelt==1.0.0\r\nsniffio==1.3.1\r\nsoupsieve==2.6\r\nSQLAlch

```
emy==2.0.35\r\ntenacity==9.0.0\r\ntiktoken==0.8.0\r\ntokenizers==0.20.1\r\nt
qdm==4.66.6\r\ntyping-inspect==0.9.0\r\ntyping_extensions==4.12.2\r\nurllib3
==2.2.3\r\nyarl==1.17.1\r\n''
}
Top 5 most similar issues for openai/openai-cookbook:
{
    "_score": 1.0,
    " type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28271",
    "_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not defi
ned using ChatVertexAI",
    " createdAt": "2024-11-21T22:43:53Z",
    " closedAt": "2024-12-31T00:36:30Z",
    " body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\r\n```python\r\n# Ensure your VertexAI credentials are con
figured\r\n\r\nfrom langchain_google_vertexai import ChatVertexAI\r\n\r\nmod
el = ChatVertexAI(model=\"gemini-1.5-flash\")\r\n\r\nmodel.invoke(\"Hello, w
orld!")\r\n\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\n
  pvthon\r\n-----
----\r\nNameError
                                                         Traceback (most re
cent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/_in
ternal/_generate_schema.py:815, in GenerateSchema._resolve_forward_ref(self,
                                   obj = typing extra.eval type backport(o
           814 try:\r\n--> 815
bj, *self._types_namespace)\r\n
                                  816 except NameError as e:\r\n\r\nFile /o
pt/conda/lib/python3.10/site-packages/pydantic/ internal/ typing extra.py:53
4, in eval_type_backport(value, globalns, localns, type_params)\r\n
                  return eval type backport(value, globalns, localns, type
ry:\r\n--> 534
_params)\r\n
               535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python
3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eval_type_ba
ckport(value, globalns, localns, type_params)\r\n
                                                    557 try:\r\n--> 558
return _eval_type(value, globalns, localns, type_params)\r\n
                                                               559 except T
ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/
_internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type
_params)\r\n
               591 else:\r\n--> 592
                                       return typing._eval_type( # type:
ignore\r\n
                         value, globalns, localns\r\n
                                                         594
                                                                 )\r\n\r\nF
              593
ile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globalns, loca
lns, recursive_guard)\r\n
                            326 if isinstance(t, ForwardRef):\r\n--> 327
return t._evaluate(globalns, localns, recursive_guard)\r\n
                                                             328 if isinsta
nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con
da/lib/python3.10/typing.py:699, in ForwardRef. evaluate(self, globalns, loc
alns, recursive_guard)\r\n 693 type_ = _type_check(\r\n
                                                             694
elf.__forward_code__, globalns, localns),\r\n
                                                        \"Forward reference
s must evaluate to types.\",\r\n
                                   696
                                           is_argument=self.__forward_is_ar
gument__,\r\n
                697
                        allow_special_forms=self.__forward_is_class__,\r\n
```

700

type_,

698)\r\n--> 699 self. forward value = eval type(\r\n

globalns, localns, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self.__forward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/ typing.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 28 if isinstance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> ev args = tuple(eval type(a, globalns, localns, recursive guard) fo r a in t.__args__)\r\n 330 if ev_args == t.__args__:\r\n\r\nFile /op t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__ar if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/py 330 thon3.10/typing.py:327, in _eval_type(t, globalns, localns, recursive_guard) return t. evaluate(326 if isinstance(t, ForwardRef):\r\n--> 327 globalns, localns, recursive guard)\r\n 328 if isinstance(t, (GenericAli as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef._evaluate(self, globalns, localns, recursive_gua $693 \text{ type}_= = \text{type}_{\text{check}} (\r\n$ 694 eval(self.__forward_code_ _, globalns, localns),\r\n 695 \"Forward references must evaluate to is_argument=self.__forward_is_argument__,\r\n types.\",\r\n 696 allow_special_forms=self.__forward_is_class__,\r\n 698)\r\n--> 699 type_, globalns, localn self.__forward_value__ = _eval_type(\r\n 700 s, recursive_guard | {self.__forward_arg__}\r\n 701)\r\n 702 self. f orward_evaluated__ = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32 9, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 if isinst ance(t, (_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 rgs = tuple(_eval_type(a, globalns, localns, recursive_guard) for a in t.__a if ev_args == t.__args__:\r\n\r\nFile /opt/conda/lib/p rgs)\r\n 330 ython3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinstance(t, (Gene ricAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev args = tuple(e val_type(a, globalns, localns, recursive_guard) for a in t.__args__)\r\n if ev args == t. args :\r\n\r\nFile /opt/conda/lib/python3.10/typi ng.py:329, in _eval_type(t, globalns, localns, recursive_guard)\r\n 328 i f isinstance(t, (GenericAlias, Generi" } { "_score": 0.9323593, "_type": "issue", " repo": "langchain", "_issueNumber": "28255", "_title": "Can't import ChatOpenAI: The `__modify_schema__` method is no t supported in Pydantic v2. ", "_createdAt": "2024-11-21T10:40:40Z", " closedAt": "2024-12-31T00:36:30Z", " body": "### Checked other resources\n\n- [X] I added a very descriptiv e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat her than my code (n-[X]) The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa

mple Code\n\nThe following code straight from the docs fails already at the

import statement:\r\n```\r\nfrom typing import Optional\r\n\r\nfrom pydantic import BaseModel, Field\r\n\r\nfrom langchain_openai import ChatOpenAI\r\n\r $\n = ChatOpenAI(model=\gpt-4o-mini\")\r\n\r\n\# Pydantic\r\nclass Jok$ e(BaseModel):\r\n \"\"\Joke to tell user.\"\"\r\n\r\n setup: str = Field(description=\"The setup of the joke\")\r\n punchline: str = Field(d escription=\"The punchline to the joke\")\r\n rating: Optional[int] = Fie ld(default=None, description=\"How funny the joke is, from 1 to 10\")\r\n\r\ n\r\nstructured_llm = llm.with_structured_output(Joke)\r\n\r\nstructured_ll m.invoke(\"Tell me a joke about cats\")\r\n```\n\n### Error Message and Stac k Trace (if applicable)\n\n```\r\nC:\\Users\\Egor\\Dropbox\\Code\\langchain\ \libs\\partners\\openai\\langchain_openai\\chat_models__init__.py:1: LangC hainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydantic v2 internally. The langchain core.pydantic v1 module was a compatibility shi m for pydantic v1, and should no longer be used. Please update the code to i mport from Pydantic directly.\r\n\r\nC:\\Users\\Egor\\Dropbox\\Code\\langcha in\\libs\\partners\\openai\\langchain_openai\\chat_models__init__.py:1: La ngChainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydant ic v2 internally. The langchain_core.pydantic_v1 module was a compatibility shim for pydantic v1, and should no longer be used. Please update the code t o import from Pydantic directly.\r\n\r\nFor example, replace imports like: ` from langchain_core.pydantic_v1 import BaseModel`\r\nwith: `from pydantic im port BaseModel`\r\nor the v1 compatibility namespace if you are working in a code base that has not been fully upgraded to pydantic 2 yet. \tfrom pydanti c.v1 import BaseModel\r\n\r\n from langchain_openai.chat_models.azure impor t AzureChatOpenAI\r\nC:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\sit e-packages\\pydantic_internal_config.py:345: UserWarning: Valid config k eys have changed in V2:\r\n* 'allow_population_by_field_name' has been renam ed to 'populate_by_name'\r\n warnings.warn(message, UserWarning)\r\nTraceba ck (most recent call last):\r\n File \"<frozen importlib._bootstrap>\", lin e 1176, in _find_and_load\r\n File \"<frozen importlib._bootstrap>\", line 1147, in _find_and_load_unlocked\r\n File \"<frozen importlib._bootstrap> \", line 690, in _load_unlocked\r\n File \"<frozen importlib._bootstrap_ext ernal>\", line 940, in exec_module\r\n File \"<frozen importlib._bootstrap> \", line 241, in _call_with_frames_removed\r\n File \"C:\\Users\\Egor\\Drop box\\Code\\langchain\\libs\\partners\\openai\\langchain_openai__init__.py \", line 1, in <module>\r\n from langchain_openai.chat_models import Azur eChatOpenAI, ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchai n\\libs\\partners\\openai\\langchain_openai\\chat_models__init__.py\", lin e 1, in <module>\r\n from langchain_openai.chat_models.azure import Azure ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\part ners\\openai\\langchain_openai\\chat_models\\azure.py\", line 41, in <module from langchain_openai.chat_models.base import BaseChatOpenAI\r\n F ile \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\partners\\openai\\lan gchain_openai\\chat_models\\base.py\", line 353, in <module>\r\n seChatOpenAI(BaseChatModel):\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motl eycrew3.11\\Lib\\site-packages\\pydantic_internal_model_construction.py \", line 226, in __new__\r\n complete_model_class(\r\n File \"C:\\Users\ \Egor\\.conda\\envs\\motleycrew3.11\\Lib\\site-packages\\pydantic_internal _model_construction.py\", line 658, in complete_model_class\r\n schema ^^^^^ = cls.__get_pydantic_core_schema__(cls, handler)\r\n

```
^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\env
s\\motleycrew3.11\\Lib\\site-packages\\pydantic\\main.py\", line 697, in __g
et_pydantic_core_schema__\r\n return handler(source)\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\si
te-packages\\pydantic\\_internal\\_schema_generation_shared.py\", line 84, i
                 schema = self. handler(source type)\r\n
^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.
11\\Lib\\site-packages\\pydantic\\_internal\\_generate_schema.py\", line 61
2, in generate_schema\r\n schema = self._generate_schema_inner(obj)\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\
motleycrew3.11\\Lib\\site-packages\\pydantic\\_internal\\_generate_schema.py
\", line 881, in _generate_schema_inner\r\n return self._model_schema(ob
                ^^^^^^\r\n File \"C:\\Users\\Egor\\.conda
j)\r\n
\\envs\\motleycrew3.11\\"
}
{
   "_score": 0.9279109,
   "_type": "issue",
   "_repo": "langchain",
   "_issueNumber": "27960",
   " title": "dict[str, pydantic model] annotation not working with structu
red output",
   "_createdAt": "2024-11-07T13:10:32Z",
   "_closedAt": "2024-12-31T00:36:30Z",
   "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n```python \r\nfrom __future__ import annotations\r\n\r\nfrom ty
ping import Optional\r\nfrom unittest import TestCase\r\n\r\nfrom dotenv imp
ort load dotenv\r\nfrom langchain openai import ChatOpenAI\r\nfrom pydantic
import Field, BaseModel\r\n\r\nload_dotenv()\r\nclass CustomTestExtractorPro
pertiesCreation(TestCase):\r\n def test_with_structured_output_dict(sel
              class Joke(BaseModel):\r\n
                                                   \"\"\"Joke to tell use
f):\r\n
r.\"\"\"\r\n\r\n
                           setup: str = Field(description=\"The setup of th
e joke\")\r\n
                        punchline: str = Field(description=\"The punchline
to the joke\")\r\n
                             rating: Optional[int] = Field(\r\n
default=None, description=\"How funny the joke is, from 1 to 10\"\r\n
            class MultipleJokes(BaseModel):\r\n
                                                          name_joke_pairs:
dict[str, Joke] = Field(description=\"Dictionary of joke_name and joke pairs
\")\r\n\r\n
                  ChatOpenAI(name=\"gpt-4o-mini\").with_structured_output(\
              MultipleJokes).invoke(\"Generate a number of name-joke pairs
r\n
\")\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\nError\r\n
Traceback (most recent call last):\r\n File \"/home/filip/work/llm-bot-fram
ework/llm-bot-framework/tests/integration/conversations/custom_test_extracto
r_properties_creation.py\", line 25, in test_with_structured_output_dict\r\n
MultipleJokes).invoke(\"Generate a number of name-joke pairs\")\r\n File
\"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/
```

site-packages/langchain_core/runnables/base.py\", line 3024, in invoke\r\n input = context.run(step.invoke, input, config)\r\n File \"/home/filip/wor k/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/lan gchain_core/output_parsers/base.py\", line 193, in invoke\r\n return sel f._call_with_config(\r\n File \"/home/filip/work/llm-bot-framework/llm-botframework/.venv/lib/python3.10/site-packages/langchain core/runnables/base.p y\", line 1927, in _call_with_config\r\n context.run(\r\n File \"/home/f ilip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-pack ages/langchain_core/runnables/config.py\", line 396, in call_func_with_varia ble args\r\n return func(input, **kwargs) # type: ignore[call-arg]\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python 3.10/site-packages/langchain_core/output_parsers/base.py\", line 194, in <la lambda inner input: self.parse result(\r\n File \"/home/filip/ work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/ langchain_core/output_parsers/openai_tools.py\", line 298, in parse_result\r raise e\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framewo rk/.venv/lib/python3.10/site-packages/langchain_core/output_parsers/openai_t ools.py\", line 293, in parse_result\r\n pydantic_objects.append(name_dic t[res[\"type\"]](**res[\"args\"]))\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/.venv/lib/python3.10/site-packages/pydantic/main.py \", line 212, in __init__\r\n validated_self = self.__pydantic_validator_ _.validate_python(data, self_instance=self)\r\npydantic_core._pydantic_core. ValidationError: 1 validation error for MultipleJokes\r\nname_joke_pairs\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n rther information visit https://errors.pydantic.dev/2.9/v/missing\n\n### Des cription\n\nI am trying to create MultipleJokes Pydantic Model (example). \r \n**Expected result:**\r\nMultipleJokes object is created no error is return ed\r\n**Actual result:**\r\nMissing field exception is raised on Pydantic va lidation \n\n### System Info\n\nSystem Information\r\n----\r\ n> OS: Linux\r\n> OS Version: #48-Ubuntu SMP PREEMPT_DYNAMIC Fri Sep 27 1 4:04:52 UTC 2024\r\n> Python Version: 3.10.15 (main, Sep 7 2024, 18:35:38) [GCC 13.2.0]\r\n\r\nPackage Information\r\n-----\r\n> langchai n_core: 0.3.15\r\n> langchain: 0.3.7\r\n> langsmith: 0.1.134\r\n> langchain_ anthropic: 0.2.3\r\n> langchain_google_genai: 2.0.1\r\n> langchain_grog: 0. 2.0\r\n> langchain_nvidia: Installed. No version info available.\r\n> langch ain_nvidia_ai_endpoints: 0.3.0\r\n> langchain_openai: 0.2.2\r\n> langchain_t ext_splitters: 0.3.0\r\n> langgraph: 0.2.38\r\n\r\nOptional packages not ins talled\r\n----\r\n> langserve\r\n\r\nOther Depend encies\r\n-----\r\n> aiohttp: 3.10.10\r\n> anthropic: 0.36.0\r\ n> async-timeout: 4.0.3\r\n> defusedxml: 0.7.1\r\n> google-generativeai: 0. 8.3\r\n> groq: 0.11.0\r\n> httpx: 0.26.0\r\n> jsonpatch: 1.33\r\n> langgraph -checkpoint: $2.0.1\r\n>$ langgraph-sdk: $0.1.33\r\n>$ numpy: $1.26.4\r\n>$ opena i: $1.51.2\r\n>$ or json: $3.10.7\r\n>$ packaging: $24.1\r\n>$ pillow: $10.4.0\r\n>$ pydantic: 2.9.2\r" } { "_score": 0.92669773, "_type": "issue", "_repo": "langchain",

"_issueNumber": "28106",

"_title": "LangChain incorrectly applies strict (OpenAIs Structured Outp ut) in schema generation from Pydantic model with union, causing OpenAI vali dation errors",

"_createdAt": "2024-11-14T13:13:41Z", " closedAt": "2024-12-31T00:36:30Z",

" body": "### Checked other resources\r\n\r\n- [X] I added a very descri ptive title to this issue.\r\n- [X] I searched the LangChain documentation w ith the integrated search. \r [X] I used the GitHub search to find a simil ar question and didn't find it.\r\n- [X] I am sure that this is a bug in Lan gChain rather than my code.\r\n- [X] The bug is not resolved by updating to the latest stable version of LangChain (or the specific integration packag e).\r\n\r\n### Example Code\r\n\r\n```python\r\nimport getpass\r\nimport os\ r\nfrom typing import Union\r\nfrom langchain openai import ChatOpenAI\r \nfrom openai import OpenAI\r\nfrom pydantic import BaseModel, Field\r\n\r\n \r\nclass Cooked(BaseModel):\r\n cooked recipe name: str = Field(\r\n)\r\n\r\n\r\nclass Baked(BaseModel):\r\n description='Recipe name.'\r\n baked_recipe_name: str = Field(\r\n description='Recipe name.'\r\n)\r\n\r\n\r\nclass Recipes(BaseModel):\r\n recipes: list[Union[Cooked, Ba $ked]] = Field(\r\n$ description='A list of recipes or tables represent ing the data sources.'\r\n)\r\n\r\nif \"OPENAI_API_KEY\" not in os.e os.environ[\"OPENAI API KEY\"] = getpass.getpass(\"Enter your nviron:\r\n OpenAI API key: \")\r\n\r\n\r\nclient = OpenAI()\r\nmodel = \"gpt-4o-2024-08 -06\"\r\nrecipe_names = \"Garlic Butter Lobster Tail, Pumpkin Spice Muffins, Spicy Korean Beef Bulgogi, Raspberry Almond Scones\"\r\n\r\ncompletion = cli ent.beta.chat.completions.parse(\r\n model=model,\r\n $messages=[\r\n]$ {\"role\": \"user\", \"content\": recipe_names},\r\n],\r\n response f ormat=Recipes,\r\n)\r\nprint(\"OpenAI:\", completion.choices[0].message.pars ed)\r\n\r\nllm = ChatOpenAI(model=model)\r\nllm = llm.with structured outpu t(Recipes, strict=True)\r\nresponse = llm.invoke(recipe_names)\r\nprint(\"La ngchain:\", response)\r\n```\r\n### Error Message and Stack Trace (if applic able)\r\n\r\nopenai.BadRequestError: Error code: 400 - {'error': {'message': \"Invalid schema for function 'Recipes': In context=('properties', 'recipe s', 'items', 'anyOf', '0'), 'additionalProperties' is required to be supplie d and to be false.\", 'type': 'invalid_request_error', 'param': 'tools[0].fu nction.parameters', 'code': 'invalid_function_parameters'}}\r\n\r\n### Descr $iption\r\n\r\n$ problem is that LangChain incorrectly applies the strict k eyword to the schema generated from the Pydantic model for the specific case in the example code above. The culprit here is the union. The same Pydantic class works when I feed it directly to OpenAI. When I injected 'additionalPr operties': False into the schema for the `Baked` and `Cooked` classes, the i ssue disappeared. \r\nI encountered the same problem when I had a Pydantic t ool schema with a union similar to the one above.\r\n\r\nOpenAI only threw e rror when `cooked_recipe_name` and `baked_recipe_name` were `recipe_name`, s o I guess that is something to be careful about.\r\n\r\nOpenAI schema before calling API:\r\n```\r\n{'\$defs': {'Baked': {'properties': {'baked_recipe_nam e': {'description': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 's tring'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'obje ct', 'additionalProperties': False}, 'Cooked': {'properties': {'cooked_recip e_name': {'description': 'Recipe name.', 'title': 'Cooked Recipe Name', 'typ e': 'string'}}, 'required': ['cooked_recipe_name'], 'title': 'Cooked', 'typ

```
e': 'object', 'additionalProperties': False}}, 'properties': {'recipes': {'d
escription': 'A list of recipes or tables representing the data sources.',
items': {'anyOf': [{'$ref': '#/$defs/Cooked'}, {'$ref': '#/$defs/Baked'}]},
'title': 'Recipes', 'type': 'array'}}, 'required': ['recipes'], 'title': 'Re
cipes', 'type': 'object', 'additionalProperties': False\r^``\r^\n\hain schema before calling API:\r^``\r^\l'name': 'Recipes', 'description':
'', 'parameters': {'properties': {'description': 'A list of reci
pes or tables representing the data sources.', 'items': {'anyOf': [{'propert
ies': {'cooked_recipe_name': {'description': 'Recipe name.', 'title': 'Cooke
d Recipe Name', 'type': 'string'}}, 'required': ['cooked_recipe_name'], 'tit
le': 'Cooked', 'type': 'object'}, {'properties': {'baked_recipe_name': {'des
cription': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 'string'}},
'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'object'}]}, 't
ype': 'array'}}, 'required': ['recipes'], 'type': 'object', 'additionalPrope
rties': False}, 'strict': True}\r\n```\r\n\r\n### System Info\r\n\r\naiohapp
yeyeballs==2.4.3\r\naiohttp==3.11.0\r\naiosignal==1.3.1\r\nannotated-types==
0.7.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r\nattrs==24.2.0\r\ncert
ifi==2024.8.30\r\ncharset-normalizer==3.4.0\r\ndistro==1.9.0\r\nexceptiongro
up==1.2.2\r\nfrozenlist==1.5.0\r\ngreenlet==3.1.1\r\nh11==0.14.0\r\nhttpcore
==1.0.6\r\nhttpx==0.27.2\r\nidna==3.10\r\njiter==0.7.1\r\njsonpatch==1.33\r\
njsonpointer==3.0.0\r\nlangchain==0.3.7\r\nlangchain-core==0.3.18\r\nlangcha
in-openai==0.2.8\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\
nmultidict == 6.1.0 \\ r\\ numpy == 1.26.4 \\ r\\ nopenai == 1.54.4 \\ r\\ norjson == 3.10.11 \\ r\\ np
ackaging==24.2\r\npropcache==0.2.0\r\npydantic==2.9.2\r\npydantic_core==2.2
3.4\r\nPvYA''
}
{
    "_score": 0.92288905,
    "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28021",
    "_title": "\u5728langgraph \u4e2d\u8fd0\u884c\u4f7f\u7528RAG\u7684\u793a
\u4f8b\u4ee3\u7801\uff0c\u51fa\u73b0pydantic\u62a5\u9519",
    "_createdAt": "2024-11-11T13:54:06Z",
    " closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\u6211\u8fd0\u884c\u5b98\u65b9\u6587\u6863\u7ed9\u51fa\u7684\u7
93a\u4f8b\u4ee3\u7801\u51fa\u73b0\u62a5\u9519\uff0c\u4ee3\u7801\u94fe\u63a5\
uff1ahttps://langchain-ai.github.io/langgraph/tutorials/code assistant/langg
raph_code_assistant/#code-solution\r\n\u73af\u5883\u4fe1\u606f\uff1a\r\nlang
chain
                     0.3.7\r\nlanggraph
                                                        0.2.45\r\npydantic
2.9.2\r\npydantic_core
                                   2.23.4\r\npydantic-settings
                                                                       2.6.1\r
\n\r\n\n### Error Message and Stack Trace (if applicable)\n\nTraceback (mo
st recent call last):\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 202
3.3.2\\plugins\\python-ce\\helpers\\pydev\\pydevconsole.py\", line 364, in r
```

 $coro = func()\r\n$ File \"<input>\", line 1, in <module>\r\n uncode\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\python-ce\\h elpers\\pydev_pydev_bundle\\pydev_umd.py\", line 197, in runfile\r\n dev_imports.execfile(filename, global_vars, local_vars) # execute the scrip t\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\pytho n-ce\\helpers\\pydev\\ pydev imps\\ pydev execfile.py\", line 18, in execfil exec(compile(contents+\"\\n\", file, 'exec'), glob, loc)\r\n File e\r\n \"D:\\codes\\AIGC\\scientificProject\\llm.py\", line 56, in <module>\r\n solution = code_gen_chain_oai.invoke(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain_env2\\lib\\site-packages\\langchain_core\\runnables\\base.py\", input = context.run(step.invoke, input, config)\ line 3024, in invoke\r\n r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\ langchain core\\output parsers\\base.py\", line 193, in invoke\r\n self. call with config(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain en v2\\lib\\site-packages\\langchain_core\\runnables\\base.py\", line 1927, in context.run(\r\n File \"C:\\Users\\anaconda3\\envs call with config\r\n \\langchain_env2\\lib\\site-packages\\langchain_core\\runnables\\config.py \", line 396, in call_func_with_variable_args\r\n return func(input, **kw args) # type: ignore[call-arg]\r\n File \"C:\\Users\\anaconda3\\envs\\lang chain_env2\\lib\\site-packages\\langchain_core\\output_parsers\\base.py\", l ine 194, in $< lambda > \r\n$ lambda inner input: self.parse result(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-packages\\langchain_ core\\output_parsers\\openai_tools.py\", line 298, in parse_result\r\n ise e\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-pack ages\\langchain_core\\output_parsers\\openai_tools.py\", line 293, in parse_ result\r\n pydantic_objects.append(name_dict[res[\"type\"]](**res[\"args \"]))\r\n File \"C:\\Users\\anaconda3\\envs\\langchain_env2\\lib\\site-pack ages\\pydantic\\main.py\", line 212, in __init__\r\n validated self = sel f. pydantic validator .validate python(data, self instance=self)\r\npydant ic_core._pydantic_core.ValidationError: 3 validation errors for code\r\npref ix\r\n Field required [type=missing, input_value={}, input_type=dict]\r\n For further information visit https://errors.pydantic.dev/2.9/v/missing\r\ni mports\r\n Field required [type=missing, input_value={}, input_type=dict]\r For further information visit https://errors.pydantic.dev/2.9/v/missin g\r\ncode\r\n Field required [type=missing, input_value={}, input_type=dic For further information visit https://errors.pydantic.dev/2.9/v/mi $ssing \\ n\\ m\#\# Description\\ n\\ n\\ u6211\\ u60f3\\ u8981\\ u5b66\\ u4e60\\ u8fd0\\ u884c\\ u5b98$ \u7f51\u4e2d\u7ed9\u51fa\u7684langgrapg RAG\u76f8\u5173\u4ee3\u7801\uff0c\u4 $f46\u51fa\u73b0\u4e86pydantic\u76f8\u5173\u7684\u5305\u7684\u62a5\u9519\u8bf$ $7\u95ee\u6211\u8981\u5982\u4f55\u89e3\u51b3\r\n\n\m## System Info\n\naiohap$ pyeyeballs==2.4.3\r\naiohttp==3.10.10\r\naiosignal==1.3.1\r\nannotated-types $==0.7.0\r\nanthropic==0.38.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r$ \nattrs==24.2.0\r\nbeautifulsoup4==4.12.3\r\nbs4==0.0.2\r\ncertifi==2024.8.3 0\r\ncharset-normalizer==3.4.0\r\ncolorama==0.4.6\r\ndataclasses-json==0.6.7 \r\ndefusedxml==0.7.1\r\ndistro==1.9.0\r\nexceptiongroup==1.2.2\r\nfilelock= $=3.16.1\r\nfrozenlist==1.5.0\r\nfsspec==2024.10.0\r\ngreenlet==3.1.1\r\nh11=$ $=0.14.0\r\nhttpcore==1.0.6\r\nhttpx==0.27.2\r\nhttpx-sse==0.4.0\r\nhuggingfa$ ce-hub==0.26.2\r\nidna==3.10\r\njiter==0.7.0\r\njsonpatch==1.33\r\njsonpoint er==3.0.0\r\nlangchain==0.3.7\r\nlangchain-anthropic==0.2.4\r\nlangchain-com munity==0.3.5\r\nlangchain-core==0.3.15\r\nlangchain-openai==0.2.5\r\nlangch

```
ain-text-splitters==0.3.2\r\nlanggraph==0.2.45\r\nlanggraph-checkpoint==2.0.
2\r\nlanggraph-sdk==0.1.35\r\nlangsmith==0.1.139\r\nmarshmallow==3.23.1\r\nm
sgpack==1.1.0\r\nmultidict==6.1.0\r\nmypy-extensions==1.0.0\r\nnumpy==1.26.4
\r\nopenai==1.53.0\r\norjson==3.10.11\r\npackaging==24.1\r\npropcache==0.2.0
\r\npydantic==2.9.2\r\npydantic-settings==2.6.1\r\npydantic_core==2.23.4\r\n
python-dotenv==1.0.1\r\nPyYAML==6.0.2\r\nregex==2024.9.11\r\nreguests==2.32.
3\r\nrequests-toolbelt==1.0.0\r\nsniffio==1.3.1\r\nsoupsieve==2.6\r\nSQLAlch
emy==2.0.35\r\ntenacity==9.0.0\r\ntiktoken==0.8.0\r\ntokenizers==0.20.1\r\nt
qdm==4.66.6\r\ntyping-inspect==0.9.0\r\ntyping_extensions==4.12.2\r\nurllib3
==2.2.3\r\nyarl==1.17.1\r\n''
Top 5 most similar issues for elastic/elasticsearch:
{
    "_score": 1.0,
    "_type": "issue",
    "_repo": "langchain",
    "_issueNumber": "28271",
    "_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not defi
ned using ChatVertexAI",
    "_createdAt": "2024-11-21T22:43:53Z",
    " closedAt": "2024-12-31T00:36:30Z",
    "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\r\n```python\r\n# Ensure your VertexAI credentials are con
figured\r\n\r\nfrom langchain google vertexai import ChatVertexAI\r\n\r\nmod
el = ChatVertexAI(model=\"gemini-1.5-flash\")\r\n\r\nmodel.invoke(\"Hello, w
orld!\")\r\n\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\n
```python\r\n-----
----\r\nNameError
 Traceback (most re
cent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/_in
ternal/_generate_schema.py:815, in GenerateSchema._resolve_forward_ref(self,
obj)\r\n
 814 try:\r\n--> 815
 obj = _typing_extra.eval_type_backport(o
bj, *self._types_namespace)\r\n
 816 except NameError as e:\r\n\r\nFile /o
pt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing_extra.py:53
4, in eval_type_backport(value, globalns, localns, type_params)\r\n
 return _eval_type_backport(value, globalns, localns, type
ry:\r\n--> 534
_params)\r\n
 535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python
3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eval_type_ba
ckport(value, globalns, localns, type_params)\r\n
 557 try:\r\n--> 558
return eval type(value, globalns, localns, type params)\r\n
 559 except T
ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/
_internal/_typing_extra.py:592, in _eval_type(value, globalns, localns, type
_params)\r\n
 591 else:\r\n--> 592
 return typing._eval_type(# type:
 value, globalns, localns\r\n
 594
ile /opt/conda/lib/python3.10/typing.py:327, in _eval_type(t, globalns, loca
lns, recursive_guard)\r\n
 326 if isinstance(t, ForwardRef):\r\n--> 327
```

return t.\_evaluate(globalns, localns, recursive\_guard)\r\n 328 if isinsta nce(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con da/lib/python3.10/typing.py:699, in ForwardRef.\_evaluate(self, globalns, loc alns, recursive\_guard)\r\n  $693 \text{ type} = \text{type}_\text{check}(\r\n$ 694 eval(s elf.\_\_forward\_code\_\_, globalns, localns),\r\n 695 \"Forward reference s must evaluate to types.\",\r\n is argument=self. forward is ar 696 gument ,\r\n 697 allow\_special\_forms=self.\_\_forward\_is\_class\_\_,\r\n 698 )\r\n--> 699 self. forward value = eval type(\r\n type , globalns, localns, recursive\_guard | {self.\_\_forward\_arg\_\_}\r\n 701 )\r\n 702 self.\_\_forward\_evaluated\_\_ = True\r\n\r\nFile /opt/conda/lib/python3.10/ typing.py:329, in \_eval\_type(t, globalns, localns, recursive\_guard)\r\n 28 if isinstance(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n--> ev args = tuple( eval type(a, globalns, localns, recursive guard) fo 329 r a in t.\_\_args\_\_)\r\n if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /op 330 t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(\_eval\_type(a, globalns, localns, recursive\_guard) for a in t.\_\_ar if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /opt/conda/lib/py  $gs_{})\r\n$ 330 thon3.10/typing.py:327, in \_eval\_type(t, globalns, localns, recursive\_guard) 326 if isinstance(t, ForwardRef):\r\n--> 327 return t.\_evaluate( globalns, localns, recursive quard)\r\n 328 if isinstance(t, ( GenericAli as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef.\_evaluate(self, globalns, localns, recursive\_gua  $693 \text{ type}_= \text{_type\_check(}r\n$ eval(self.\_\_forward\_code\_  $rd)\r\n$ 694 \_, globalns, localns),\r\n 695 \"Forward references must evaluate to is\_argument=self.\_\_forward\_is\_argument\_\_,\r\n types.\",\r\n 696 allow\_special\_forms=self.\_\_forward\_is\_class\_\_,\r\n 698 )\r\n--> 699 self.\_\_forward\_value\_\_ = \_eval\_type(\r\n type\_, globalns, localn 700 s, recursive quard | {self. forward arg }\r\n 701 )\r\n 702 self. f orward\_evaluated\_\_ = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32 9, in eval type(t, globalns, localns, recursive guard)\r\n 328 if isinst ance(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 rgs = tuple(\_eval\_type(a, globalns, localns, recursive\_guard) for a in t.\_\_a 330 if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /opt/conda/lib/p ython3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinstance(t, (\_Gene ricAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev args = tuple( e val\_type(a, globalns, localns, recursive\_guard) for a in t.\_\_args\_\_)\r\n if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /opt/conda/lib/python3.10/typi 330 ng.py:329, in \_eval\_type(t, globalns, localns, recursive\_guard)\r\n 328 i f isinstance(t, (\_GenericAlias, Generi" } { "\_score": 0.9323593, " type": "issue", "\_repo": "langchain", "\_issueNumber": "28255", "\_title": "Can't import ChatOpenAI: The `\_\_modify\_schema\_\_` method is no t supported in Pydantic v2. ", "\_createdAt": "2024-11-21T10:40:40Z", "\_closedAt": "2024-12-31T00:36:30Z",

" body": "### Checked other resources\n\n- [X] I added a very descriptiv e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat her than my code.\n- [X] The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa mple Code\n\nThe following code straight from the docs fails already at the import statement:\r\n```\r\nfrom typing import Optional\r\n\r\nfrom pydantic import BaseModel, Field\r\n\r\nfrom langchain\_openai import ChatOpenAI\r\n\r  $\n$  = ChatOpenAI(model=\"gpt-4o-mini\")\r\n\r\n# Pydantic\r\nclass Jok \"\"Joke to tell user.\"\"\r\n\r\n e(BaseModel):\r\n setup: str = Field(description=\"The setup of the joke\")\r\n punchline: str = Field(d escription=\"The punchline to the joke\")\r\n rating: Optional[int] = Fie ld(default=None, description=\"How funny the joke is, from 1 to 10\")\r\n\r\ n\r\nstructured\_llm = llm.with\_structured\_output(Joke)\r\n\r\nstructured\_ll m.invoke(\"Tell me a joke about cats\")\r\n```\n\n### Error Message and Stac k Trace (if applicable)\n\n```\r\nC:\\Users\\Egor\\Dropbox\\Code\\langchain\ \libs\\partners\\openai\\langchain\_openai\\chat\_models\\\_\_init\_\_.py:1: LangC hainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydantic v2 internally. The langchain\_core.pydantic\_v1 module was a compatibility shi m for pydantic v1, and should no longer be used. Please update the code to i mport from Pydantic directly.\r\n\r\nC:\\Users\\Egor\\Dropbox\\Code\\langcha in\\libs\\partners\\openai\\langchain\_openai\\chat\_models\\\_\_init\_\_.py:1: La ngChainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydant ic v2 internally. The langchain\_core.pydantic\_v1 module was a compatibility shim for pydantic v1, and should no longer be used. Please update the code t o import from Pydantic directly.\r\n\r\nFor example, replace imports like: ` from langchain\_core.pydantic\_v1 import BaseModel`\r\nwith: `from pydantic im port BaseModel`\r\nor the v1 compatibility namespace if you are working in a code base that has not been fully upgraded to pydantic 2 yet. \tfrom pydanti c.v1 import BaseModel\r\n\r\n from langchain openai.chat models.azure impor t AzureChatOpenAI\r\nC:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\sit e-packages\\pydantic\\\_internal\\\_config.py:345: UserWarning: Valid config k eys have changed in V2:\r\n\* 'allow\_population\_by\_field\_name' has been renam ed to 'populate\_by\_name'\r\n warnings.warn(message, UserWarning)\r\nTraceba ck (most recent call last):\r\n File \"<frozen importlib.\_bootstrap>\", lin e 1176, in \_find\_and\_load\r\n File \"<frozen importlib.\_bootstrap>\", line 1147, in \_find\_and\_load\_unlocked\r\n File \"<frozen importlib.\_bootstrap> \", line 690, in \_load\_unlocked\r\n File \"<frozen importlib.\_bootstrap\_ext ernal>\", line 940, in exec\_module\r\n File \"<frozen importlib.\_bootstrap> \", line 241, in \_call\_with\_frames\_removed\r\n File \"C:\\Users\\Egor\\Drop box\\Code\\langchain\\libs\\partners\\openai\\langchain\_openai\\\_\_init\_\_.py \", line 1, in <module>\r\n from langchain\_openai.chat\_models import Azur eChatOpenAI, ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchai n\\libs\\partners\\openai\\langchain\_openai\\chat\_models\\\_\_init\_\_.py\", lin from langchain openai.chat models.azure import Azure e 1, in <module>\r\n ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\part ners\\openai\\langchain\_openai\\chat\_models\\azure.py\", line 41, in <module from langchain\_openai.chat\_models.base import BaseChatOpenAI\r\n F ile \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\partners\\openai\\lan

seChatOpenAI(BaseChatModel):\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motl

gchain\_openai\\chat\_models\\base.py\", line 353, in <module>\r\n

```
eycrew3.11\\Lib\\site-packages\\pydantic_internal_model_construction.py
\", line 226, in __new__\r\n
 complete_model_class(\r\n File \"C:\\Users\
\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\site-packages\\pydantic_internal
\\ model construction.py\", line 658, in complete model class\r\n
= cls. get pydantic core schema (cls, handler)\r\n
^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\env
s\\motleycrew3.11\\Lib\\site-packages\\pydantic\\main.py\", line 697, in __g
et_pydantic_core_schema__\r\n
 return handler(source)\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\si
te-packages\\pydantic_internal_schema_generation_shared.py\", line 84, i
 schema = self. handler(source type)\r\n
^^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.
11\\Lib\\site-packages\\pydantic_internal_generate_schema.py\", line 61
 schema = self. generate schema inner(obj)\r\n
2, in generate schema\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\
motleycrew3.11\\Lib\\site-packages\\pydantic_internal_generate_schema.py
\", line 881, in _generate_schema_inner\r\n return self._model_schema(ob
 ^^^^^^^\r\n File \"C:\\Users\\Egor\\.conda
j)\r\n
\\envs\\motleycrew3.11\\"
}
{
 "_score": 0.9279109,
 "_type": "issue",
 "_repo": "langchain",
 " issueNumber": "27960",
 "_title": "dict[str, pydantic_model] annotation not working with structu
red output",
 "_createdAt": "2024-11-07T13:10:32Z",
 "_closedAt": "2024-12-31T00:36:30Z",
 "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n```python \r\nfrom __future__ import annotations\r\n\r\nfrom ty
ping import Optional\r\nfrom unittest import TestCase\r\n\r\nfrom dotenv imp
ort load dotenv\r\nfrom langchain openai import ChatOpenAI\r\nfrom pydantic
import Field, BaseModel\r\n\r\nload_dotenv()\r\nclass CustomTestExtractorPro
pertiesCreation(TestCase):\r\n
 def test_with_structured_output_dict(sel
 class Joke(BaseModel):\r\n
 \"\"\"Joke to tell use
f):\r\n
r.\"\"\r\n\r\n
 setup: str = Field(description=\"The setup of th
e joke\")\r\n
 punchline: str = Field(description=\"The punchline
 rating: Optional[int] = Field(\r\n
to the joke\")\r\n
default=None, description=\"How funny the joke is, from 1 to 10\"\r\n
 class MultipleJokes(BaseModel):\r\n
dict[str, Joke] = Field(description=\"Dictionary of joke_name and joke pairs
\")\r\n\r\n
 ChatOpenAI(name=\"gpt-4o-mini\").with_structured_output(\
```

MultipleJokes).invoke(\"Generate a number of name-joke pairs r\n \")\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\nError\r\n Traceback (most recent call last):\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/tests/integration/conversations/custom\_test\_extracto r\_properties\_creation.py\", line 25, in test\_with\_structured\_output\_dict\r\n MultipleJokes).invoke(\"Generate a number of name-joke pairs\")\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/ site-packages/langchain\_core/runnables/base.py\", line 3024, in invoke\r\n input = context.run(step.invoke, input, config)\r\n File \"/home/filip/wor k/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/lan gchain\_core/output\_parsers/base.py\", line 193, in invoke\r\n f.\_call\_with\_config(\r\n File \"/home/filip/work/llm-bot-framework/llm-botframework/.venv/lib/python3.10/site-packages/langchain core/runnables/base.p y\", line 1927, in call with config\r\n context.run(\r\n File \"/home/f ilip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-pack ages/langchain\_core/runnables/config.py\", line 396, in call\_func\_with\_varia return func(input, \*\*kwargs) # type: ignore[call-arg]\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python 3.10/site-packages/langchain\_core/output\_parsers/base.py\", line 194, in <la lambda inner\_input: self.parse\_result(\r\n File \"/home/filip/ work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/ langchain\_core/output\_parsers/openai\_tools.py\", line 298, in parse\_result\r raise e\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framewo rk/.venv/lib/python3.10/site-packages/langchain\_core/output\_parsers/openai\_t ools.py\", line 293, in parse\_result\r\n pydantic\_objects.append(name\_dic t[res[\"type\"]](\*\*res[\"args\"]))\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/.venv/lib/python3.10/site-packages/pydantic/main.py \", line 212, in \_\_init\_\_\r\n validated\_self = self.\_\_pydantic\_validator\_ \_.validate\_python(data, self\_instance=self)\r\npydantic\_core.\_pydantic\_core. ValidationError: 1 validation error for MultipleJokes\r\nname\_joke\_pairs\r\n Field required [type=missing, input value={}, input type=dict]\r\n rther information visit https://errors.pydantic.dev/2.9/v/missing\n\n### Des cription\nI am trying to create MultipleJokes Pydantic Model (example). \r \n\*\*Expected result:\*\*\r\nMultipleJokes object is created no error is return ed\r\n\*\*Actual result:\*\*\r\nMissing field exception is raised on Pydantic va lidation \n\n### System Info\n\nSystem Information\r\n----\r\ n> OS: Linux\r\n> OS Version: #48-Ubuntu SMP PREEMPT\_DYNAMIC Fri Sep 27 1 4:04:52 UTC 2024\r\n> Python Version: 3.10.15 (main, Sep 7 2024, 18:35:38) [GCC 13.2.0]\r\n\r\nPackage Information\r\n----\r\n> langchai n\_core: 0.3.15\r\n> langchain: 0.3.7\r\n> langsmith: 0.1.134\r\n> langchain\_ anthropic: 0.2.3\r\n> langchain\_google\_genai: 2.0.1\r\n> langchain\_grog: 0. 2.0\r\n> langchain\_nvidia: Installed. No version info available.\r\n> langch ain\_nvidia\_ai\_endpoints: 0.3.0\r\n> langchain\_openai: 0.2.2\r\n> langchain\_t ext splitters: 0.3.0\r\n> langgraph: 0.2.38\r\n\r\nOptional packages not ins talled\r\n----\r\n> langserve\r\n\r\nOther Depend encies\r\n----\r\n> aiohttp: 3.10.10\r\n> anthropic: 0.36.0\r\ n> async-timeout: 4.0.3\r\n> defusedxml: 0.7.1\r\n> google-generativeai: 0. 8.3\r\n> grog: 0.11.0\r\n> httpx: 0.26.0\r\n> jsonpatch: 1.33\r\n> langgraph -checkpoint:  $2.0.1\r\n>$  langgraph-sdk:  $0.1.33\r\n>$  numpy:  $1.26.4\r\n>$  opena i:  $1.51.2\r\n>$  or json:  $3.10.7\r\n>$  packaging:  $24.1\r\n>$  pillow:  $10.4.0\r\n>$ 

pydantic: 2.9.2\r"

```
{
 "_score": 0.92669773,
 "_type": "issue",
 " repo": "langchain",
 "_issueNumber": "28106",
 "_title": "LangChain incorrectly applies strict (OpenAIs Structured Outp
ut) in schema generation from Pydantic model with union, causing OpenAI vali
dation errors",
 "_createdAt": "2024-11-14T13:13:41Z",
 "_closedAt": "2024-12-31T00:36:30Z",
 " body": "### Checked other resources\r\n\r\n- [X] I added a very descri
ptive title to this issue.\r\n- [X] I searched the LangChain documentation w
ith the integrated search.\r [X] I used the GitHub search to find a simil
ar question and didn't find it.\r\n- [X] I am sure that this is a bug in Lan
gChain rather than my code.\r\n- [X] The bug is not resolved by updating to
the latest stable version of LangChain (or the specific integration packag
e).\r\n\r\n### Example Code\r\n\r\n```python\r\nimport getpass\r\nimport os\
r\nfrom typing import Union\r\n\r\nfrom langchain_openai import ChatOpenAI\r
\nfrom openai import OpenAI\r\nfrom pydantic import BaseModel, Field\r\n\r\n
\r\nclass Cooked(BaseModel):\r\n
 cooked_recipe_name: str = Field(\r\n
description='Recipe name.'\r\n
)\r\n\r\n\r\nclass Baked(BaseModel):\r\n
baked_recipe_name: str = Field(\r\n
 description='Recipe name.'\r\n
)\r\n\r\n\r\nclass Recipes(BaseModel):\r\n
 recipes: list[Union[Cooked, Ba
ked]] = Field(\r\n
 description='A list of recipes or tables represent
ing the data sources.'\r\n
)\r\n\r\nif \"OPENAI API KEY\" not in os.e
 os.environ[\"OPENAI_API_KEY\"] = getpass.getpass(\"Enter your
OpenAI API key: \")\r\n\r\n\r\nclient = OpenAI()\r\nmodel = \"qpt-40-2024-08
-06\"\r\nrecipe_names = \"Garlic Butter Lobster Tail, Pumpkin Spice Muffins,
Spicy Korean Beef Bulgogi, Raspberry Almond Scones\"\r\n\r\ncompletion = cli
ent.beta.chat.completions.parse(\r\n
 model=model,\r\n
 messages=[\r\n]
{\"role\": \"user\", \"content\": recipe_names},\r\n
],\r\n
ormat=Recipes,\r\n)\r\nprint(\"OpenAI:\", completion.choices[0].message.pars
ed)\r\n\r\nllm = ChatOpenAI(model=model)\r\nllm = llm.with_structured_outpu
t(Recipes, strict=True)\r\nresponse = llm.invoke(recipe_names)\r\nprint(\"La
ngchain:\", response)\r\n```\r\n### Error Message and Stack Trace (if applic
able)\r\n\r\nopenai.BadRequestError: Error code: 400 - {'error': {'message':
\"Invalid schema for function 'Recipes': In context=('properties', 'recipe
s', 'items', 'anyOf', '0'), 'additionalProperties' is required to be supplie
d and to be false.\", 'type': 'invalid_request_error', 'param': 'tools[0].fu
nction.parameters', 'code': 'invalid_function_parameters'}}\r\n\r\n### Descr
iption\r\nThe problem is that LangChain incorrectly applies the strict k
eyword to the schema generated from the Pydantic model for the specific case
in the example code above. The culprit here is the union. The same Pydantic
class works when I feed it directly to OpenAI. When I injected 'additionalPr
operties': False into the schema for the `Baked` and `Cooked` classes, the i
ssue disappeared. \r\nI encountered the same problem when I had a Pydantic t
ool schema with a union similar to the one above.\r\n\r\nOpenAI only threw e
rror when `cooked_recipe_name` and `baked_recipe_name` were `recipe_name`, s
```

```
o I guess that is something to be careful about.\r\n\r\nOpenAI schema before
calling API:\r\n```\r\n{'$defs': {'Baked': {'properties': {'baked_recipe_nam
e': {'description': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 's
tring'}}, 'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'obje
ct', 'additionalProperties': False}, 'Cooked': {'properties': {'cooked_recip
e name': {'description': 'Recipe name.', 'title': 'Cooked Recipe Name', 'typ
e': 'string'}}, 'required': ['cooked_recipe_name'], 'title': 'Cooked', 'typ
e': 'object', 'additionalProperties': False}}, 'properties': {'recipes': {'d
escription': 'A list of recipes or tables representing the data sources.', '
items': {'anyOf': [{'$ref': '#/$defs/Cooked'}, {'$ref': '#/$defs/Baked'}]},
'title': 'Recipes', 'type': 'array'}}, 'required': ['recipes'], 'title': 'Re
cipes', 'type': 'object', 'additionalProperties': False\r^``\r^\n\hain schema before calling API:\r^``\r^\'name': 'Recipes', 'description':
'', 'parameters': {'properties': {'description': 'A list of reci
pes or tables representing the data sources.', 'items': {'anyOf': [{'propert
ies': {'cooked_recipe_name': {'description': 'Recipe name.', 'title': 'Cooke
d Recipe Name', 'type': 'string'}}, 'required': ['cooked_recipe_name'], 'tit
le': 'Cooked', 'type': 'object'}, {'properties': {'baked_recipe_name': {'des
cription': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 'string'}},
'required': ['baked_recipe_name'], 'title': 'Baked', 'type': 'object'}]}, 't
ype': 'array'}}, 'required': ['recipes'], 'type': 'object', 'additionalPrope
rties': False}, 'strict': True}\r\n```\r\n\r\n### System Info\r\n\r\naiohapp
yeyeballs==2.4.3\r\naiohttp==3.11.0\r\naiosignal==1.3.1\r\nannotated-types==
0.7.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r\nattrs==24.2.0\r\ncert
ifi==2024.8.30\r\ncharset-normalizer==3.4.0\r\ndistro==1.9.0\r\nexceptiongro
up==1.2.2\r\nfrozenlist==1.5.0\r\ngreenlet==3.1.1\r\nh11==0.14.0\r\nhttpcore
==1.0.6\r\nhttpx==0.27.2\r\nidna==3.10\r\njiter==0.7.1\r\njsonpatch==1.33\r\
njsonpointer==3.0.0\r\nlangchain==0.3.7\r\nlangchain-core==0.3.18\r\nlangcha
in-openai==0.2.8\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\
nmultidict==6.1.0\r\nnumpy==1.26.4\r\nopenai==1.54.4\r\norjson==3.10.11\r\np
ackaging==24.2\r\npropcache==0.2.0\r\npydantic==2.9.2\r\npydantic core==2.2
3.4\r\nPyYA''
}
{
 "_score": 0.92288905,
 "_type": "issue",
 "_repo": "langchain",
 " issueNumber": "28021",
```

"\_createdAt": "2024-11-11113:54:062", "closedAt": "2024-12-31T00:36:30Z",

"\_body": "### Checked other resources\n\n- [X] I added a very descriptive title to this issue.\n- [X] I searched the LangChain documentation with the integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rather than my code.\n- [X] The bug is not resolved by updating to the latest stable version of LangChain (or the specific integration package).\n\n## Example Code\n\n\u6211\u8fd0\u884c\u5b98\u65b9\u6587\u6863\u7ed9\u51fa\u7684\u793a\u4f8b\u4ee3\u7801\u51fa\u73b0\u62a5\u9519\uff0c\u4ee3\u7801\u94fe\u63a5\

ufflahttps://langchain-ai.github.io/langgraph/tutorials/code\_assistant/langg raph\_code\_assistant/#code-solution\r\n\u73af\u5883\u4fe1\u606f\uff1a\r\nlang chain 0.3.7\r\nlanggraph 0.2.45\r\npydantic 2.9.2\r\npydantic\_core 2.23.4\r\npydantic-settings 2.6.1\r \n\r\n\n\n### Error Message and Stack Trace (if applicable)\n\nTraceback (mo st recent call last):\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 202 3.3.2\\plugins\\python-ce\\helpers\\pydev\\pydevconsole.py\", line 364, in r  $coro = func()\r\n$  File \"<input>\", line 1, in <module>\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\python-ce\\h elpers\\pydev\\\_pydev\_bundle\\pydev\_umd.py\", line 197, in runfile\r\n dev\_imports.execfile(filename, global\_vars, local\_vars) # execute the scrip t\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\pytho n-ce\\helpers\\pydev\\\_pydev\_imps\\\_pydev\_execfile.py\", line 18, in execfil exec(compile(contents+\"\\n\", file, 'exec'), glob, loc)\r\n File \"D:\\codes\\AIGC\\scientificProject\\llm.py\", line 56, in <module>\r\n solution = code\_gen\_chain\_oai.invoke(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain\_env2\\lib\\site-packages\\langchain\_core\\runnables\\base.py\", input = context.run(step.invoke, input, config)\ line 3024, in invoke\r\n r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_env2\\lib\\site-packages\\ langchain\_core\\output\_parsers\\base.py\", line 193, in invoke\r\n self.\_call\_with\_config(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_en v2\\lib\\site-packages\\langchain\_core\\runnables\\base.py\", line 1927, in \_call\_with\_config\r\n context.run(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain\_env2\\lib\\site-packages\\langchain\_core\\runnables\\config.py \", line 396, in call\_func\_with\_variable\_args\r\n return func(input, \*\*kw args) # type: ignore[call-arg]\r\n File \"C:\\Users\\anaconda3\\envs\\lang chain\_env2\\lib\\site-packages\\langchain\_core\\output\_parsers\\base.py\", l lambda inner input: self.parse result(\r\n File ine 194, in  $< lambda > \r\n$ \"C:\\Users\\anaconda3\\envs\\langchain env2\\lib\\site-packages\\langchain core\\output\_parsers\\openai\_tools.py\", line 298, in parse\_result\r\n ise e\r\n File \"C:\\Users\\anaconda3\\envs\\langchain env2\\lib\\site-pack ages\\langchain\_core\\output\_parsers\\openai\_tools.py\", line 293, in parse\_ pydantic\_objects.append(name\_dict[res[\"type\"]](\*\*res[\"args result\r\n \"]))\r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_env2\\lib\\site-pack ages\\pydantic\\main.py\", line 212, in \_\_init\_\_\r\n validated\_self = sel f.\_\_pydantic\_validator\_\_.validate\_python(data, self\_instance=self)\r\npydant ic\_core.\_pydantic\_core.ValidationError: 3 validation errors for code\r\npref ix\r\n Field required [type=missing, input\_value={}, input\_type=dict]\r\n For further information visit https://errors.pydantic.dev/2.9/v/missing\r\ni mports\r\n Field required [type=missing, input\_value={}, input\_type=dict]\r For further information visit https://errors.pydantic.dev/2.9/v/missin g\r\ncode\r\n Field required [type=missing, input\_value={}, input\_type=dic For further information visit https://errors.pydantic.dev/2.9/v/mi  $ssing\n\m^{\#\#}$  Description\n\u6211\u60f3\u8981\u5b66\u4e60\u8fd0\u884c\u5b98 f46\u51fa\u73b0\u4e86pydantic\u76f8\u5173\u7684\u5305\u7684\u62a5\u9519\u8bf  $7\u95ee\u6211\u8981\u5982\u4f55\u89e3\u51b3\r\n\n\m## System Info\n\naiohap$ pyeyeballs==2.4.3\r\naiohttp==3.10.10\r\naiosignal==1.3.1\r\nannotated-types ==0.7.0\r\nanthropic==0.38.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r \nattrs==24.2.0\r\nbeautifulsoup4==4.12.3\r\nbs4==0.0.2\r\ncertifi==2024.8.3

```
0\r\ncharset-normalizer==3.4.0\r\ncolorama==0.4.6\r\ndataclasses-json==0.6.7
\r\ndefusedxml==0.7.1\r\ndistro==1.9.0\r\nexceptiongroup==1.2.2\r\nfilelock=
=3.16.1\r\nfrozenlist==1.5.0\r\nfsspec==2024.10.0\r\ngreenlet==3.1.1\r\nh11=
=0.14.0\r\ranglenhttpcore==1.0.6\r\nhttpx==0.27.2\r\nhttpx-sse==0.4.0\r\nhuggingfa
ce-hub==0.26.2\r\nidna==3.10\r\njiter==0.7.0\r\njsonpatch==1.33\r\njsonpoint
er==3.0.0\r\nlangchain==0.3.7\r\nlangchain-anthropic==0.2.4\r\nlangchain-com
munity==0.3.5\r\nlangchain-core==0.3.15\r\nlangchain-openai==0.2.5\r\nlangch
ain-text-splitters==0.3.2\r\nlanggraph==0.2.45\r\nlanggraph-checkpoint==2.0.
2\r\nlanggraph-sdk==0.1.35\r\nlangsmith==0.1.139\r\nmarshmallow==3.23.1\r\nm
sgpack==1.1.0\r\nmultidict==6.1.0\r\nmypy-extensions==1.0.0\r\nnumpy==1.26.4
\r\nopenai==1.53.0\r\norjson==3.10.11\r\npackaging==24.1\r\npropcache==0.2.0
\r\npydantic==2.9.2\r\npydantic-settings==2.6.1\r\npydantic_core==2.23.4\r\n
python-dotenv==1.0.1\r\nPyYAML==6.0.2\r\nregex==2024.9.11\r\nreguests==2.32.
3\r\nrequests-toolbelt==1.0.0\r\nsniffio==1.3.1\r\nsoupsieve==2.6\r\nSQLAlch
emy==2.0.35\r\ntenacity==9.0.0\r\ntiktoken==0.8.0\r\ntokenizers==0.20.1\r\nt
qdm==4.66.6\r\ntyping-inspect==0.9.0\r\ntyping extensions==4.12.2\r\nurllib3
==2.2.3\r\nyarl==1.17.1\r\n''
}
Top 5 most similar issues for milvus-io/pymilvus:
{
 "_score": 1.0,
 "_type": "issue",
 "_repo": "langchain",
 "_issueNumber": "28271",
 "_title": "PydanticUndefinedAnnotation: name 'SafetySetting' is not defi
ned using ChatVertexAI",
 " createdAt": "2024-11-21T22:43:53Z",
 " closedAt": "2024-12-31T00:36:30Z",
 " body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n\r\n```python\r\n# Ensure your VertexAI credentials are con
figured\r\n\r\nfrom langchain_google_vertexai import ChatVertexAI\r\n\r\nmod
el = ChatVertexAI(model=\"gemini-1.5-flash\")\r\n\r\nmodel.invoke(\"Hello, w
orld!\")\r\n\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\n \,
 python\r\n----
----\r\nNameError
 Traceback (most re
cent call last)\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/_in
ternal/_generate_schema.py:815, in GenerateSchema._resolve_forward_ref(self,
 814 try:\r\n--> 815
 obj = _typing_extra.eval_type_backport(o
obj)\r\n
 816 except NameError as e:\r\n\r\nFile /o
bj, *self. types namespace)\r\n
pt/conda/lib/python3.10/site-packages/pydantic/_internal/_typing_extra.py:53
4, in eval_type_backport(value, globalns, localns, type_params)\r\n
ry:\r\n--> 534
 return _eval_type_backport(value, globalns, localns, type
 535 except TypeError as e:\r\n\r\nFile /opt/conda/lib/python
3.10/site-packages/pydantic/_internal/_typing_extra.py:558, in _eval_type_ba
ckport(value, globalns, localns, type_params)\r\n
 557 try:\r\n--> 558
```

return \_eval\_type(value, globalns, localns, type\_params)\r\n 559 except T ypeError as e:\r\n\r\nFile /opt/conda/lib/python3.10/site-packages/pydantic/ \_internal/\_typing\_extra.py:592, in \_eval\_type(value, globalns, localns, type 591 else:\r\n--> 592 return typing.\_eval\_type( # type: \_params)\r\n value, globalns, localns\r\n ignore\r\n 593 594  $)\r\n\r\nF$ ile /opt/conda/lib/python3.10/typing.py:327, in eval type(t, globalns, loca lns, recursive quard)\r\n 326 if isinstance(t, ForwardRef):\r\n--> 327 return t. evaluate(globalns, localns, recursive guard)\r\n nce(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/con da/lib/python3.10/typing.py:699, in ForwardRef.\_evaluate(self, globalns, loc alns, recursive\_guard)\r\n  $693 \text{ type} = \text{_type\_check(\r\n}$ 694 elf.\_\_forward\_code\_\_, globalns, localns),\r\n 695 \"Forward reference s must evaluate to types.\",\r\n 696 is argument=self. forward is ar qument\_\_,\r\n 697 allow\_special\_forms=self.\_\_forward\_is\_class\_\_,\r\n 698 )\r\n--> 699 self. forward value = eval type(\r\n type , globalns, localns, recursive\_guard | {self.\_\_forward\_arg\_\_}\r\n 701 )\r\n 702 self.\_\_forward\_evaluated\_\_ = True\r\n\r\nFile /opt/conda/lib/python3.10/ typing.py:329, in \_eval\_type(t, globalns, localns, recursive\_guard)\r\n 28 if isinstance(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n--> ev\_args = tuple(\_eval\_type(a, globalns, localns, recursive\_guard) fo r a in t.\_\_args\_\_)\r\n 330 if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /op t/conda/lib/python3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinsta nce(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 gs = tuple(\_eval\_type(a, globalns, localns, recursive\_guard) for a in t.\_\_ar if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /opt/conda/lib/py 330 thon3.10/typing.py:327, in \_eval\_type(t, globalns, localns, recursive\_guard) 326 if isinstance(t, ForwardRef):\r\n--> 327 return t. evaluate( globalns, localns, recursive\_guard)\r\n 328 if isinstance(t, ( GenericAli as, GenericAlias, types.UnionType)):\r\n\r\nFile /opt/conda/lib/python3.10/t yping.py:699, in ForwardRef.\_evaluate(self, globalns, localns, recursive\_gua 693 type\_ = \_type\_check( $\r\n$ 694 eval(self.\_\_forward\_code\_ \_, globalns, localns),\r\n \"Forward references must evaluate to 695 is\_argument=self.\_\_forward\_is\_argument\_\_,\r\n types.\",\r\n 696 allow\_special\_forms=self.\_\_forward\_is\_class\_\_,\r\n 698 )\r\n--> 699 self.\_\_forward\_value\_\_ = \_eval\_type(\r\n type\_, globalns, localn 700 s, recursive\_guard | {self.\_\_forward\_arg\_\_}\r\n 701 )\r\n 702 self. f orward\_evaluated\_\_ = True\r\n\r\nFile /opt/conda/lib/python3.10/typing.py:32 9, in \_eval\_type(t, globalns, localns, recursive\_guard)\r\n 328 if isinst ance(t, (\_GenericAlias, GenericAlias, types.UnionType)):\r\n--> 329 rgs = tuple(\_eval\_type(a, globalns, localns, recursive\_guard) for a in t.\_\_a if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /opt/conda/lib/p rgs\_\_)\r\n ython3.10/typing.py:329, in <genexpr>(.0)\r\n 328 if isinstance(t, (\_Gene ricAlias, GenericAlias, types.UnionType)):\r\n--> 329 ev\_args = tuple(\_e val type(a, globalns, localns, recursive quard) for a in t. args )\r\n if ev\_args == t.\_\_args\_\_:\r\n\r\nFile /opt/conda/lib/python3.10/typi ng.py:329, in eval type(t, globalns, localns, recursive guard)\r\n 328 i f isinstance(t, (\_GenericAlias, Generi" } {

"\_score": 0.9323593,

```
"_type": "issue",
 "_repo": "langchain",
 "_issueNumber": "28255",
 "_title": "Can't import ChatOpenAI: The `__modify_schema__` method is no
t supported in Pydantic v2. ",
 "_createdAt": "2024-11-21T10:40:40Z",
 "_closedAt": "2024-12-31T00:36:30Z",
```

"\_body": "### Checked other resources\n\n- [X] I added a very descriptiv e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it. $\n$ - [X] I am sure that this is a bug in LangChain rat her than my code.\n- [X] The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa mple Code\n\nThe following code straight from the docs fails already at the import statement: $\r\n^{\'}\r\n$  typing import Optional $\r\n\r\n$ import BaseModel, Field\r\n\r\nfrom langchain openai import ChatOpenAI\r\n\r \nllm = ChatOpenAI(model=\"gpt-4o-mini\")\r\n\r\n# Pydantic\r\nclass Jok \"\"Joke to tell user.\"\"\r\n\r\n e(BaseModel):\r\n setup: str = Field(description=\"The setup of the joke\")\r\n punchline: str = Field(d escription=\"The punchline to the joke\")\r\n rating: Optional[int] = Fie  $ld(default=None, description=\''How funny the joke is, from 1 to 10\'')\r\n\r\$ n\r\nstructured\_llm = llm.with\_structured\_output(Joke)\r\n\r\nstructured\_ll m.invoke(\"Tell me a joke about cats\")\r\n```\n\n### Error Message and Stac k Trace (if applicable)\n\n```\r\nC:\\Users\\Egor\\Dropbox\\Code\\langchain\ \libs\\partners\\openai\\langchain\_openai\\chat\_models\\\_\_init\_\_.py:1: LangC hainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydantic v2 internally. The langchain\_core.pydantic\_v1 module was a compatibility shi m for pydantic v1, and should no longer be used. Please update the code to i mport from Pydantic directly.\r\n\r\nC:\\Users\\Egor\\Dropbox\\Code\\langcha in\\libs\\partners\\openai\\langchain\_openai\\chat\_models\\\_\_init\_\_.py:1: La ngChainDeprecationWarning: As of langchain-core 0.3.0, LangChain uses pydant ic v2 internally. The langchain\_core.pydantic\_v1 module was a compatibility shim for pydantic v1, and should no longer be used. Please update the code t o import from Pydantic directly.\r\n\r\nFor example, replace imports like: ` from langchain\_core.pydantic\_v1 import BaseModel`\r\nwith: `from pydantic im port BaseModel`\r\nor the v1 compatibility namespace if you are working in a code base that has not been fully upgraded to pydantic 2 yet. \tfrom pydanti c.v1 import BaseModel\r\n\r\n from langchain\_openai.chat\_models.azure impor t AzureChatOpenAI\r\nC:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\sit e-packages\\pydantic\\\_internal\\\_config.py:345: UserWarning: Valid config k eys have changed in V2:\r\n\* 'allow\_population\_by\_field\_name' has been renam ed to 'populate\_by\_name'\r\n warnings.warn(message, UserWarning)\r\nTraceba ck (most recent call last):\r\n File \"<frozen importlib.\_bootstrap>\", lin e 1176, in \_find\_and\_load\r\n File \"<frozen importlib.\_bootstrap>\", line 1147, in \_find\_and\_load\_unlocked\r\n File \"<frozen importlib.\_bootstrap> \", line 690, in load unlocked\r\n File \"<frozen importlib. bootstrap ext ernal>\", line 940, in exec\_module\r\n File \"<frozen importlib.\_bootstrap> \", line 241, in \_call\_with\_frames\_removed\r\n File \"C:\\Users\\Egor\\Drop box\\Code\\langchain\\libs\\partners\\openai\\langchain\_openai\\\_\_init\_\_.py \", line 1, in <module>\r\n from langchain\_openai.chat\_models import Azur

```
eChatOpenAI, ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchai
n\\libs\\partners\\openai\\langchain_openai\\chat_models__init__.py\", lin
 from langchain_openai.chat_models.azure import Azure
e 1, in <module>\r\n
ChatOpenAI\r\n File \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\part
ners\\openai\\langchain_openai\\chat_models\\azure.py\", line 41, in <module
 from langchain openai.chat models.base import BaseChatOpenAI\r\n F
ile \"C:\\Users\\Egor\\Dropbox\\Code\\langchain\\libs\\partners\\openai\\lan
gchain_openai\\chat_models\\base.py\", line 353, in <module>\r\n
seChatOpenAI(BaseChatModel):\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motl
eycrew3.11\\Lib\\site-packages\\pydantic_internal_model_construction.py
\", line 226, in __new__\r\n
 complete_model_class(\r\n File \"C:\\Users\
\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\site-packages\\pydantic_internal
\\ model construction.py\", line 658, in complete model class\r\n
= cls.__get_pydantic_core_schema__(cls, handler)\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\env
s\\motleycrew3.11\\Lib\\site-packages\\pydantic\\main.py\", line 697, in __g
et_pydantic_core_schema__\r\n
 return handler(source)\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.11\\Lib\\si
te-packages\\pydantic_internal_schema_generation_shared.py\", line 84, i
 schema = self._handler(source_type)\r\n
^^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\motleycrew3.
11\\Lib\\site-packages\\pydantic_internal_generate_schema.py\", line 61
2. in generate schema\r\n
 schema = self._generate_schema_inner(obj)\r\n
^^^^^\r\n File \"C:\\Users\\Egor\\.conda\\envs\\
motleycrew3.11\\Lib\\site-packages\\pydantic_internal_generate_schema.py
\", line 881, in _generate_schema_inner\r\n return self._model_schema(ob
 ^^^^^^^\r\n File \"C:\\Users\\Egor\\.conda
i)\r\n
\\envs\\motleycrew3.11\\"
}
{
 "_score": 0.9279109,
 "_type": "issue",
 "_repo": "langchain",
 " issueNumber": "27960",
 "_title": "dict[str, pydantic_model] annotation not working with structu
red output",
 "_createdAt": "2024-11-07T13:10:32Z",
 " closedAt": "2024-12-31T00:36:30Z",
 "_body": "### Checked other resources\n\n- [X] I added a very descriptiv
e title to this issue.\n- [X] I searched the LangChain documentation with th
e integrated search.\n- [X] I used the GitHub search to find a similar quest
ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat
her than my code.\n- [X] The bug is not resolved by updating to the latest s
table version of LangChain (or the specific integration package).\n\n### Exa
mple Code\n\n```python \r\nfrom __future__ import annotations\r\n\r\nfrom ty
ping import Optional\r\nfrom unittest import TestCase\r\n\r\nfrom dotenv imp
ort load_dotenv\r\nfrom langchain_openai import ChatOpenAI\r\nfrom pydantic
import Field, BaseModel\r\n\r\nload_dotenv()\r\nclass CustomTestExtractorPro
pertiesCreation(TestCase):\r\n
 def test_with_structured_output_dict(sel
f):\r\n
 class Joke(BaseModel):\r\n
 \"\"\"Joke to tell use
```

r.\"\"\"\r\n\r\n setup: str = Field(description=\"The setup of th punchline: str = Field(description=\"The punchline e joke\")\r\n rating: Optional[int] = Field(\r\n to the joke\")\r\n default=None, description=\"How funny the joke is, from 1 to 10\"\r\n class MultipleJokes(BaseModel):\r\n )\r\n name\_joke\_pairs: dict[str, Joke] = Field(description=\"Dictionary of joke name and joke pairs ChatOpenAI(name=\"gpt-4o-mini\").with\_structured\_output(\ \")\r\n\r\n MultipleJokes).invoke(\"Generate a number of name-joke pairs r\n \")\r\n```\n\n### Error Message and Stack Trace (if applicable)\n\nError\r\n Traceback (most recent call last):\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/tests/integration/conversations/custom\_test\_extracto r\_properties\_creation.py\", line 25, in test\_with\_structured\_output\_dict\r\n MultipleJokes).invoke(\"Generate a number of name-joke pairs\")\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/ site-packages/langchain\_core/runnables/base.py\", line 3024, in invoke\r\n input = context.run(step.invoke, input, config)\r\n File \"/home/filip/wor k/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/lan gchain\_core/output\_parsers/base.py\", line 193, in invoke\r\n f.\_call\_with\_config(\r\n File \"/home/filip/work/llm-bot-framework/llm-botframework/.venv/lib/python3.10/site-packages/langchain\_core/runnables/base.p y\", line 1927, in call with config\r\n context.run(\r\n File \"/home/f ilip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-pack ages/langchain\_core/runnables/config.py\", line 396, in call\_func\_with\_varia return func(input, \*\*kwargs) # type: ignore[call-arg]\r\n ble\_args\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framework/.venv/lib/python 3.10/site-packages/langchain\_core/output\_parsers/base.py\", line 194, in <la lambda inner\_input: self.parse\_result(\r\n File \"/home/filip/ mbda>\r\n work/llm-bot-framework/llm-bot-framework/.venv/lib/python3.10/site-packages/ langchain\_core/output\_parsers/openai\_tools.py\", line 298, in parse\_result\r raise e\r\n File \"/home/filip/work/llm-bot-framework/llm-bot-framewo rk/.venv/lib/python3.10/site-packages/langchain core/output parsers/openai t ools.py\", line 293, in parse\_result\r\n pydantic\_objects.append(name\_dic t[res[\"type\"]](\*\*res[\"args\"]))\r\n File \"/home/filip/work/llm-bot-fram ework/llm-bot-framework/.venv/lib/python3.10/site-packages/pydantic/main.py \", line 212, in \_\_init\_\_\r\n validated\_self = self.\_\_pydantic\_validator\_ \_.validate\_python(data, self\_instance=self)\r\npydantic\_core.\_pydantic\_core. ValidationError: 1 validation error for MultipleJokes\r\nname\_joke\_pairs\r\n Field required [type=missing, input\_value={}, input\_type=dict]\r\n rther information visit https://errors.pydantic.dev/2.9/v/missing\n\n### Des cription\n\nI am trying to create MultipleJokes Pydantic Model (example). \r \n\*\*Expected result:\*\*\r\nMultipleJokes object is created no error is return ed\r\n\*\*Actual result:\*\*\r\nMissing field exception is raised on Pydantic va lidation \n\n### System Info\n\nSystem Information\r\n----\r\ n> OS: Linux\r\n> OS Version: #48-Ubuntu SMP PREEMPT DYNAMIC Fri Sep 27 1 4:04:52 UTC 2024\r\n> Python Version: 3.10.15 (main, Sep 7 2024, 18:35:38) [GCC 13.2.0]\r\n\r\nPackage Information\r\n-----\r\n> langchai n\_core: 0.3.15\r\n> langchain: 0.3.7\r\n> langsmith: 0.1.134\r\n> langchain\_ anthropic: 0.2.3\r\n> langchain google genai: 2.0.1\r\n> langchain grog: 0. 2.0\r\n> langchain\_nvidia: Installed. No version info available.\r\n> langch ain\_nvidia\_ai\_endpoints: 0.3.0\r\n> langchain\_openai: 0.2.2\r\n> langchain\_t

```
ext_splitters: 0.3.0\r\n> langgraph: 0.2.38\r\n\r\nOptional packages not ins
talled\r\n----\r\n> langserve\r\n\r\nOther Depend
encies\r\n-----\r\n> aiohttp: 3.10.10\r\n> anthropic: 0.36.0\r\
n> async-timeout: 4.0.3\r\n> defusedxml: 0.7.1\r\n> google-generativeai: 0.
8.3\r\n> groq: 0.11.0\r\n> httpx: 0.26.0\r\n> jsonpatch: 1.33\r\n> langgraph
-checkpoint: 2.0.1\r\n> langgraph-sdk: 0.1.33\r\n> numpy: 1.26.4\r\n> opena
i: 1.51.2\r\n> or json: 3.10.7\r\n> packaging: 24.1\r\n> pillow: 10.4.0\r\n>
pydantic: 2.9.2\r"
{
 "_score": 0.92669773,
 "_type": "issue",
 " repo": "langchain",
 " issueNumber": "28106",
 " title": "LangChain incorrectly applies strict (OpenAIs Structured Outp
ut) in schema generation from Pydantic model with union, causing OpenAI vali
dation errors",
 "_createdAt": "2024-11-14T13:13:41Z",
 "_closedAt": "2024-12-31T00:36:30Z",
 "_body": "### Checked other resources\r\n\r\n- [X] I added a very descri
ptive title to this issue.\r\n- [X] I searched the LangChain documentation w
ith the integrated search.\r\n- [X] I used the GitHub search to find a simil
ar question and didn't find it.\r\n- [X] I am sure that this is a bug in Lan
gChain rather than my code.\r\n- [X] The bug is not resolved by updating to
the latest stable version of LangChain (or the specific integration packag
e).\r\n\r\n### Example Code\r\n\r\n```python\r\nimport getpass\r\nimport os\
r\nfrom typing import Union\r\n\r\nfrom langchain_openai import ChatOpenAI\r
\nfrom openai import OpenAI\r\nfrom pydantic import BaseModel, Field\r\n\r\n
 cooked recipe name: str = Field(\r\n
\r\nclass Cooked(BaseModel):\r\n
description='Recipe name.'\r\n
)\r\n\r\n\r\nclass Baked(BaseModel):\r\n
baked recipe name: str = Field(\r\n
 description='Recipe name.'\r\n
)\r\n\r\n\r\nclass Recipes(BaseModel):\r\n
 recipes: list[Union[Cooked, Ba
 description='A list of recipes or tables represent
ked]] = Field(\r\n
ing the data sources.'\r\n
)\r\n\r\n\r\nif \"OPENAI_API_KEY\" not in os.e
 os.environ[\"OPENAI_API_KEY\"] = getpass.getpass(\"Enter your
OpenAI API key: \")\r\n\r\n\r\nclient = OpenAI()\r\nmodel = \"gpt-4o-2024-08
-06\"\r\nrecipe_names = \"Garlic Butter Lobster Tail, Pumpkin Spice Muffins,
Spicy Korean Beef Bulgogi, Raspberry Almond Scones\"\r\n\r\ncompletion = cli
ent.beta.chat.completions.parse(\r\n
 model=model,\r\n
 messages=[\r\n
{\"role\": \"user\", \"content\": recipe_names},\r\n
],\r\n
ormat=Recipes,\r\n)\r\nprint(\"OpenAI:\", completion.choices[0].message.pars
ed)\r\n\r\nllm = ChatOpenAI(model=model)\r\nllm = llm.with_structured_outpu
t(Recipes, strict=True)\r\nresponse = llm.invoke(recipe_names)\r\nprint(\"La
ngchain:\", response)\r\n```\r\n### Error Message and Stack Trace (if applic
able)\r\n\r\nopenai.BadRequestError: Error code: 400 - {'error': {'message':
\"Invalid schema for function 'Recipes': In context=('properties', 'recipe
s', 'items', 'anyOf', '0'), 'additionalProperties' is required to be supplie
d and to be false.\", 'type': 'invalid_request_error', 'param': 'tools[0].fu
nction.parameters', 'code': 'invalid_function_parameters'}}\r\n\r\n### Descr
iption\r\n\r\n problem is that LangChain incorrectly applies the strict k
```

eyword to the schema generated from the Pydantic model for the specific case in the example code above. The culprit here is the union. The same Pydantic class works when I feed it directly to OpenAI. When I injected 'additionalPr operties': False into the schema for the `Baked` and `Cooked` classes, the i ssue disappeared. \r\nI encountered the same problem when I had a Pydantic t ool schema with a union similar to the one above.\r\n\r\nOpenAI only threw e rror when `cooked\_recipe\_name` and `baked\_recipe\_name` were `recipe\_name`, s o I guess that is something to be careful about.\r\n\r\nOpenAI schema before calling API:\r\n```\r\n{'\$defs': {'Baked': {'properties': {'baked\_recipe\_nam e': {'description': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 's tring'}}, 'required': ['baked\_recipe\_name'], 'title': 'Baked', 'type': 'obje ct', 'additionalProperties': False}, 'Cooked': {'properties': {'cooked\_recip e\_name': {'description': 'Recipe name.', 'title': 'Cooked Recipe Name', 'typ e': 'string'}}, 'required': ['cooked\_recipe\_name'], 'title': 'Cooked', 'typ e': 'object', 'additionalProperties': False}}, 'properties': {'recipes': {'d escription': 'A list of recipes or tables representing the data sources.', ' items': {'anyOf': [{'\$ref': '#/\$defs/Cooked'}, {'\$ref': '#/\$defs/Baked'}]}, 'title': 'Recipes', 'type': 'array'}}, 'required': ['recipes'], 'title': 'Re cipes', 'type': 'object', 'additionalProperties': False $\r^``\r^\n\$ hain schema before calling API: $\r^``\r^\$ 'name': 'Recipes', 'description': '', 'parameters': {'properties': {'description': 'A list of reci pes or tables representing the data sources.', 'items': {'anyOf': [{'propert ies': {'cooked\_recipe\_name': {'description': 'Recipe name.', 'title': 'Cooke d Recipe Name', 'type': 'string'}}, 'required': ['cooked\_recipe\_name'], 'tit le': 'Cooked', 'type': 'object'}, {'properties': {'baked\_recipe\_name': {'des cription': 'Recipe name.', 'title': 'Baked Recipe Name', 'type': 'string'}}, 'required': ['baked\_recipe\_name'], 'title': 'Baked', 'type': 'object'}]}, 't ype': 'array'}}, 'required': ['recipes'], 'type': 'object', 'additionalPrope rties': False}, 'strict': True}\r\n```\r\n\r\n### System Info\r\n\r\naiohapp yeyeballs==2.4.3\r\naiohttp==3.11.0\r\naiosignal==1.3.1\r\nannotated-types== 0.7.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r\nattrs==24.2.0\r\ncert ifi==2024.8.30\r\ncharset-normalizer==3.4.0\r\ndistro==1.9.0\r\nexceptiongro  $up==1.2.2\r\nfrozenlist==1.5.0\r\ngreenlet==3.1.1\r\nh11==0.14.0\r\nhttpcore$ ==1.0.6\r\nhttpx==0.27.2\r\nidna==3.10\r\njiter==0.7.1\r\njsonpatch==1.33\r\ njsonpointer==3.0.0\r\nlangchain==0.3.7\r\nlangchain-core==0.3.18\r\nlangcha  $in-openai==0.2.8\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangchain-text-splitters==0.3.2\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.1.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.143\r\nlangsmith==0.1$  $nmultidict==6.1.0\r\numpy==1.26.4\r\nopenai==1.54.4\r\norjson==3.10.11\r\np$ ackaging==24.2\r\npropcache==0.2.0\r\npydantic==2.9.2\r\npydantic\_core==2.2  $3.4\r\nPyYA"$ } { "\_score": 0.92288905, "\_type": "issue", "\_repo": "langchain", " issueNumber": "28021", " title": "\u5728langgraph \u4e2d\u8fd0\u884c\u4f7f\u7528RAG\u7684\u793a  $\u4f8b\u4ee3\u7801\uff0c\u51fa\u73b0pydantic\u62a5\u9519"$ " createdAt": "2024-11-11T13:54:06Z", " closedAt": "2024-12-31T00:36:30Z", "\_body": "### Checked other resources\n\n- [X] I added a very descriptiv

e title to this issue.\n- [X] I searched the LangChain documentation with th e integrated search.\n- [X] I used the GitHub search to find a similar quest ion and didn't find it.\n- [X] I am sure that this is a bug in LangChain rat her than my code.\n- [X] The bug is not resolved by updating to the latest s table version of LangChain (or the specific integration package).\n\n### Exa mple Code\n\n\u6211\u8fd0\u884c\u5b98\u65b9\u6587\u6863\u7ed9\u51fa\u7684\u7 93a\u4f8b\u4ee3\u7801\u51fa\u73b0\u62a5\u9519\uff0c\u4ee3\u7801\u94fe\u63a5\ uff1ahttps://langchain-ai.github.io/langgraph/tutorials/code assistant/langg raph\_code\_assistant/#code-solution\r\n\u73af\u5883\u4fe1\u606f\uff1a\r\nlang chain 0.3.7\r\nlanggraph 0.2.45\r\npydantic 2.9.2\r\npydantic\_core 2.23.4\r\npydantic-settings 2.6.1\r \n\r\n\n\n### Error Message and Stack Trace (if applicable)\n\nTraceback (mo st recent call last):\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 202 3.3.2\\plugins\\python-ce\\helpers\\pydev\\pydevconsole.py\", line 364, in r uncode\r\n  $coro = func()\r\n$  File \"<input>\", line 1, in <module>\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\python-ce\\h elpers\\pydev\\\_pydev\_bundle\\pydev\_umd.py\", line 197, in runfile\r\n dev\_imports.execfile(filename, global\_vars, local\_vars) # execute the scrip t\r\n File \"C:\\Program Files\\JetBrains\\PyCharm 2023.3.2\\plugins\\pytho n-ce\\helpers\\pydev\\_pydev\_imps\\\_pydev\_execfile.py\", line 18, in execfil exec(compile(contents+\"\\n\", file, 'exec'), glob, loc)\r\n File e\r\n \"D:\\codes\\AIGC\\scientificProject\\llm.py\", line 56, in <module>\r\n solution = code\_gen\_chain\_oai.invoke(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain\_env2\\lib\\site-packages\\langchain\_core\\runnables\\base.py\", line 3024, in invoke\r\n input = context.run(step.invoke, input, config)\ r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_env2\\lib\\site-packages\\ langchain\_core\\output\_parsers\\base.py\", line 193, in invoke\r\n self.\_call\_with\_config(\r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_en v2\\lib\\site-packages\\langchain\_core\\runnables\\base.py\", line 1927, in call with config\r\n context.run(\r\n File \"C:\\Users\\anaconda3\\envs \\langchain env2\\lib\\site-packages\\langchain core\\runnables\\config.py \", line 396, in call\_func\_with\_variable\_args\r\n return func(input, \*\*kw args) # type: ignore[call-arg]\r\n File \"C:\\Users\\anaconda3\\envs\\lang chain\_env2\\lib\\site-packages\\langchain\_core\\output\_parsers\\base.py\", l lambda inner\_input: self.parse\_result(\r\n File ine 194, in  $< lambda > \r\n$ \"C:\\Users\\anaconda3\\envs\\langchain\_env2\\lib\\site-packages\\langchain\_ core\\output\_parsers\\openai\_tools.py\", line 298, in parse\_result\r\n ise e\r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_env2\\lib\\site-pack ages\\langchain\_core\\output\_parsers\\openai\_tools.py\", line 293, in parse\_ pydantic\_objects.append(name\_dict[res[\"type\"]](\*\*res[\"args result\r\n \"]))\r\n File \"C:\\Users\\anaconda3\\envs\\langchain\_env2\\lib\\site-pack ages\\pydantic\\main.py\", line 212, in \_\_init\_\_\r\n validated self = sel f.\_\_pydantic\_validator\_\_.validate\_python(data, self\_instance=self)\r\npydant ic core. pydantic core. ValidationError: 3 validation errors for code\r\npref ix\r\n Field required [type=missing, input\_value={}, input\_type=dict]\r\n For further information visit https://errors.pydantic.dev/2.9/v/missing\r\ni mports\r\n Field required [type=missing, input\_value={}, input\_type=dict]\r For further information visit https://errors.pydantic.dev/2.9/v/missin g\r\ncode\r\n Field required [type=missing, input\_value={}, input\_type=dic t]\r\n For further information visit https://errors.pydantic.dev/2.9/v/mi

 $ssing \\ n\\ m\#\# Description\\ n\\ n\\ u6211\\ u60f3\\ u8981\\ u5b66\\ u4e60\\ u8fd0\\ u884c\\ u5b98$ \u7f51\u4e2d\u7ed9\u51fa\u7684langgrapg RAG\u76f8\u5173\u4ee3\u7801\uff0c\u4  $f46 \ u51fa \ u73b0 \ u4e86py dantic \ u76f8 \ u5173 \ u7684 \ u5305 \ u7684 \ u62a5 \ u9519 \ u8bf$  $7\u95ee\u6211\u8981\u5982\u4f55\u89e3\u51b3\r\n\n\m## System Info\n\naiohap$ pyeyeballs==2.4.3\r\naiohttp==3.10.10\r\naiosignal==1.3.1\r\nannotated-types ==0.7.0\r\nanthropic==0.38.0\r\nanyio==4.6.2.post1\r\nasync-timeout==4.0.3\r \nattrs==24.2.0\r\nbeautifulsoup4==4.12.3\r\nbs4==0.0.2\r\ncertifi==2024.8.3 0\r\ncharset-normalizer==3.4.0\r\ncolorama==0.4.6\r\ndataclasses-json==0.6.7 \r\ndefusedxml==0.7.1\r\ndistro==1.9.0\r\nexceptiongroup==1.2.2\r\nfilelock=  $=3.16.1\r\nfrozenlist==1.5.0\r\nfsspec==2024.10.0\r\ngreenlet==3.1.1\r\nh11=$  $= 0.14.0 \\ r\nhttpx == 0.27.2 \\ r\nhttpx - sse == 0.4.0 \\ r\nhugging fa$ ce-hub==0.26.2\r\nidna==3.10\r\njiter==0.7.0\r\njsonpatch==1.33\r\njsonpoint er==3.0.0\r\nlangchain==0.3.7\r\nlangchain-anthropic==0.2.4\r\nlangchain-com munity==0.3.5\r\nlangchain-core==0.3.15\r\nlangchain-openai==0.2.5\r\nlangch ain-text-splitters==0.3.2\r\nlanggraph==0.2.45\r\nlanggraph-checkpoint==2.0. 2\r\nlanggraph-sdk==0.1.35\r\nlangsmith==0.1.139\r\nmarshmallow==3.23.1\r\nm sgpack==1.1.0\r\nmultidict==6.1.0\r\nmypy-extensions==1.0.0\r\nnumpy==1.26.4 \r\nopenai==1.53.0\r\norjson==3.10.11\r\npackaging==24.1\r\npropcache==0.2.0 \r\npydantic==2.9.2\r\npydantic-settings==2.6.1\r\npydantic\_core==2.23.4\r\n python-dotenv==1.0.1\r\nPyYAML==6.0.2\r\nregex==2024.9.11\r\nrequests==2.32.3\r\nrequests-toolbelt==1.0.0\r\nsniffio==1.3.1\r\nsoupsieve==2.6\r\nSQLAlch  $emy==2.0.35\r\ntenacity==9.0.0\r\ntiktoken==0.8.0\r\ntokenizers==0.20.1\r\nt$ qdm==4.66.6\r\ntyping-inspect==0.9.0\r\ntyping\_extensions==4.12.2\r\nurllib3  $==2.2.3\r\nyarl==1.17.1\r\n''$ 

## Part 2

## **REQUIREMENT 1**

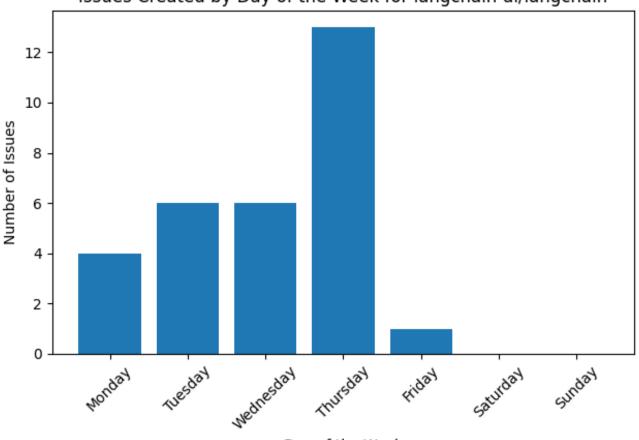
- 1. https://github.com/langchain-ai/langchain
- 2. https://github.com/langchain-ai/langgraph
- 3. https://github.com/microsoft/autogen
- 4. https://github.com/openai/openai-cookbook
- 5. https://github.com/elastic/elasticsearch
- 6. https://github.com/milvus-io/pymilvus

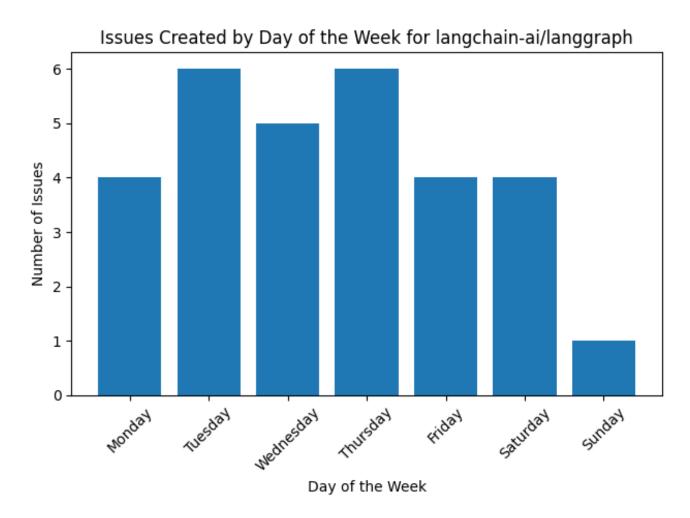
Create a Bar Chart to plot the number of issues created for every repo for every day of the week; that is total number of issues created on Monday, Tuesday, Wednesday ..., Sunday for EVERY Repo name.

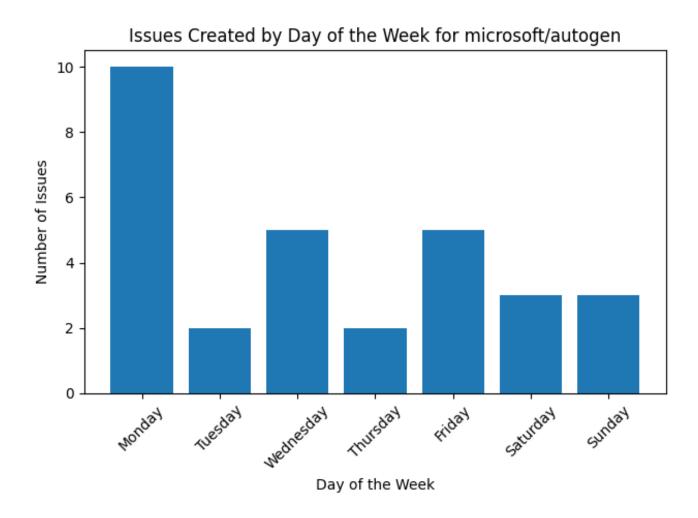
In [20]: **from** collections **import** defaultdict

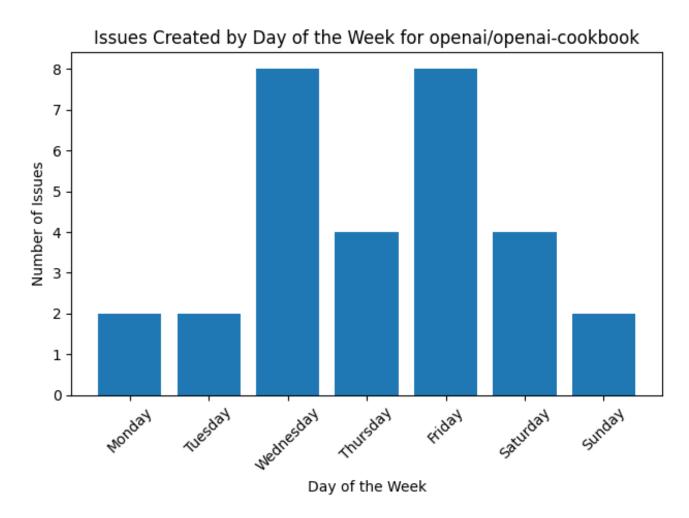
```
from datetime import datetime, timedelta
import requests
import matplotlib.pyplot as plt
GitHub API endpoint for issues
API URL = "https://api.github.com/repos/{}/issues"
Function to fetch issues for a repository
def fetch_issues(repo_url):
 repo_name = repo_url.split("/")[-2] + "/" + repo_url.split("/")[-1]
 response = requests.get(API_URL.format(repo_name))
 if response.status_code == 200:
 return response.json()
 else:
 print("Failed to fetch issues for", repo url)
 print("Status code:", response.status_code)
 print("Response:", response.text)
 return []
Function to filter issues for the past 2 months
def filter_issues_for_past_2_months(issues):
 two_months_ago = datetime.now() - timedelta(days=30*2)
 return [issue for issue in issues if datetime.strptime(issue['created at
Function to count the number of issues created on each day of the week for
def count_issues_per_day_of_week(issues):
 issues_per_day = defaultdict(int)
 for issue in issues:
 created_at = datetime.strptime(issue['created_at'], '%Y-%m-%dT%H:%M:
 day_of_week = created_at.strftime('%A') # Get the day of the week (
 issues per day[day of week] += 1
 return issues_per_day
Function to create a bar chart of issues created on each day of the week 1
def plot_issues_per_day_of_week(repo_name, issues_per_day):
 days_of_week = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday',
 issue_counts = [issues_per_day[day] for day in days_of_week]
 plt.bar(days_of_week, issue_counts)
 plt.title('Issues Created by Day of the Week for {}'.format(repo_name))
 plt.xlabel('Day of the Week')
 plt.ylabel('Number of Issues')
 plt.xticks(rotation=45)
 plt.tight_layout()
 plt.show()
Repositories to analyze
repositories = [
 "https://github.com/langchain-ai/langchain",
 "https://github.com/langchain-ai/langgraph",
```

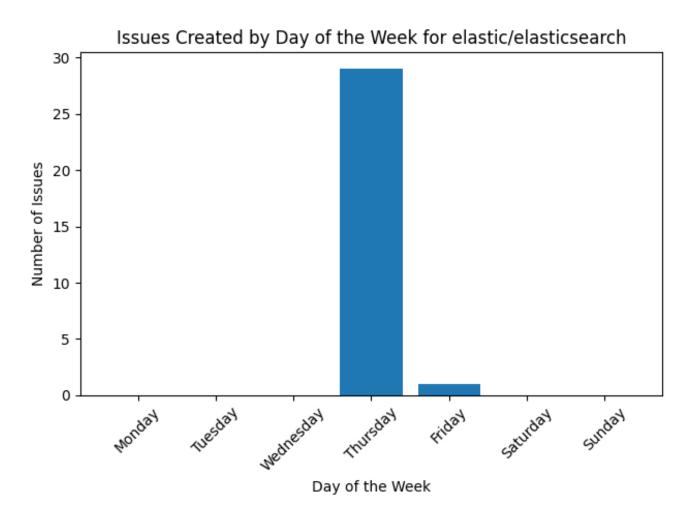
## Issues Created by Day of the Week for langchain-ai/langchain



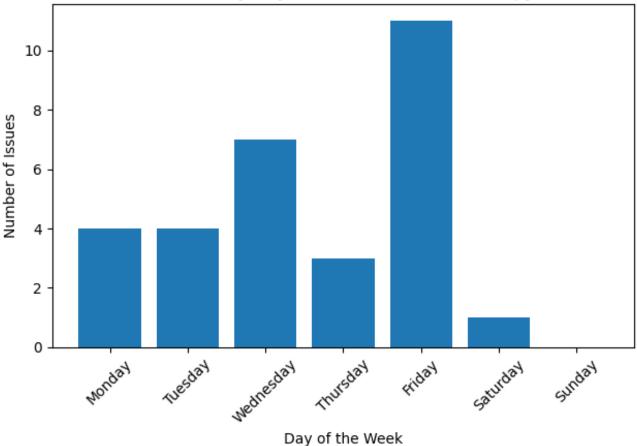












# **Sanity Test:**

Execute following commands from the command window/terminal:

#### To verify the index got created:

curl -XGET "http://localhost:9200/\_cat/indices?v"

#### To check the structure of index:

curl -X GET "localhost:9200/github\_issues?pretty"

#### To check the stats of the index:

curl -X GET "localhost:9200/github\_issues/\_stats?pretty"

#### To dump the documents in the index to stdout:

curl -XGET "http://localhost:9200/github\_issues/\_search?pretty=true"

### To dump the mapping of the index to stdout:

• curl -XGET "localhost:9200/github\_issues/\_mapping?pretty"

# How to delete the index?

### To delete the index you created:

• curl -XDELETE "http://localhost:9200/github\_issues?pretty"