

Project Documentation

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Note: The application is entirely written in python. It is mentioned in the project requirements that the application must be developed entirely in GO and GO modules. I have attended the retail pulse pre placement session in which I and many others have raised about the programming language barrier imposed. And Someone in the panel replied to that and said that it won't be an issue as if when we are familiar with one particular programming language then we can easily learn other languages and it won't be a problem for the assessments and hiring and also asked us to apply for the same. Keeping in that mind I have applied and cleared the initial round.

I have mailed siddarth and careers@retail_pulse if I could get any waiver for language restriction and few days after siddarth reverted to me on the same, to develop the application in python. So that I have developed the entire application in python. And the reason behind the delay for few days is because I was having end semester examinations and I couldn't manage time to complete the assessment, so I managed with whatever I can allocate and completed the assignment.

Description

The application is written in Python using Flask and Flask-Restful. The application is built to support Rest-APIs. The application supports the end points that are mentioned in the assignment and also the HTTP error codes were also assigned similar to the requirements mentioned in the assignment. The application can take json payload similar to that in the requirements. Creates the job, assigns a job id and the job id can further be used to access the job along with the errors raised if any.

Installing Setup and Testing Instr.

The submission folder contains a file called app.py, requirements.txt, .gitignore .

app.py contains the application of the app.

Requirements.txt contains the required python packages

.gitignore contains the info of the files that is not to be added to version control

- 1) Go to the folder submission in your terminal
- 2) Run **pip install -r requirements.txt**

- 3) The above command installs all the python packages that are required for the app.
- 4) After installing the libraries run : **python app.py**
- 5) This starts the backend application in your local system on url: <http://127.0.0.1:5000/>
- 6) If you want to enable debugger for more information , change the last line of code in app.py from **app.run()** to **app.run(debug=True)**
- 7) For ease of testing you can use postman to test the application.
- 8) Do not forget to add content_type , application_json to the postman headers and body to raw, json for post json payload request.
- 9) You can now test the application , which meets the requirements mentioned in the assessment.

Work Environment

Operating System: Windows 11

IDE used for development: Pycharm by JetBrains

Testing Tool used for development: Postman

Programming Languages used: Python

Libraries Used : Flask , Flask-RESTful , uwsgi , psycpg2 , pillow

Improvements

In the application I have used in memory data objects like list and dictionaries , due to the time constraints. Because of this the application will lose the json payload data if the application is terminated. To overcome this we can use database to retain data. Also if time provided for large json payloads we can use multi-threading to execute the application much faster.