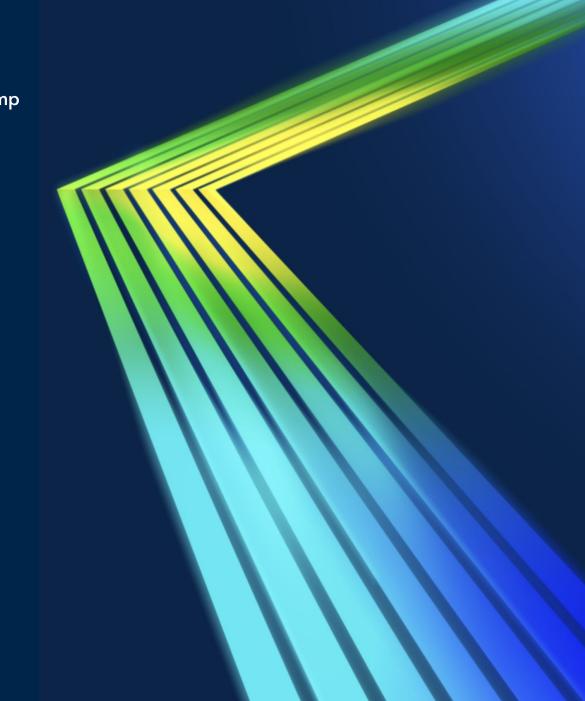


SmartRead

Unlock the Hidden Insights in Your Content

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Problem Statement

As new members of the Intuit team, we were given a substantial amount of documentation to study. However, as time passed, it became increasingly difficult to navigate through the multiple files and keep track of which doc contained the information we needed.

This is how our team came up with the idea of creating a tool that could process and analyze multiple file types, in order to provide quick answers and the corresponding source information.

Solution: Features we are providing

- Ability to upload URLs, PDFs, PPTs, and Images as input formats for queries
- Support for querying from different input formats
- Audio recognition capabilities for asking queries via voice
- Multi-lingual support for querying in different languages
- Integration with Slack channels to post queries, answers, and source links
- Ability to ask questions related to content available on the team's Slack channel

Techstack

- Langchain Used to simplify the creation of applications using large language models.
- Streamlit Used for building simple and interactive applications with minimal coding.
- VectorDB Used as an efficient and scalable database for storing and querying vector embeddings
- Slack API Incoming webhooks are used to post messages from our app into Slack in the form of JSON payload
- Coupler.io Automates data transfers from slack where data will be automatically imported at a regular schedule



BTS - What happens Behind the scenes?

SPLIT INTO SOURCES VECTOR DB RETRIEVAL PROMPT ANSWERS CHUNKS

- Unstructured URL Loader
- Unstructured PDF Loader
- Unstructured PPT Loader
- Unstructured Image Loader

- Recursive Character Text Splitter
- Semantic Search
- Retrieval QAwithSourcesCh ain
- Question

Doesn't Chat Gpt or GenStudio do the same job?



- **Reduces Human Effort:** The process of copying and pasting content from documents or files can be laborious and time-consuming.
- **Audio Support:** GenStudio doesn't offer asking questions through voice.
- **Efficient Content Retrieval:** When utilizing Chat GPT/GenStudio to retrieve information from a document, it may be necessary to input the entire text of the document, regardless of the fact that the answer to the query might be found in the first paragraph only, resulting in greater overall costs. Our tool employs intelligent algorithms to determine the most practically useful segment of the document in responding to the query, decreasing total expenses and enhancing efficiency.
- Multilingual Support: Our tool features multifaceted, multilingual audio support that streamlines the questioning process, making it convenient for users to pose questions in numerous languages. This additional functionality broadens the scope of the tool and expands its user base, overcoming language barriers.

How can Intuit leverage this tool?

- Interns and new hires are typically inundated with a plethora of documentation during their first few weeks on the job. However, it is common for individuals to forget the information contained in these documents after a short period of time. Our tool helps to solve this problem by providing the following features:
 - Simplified Document Management: Interns or new hires can easily upload relevant documents or URL links from which they would like to ask questions.
 - Convenient Questioning: Our tool allows users to ask questions by uploading a single URL, PDF, or PPT. This enables them to ask questions based on mixed content from all of the documents.
- Streamline the onboarding process
- Ensure that new hires have all the information they need to be successful in their new roles.
- 2. Intuit teams use different formats for documenting their work, including Wiki, Google Docs, and Github Readme.
 - Employees can use this tool according to whatever format their teams use to ask relevant questions.
 - They can upload documents in any preferred format, such as PDFs, Word documents, or spreadsheets.
 - Documents can be posted in their team Slack channel for sharing with other team members too.
 - Employees can ask questions from the content posted in their Team's Slack channel.
- This tool enables efficient collaboration and communication.
- It improves team productivity by ensuring all members have access to the latest information and resources.

Future scope of improvement

- Extract, analyse and answer questions related to code from the urls, docs provided
- Analyse documents, images, pdfs from slack group channels directly
- Extract images present in pdfs, docs and analyse them
- Instead of reading all the slack messages from start when the application reruns, automatically analyse slack messages each time a new message is sent
- Save user history so that the asked question and answers are saved
- Deploy to build an application and make it available to all Intuit developers

DEMO!!

Uploading all Documents