DIBS: Dynamic and Informed Branch Simulator (DIBS): Improving Branch Location and Layout through Simulation and AI-powered Insights

Project submitted to the BPI DATA Wave 2025 Hackathon, powered by Eskwelabs, by (team) PISIKA, consisting of the ff. authors:

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all of whom were undergraduate researchers at the National Institute of Physics, UP Diliman, at the time of the Hackathon.

Contents

* `RAG Ingest` - contains `csvs` and `documents` for input of pertinent documents for RAG usability. Also contains `ingest.py` which is the script for ingesting the documents or csvs into the supabase database.

* `Streamlit` - contains the prototype. `banksim` contains the simulation model as `model.py`, `data` contains both simulated and scraped data, and `pages` contain the streamlit pages. `5_Ask_DIBS` contains the agentic RAG chatbot.

* `.env.sample` - template `.env` for containing API keys for both OpenAI and supabase's APIs, etc. Primarily for our safety so that we can remove our API keys.

How to run

Python version 3.12 is recommended. Libraries and packages are listed in `gen_requirements.txt` and `RAG_requirements.txt`. For ease, kindly run:

Upon installation, since we have removed our API keys for safety, please use an your own API keys for supabase and OpenAI and save them in `.env.sample` as `.env`.

Please don't forget to update ``file_path`` in `ingest.py` and `5_Ask_DIBS.py`.

Acknowledgments

* Various free online tutorials: Thomas Janssen's Agentic RAG tutorial.

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