

# DSCI 560 Final Project

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## About

For this final project, our group decided to create a chatbot called Travel Genie that assists with generating convenient travel itineraries based on the user's personal inquiry. For example, if a user wants to travel with their pet, they can ask our chatbot about pet regulations on different airlines, hotels, activities, etc. and use this information to decide on their plans accordingly. In addition, the user can specify their budget and duration of the trip and the chatbot will give suggestions that meet the specifications.

## Content

To create Travel Genie, we have two scripts: 1) `web_scraper.py` and 2) `app.py`. Our web scraping script retrieves information and images across different travel-related websites in real-time in order to extract information that can be used to answer our users' queries. Our app script is the main script for our Travel Genie chatbot and handles all of the data pre-processing, embeddings, vector database, training, and chat history. To run all of this, we also included a `requirements.txt` file so it's simple to download all the necessary dependencies.

## Dependencies

All of the dependencies used, including their version number, are included in a list within the `requirements.txt` file.

## Installation

How to install the requirements necessary to run your project:

```
pip install -r requirements.txt
```

## Running the Project

In order to reproduce the results from this project, you will need to run the following command in your command line:

```
python3 web_scraper.py  
streamlit run Final_Project_DYE/app.py
```

Once the script is running, the program will open the streamlit application in their browser and prompt the user to upload a PDF if they want to use it as a data input and then enter a question into the text field. Afterwards, Travel Genie will write and output an answer to the user's query.