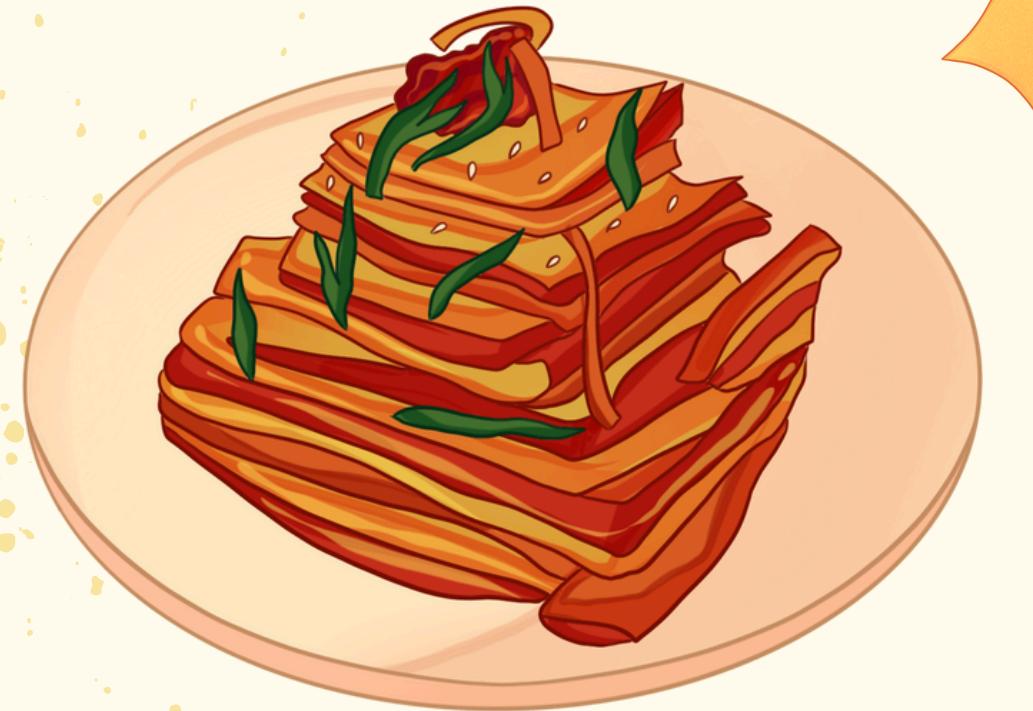
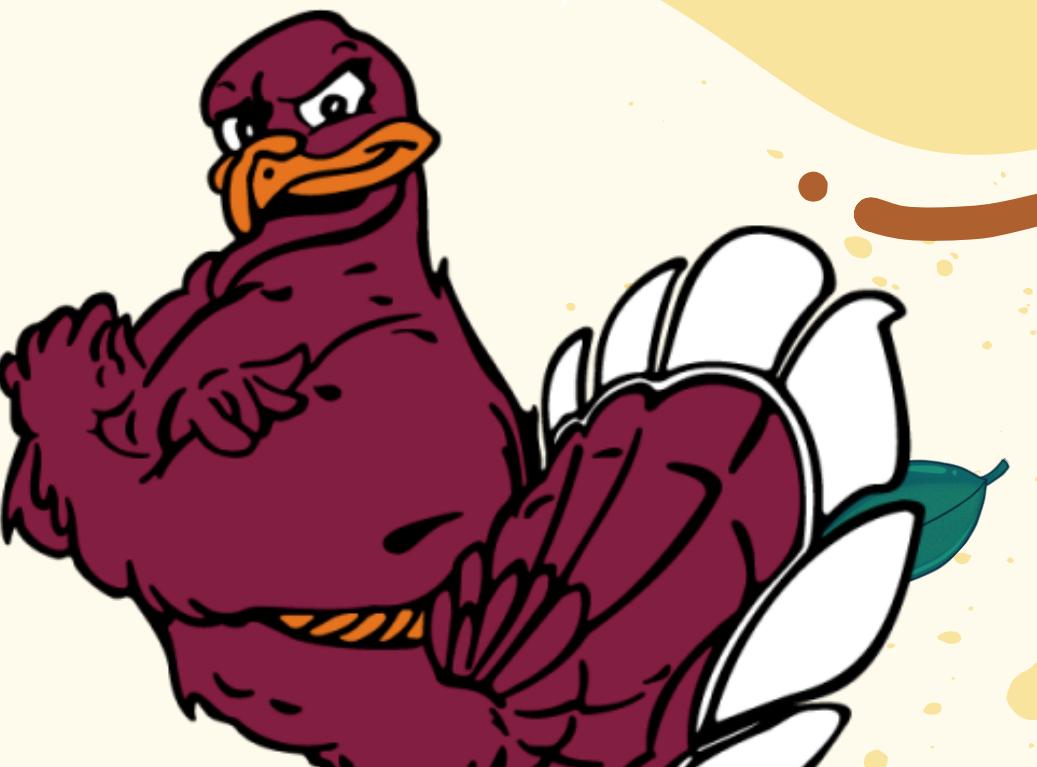


VT HACKS'24



HokieEATS
Food Sorted in a Snap



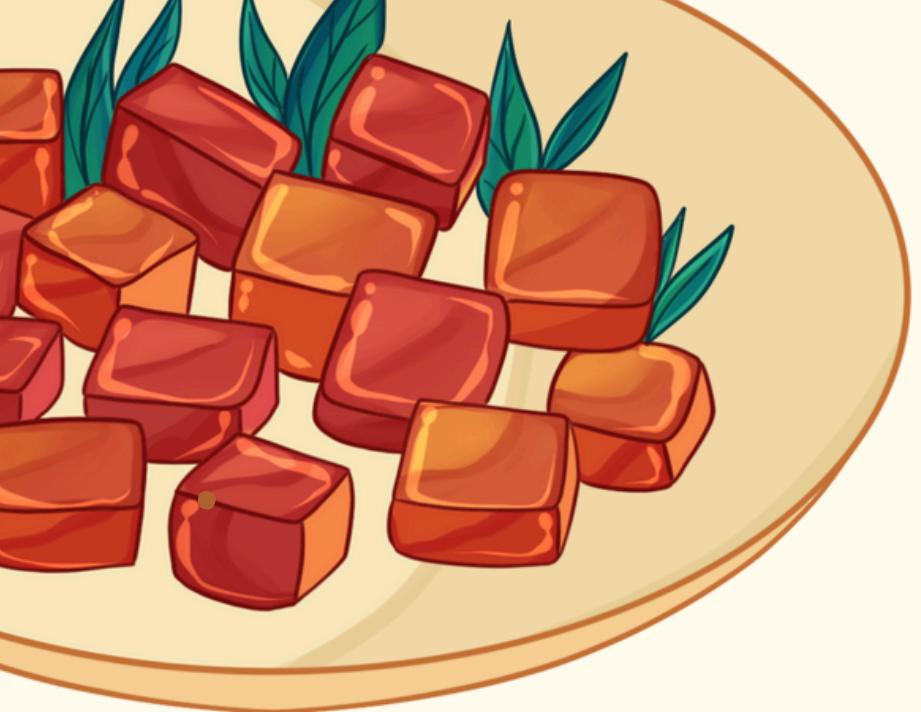
TEAM MEMBER

Mrunaldhar

Nikhil

Satwik

Sreenidhi



Problem Statement



New students arriving in a city often face multiple challenges related to food:



Unfamiliarity with Local Restaurants:

Students are unfamiliar with nearby dining options that cater to their specific tastes and dietary needs.



Difficulty Finding Suitable Meals:

Finding meals on preferences like calorie, protein, cuisine and allergy can be overwhelming and time taking.



Lack of Cooking Skills and Ingredient Knowledge :

Students struggle with cooking due to lack of skills, limited time and challenge of balancing academics with daily chores.



Homesickness and Stress Management Issues:

Students miss the comfort of homely meals, and the predominance of Western food contributes to feelings of isolation or stress.



High Cost of Eating Out Mostly end up with Junk Food:

Constant reliance on eating outside can be expensive and unsustainable for students on tight budgets.





Project Overview

Our project aims to provide students with an intelligent chatbot that helps them discover nearby restaurants or quick, student-friendly recipes tailored to their preferences and constraints. The system uses multiple Large Language Models (LLMs) in conjunction with Retrieval-Augmented Generation (RAG) to offer personalized food recommendations based on factors like calorie count, cuisine type, dietary restrictions, and allergens. By pulling from a real-time dataset, the chatbot ensures up-to-date, accurate suggestions. This solution simplifies the process of finding affordable, healthy, and comforting food options for students, alleviating the challenges they face when adjusting to a new environment.

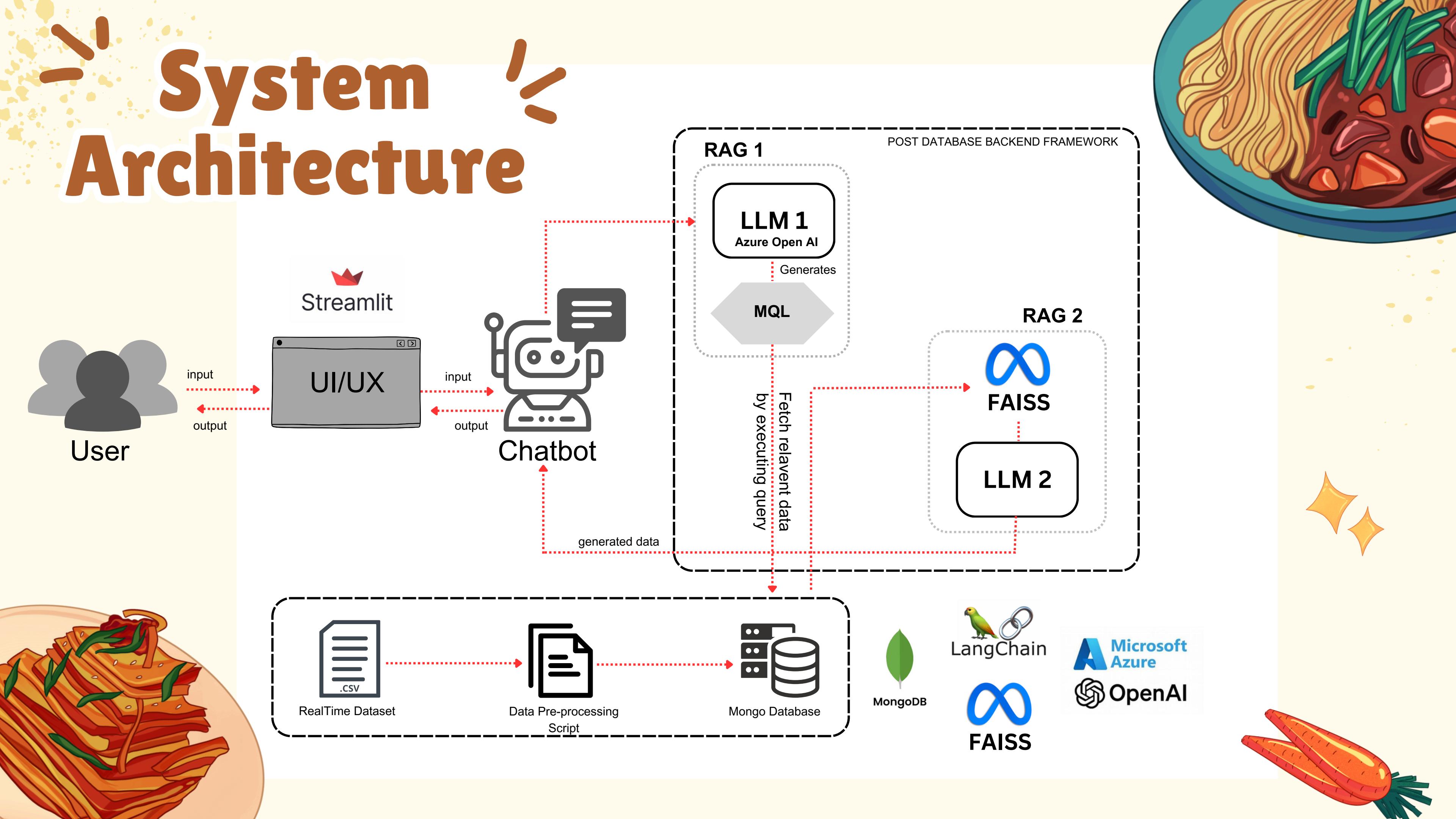
HokieEATS

Type your message here...

I want to eat something Indian, Maybe chicken tikka masala and I want it

Press Enter to apply

System Architecture



TECH STACK

- FrontEnd : StreamLit hosted in Azure app services
- Backend : Azure Function App
- DataBase : CosmosDB
- Backend TechStack : LangChain, RAG, PyMongo, Azure OpenAI, FAISS



Challenges Faced

Data Processing

Prompt Engineering

MongoDB joining Collections using LLMs

LangChain retaining Chat History

Future SCOPES

Realtime Data Streaming

Semantic Search

Integrating with Maps SDK





**Thank you
for your attention**

ON

HokieEATS
Food Sorted in a Snap



A cartoon illustration of a ramen bowl character with a purple face, orange scarf, and black hair. It has large white eyes and a small smile. It is holding a bowl of ramen with yellow noodles, red shrimp, green onions, and a slice of lime.

Access Project Here:
<http://hokieeats.study/>

