

# UniVerse

**A conversational AI that instantly answers any question  
about life in Thapar**

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# Introduction

- **The Problem:** Finding essential campus information in Patiala is a challenge. Data on faculty, mess menus, and administrative processes and directions is scattered across outdated websites, portals, and physical notice boards, wasting valuable time for students.
- **Our Solution:** A centralized, prompt-based chatbot that acts as a single source of truth. Users can ask questions in natural English and get instant, accurate answers.
- **Key Features:**

**Smart Faculty Search:** Instantly find any professor's details with fuzzy name matching, even with partial input.

**Daily Campus Info:** Get up-to-date mess menus, cafeteria details, and procedural information on demand.

**Interactive Navigation:** Ask for a location (e.g., "Where is Block C?") and receive an interactive map with the location pinpointed.

# Workable Prototype demonstration

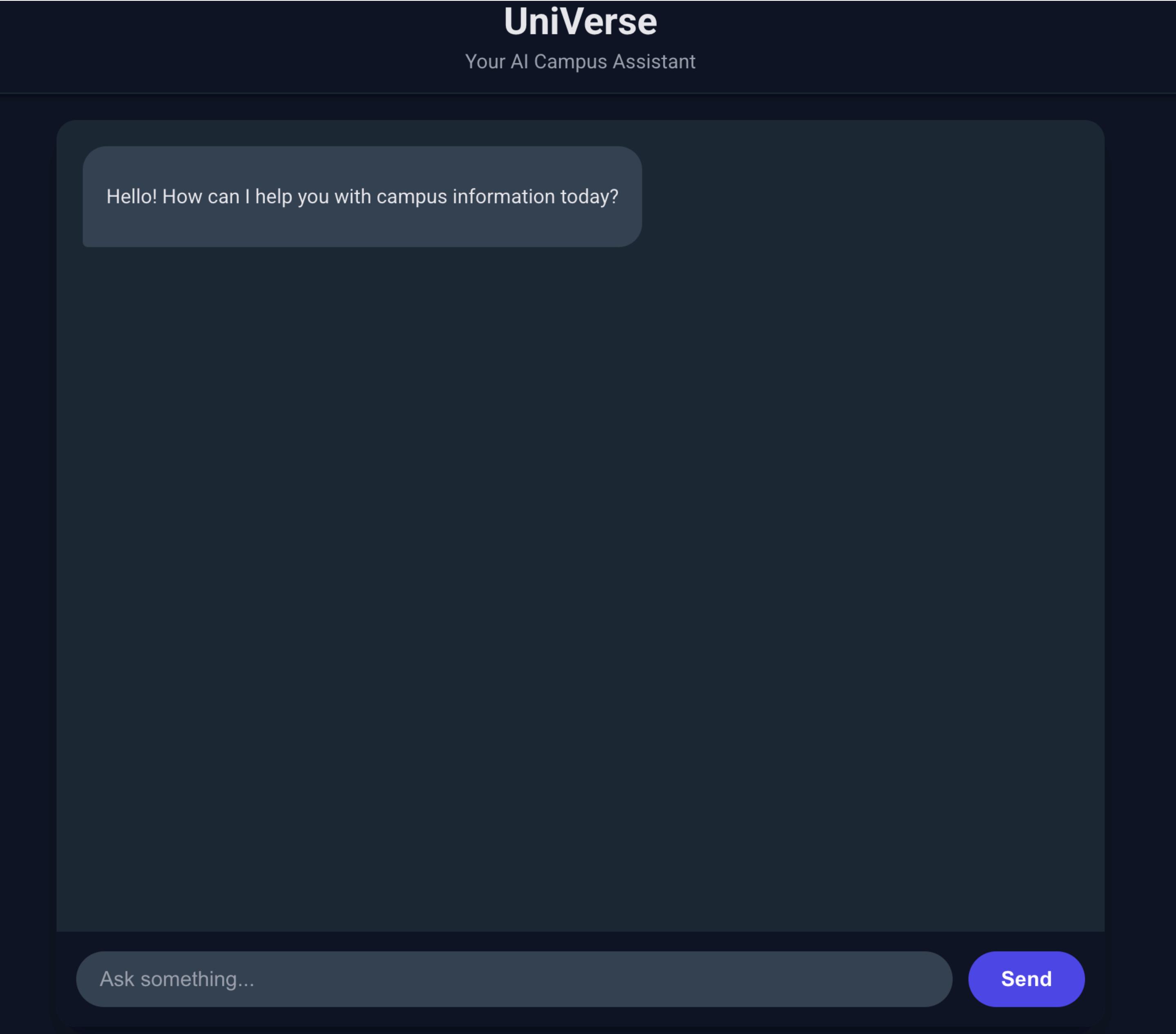
**GITHUB LINK:-**

<https://github.com/KS171003/CampusGPT>

# Landing Page

## Welcome page for students

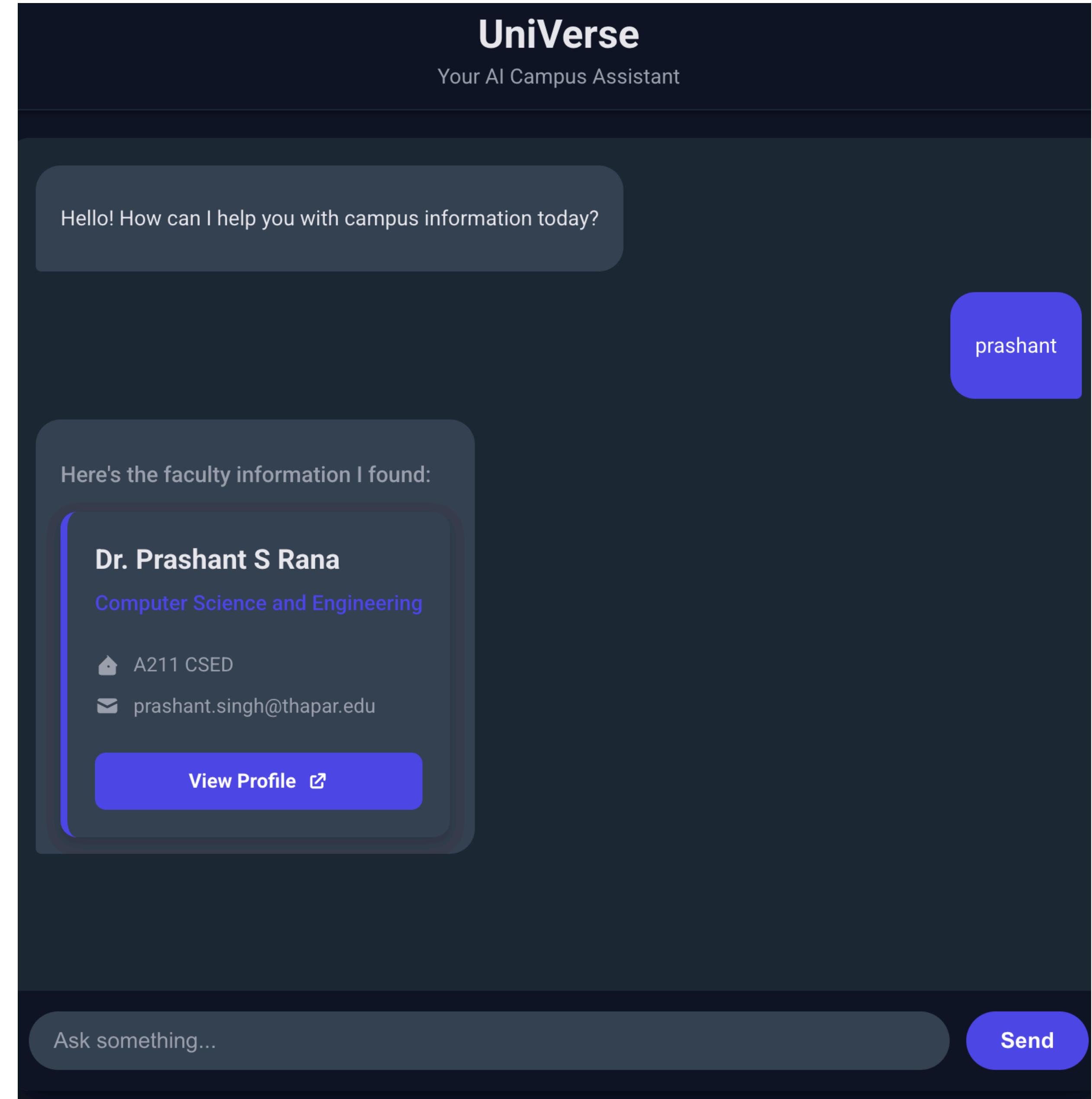
- A simple and interactive UI/UX allowing students to type the prompt into the search box
- Send button sends the prompt to backend that classify the prompt into different categories.
- Simple interface for the application to show the related results into the window.



# Faculty Information

## Searching the faculty by name

- Allows the students to search the name of the faculty (even any substring of the name).
- Shows the faculty card that include Name, Department, Office, email, Profile link
- If same multiple names the chat clarify the full name of the faculty and then show information



# Web Scrapping

The screenshot shows a database application interface with a result grid and an action history section.

**Result Grid:**

FacultyID	Name	Department	Specialization	Email	Office	link
429	Dr. Prabhat Chand Yadav	Mechanical Enginee...	NULL	prabhatchand.yadav@thapar...	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTQ...">https://med.thapar.edu/facultydetails/MTQ...</a>
430	Dr. Dharmveer Agarwal	Mechanical Enginee...	NULL	dharma...veer.agarwal@thapar...	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
431	Dr. Vivek Parmar	Mechanical Enginee...	NULL	vivek.parmar@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
432	Dr. Sunil Kumar	Mechanical Enginee...	NULL	sunil.kumar@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
433	Dr. Prathvi Raj Chauhan	Mechanical Enginee...	NULL	prathvi.chauhan@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTcx...">https://med.thapar.edu/facultydetails/MTcx...</a>
434	Dr. Sudhir Kumar Singh	Mechanical Enginee...	NULL	Sudhir.singh@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTcz...">https://med.thapar.edu/facultydetails/MTcz...</a>
435	Dr. Daksh Shelly	Mechanical Enginee...	NULL	daksh.shelly@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTcz...">https://med.thapar.edu/facultydetails/MTcz...</a>
436	Dr. Ankit Kumar	Mechanical Enginee...	NULL	ankit.kumar3@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
437	Dr. Vijay Kumar	Mechanical Enginee...	NULL	vijay.kumar5@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
438	Dr. Sudhar Rajagopalan	Mechanical Enginee...	NULL	sudhar.rajagopalan@thapar...	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
439	Dr. Abhishek Ghosh	Mechanical Enginee...	NULL	abhishek.ghosh@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
440	Dr. Sohan Lal	Mechanical Enginee...	NULL	sohanlal@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>
441	Dr. Avush Awasthi	Mechanical Enginee...	NULL	avush.awasthi@thapar.edu	A211 CSED	<a href="https://med.thapar.edu/facultydetails/MTc...">https://med.thapar.edu/facultydetails/MTc...</a>

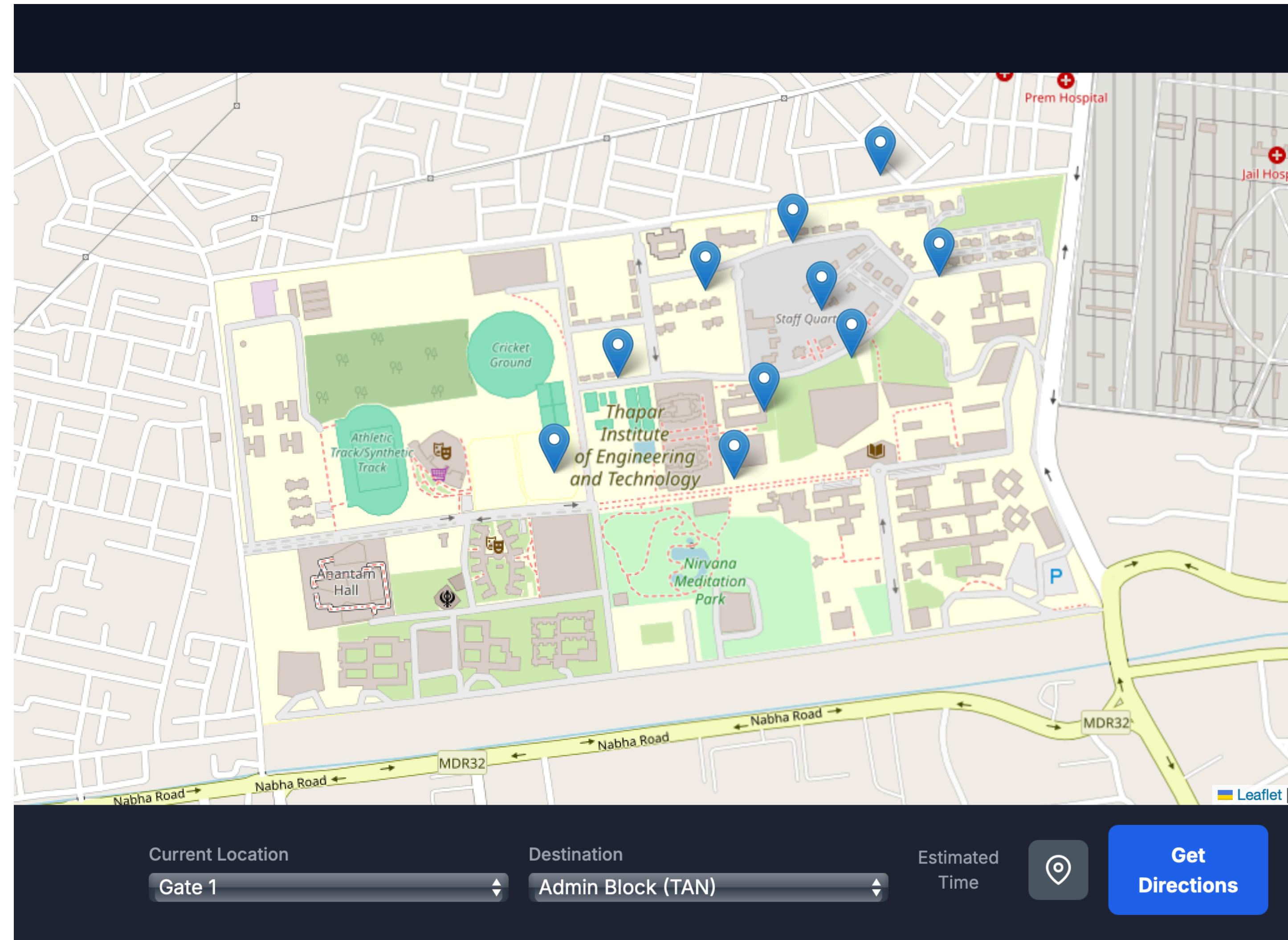
**Action Output:**

Time	Action	Response	Duration / Fetch Time
02:30:20	TRUNCATE TABLE Faculty	0 row(s) affected	0.029 sec
02:36:24	SELECT * FROM campusgpt.Faculty LIMIT 0, 1000	0 row(s) returned	0.014 sec / 0.00052 s...
02:42:36	SELECT * FROM campusgpt.Faculty LIMIT 0, 1000	14 row(s) returned	0.015 sec / 0.00084...
02:44:44	SELECT * FROM campusgpt.Faculty LIMIT 0, 1000	191 row(s) returned	0.014 sec / 0.00073 s...
02:53:31	SELECT * FROM campusgpt.Faculty LIMIT 0, 1000	441 row(s) returned	0.031 sec / 0.0023 sec

Successfully fetched 441 faculties from different departments using web scrapping in around 1 minute and used this database to display the faculty card  
Website :- <https://www.thapar.edu/faculties>

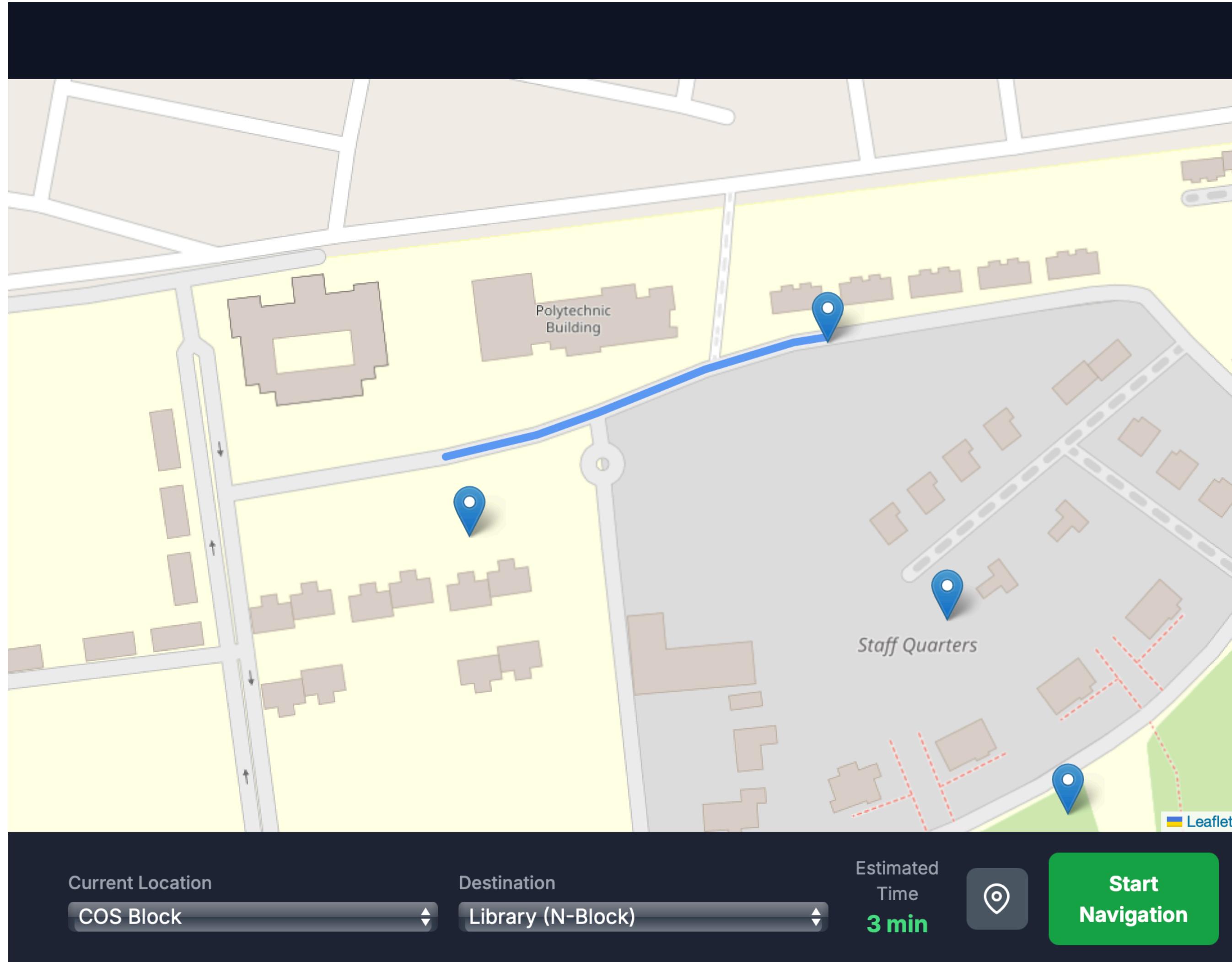
# Navigation

## Navigating from different parts of campus



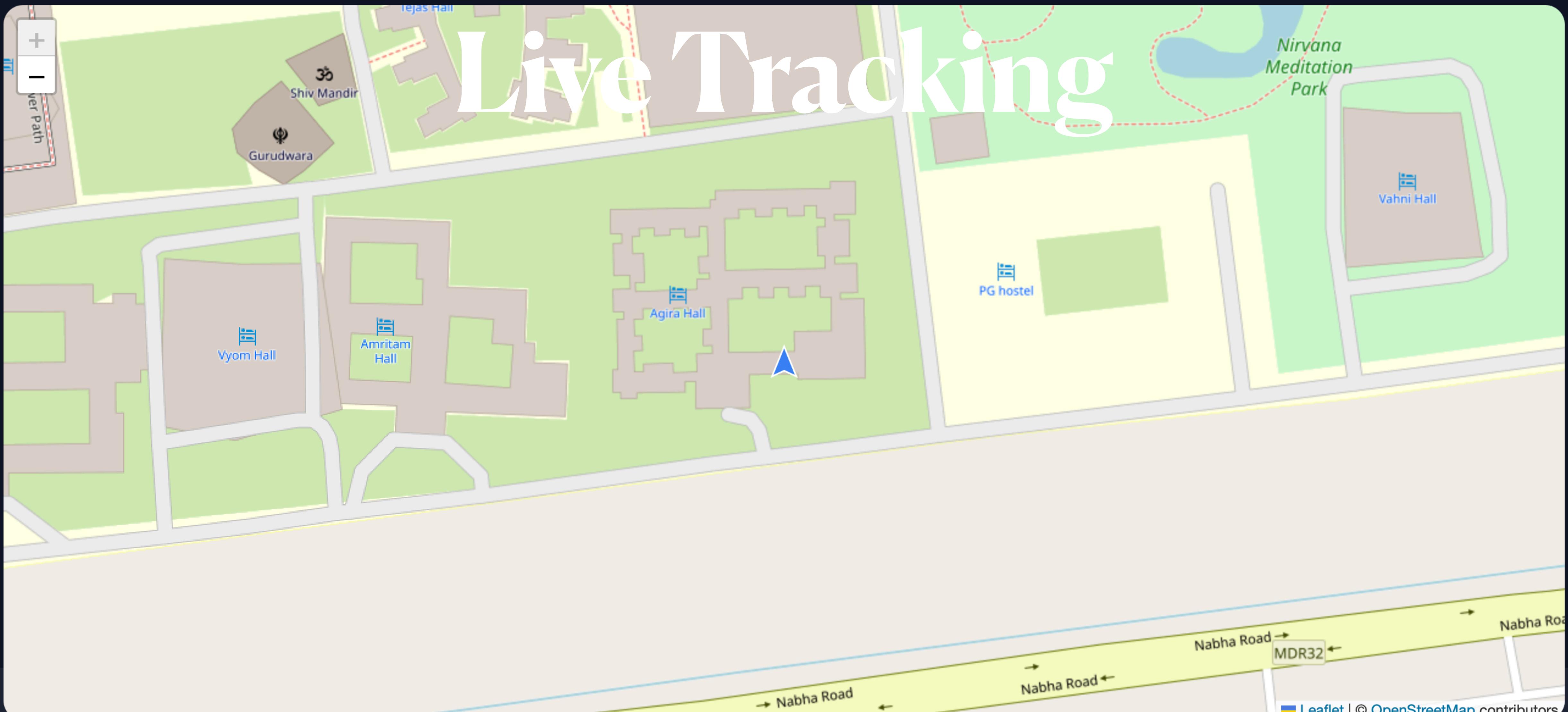
- A simple UI/UX giving options between the current location and destination
- Predicting estimated time for the path
- Use of Dijkstra algorithm to find the optimal path

# Directions



**Showing the optimal path and  
allowing the live navigation by  
clicking the start navigation button  
by detecting live location**

# Live Tracking



Current Location

Destination

Estimated Time



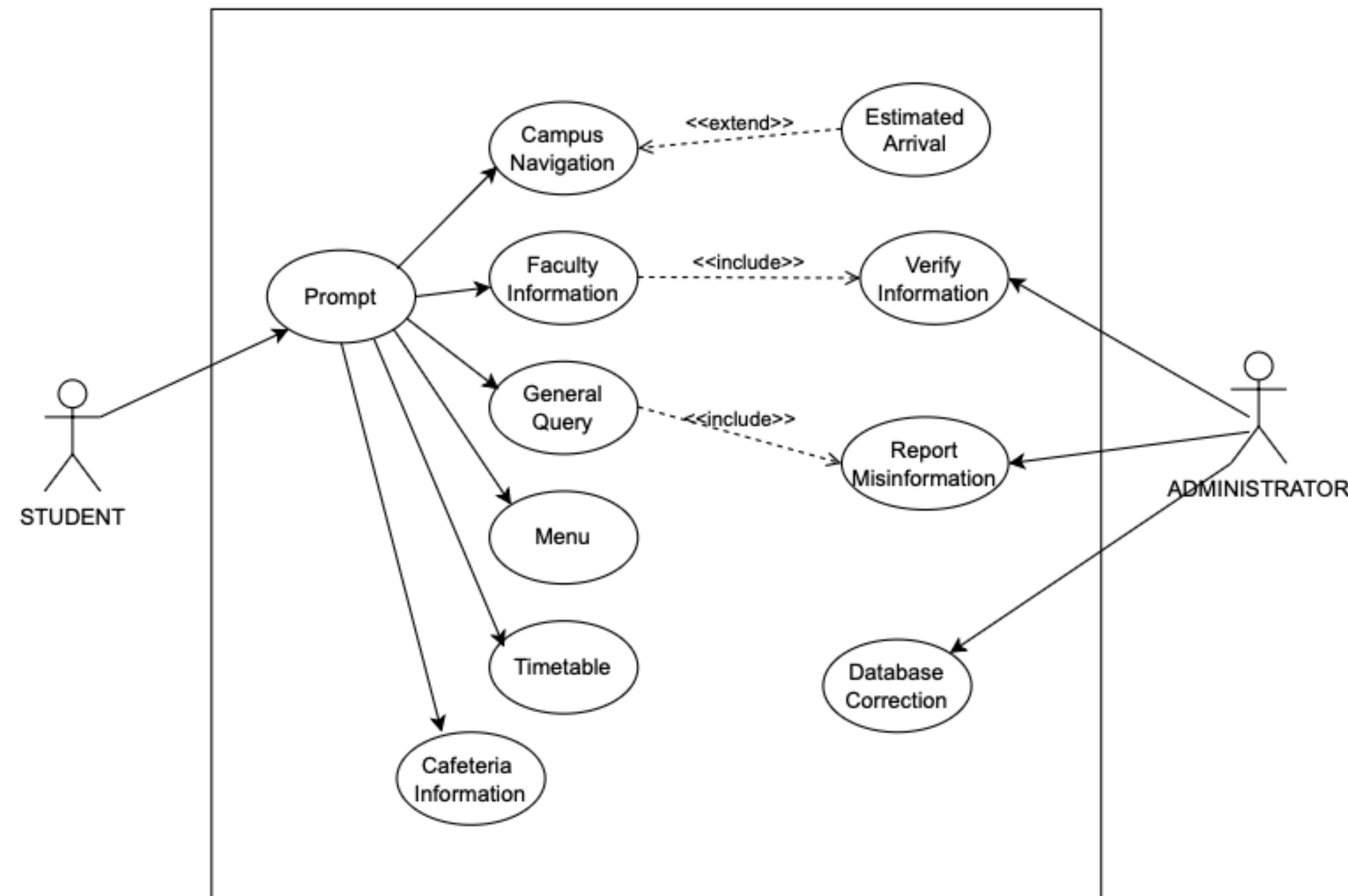
# Diagrams

Code4Good

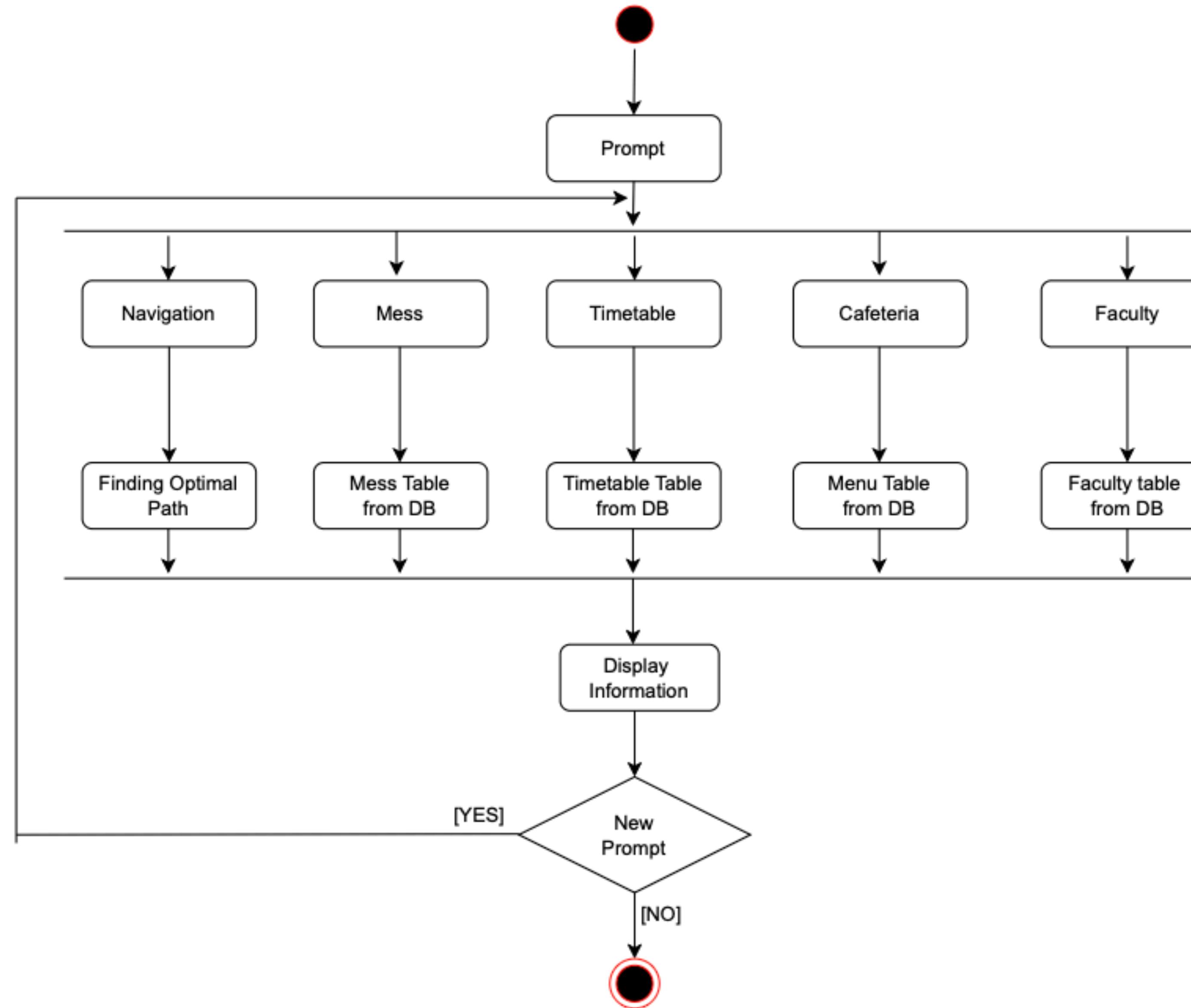
# UserCase Template

<b>1. Use Case Title</b>	Prompt
<b>2. Abbreviated Title</b>	Manages User Queries
<b>3. Use Case Id</b>	1
<b>4. Actors</b>	Student
<b>5. Description</b>	With this facility, user can ask for campus related queries such as Faculty Information,Cafeteria Menu,Timetable schedule
<b>5.1. Pre Conditions</b>	User must be logged in
<b>5.2. Task Sequence</b>	<ol style="list-style-type: none"><li>1. System will show screen to enter prompt</li><li>2. System will also show a sidebar to directly access Campus Navigation</li><li>3. User can search for Queries</li></ol>
<b>5.3. Post Conditions</b>	<ol style="list-style-type: none"><li>1. Use can view his desired result</li><li>2. User can ask for next prompt</li><li>3. User can quit</li></ol>
<b>6. Modification History</b>	Date - 10 October 2025
<b>7. Author:</b>	CODE4GOOD

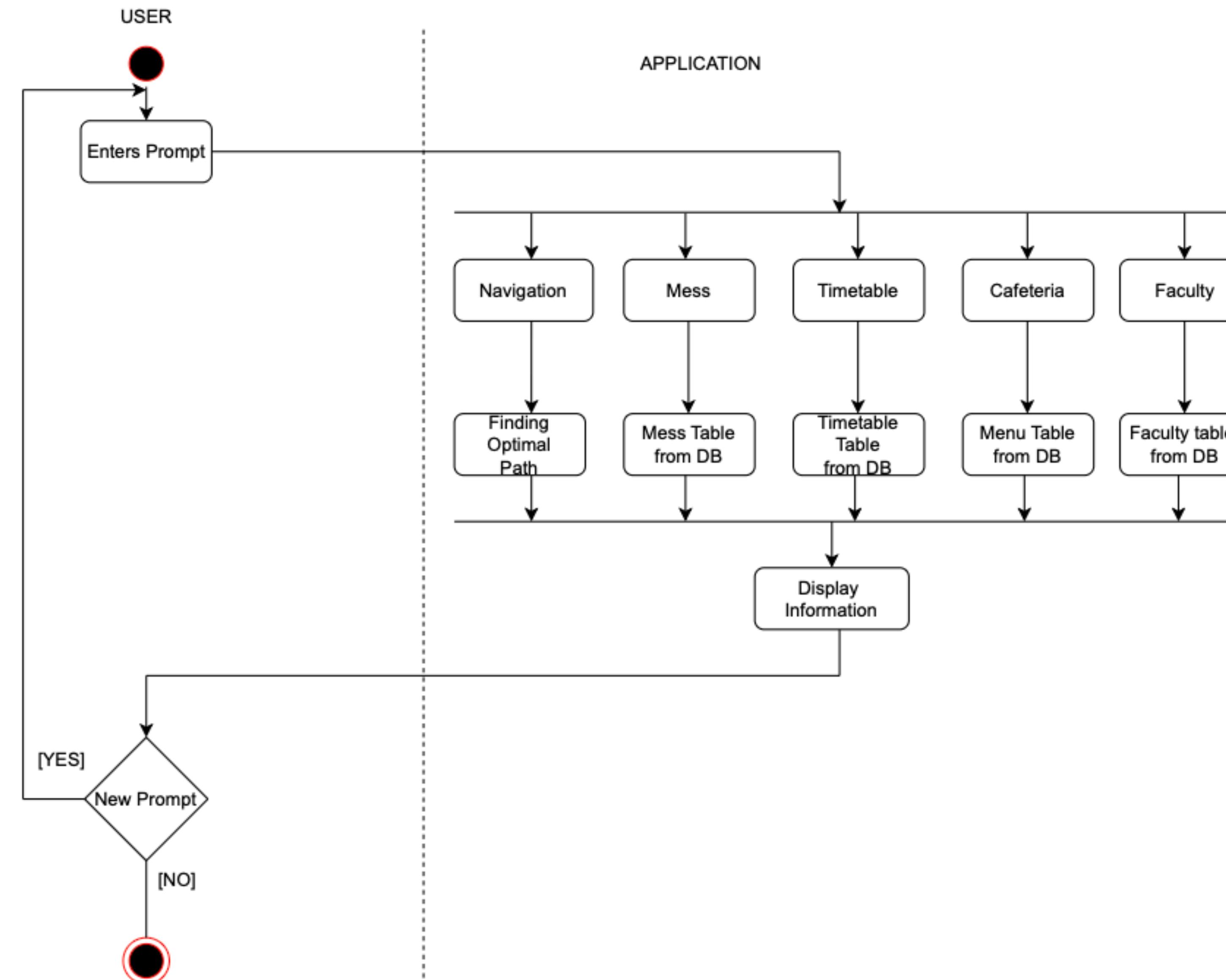
# UserCase Diagram



# Activity Diagram

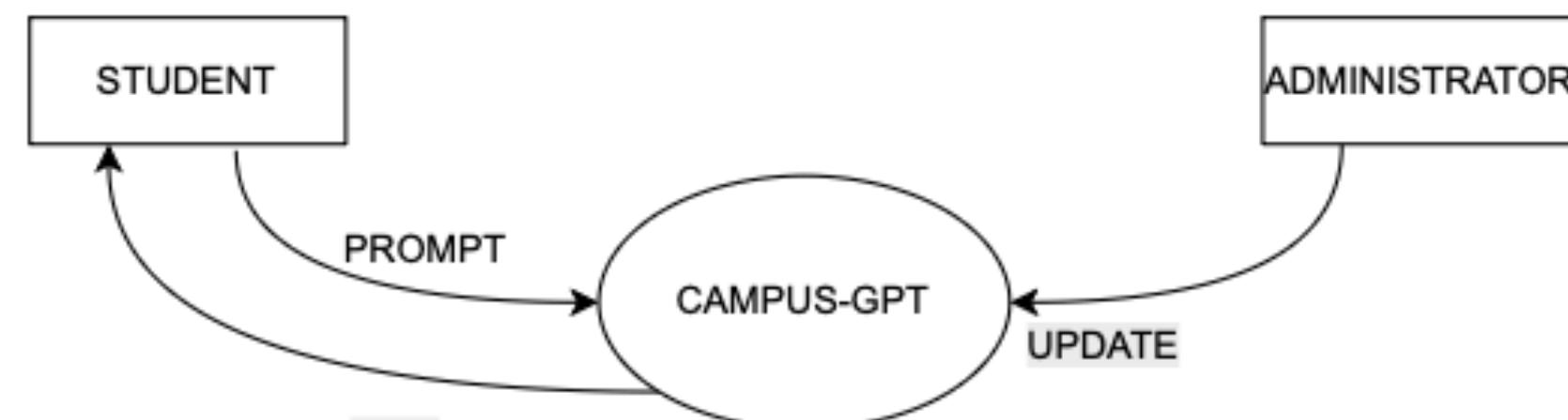


# Swim lane Diagram

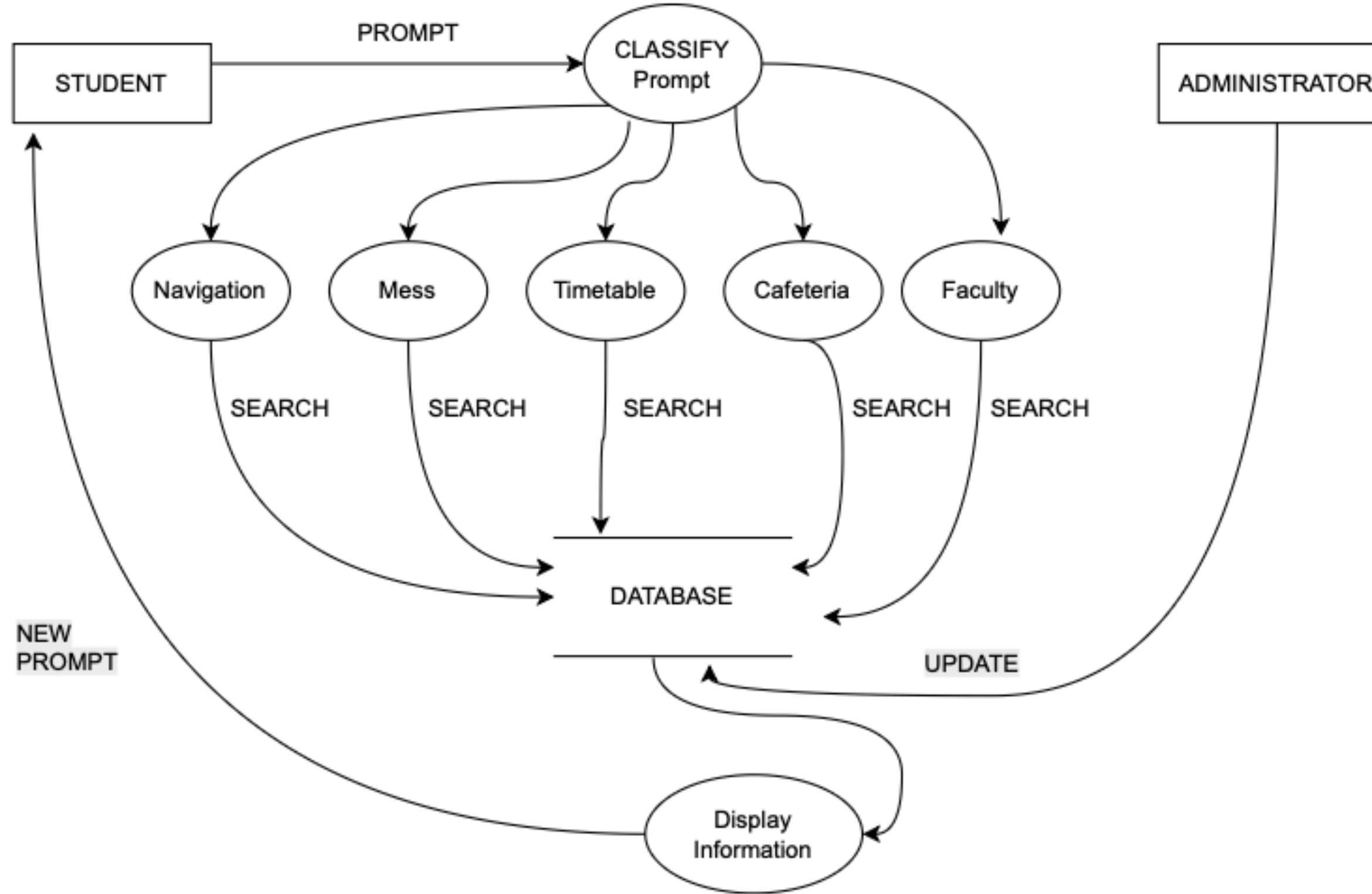


# DFD's

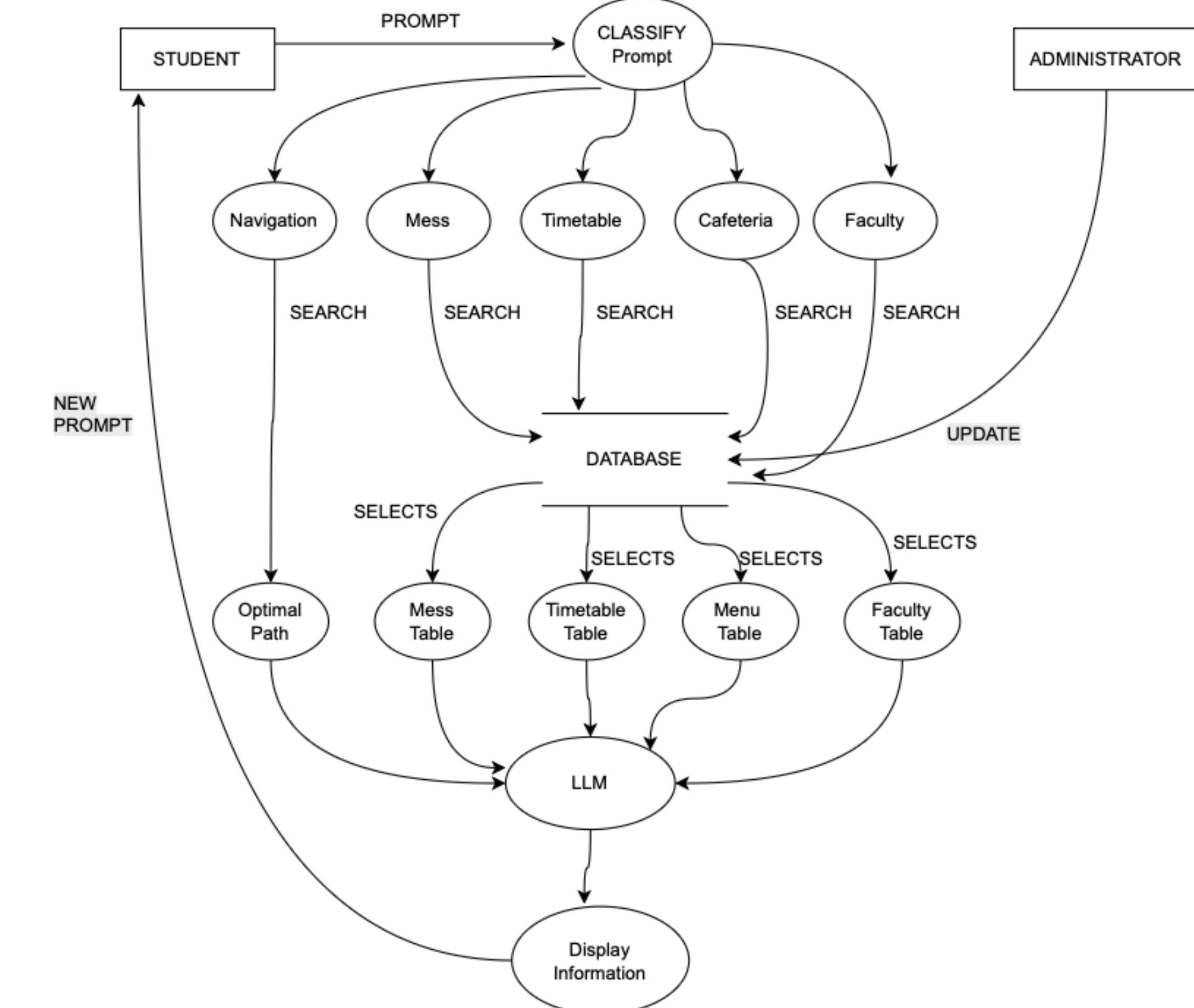
L-0



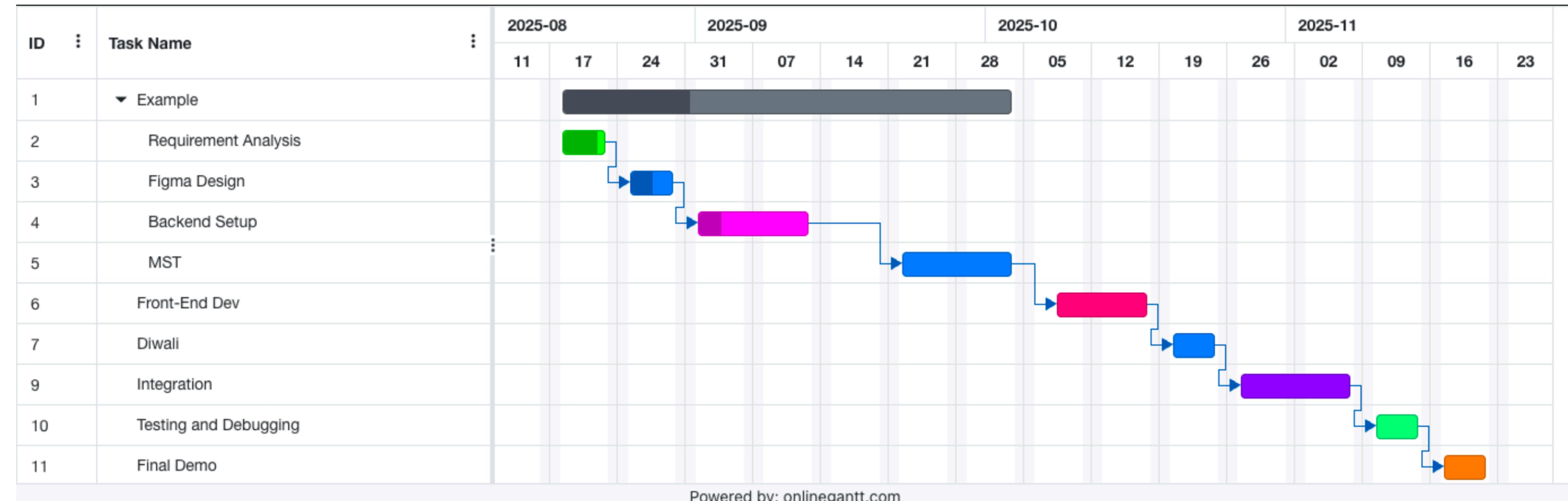
L-1



L-2



# GANNT Chart



# **Future Work/ Next Steps**

## **What we will build in future**

- Timetable:- fetching the timetable data form the websites and displaying it in the chat
- Menu:- updating the mess-menu DB and displaying the correct meal in the chat
- Cafeteria information:- All cafeteria menu as well as scanners to be collected and display on the website
- Integrating LLMs for general query chat like academic related

**We appreciate any kind of suggestion  
that can improve the usage of our project**

**Thank You !**