

UniVerse

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

Kunal Sharma(102303330)
Japnit Singh(102303334)
Ritika Kaushik(102303079)
Angad Singh(102303331)

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 Data on faculty, mess menus, and administrative processes and directions is scattered across outdated websites, portals, and physical notice boards, wasting valuable time for students.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

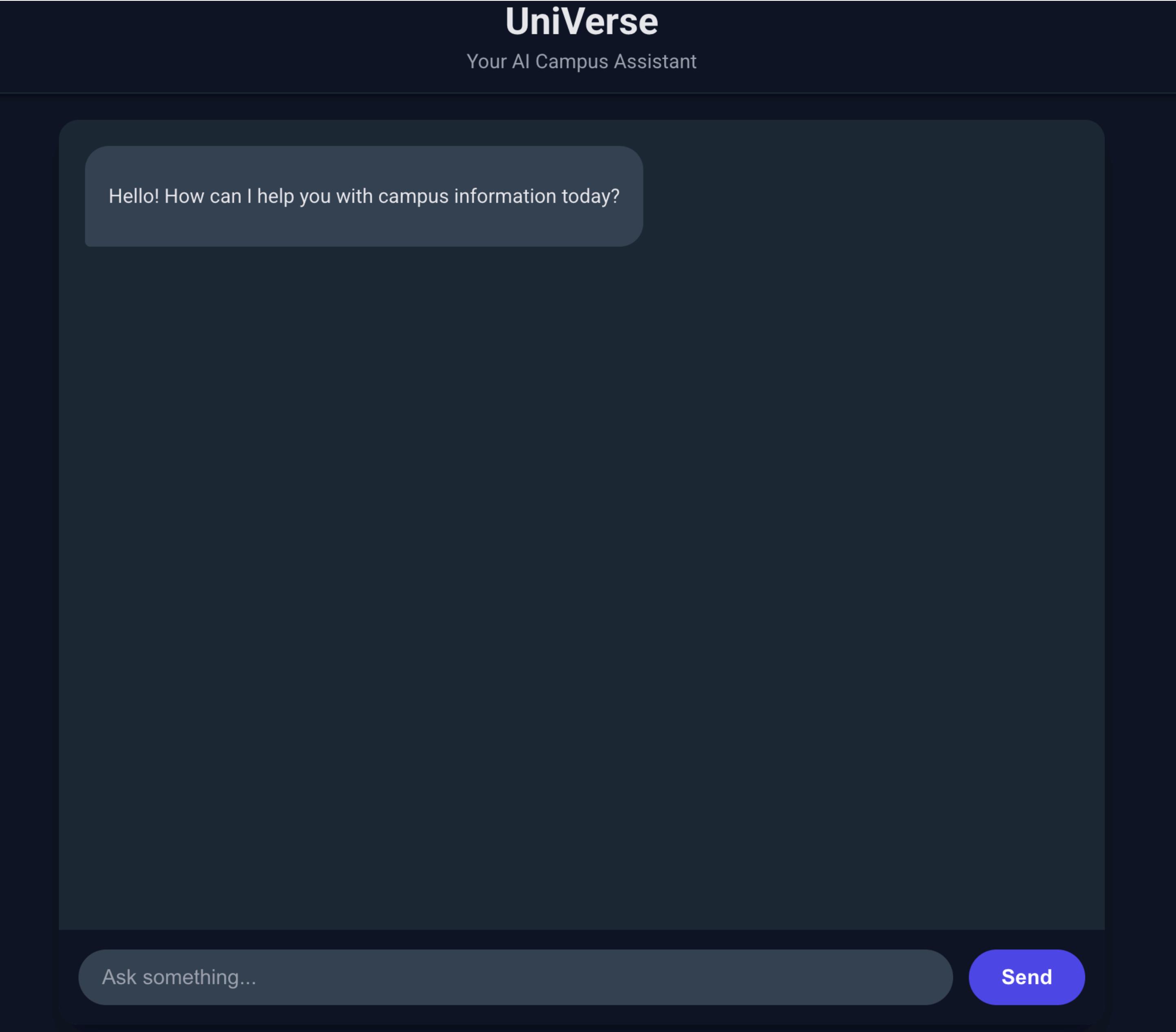
GITHUB LINK:-

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

Landing Page

Welcome page for students

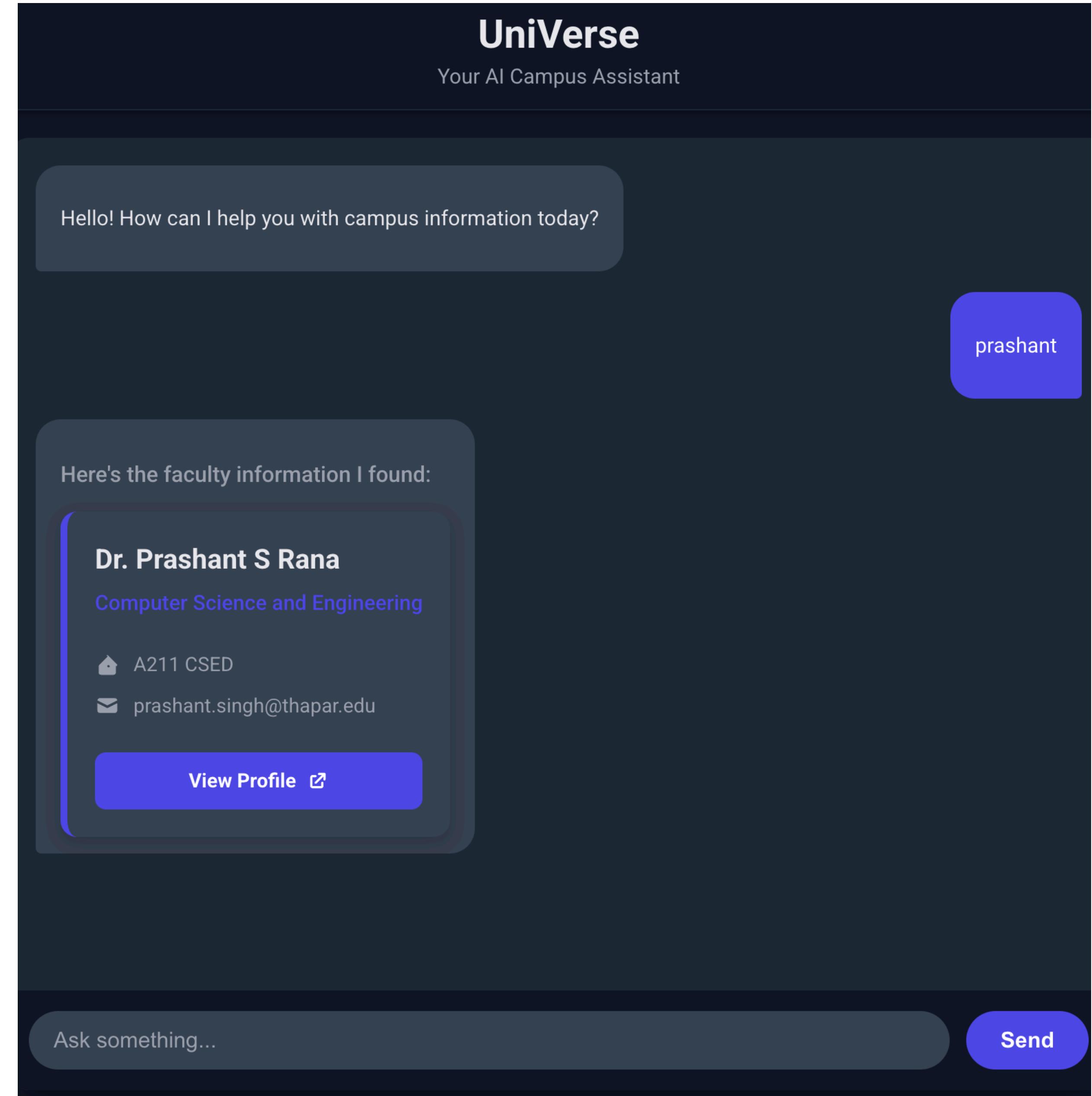
- A simple and interactive UI/UX allowing students to type the prompt into the search box
- Send button sends the prompt to backend that classify the prompt into different categories.
- Simple interface for the application to show the related results into the window.



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

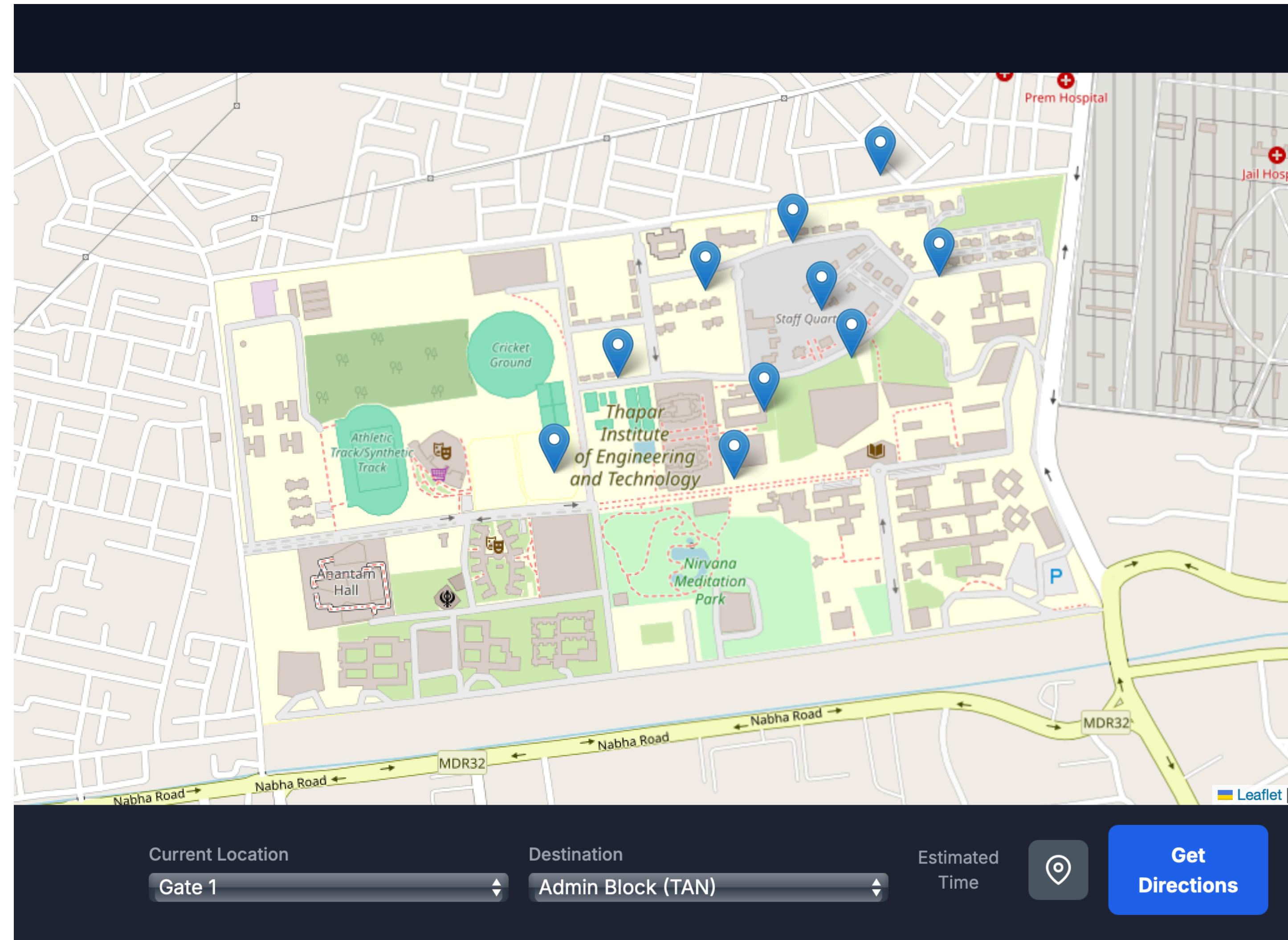
Action Output:

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>

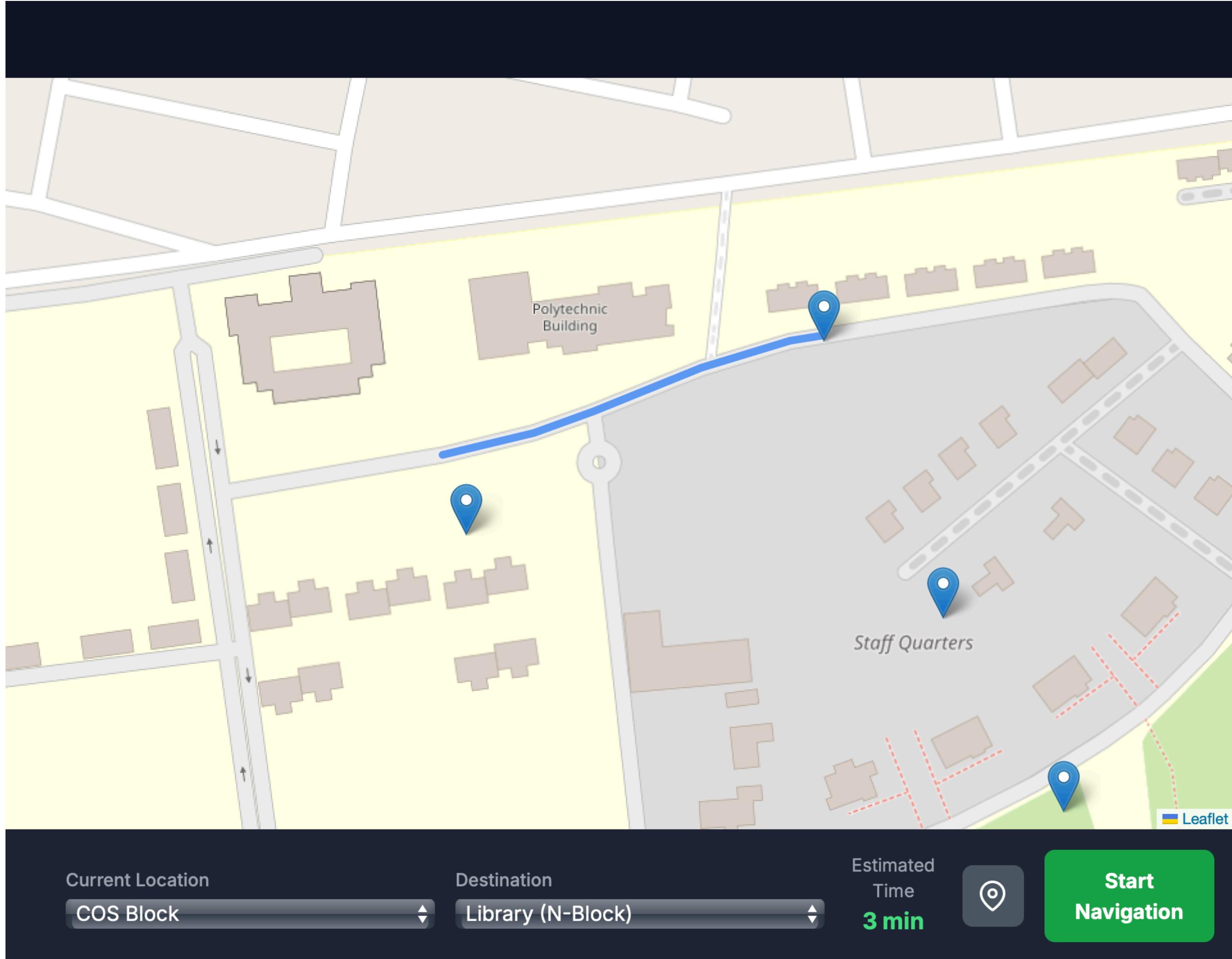
Navigation

Navigating from different parts of campus



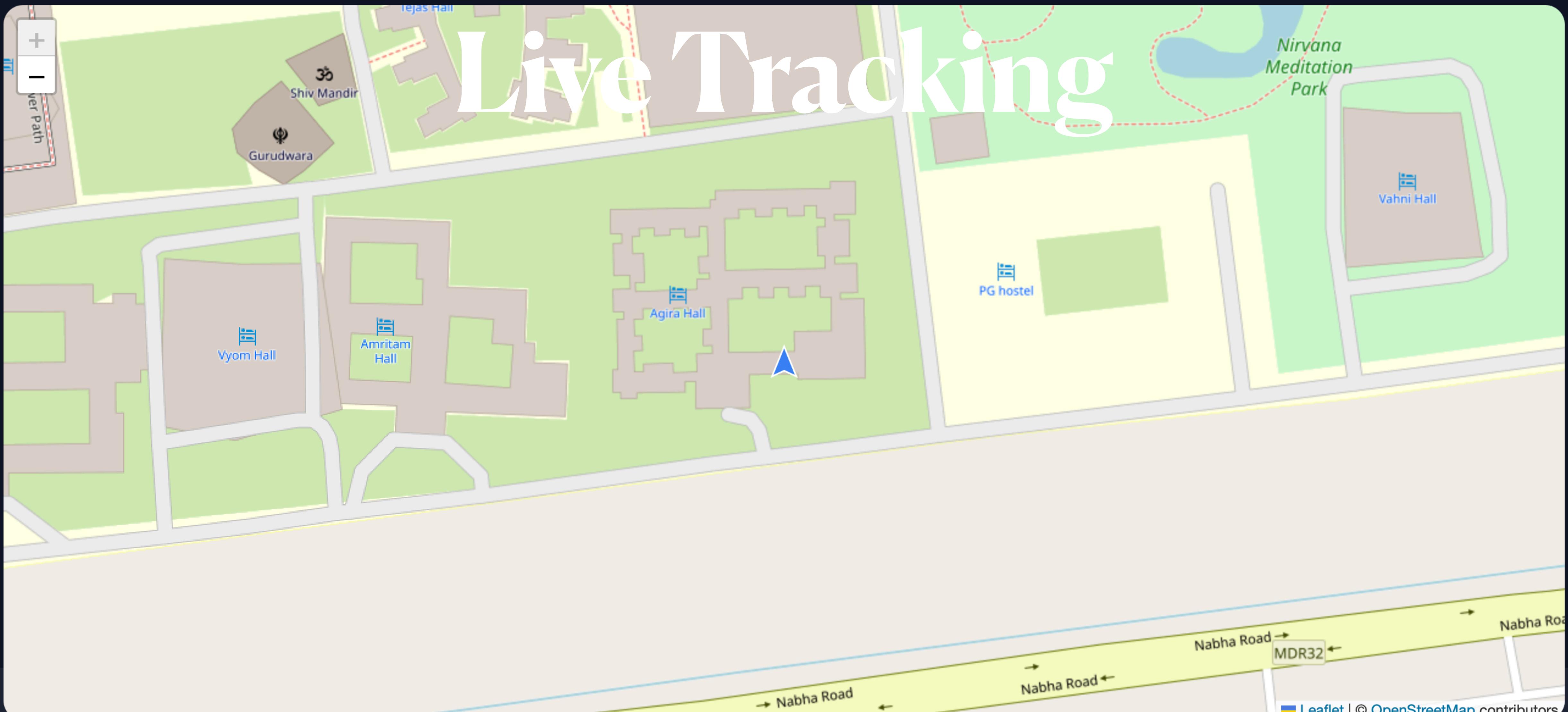
- A simple UI/UX giving options between the current location and destination
- Predicting estimated time for the path
- Use of Dijkstra algorithm to find the optimal path

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



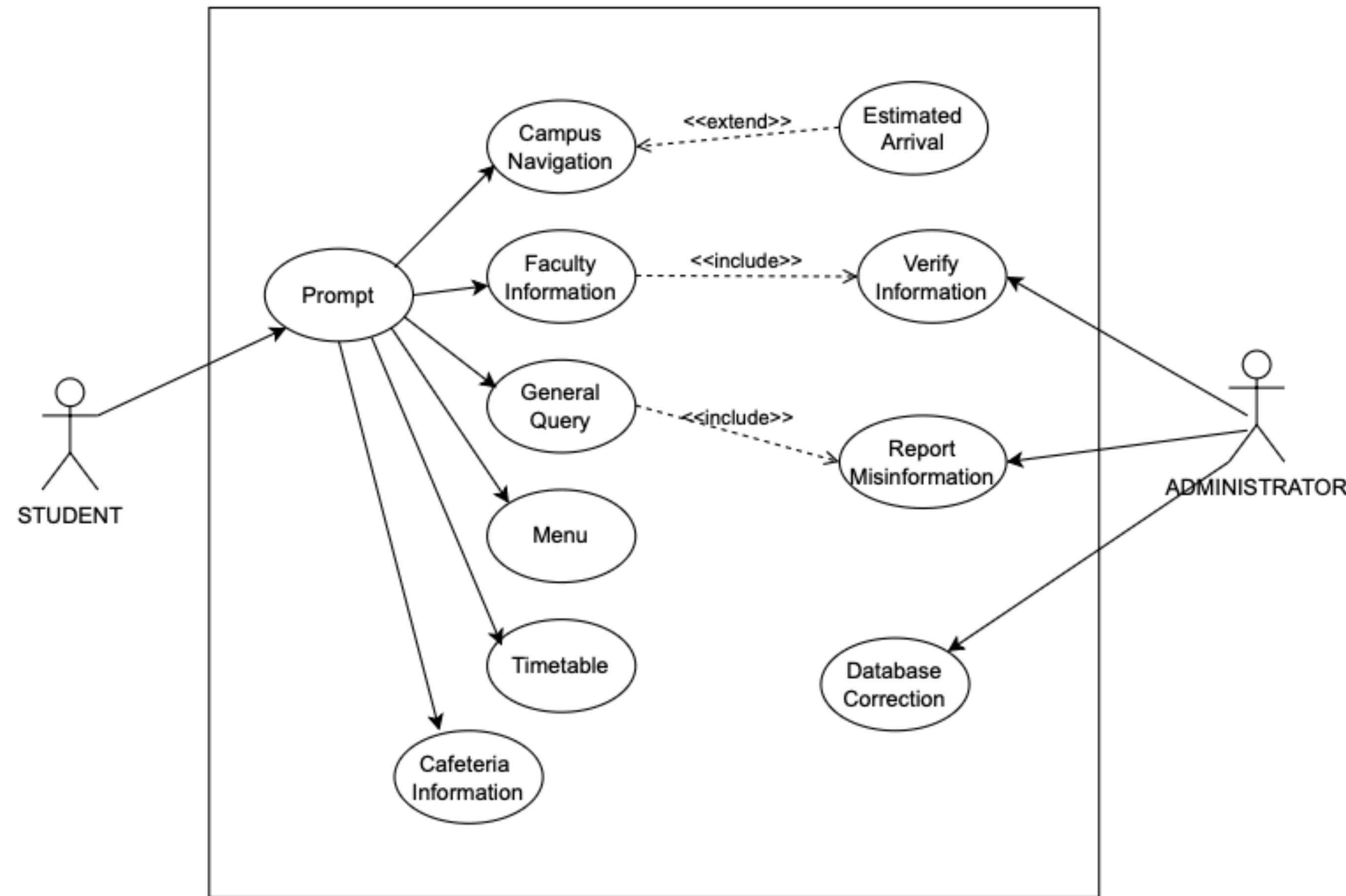
Diagrams

Tech4Good

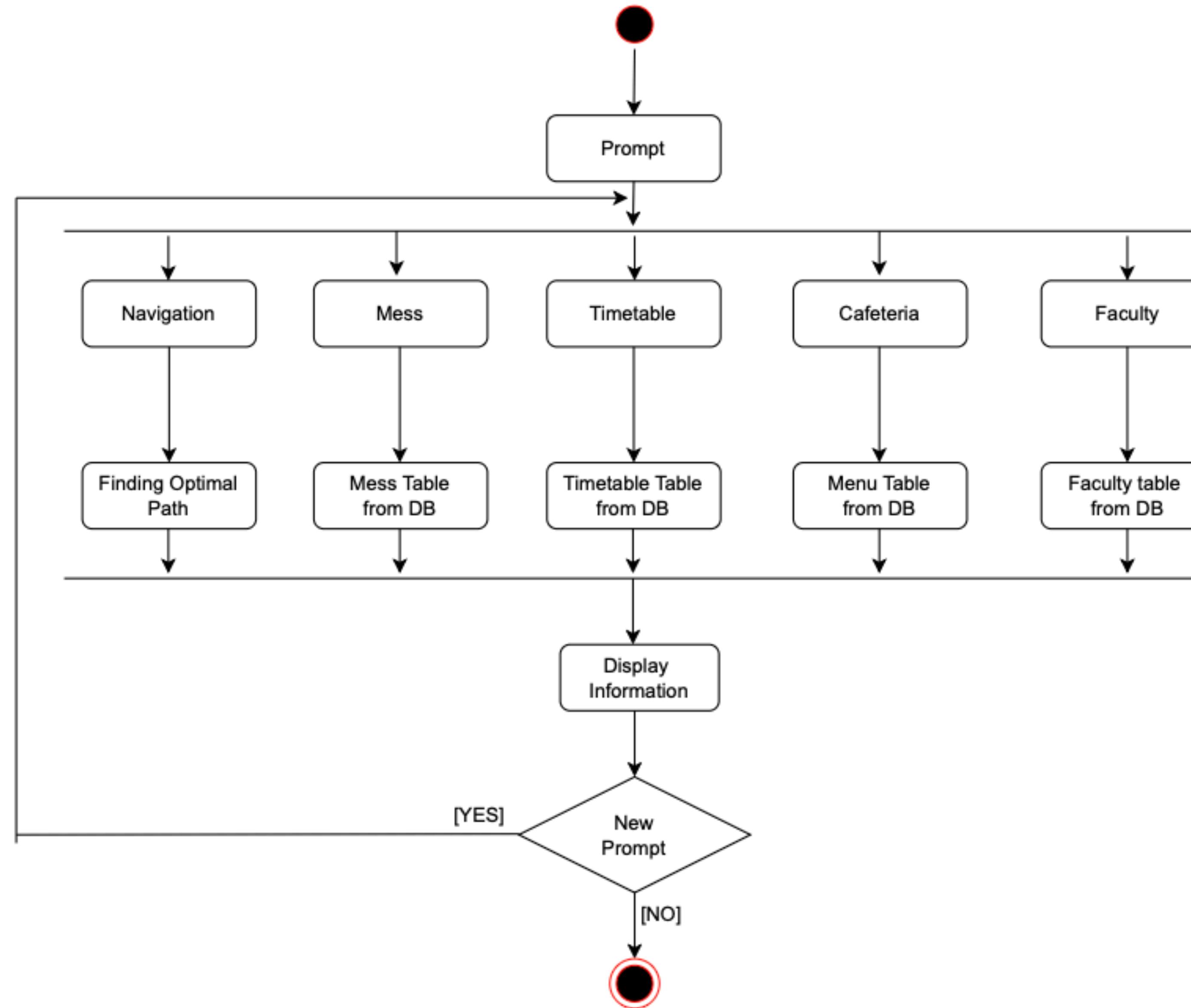
UserCase Template

1. Use Case Title	Prompt
2. Abbreviated Title	Manages User Queries
3. Use Case Id	1
4. Actors	Student
5. Description	With this facility, user can ask for campus related queries such as Faculty Information,Cafeteria Menu,Timetable schedule
5.1. Pre Conditions	User must be logged in
5.2. Task Sequence	<ol style="list-style-type: none">1. System will show screen to enter prompt2. System will also show a sidebar to directly access Campus Navigation3. User can search for Queries
5.3. Post Conditions	<ol style="list-style-type: none">1. User can view his desired result2. User can ask for next prompt3. User can quit
6. Modification History	Date - 10 October 2025
7. Author:	CODE4GOOD

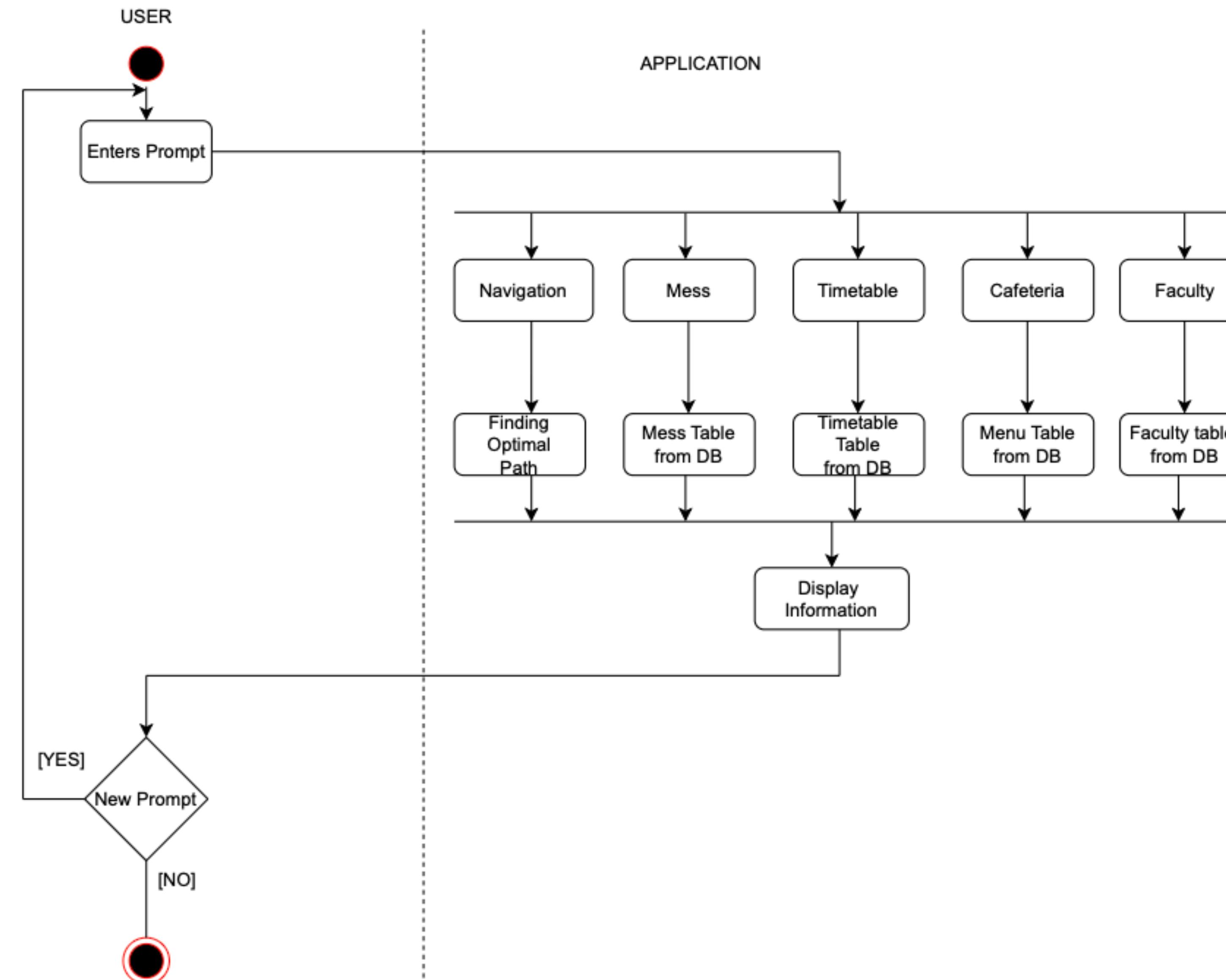
UserCase Diagram



Activity Diagram

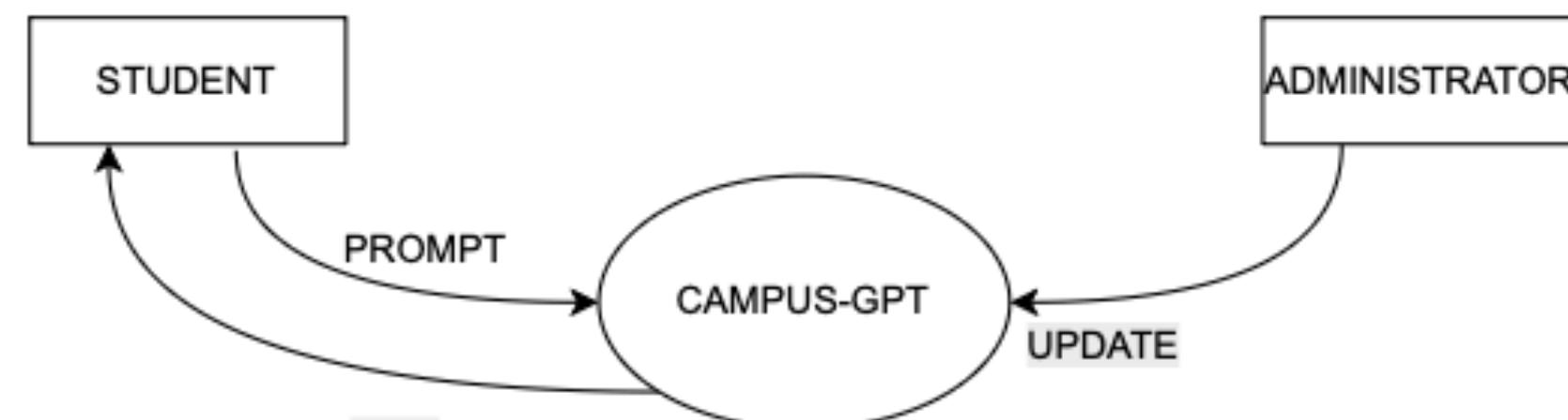


Swim lane Diagram

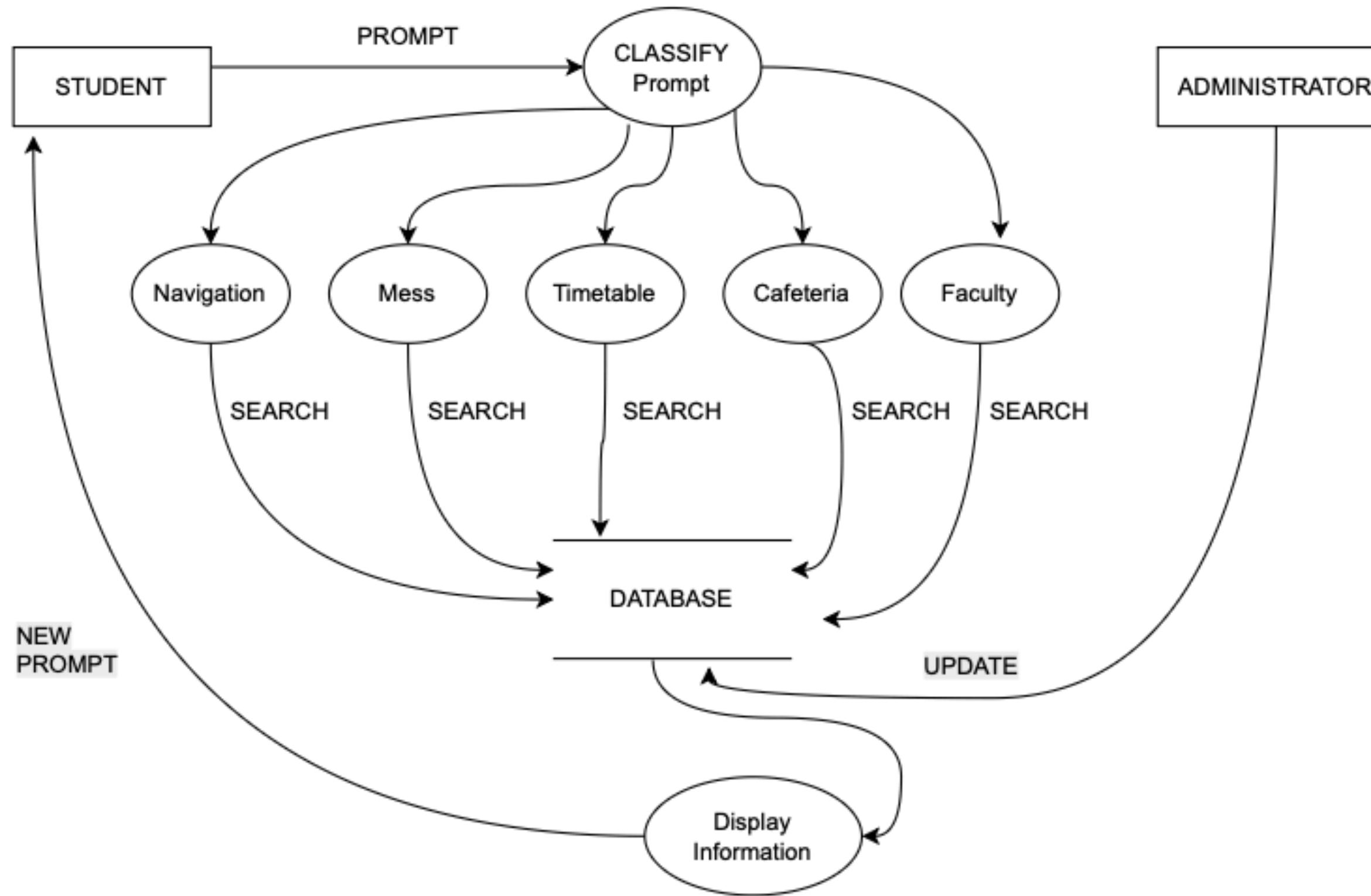


DFD's

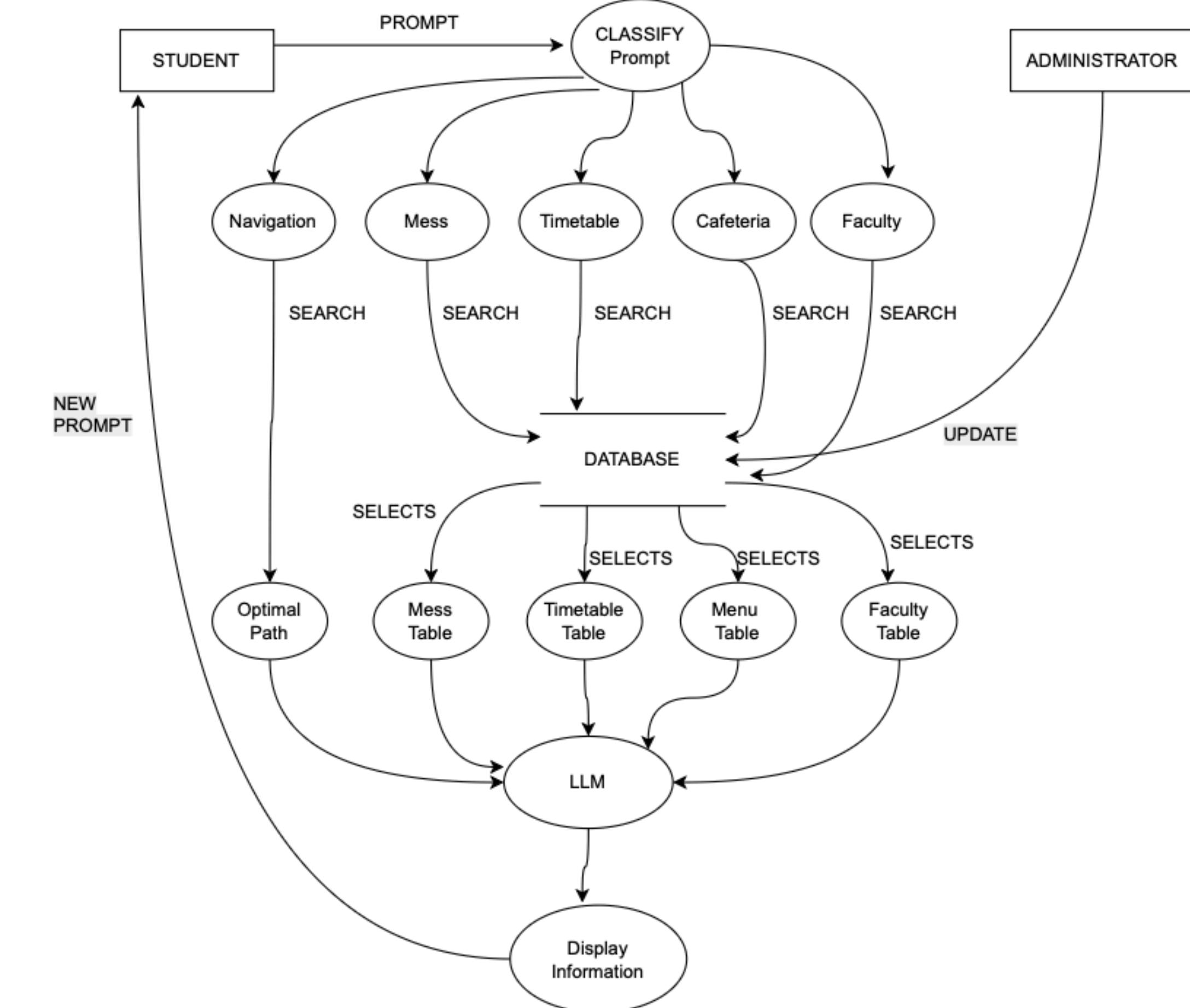
L-0



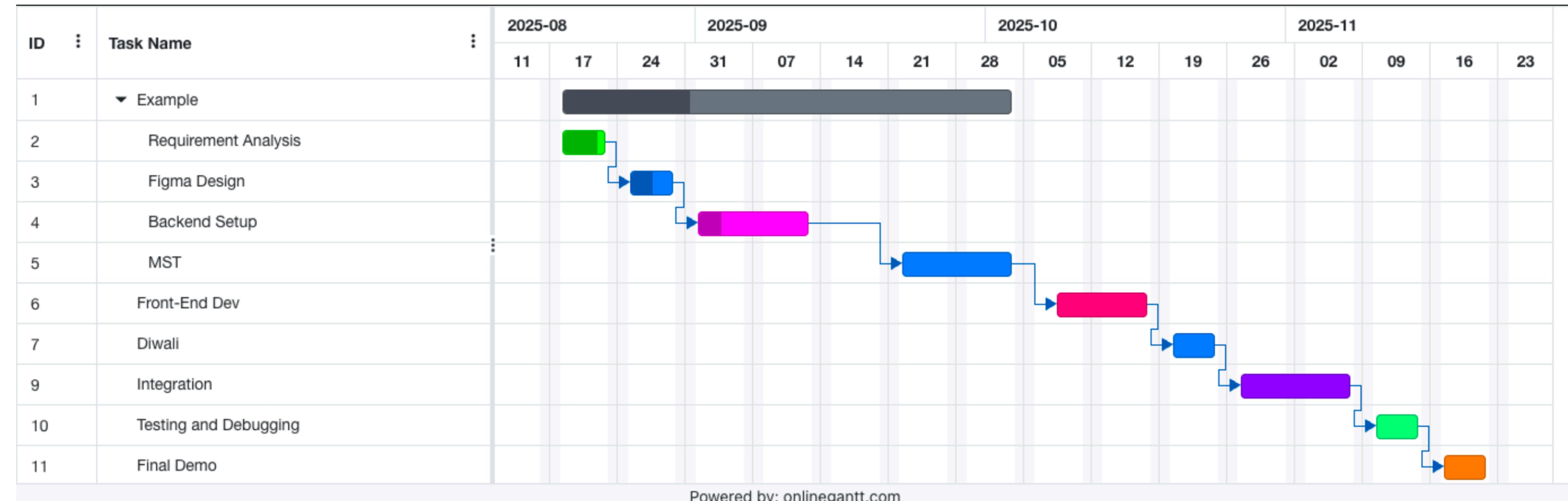
L-1



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 !