

Week 3: Development & Implementation Report

This week's focus was on building the main system features. The bot's logic, navigation, and basic interface have been set up successfully.

Key Achievements:

User Interface & Intent Recognition:

The chatbot can find the route to each of the campus location and help the visitor or the new student guide them to reach their destination.

Navigation & Pathfinding:

- *The navigation system is fully working using a graph model of the campus (locations as nodes, distances as edges).*
- *Four algorithms—Breadth-First Search (BFS), Depth-First Search (DFS), Uniform Cost Search (UCS), and A* Search—have been implemented to find the best path between any two locations.*
- *The system also shows a campus map with location markers and draws the path chosen by the algorithm.*