Plan of Work :

Project Management

Our early work plan has a linear progression that breaks down the entire project into several parts. Then assigned to each group member. We hope that every part of the project will be completed smoothly. In order to improve work efficiency and quality of work, we divided the team into groups to do the following:

Initial Plan of work :

|  |  |  |  |
| --- | --- | --- | --- |
| Milestone | Original Deadline | Date completed | Group |
| Navigating data collection for user needs | 3/29 |  | Palmer and  Caden |
| Traffic data collection | 4/14 |  | William and  Chandler |
| Weather data collection | 5/3 |  | Guy and Jay |
| Initial database script | 5/17 |  | William and  Caden |
| Schedule a navigation route | 5/31 |  | Palmer and  Chandler |
| Traffic algorithm and direction algorithm | 15/6 |  | Guy and Jay |

Final history of work:

|  |  |  |
| --- | --- | --- |
| Milestones | Completion Date | Group |
| Initial database script |  |  |
| Traffic data collection |  |  |
| Weather data collection |  |  |
| Traffic algorithm and weather algorithm |  |  |
| Flow algorithm and direction algorithm |  |  |
| Create a user profile database |  |  |
| Traffic map |  |  |
| Navigation software user interface |  |  |
| Schedule a navigation route |  |  |
| Mobile integration test |  |  |
| user experience |  |  |

Current achievement

1. Navigate the data collection of user needs, analyze the data, and determine the research direction.
2. Create a navigation system and user profile database
3. Flow algorithm, direction algorithm, traffic and weather prediction algorithm.
4. Improve the accuracy of traffic maps.
5. Design the user interface of the navigation software.
6. Traffic conditions and weather updates in real time.
7. Mobile traffic data report.
8. Scheduled reservation navigation service

Our current navigation software provides services on mobile mobile devices. Users can visit the website, log in and verify the user, and locate the location of the user in real time. The navigation software plans the best route and alternative route according to the user's needs. The traffic monitor is for the user. The navigation route is monitored in real time and fed back to the central management system to predict traffic and weather emergencies and to plan the most appropriate route. At the same time, our team also created an offline map database, using Beidou satellite to implement positioning, even in rural areas, suburbs and other areas with poor network signals can be navigated. The software page allows you to view traffic maps offline, 3D map mode, and emergency services. Compared to other navigation software, our products can provide scheduled appointment navigation route service, so we need to establish a reservation mode navigation route database. Finally, our data collection script runs without problems.

# Future of work :

For our current navigation software, we will do a lot of work in the future to improve and optimize the software to provide better services to users. The huge data information will destroy the existing database information, so it is very important to improve the user information

database. More accurate calculations of driving speed, time, weather, traffic and the user's current location. We can establish a database of information on traffic accidents based on the user's driving route and the location of the traffic accident, reminding users who will pass the accident site and providing appropriate driving speed or other routes. The accuracy of navigation depends on our algorithm, and we must improve and improve the algorithm. The traffic information database needs to be updated frequently so that users can view the latest traffic information. Improve the speed at which traffic monitors collect traffic accident information and be able to view road conditions. For the navigation system in the reservation mode, the requirements for planning the navigation route are very high. After the judgment of the traffic monitor, the comprehensive information such as the prediction of the weather satellite can finally plan the best route in advance. Therefore, we need to improve the accuracy of the number of road traffic monitors, flow algorithms, direction algorithms, traffic and weather prediction algorithms.