Milestone 2 Project Evaluation

Team Members:
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Client Name:
Dr. Phillip Chan –pkc@cs.fit.edu

Affiliation: Florida Tech

Meeting Dates:
                    3/1/2024
                    3/15/2024
Scheduled: Fridays Bi-Weekly at 3pm

Progress Milestone 2

Task	Completion	Austin	Jason	Jacqueline	Hunter
Develop and test user interface for first half of user profile setup (input schedule, location, other preferences)	80%	25%	25%	25%	25%
Develop and test second half of user profile (friendlist, privacy, user statistics…)	80%	25%	25%	25%	25%
Develop and test database integration into the web application	100%	25%	25%	25%	25%

Develop and test routing/map integration using assumed groups	80%	25%	25%	25%	25%

Discussion (at least a few sentences, ie a paragraph) of each accomplished task (and obstacles) for the current Milestone:

Task 1 (Profile Setup 1): The first half of the user profile creation is completed, with the user interface displaying pages/fields for users to enter their basic information, location information, schedule information, and their carpooling preferences. In the Profile page, the user can enter basic personal information, such as their name, phone number, gender, and carpooling role in the application. The user's location information (such as address and pick-up/drop-off location) and their carpooling schedule (displayed using a calendar api) are also included on this page. The user preferences page allows for users to select between the safety, cleanliness, and comfort preferences detailed in the Requirements Document.

Task 2 (Profile Setup 2): The second half of the user profile creation included implementing and visualizing the friends list, privacy options, and user statistics. The Friends page allows users to see and manage their list of friends. It displays their friends' names and activity status and allows users to invite a friend to their carpool group or remove a friend from their list. The privacy options in profile management allow users to control the visibility of their sensitive information, such as their home address and phone number, to other users. Users' driving statistics, including Driving/Riding miles and net driving miles for Drivers are also displayed when a user manages their profile.

Task 3 (Database Integration): This task is complete, all databases tables were created in the database. The tables were created according to the design and requirements document with slight modifications during the database integration into the web application. The biggest modification was to the preferences table where in the design document we had a column for the name of the preference, a value and then the user id for the user the preference was for. This was modified so that each preference was a column name and the value was the value for the user id that is in that row, that way all rows represent a single user with all of their preferences. This lowers the amount of time we have to take to process when inserting and returning from the database.

Task 4 (Routing/Map Integration): This task is completed and was completed with modularity in mind. Currently a test user interface was created to show off using the Google API to generate routes with a variable number of stops. This can easily be modified to generate directions for the driver. A link directly to google maps is also there to show the ability to link users directly to google maps which will work on mobile and

open the google maps application if it's available. In order to show where stops are in a more visually appealing way we will attempt to add red markers at each of the stops along the route.

Discussion (at least a few sentences, ie a paragraph) of contribution of each team member to the current Milestone:

Austin Phillips: During this milestone I implemented a user interface that takes in a starting location, end location and 0 or more stops. After the user inputs the locations they want and press the button to generate routing information a map with a route that goes to all the stops and ends at the end location. On the map it displays the route, stops, and the total estimated time. This is done by using the Google API. I also created tables for the database as described in the design document. For each of these tables I created a data class in which SQL queries are specified for a table and a model class so that each column value has an attribute in that model to map to. This is to support modularity between tables and to separate logic and data access. I have started working on making user interfaces for performing CRUD operations on each table through the web application for system administrators to use.

Jason Smith: During Milestone 2, I expanded the user Profile page to include privacy settings for users' phone number and address information and implemented a separate Preferences page allowing users to enter their carpooling preferences as detailed in the Requirements Document. I also implemented a Friends page which visualizes the user's friend list by displaying friends' names and their activity status. Users will also be able to search for friends, invite a friend to their carpool group, and remove a friend from their friends list on this page.

Jacqueline Torres: On this current milestone, I created the User Detail page that will provide a solid base into viewing profiles. The User Detail page allows for a smoother flow between webpages. For example, this page will display the amount of friends you currently have and are able to click that number and will guide you to your friends list. This page allows you to toggle from a "Driver" or "Rider" role which will display different information such as getting directions as a driver or searching for your driver as a rider.

Hunter Smith: In Milestone 2, I developed the Friends List page up from its basic implementation. I added a second section of the webpage for incoming friend requests. I made the friends list update dynamically, so any changes a user makes will be instantly shown. I also added buttons to friends' names, allowing users to add and decline friend requests, as well as remove previously added friends. I made sure to future proof the page, so when database implementation is added, only basic functions will need to be updated.

Task Matrix for Milestone 3

Task	Austin	Jason	Jacqueline	Hunter
Complete remaining profile tasks.	25%	25%	25%	25%
Develop and test algorithm for carpool group recommendations	25%	25%	25%	25%
Develop user interface for showing user carpool groups and allow users to create/form groups	25%	25%	25%	25%
Develop and test real time tracking and route creation	25%	25%	25%	25%

Discussion of each planned task for the next Milestone:

Task 1: To complete the remaining tasks from milestone 2, we will implement uploading of a driver's car to the users profile area to complete the user profile area. We will also complete the scheduling area by allowing users to set up recurring events in their calendar and allowing them to enter an Earliest/Latest arrival/departure time along with their desired time. The two smaller subtasks are to set the music preference to default to no preference and to move the privacy inputs to the settings/manage tab.

Task 2: With developing the algorithm for carpool group recommendations we will need to first establish how we will quantify the 4 inputs to the algorithms. The three inputs are number of seat belts, users schedule, how close users are to each other, and user preferences. The input that will need the most thought and considerations is the preferences.

Task 3: Expanding on Task 2, we will develop the user interface for viewing and forming carpooling groups based on the recommendations algorithm. First, users will be able to view a brief profile of members in the recommended group. This brief profile would display a user's name, profile picture, role in the group (rider or driver), and the user's rating. Users will also be able to view an expanded profile of other group members. Users may then accept or deny group recommendations made for them. If they deny the recommendation, they will either be recommended another group or be prompted to form one manually. This interface is detailed in Section 3.3 of the Requirements Document.

Task 4: To develop and test real time tracking and route creation, we will implement a Rider's view of their group's Driver when a trip has started. The Rider can view the Driver's vehicle location and their distance from the next pick-up location. Riders will also be able to see the Driver's estimated time of arrival to their pick-up location. This information will be accessible to Riders in a group after the Driver has started the route.

Date(s) of meeting(s) with Client during the current milestone:
- 3/1/2024
- 3/15/2024

Client feedback on the current milestone
- See Faculty Advisor Feedback below

Date(s) of meeting(s) with Faculty Advisor during the current milestone:
- 3/1/2024
- 3/15/2024

Faculty Advisor feedback on each task for the current Milestone:

3/1/24 Meeting -
Task 1c. focus on the "self" view of the profile. (We can worry about how one can view others later on, which contains a subset of the items in the profile)

Task 4. Integrating addr info and routing on a map

    a. Create at least 4 users with address (location) info

    b. Assume they are carpooling, show a route on a map for one user/driver to pick up the other 3 on the way to FIT. Assuming the same group and driver, show a route from FIT to drop off the others.

3/15/24 Meeting -
Task 1 and 2:
1. Upload image for Car
2. Recurring Schedule
3. Find/Search for friends
4. Preferences: no preference default
5. Move privacy information to Settings/Manage tab

Task 4: Add icons/markers for pick-up locations/stops

Faculty Advisor Signature: _____ Date: _____