Panther Carpooling & Parking

Milestone 5







Team Members

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Overview of Milestone 5

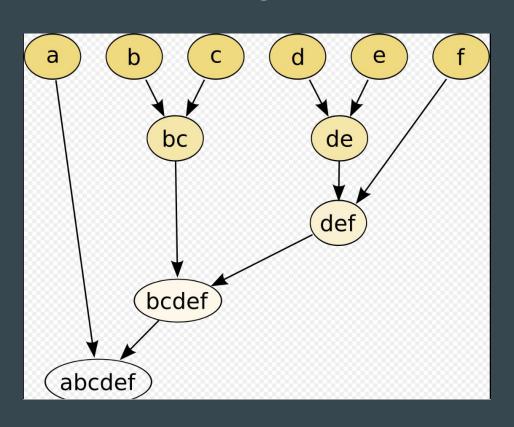
- ☐ Group Recommendation Page & Algorithm
- ☐ Application Home Page
- Comments and Reports System
- → Friends System
- Expectations for Milestone 6

Group Recommendation

- Current Capabilities
 - Hierarchical Agglomerative Clustering
 - Currently used to merge groups together to form groups of users based on their preferences and distance.
 - Both distance and preferences are weighted equally
 - View Group Info
 - Users can view more detailed information by clicking the group they are recommended
 - Joining Groups
 - Users can freely join and leave groups with the database being updated on all operations

Group Recommendations Demo

HAC Diagram



Group Recommendation

- Improvements
 - K Means Clustering
 - This will be needed as the user base grows due to how long the HAC algorithm can take to run
 - Test HAC
 - Test HAC only using preferences or distance for scoring
 - Improve Group Information Page
 - Add Group Map section so the user can view on an interactive map where group members want to be picked up
 - Add Preferences matrix section so users can see how well they match and in what areas

Home Page

FIT Carpool Group Finder Florida Tech Welcome! Welcome to FIT Carpool Group Finder, where commuting just got a lot easier for students like you! Log in to connect with classmates and make your journey to class a breeze! AlexTest@my.fit.edu Password Cen Remember me Forgot your password? Log in Don't have an account? Sign Up Didn't get an E-Mail? Resend E-Mail Confirmation This site is currently under construction by Austin Phillips, Hunter Smith, Jason Smith, and Jacqueline Torres.

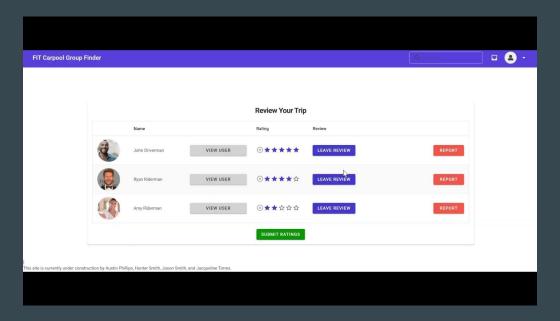
Home Page

To-do:

- Make Style Changes
 - Multiple Upcoming rides/friends displays in individual cards
- Change Direction Wording
 - arrival/departure -> arriving/departing to/from school
- Add the Ability to start trip as driver or view trip details as a rider
- Add Pre trip, current trip, and post trip
- Friends
 - Add profile picture, name, and link to user details

Comments and Reports (After Trip Page)

- Leave Ratings, Comments, or Reports for members of your previous carpool trip
- Ratings and Comments are displayed in a user's User Details page



Friends System

Added checks on Friend Requests

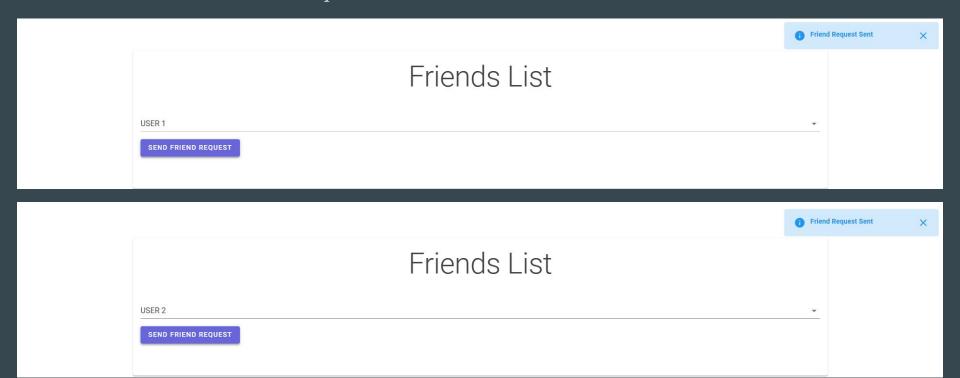
- You can not friend request yourself
- You can not friend request someone you've already friended
- You can not friend request someone you've already friend requested
- Friend requesting a user who sent you a friend request automatically adds them

Also....

Has been updated to notify a user when their friend request is denied

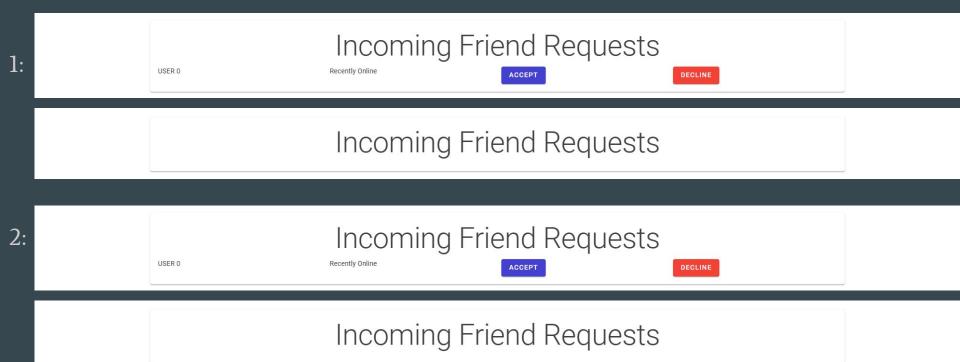
Friends Demo

USER 0: Sends a Friend Request to USER 1 and USER 2



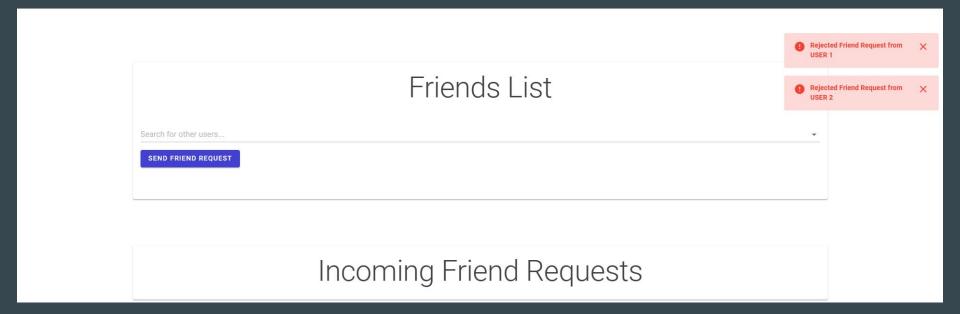
Friends Demo

USER 1 and USER 2: Both decline the Friend Request



Friends Demo

USER 0: Refreshes the page



Progress Matrix of Milestone 5

Task	Completion	Austin	Jason	Jacqueline	Hunter	To do:
Group Recommendation for 32 students, 8 east, 8 west, 8 north and 8 south	75%	100%	0%	0%	0%	Implement K-Means clustering, perform testing with
Develop and test a home page that displays the user's upcoming trips	60%	0%	0%	100%	0%	Needs to be better formatted
Develop and test a group management page	95%	100%	0%	0%	0%	Link this page on the home page so it's easily accessible.
Integrate accept and deny group recommendations into the database	100%	100%	0%	0%	0%	N/A
Develop and test after trip page (comments and reports)	95%	100%	0%	0%	0%	Display users from previous trip
Develop and Test a friends request system for adding and removing users from a friends list	95%	0%	0%	0%	100%	Further testing

Milestone 6

- Group Recommendation test for 64 users (16 east, 16 west, 16 north and 16 south)
- Add tables to group view page for users to view how good of a match the users are
- Modify the home page to display upcoming user trips
- Modify users rating to display numerical value (IE half stars) and After Trip page to display trip members
- Evaluation of Group recommendation algorithm accuracy
- One demo video for the main features: group recommendations, pre-trip, during trip, post-trip

Thoughts, Questions, Suggestions?