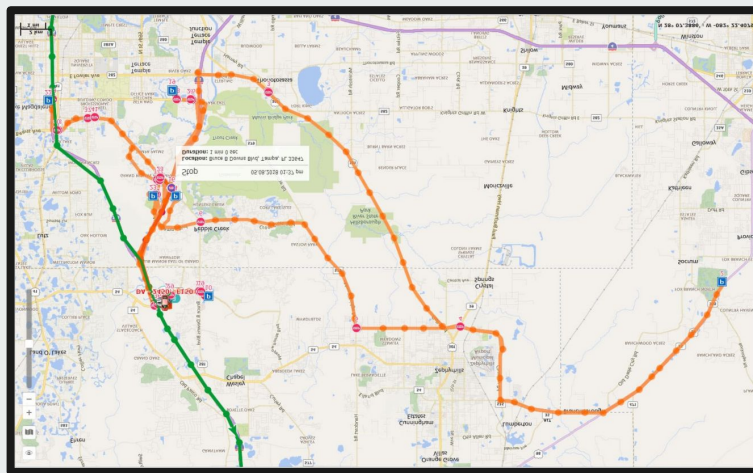


Team 6: Trip Tracker


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Nominal Use Scenario

User logs in, starts a trip, completes it, uploads data

Admin logs in, selects a range of trips, downloads trip data



Nominal Case:

**User completes trip, admin
downloads as part of group**

John is an undergraduate student in a traffic engineering course. He is assigned a trip to record. In order to do so, he opens the Trip Tracker web app on his phone and leaves it open while driving along the route.

Mary is a graduate student working as a TA for John's course. She reviews trips students have taken from her computer at her desk.



Use Scenario Description - Student

When John is about to leave for a period of time for travel, he remembers to log in to TripTracker to log the path taken. He is presented with the student view, and allows location data to be collected during the trip. He then presses “start trip”, and begins to drive along whichever route he likes. At the end of his trip, he presses the “end trip” button, causing the app to stop recording his location, and compile the data into a neat format for him to review. After reviewing the data he selects to upload it for his professor or a TA to review.



Use Scenario Description - Instructor

Mary logs into TripTracker to look over the work students in her section have submitted. She navigates to the admin trip history page, and selects the range of dates from when the trip was assigned to when it was due. She then downloads all of the trips completed in this time frame.

Error Handling Use Scenario

User fails to finish trip recording



Error Case: **User fails to end trip** **recording**

John is an undergraduate student in a traffic engineering course. He is assigned a trip to record. In order to do so, he opens the Trip Tracker web app on his phone and leaves it open while driving along the route.

Mary is a graduate student working as a TA for John's course. She reviews trips students have taken from her computer at her desk.



Error Case: User fails to end trip recording

John logs in to TripTracker and indicates that he would like to start a trip. John completes the trip, but upon reaching his destination, forgets to indicate to TripTracker that he is finished. John drives home, and TripTracker continues to record his position as part of the same trip. After a couple hours, while John driving home, TripTracker automatically stops recording data, and uploads the dataset as a single trip.

That evening, Mary is looking through the trips students in her section have completed, and notices that John's total trip time is equal to the maximum allowed value. She concludes that John must not have stopped the recording on reaching his destination, and deletes the trip.

Paper Prototype Views

TRIP TRACKER

LOGIN

USERNAME

PASSWORD

SUBMIT

TRIP TRACKER

WELCOME, USERNAME

START A NEW TRIP

VIEW TRIP HISTORY

UPLOAD TRIP

EDIT ACCOUNT INFORMATION

LOG OUT

TRIP TRACKER

ORIGIN

DESTINATION

MODE

CAR

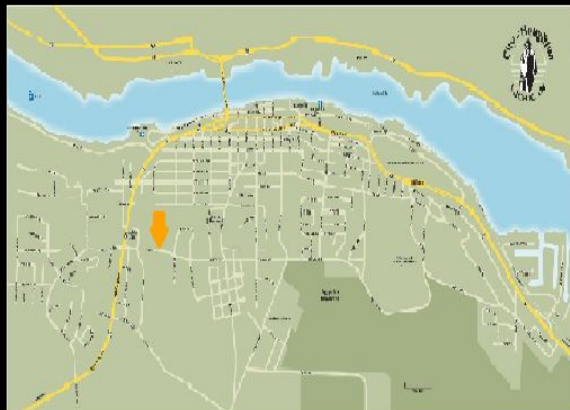
BIKE

WALK



START TRIP

CURRENT TRIP



TIMER 00:05:35

END TRIP

TRIP OVERVIEW

ORIGIN

DESTINATION

MODE

DISTANCE

TIME

HOME

TRIP TRACKER

PREVIOUS TRIPS

TRIP_1



TRIP_2



BACK

TRIP TRACKER

UPLOAD TRIPS

TRIP_1

UPLOAD

TRIP_2

UPLOAD

BACK

TRIP TRACKER

WELCOME, USERNAME

START A NEW TRIP

VIEW TRIP HISTORY

UPLOAD TRIP

DOWNLOAD TRIPS

EDIT ACCOUNT INFORMATION

LOG OUT

TRIP TRACKER

SELECT DATE RANGE

FROM Jan 1, 2019	TO Feb 14, 2019
---------------------	--------------------

← January 2019 →

Mo	Tu	We	Th	Fr	Sa	Su
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

TRIPS
SELECTED

DOWNLOAD



Usability Goals

Effective:

- Provide users with all necessary methods and interactions that would allow them to complete, upload and view their trips.

Safe:

- Provide audio feedback to users who will be moving/riding/driving while using this app.

Utility:

- Provide users with all necessary methods and interactions that would allow them to complete, upload and view their trips.

Learnability:

- App should be well labeled and documented in a manner that makes it intuitive to use.



Usability Concerns

Feedback

- The user will be driving while using the app, so the non-visual feedback methods will need to be implemented. (Audio, Vibrations)

Consistency:

- Due to the frequency of trips and volume of data produced from each; this will need to produce consistent results.

Control

- The users should be in control over their own trip, viewing past trips but not editing them while the admin accounts can pull all user data.

Responsiveness:

- The site should be responsive to the user input, and the multiple viewports of mobile devices.