MICHIGAN STATE UNIVERSITY

Beta Presentation

Navigation and Accident History App

The Capstone Experience

Team Auto-Owners

Austin Huynh
Zach Ray
Tim Sloncz
Megan Frankel
Isaac Vogler

Department of Computer Science and Engineering
Michigan State University

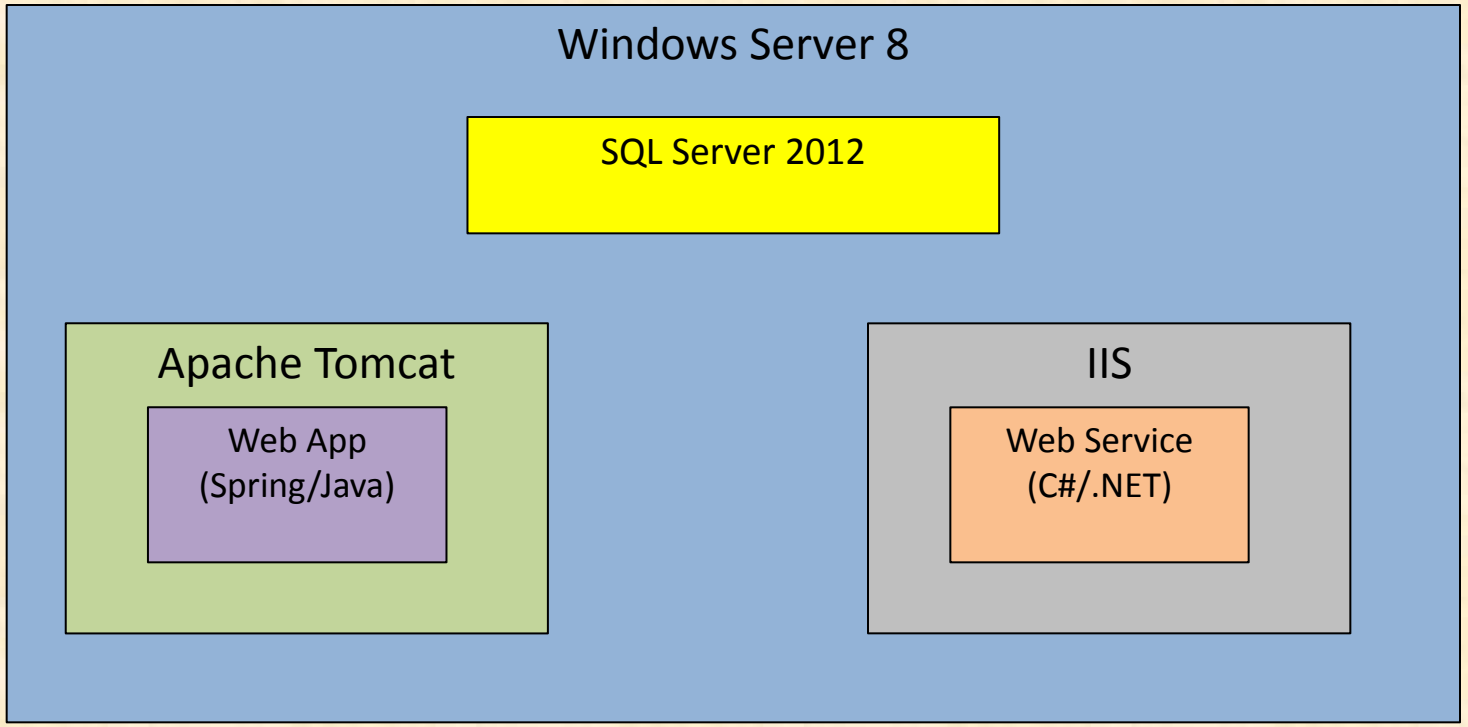
Fall 2014

From Students…
…to Professionals

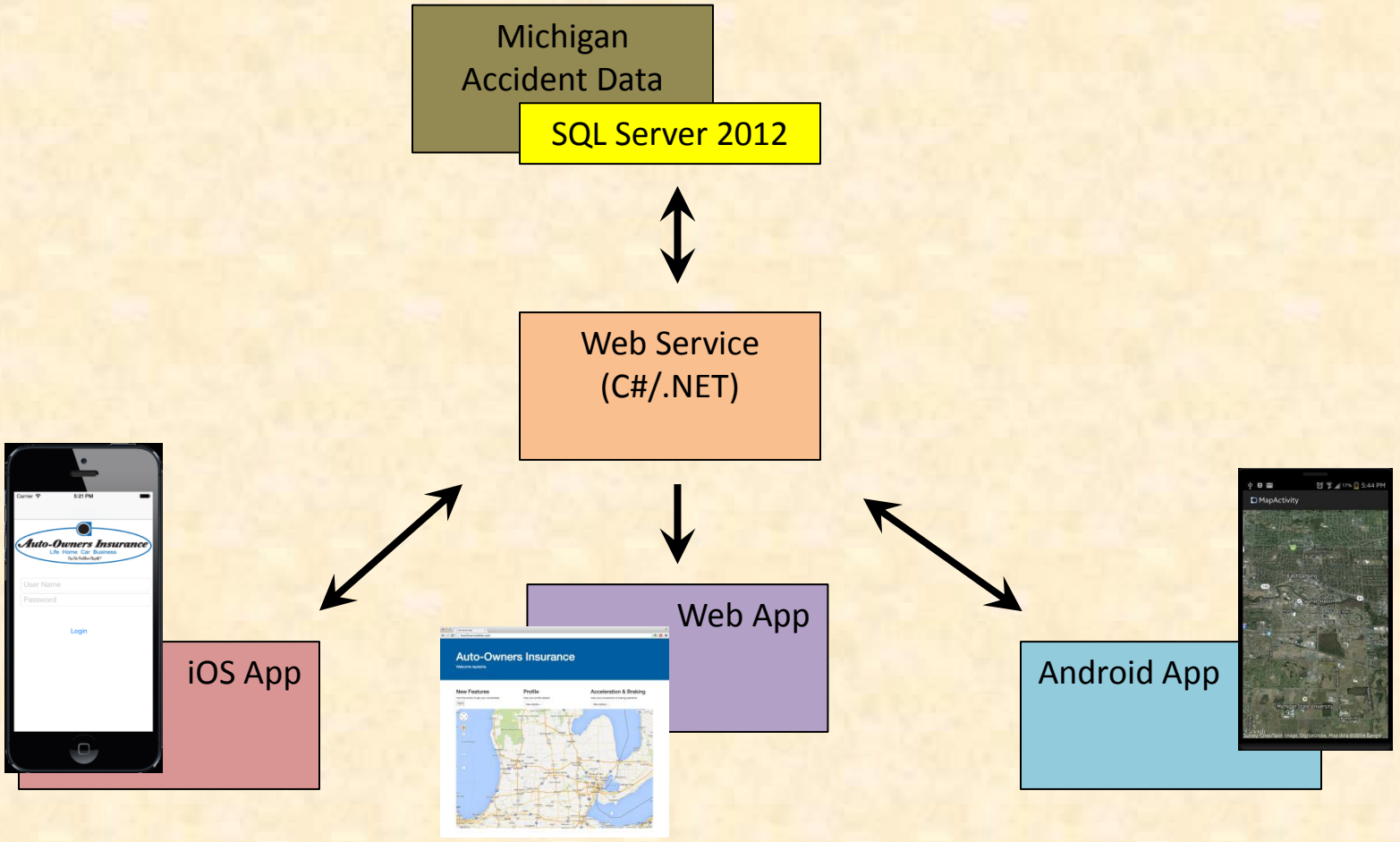
Project Overview

- Track users everyday driving routines
- Send users alternative safer routes
- Provide users with driving statistics
- The goal for this application is to be **Quick, Simple** & **Safe**

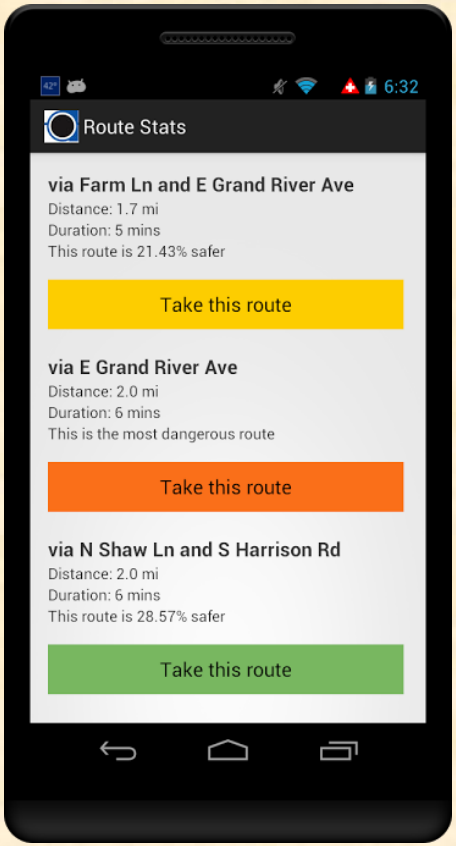
System Architecture

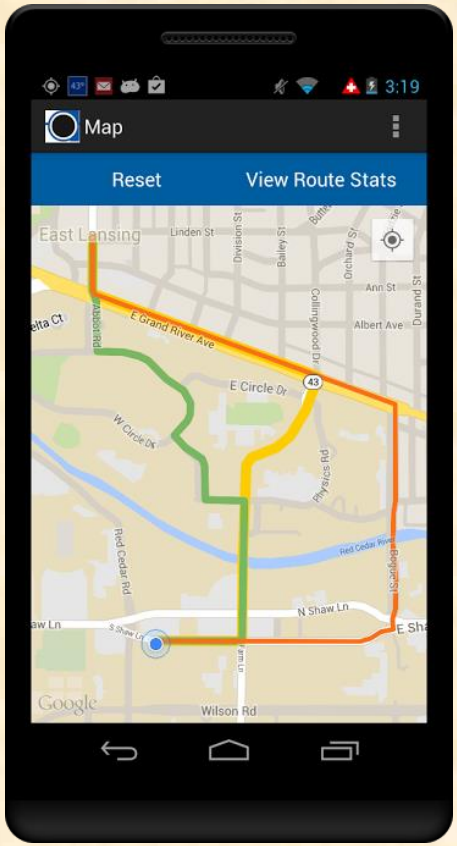


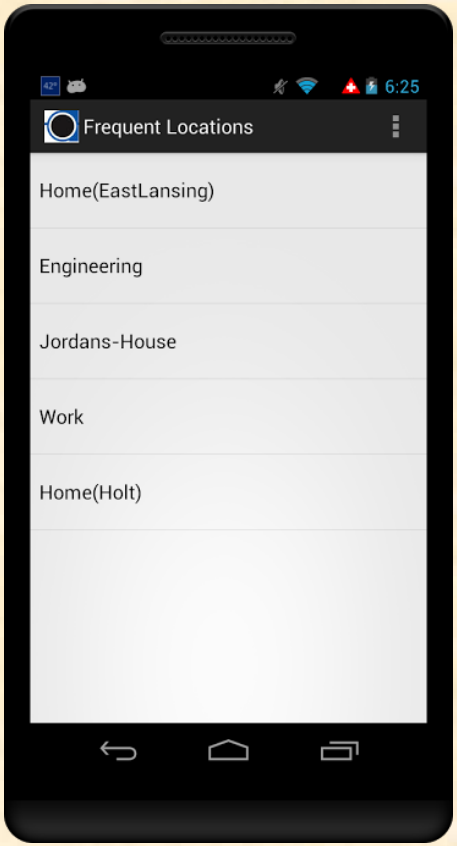
System Architecture



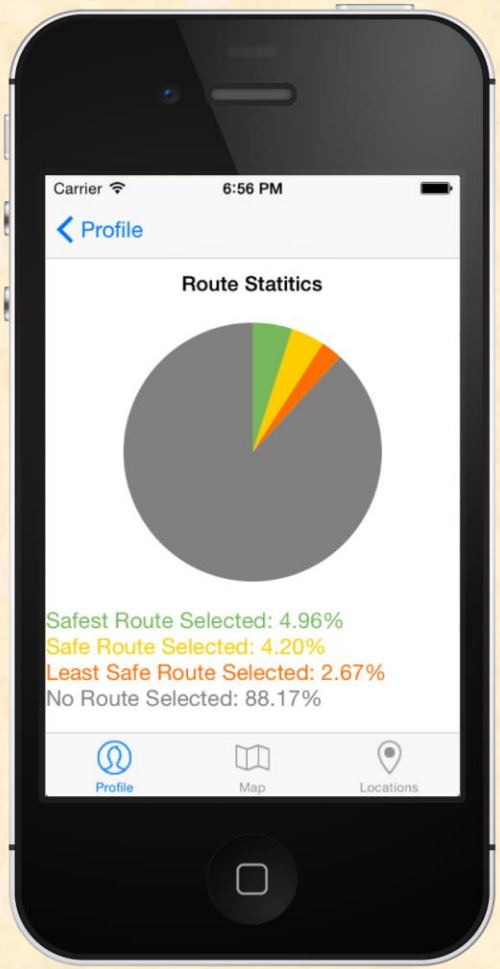
Android App

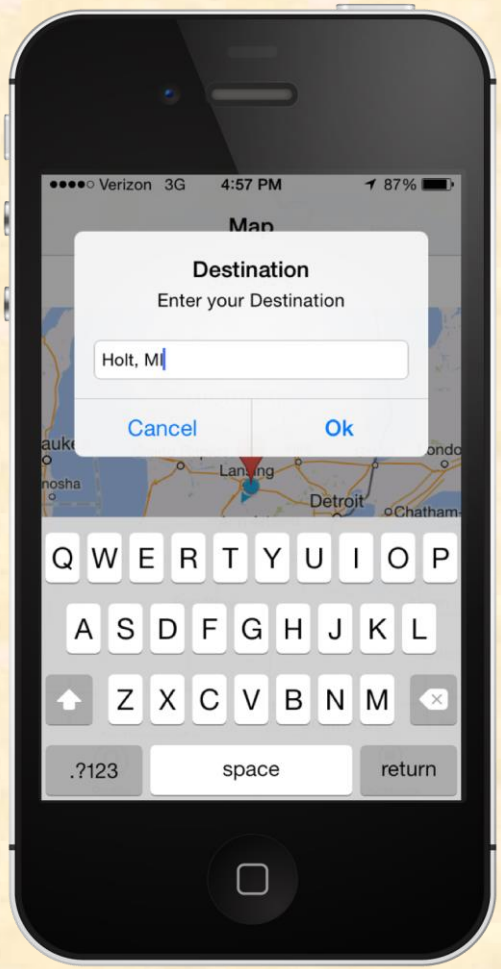

6:32
Route Stats
via Farm Ln and E Grand River Ave
Distance: 1.7 mi
Duration: 5 mins
This route is 21.43% safer
Take this route
via E Grand River Ave
Distance: 2.0 mi
Duration: 6 mins
This is the most dangerous route
Take this route
via N Shaw Ln and S Harrison Rd
Distance: 2.0 mi
Duration: 6 mins
This route is 28.57% safer
Take this route

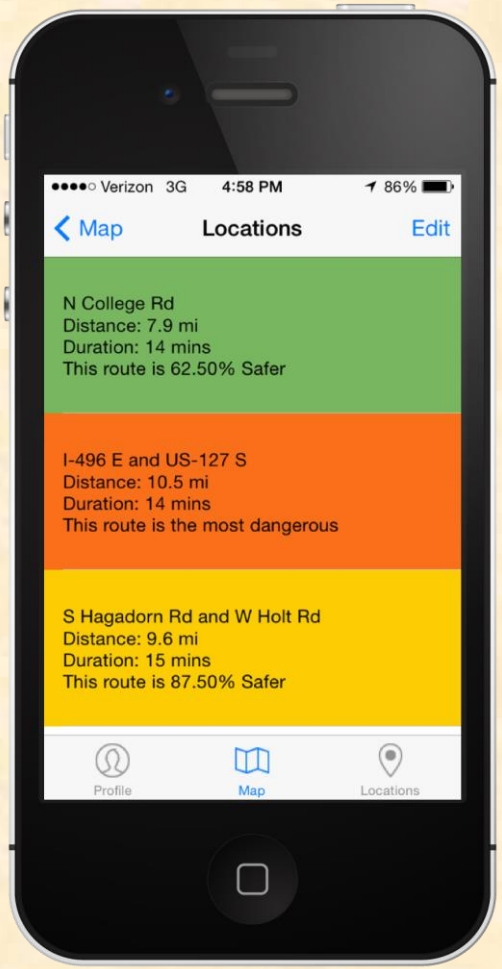

3:19
Map
Reset
View Route Stats
East Lansing
E Grand River Ave
E Circle Dr
N Shaw Ln
Wilson Rd
Google


6:25
Frequent Locations
Home(EastLansing)
Engineering
Jordans-House
Work
Home(Holt)

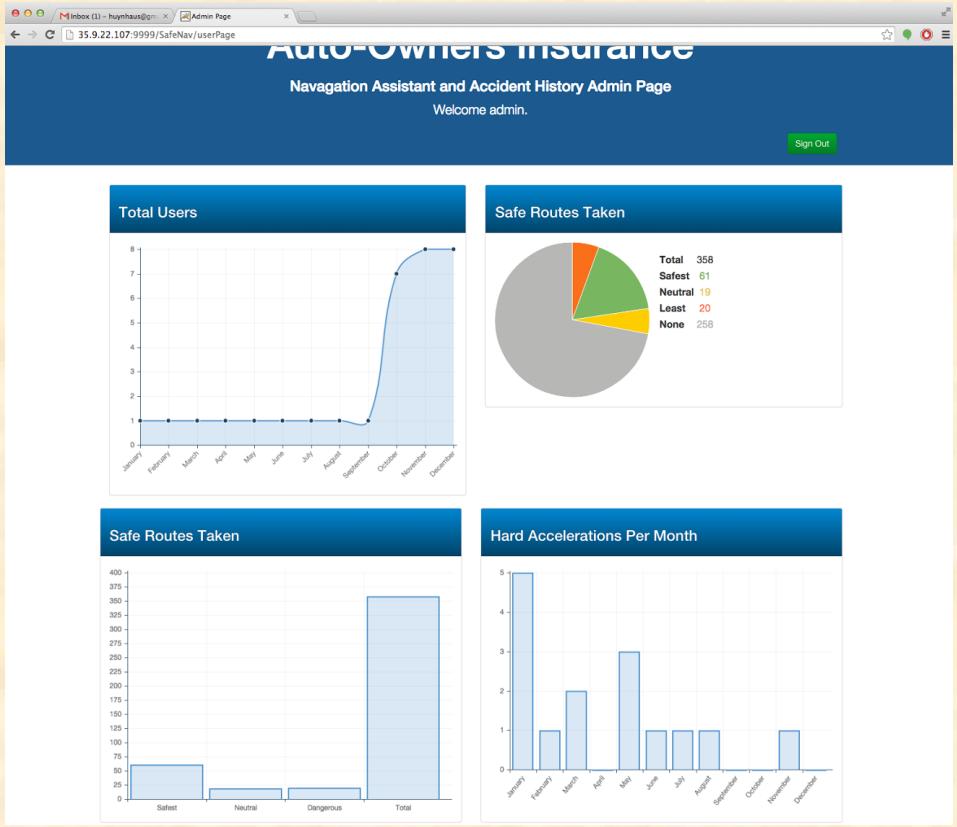
iOS App


Carrier
6:56 PM
Profile
Route Statitics
Safest Route Selected: 4.96%
Safe Route Selected: 4.20%
Least Safe Route Selected: 2.67%
No Route Selected: 88.17%
Profile
Map
Locations

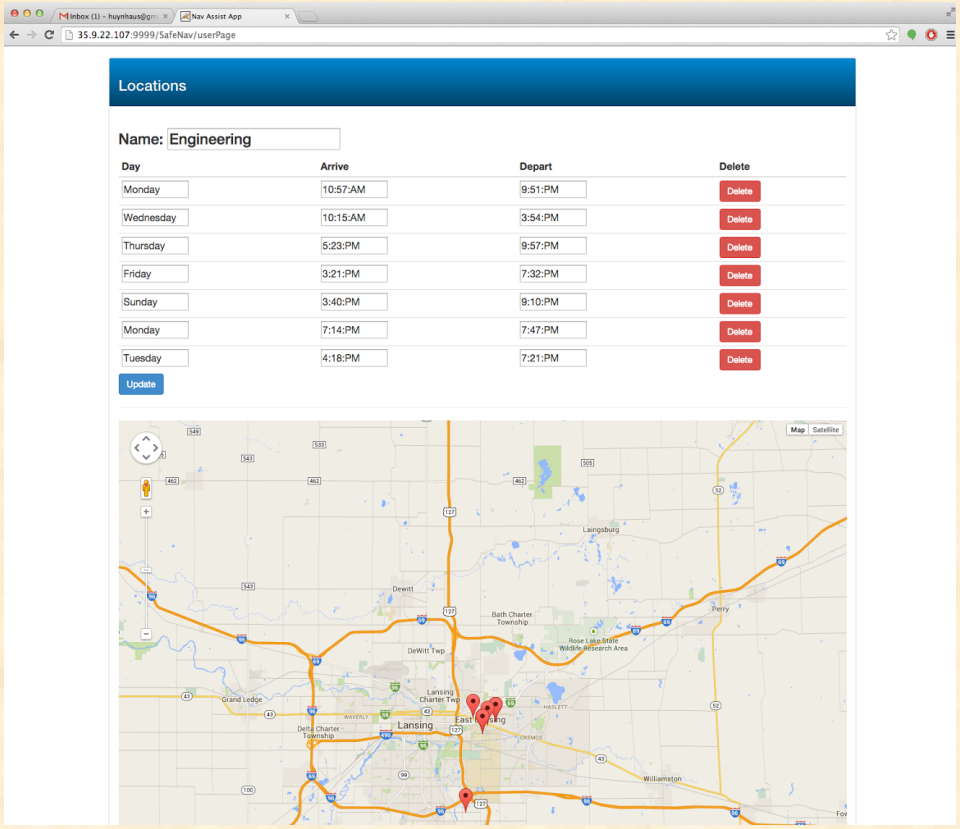

Verizon 3G
4:57 PM
87%
Map
Destination
Enter your Destination
Holt, MI
Cancel
Ok
Detroit
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
.?123
space
return


Verizon 3G
4:58 PM
86%
Map
Locations
Edit
N College Rd
Distance: 7.9 mi
Duration: 14 mins
This route is 62.50% Safer
I-496 E and US-127 S
Distance: 10.5 mi
Duration: 14 mins
This route is the most dangerous
S Hagadorn Rd and W Holt Rd
Distance: 9.6 mi
Duration: 15 mins
This route is 87.50% Safer
Profile
Map
Locations

Web App


35.9.22.107:9999/SafeNav/userPage
Navagation Assistant and Accident History Admin Page
Welcome admin.
Sign Out
Total Users
Safe Routes Taken
Total 358
Safest 61
Neutral 19
Least 20
None 258
Safe Routes Taken
Safest
Neutral
Dangerous
Total
Hard Accelerations Per Month

Web App


Nav Assist App
35.9.22.107:9999/SafeNav/userPage
Locations
Name: Engineering
Day
Arrive
Depart
Delete
Monday 10:57:AM 9:51:PM Delete
Wednesday 10:15:AM 3:54:PM Delete
Thursday 5:23:PM 9:57:PM Delete
Friday 3:21:PM 7:32:PM Delete
Sunday 3:40:PM 9:10:PM Delete
Monday 7:14:PM 7:47:PM Delete
Tuesday 4:18:PM 7:21:PM Delete
Update
Map
Satellite
Lansing
DeWitt
Laingsburg
Williamston

What's left to do?

- Braking tracking tweaks
- Further testing
- More cosmetics with each app
- Clean up code