Project Plan
Location-Based Services App
The Capstone Experience

Team Auto-Owners
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Functional Specifications

• Connect Auto-Owners’ associates while out in the community
• Enable innovative customer interactions
• Provide mobile access to customer information
• Able to make notes on policies while out in the field
Design Specifications

• Support role-based authentication and authorization
• Handle location, based on address or GPS
• Enable claims submissions
• Visualize mapping of customers nearby
  ▪ Policyholders
  ▪ Claims
  ▪ Proposals
• Provide administrative web portal
Screen Mockup: Login and Map View
Screen Mockup: Policy Details

AutoOwners

Search: John Smith
Policy Holder: John Smith
Address: 221b Bakers st.
Policy Type: Home Insurance

Claims:
Claim Number: 123456
State: Pending...
Details: 

Policies
Policy 1:
Type: Home
Effective Date: 1-1-2017
Expiration Date: 1-12-2017
Policy Limit: 100000
Claim 1:
Number: 8675309
Loss Date: 8-12-2016
Submission Date: 9-12-2016
Close Date: 1-7-2017
Amount: 10000
Settled Amount: 8000
Suspected Fraud: false

Claim 2:
Number: 7654321
Loss Date: 23-4-2014
Submission Date: 30-4-2014
Close Date: 12-5-2014
Amount: 55000
Settled Amount: 48000
Suspected Fraud: true
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<th>Modified</th>
<th>Actions</th>
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Screen Mockup: Web: Edit Data

Auto-Owners

- ACTIONS
  - Delete
  - List Database Entries
  - List Users
  - New User

Edit Database Entry

- User
  - 4

- Title
  - claims edit

- Description
  - database desc edit

- Url
  - database field edit

- Tags
  - funny
  - tag-title

Submit
Technical Specifications

• Mobile app development to support both IOS and Android
• Location-based services (GPS)
• Integration with a mock database
• Google Maps API and Geocoding API
• Using the medium-tier MySQL server
• CakePHP web framework
System Architecture

- Ubuntu Server
  - MySQL Database
- Admin Web Portal
- iOS
  - Swift/Xcode
- Android
  - Android Studio
- Google Maps API

HTTP
POST/GET/PUT
System Components

• Hardware Platforms
  ▪ Ubuntu
  ▪ IOS
  ▪ Android

• Software Platforms / Technologies
  ▪ Android Studio
  ▪ Xcode
  ▪ Google Maps API
  ▪ MySQL database
  ▪ CakePHP
Testing

- End-user testing of admin site
- Multi-Location in-person GPS feature testing
- End-user testing in online and offline modes
- Caching data testing for login data and specific location data
- Updating cached data upon login testing
Risks

• IOS Development
  ▪ No one in our group has experience programming IOS APPs
  ▪ Assigned Alex to research and develop the app using Swift in Xcode

• Mapping API
  ▪ No prior experience with implementing Google Maps API
  ▪ Assigned Yunfei to research the API and implement it

• Data Caching
  ▪ Application needs to cache data from database when offline
  ▪ Working on building a functional caching prototype
Questions?