

MICHIGAN STATE
UNIVERSITY

Project Plan

Mobile Event App

The Capstone Experience

Team Auto-Owners

Matt Krease

Shen Li

Eddy Maxwell

Allen Scheck

Tyler Smith

Department of Computer Science and Engineering
Michigan State University

Fall 2016



From Students...
...to Professionals

Functional Specifications

- Allows Auto-Owners to create and manage private or public events for conferences, recruitment events, etc.
- Supports maximum capacity for an event with a waiting list for those registered past capacity.
- Supports the construction of a personal itinerary for events as well as relevant media.
- Auto-Owners will be able to create customized notifications when events are modified and surveys for feedback on various parts of the event



Design Specifications

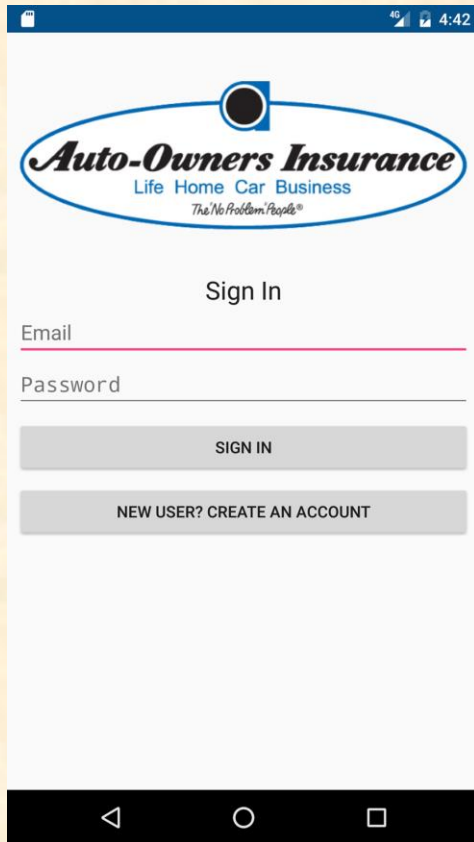
- Event admin functionality
 - Build an event
 - Create event survey(s), upload files to the event page, add links to external resources
 - Make changes to an existing event
 - View reporting\analytics on the event survey(s)



Design Specifications

- Event attendee functionality
 - Register for an event
 - View event newsfeed
 - Create a personalized agenda for each event
 - Access any event materials that were uploaded via event admin
 - Give feedback via the event survey(s)

Screen Mockup: Mobile Interface



4G 4:42

Auto-Owners Insurance
Life Home Car Business
The 'No Problem' People®

Sign In

Email

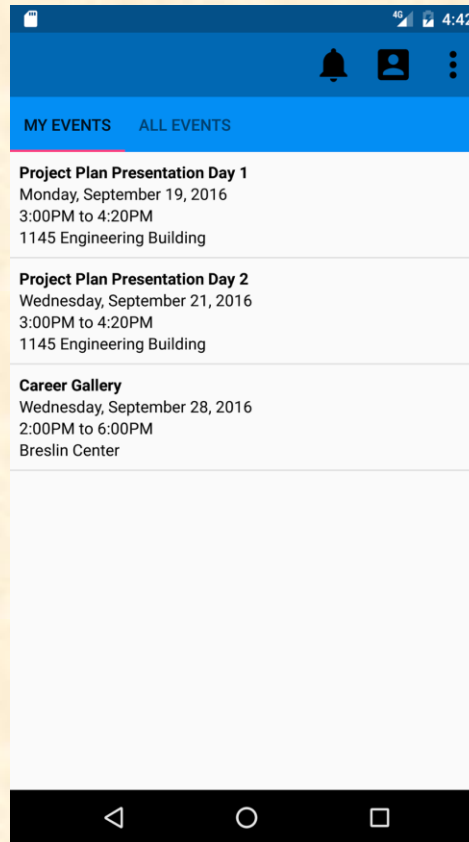
Password

SIGN IN

NEW USER? CREATE AN ACCOUNT

Navigation icons: back, home, recent apps

Login Page



4G 4:42

MY EVENTS ALL EVENTS

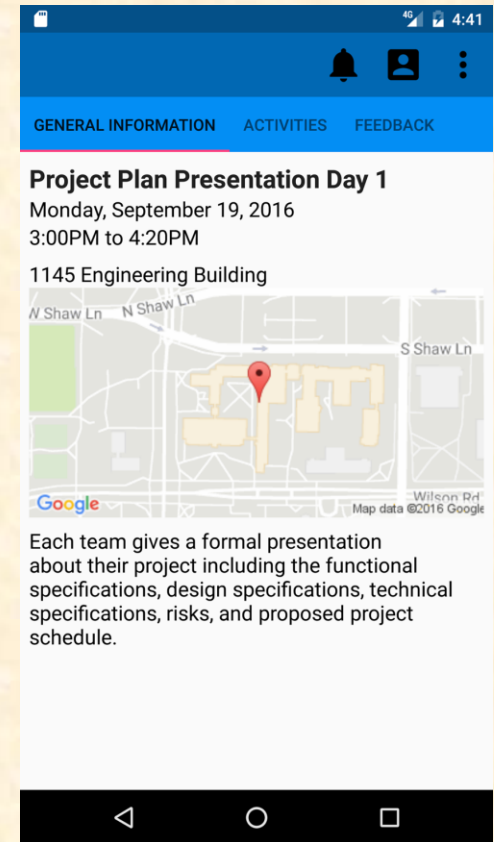
Project Plan Presentation Day 1
Monday, September 19, 2016
3:00PM to 4:20PM
1145 Engineering Building

Project Plan Presentation Day 2
Wednesday, September 21, 2016
3:00PM to 4:20PM
1145 Engineering Building

Career Gallery
Wednesday, September 28, 2016
2:00PM to 6:00PM
Breslin Center

Navigation icons: back, home, recent apps

Upcoming Events



4G 4:41

GENERAL INFORMATION ACTIVITIES FEEDBACK

Project Plan Presentation Day 1
Monday, September 19, 2016
3:00PM to 4:20PM
1145 Engineering Building

Map showing location of 1145 Engineering Building (marked with a red pin) near N Shaw Ln and S Shaw Ln. Map data ©2016 Google.

Each team gives a formal presentation about their project including the functional specifications, design specifications, technical specifications, risks, and proposed project schedule.

Navigation icons: back, home, recent apps

Event Page



Screen Mockup: Web Application

Auto-Owners INSURANCE EVENT PLANNER

Log in to Your Account

Email address

Field is required

Password

☐ Remember me

LOG IN

[Forgot password?](#)

[Enroll now](#)

CONTENT PLACEHOLDER

CONTACT US TERMS OF USE ENROLLMENT AGREEMENT

1-800-288-8740 option 3

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Auto-Owners INSURANCE

LIFE • HOME • CAR • BUSINESS

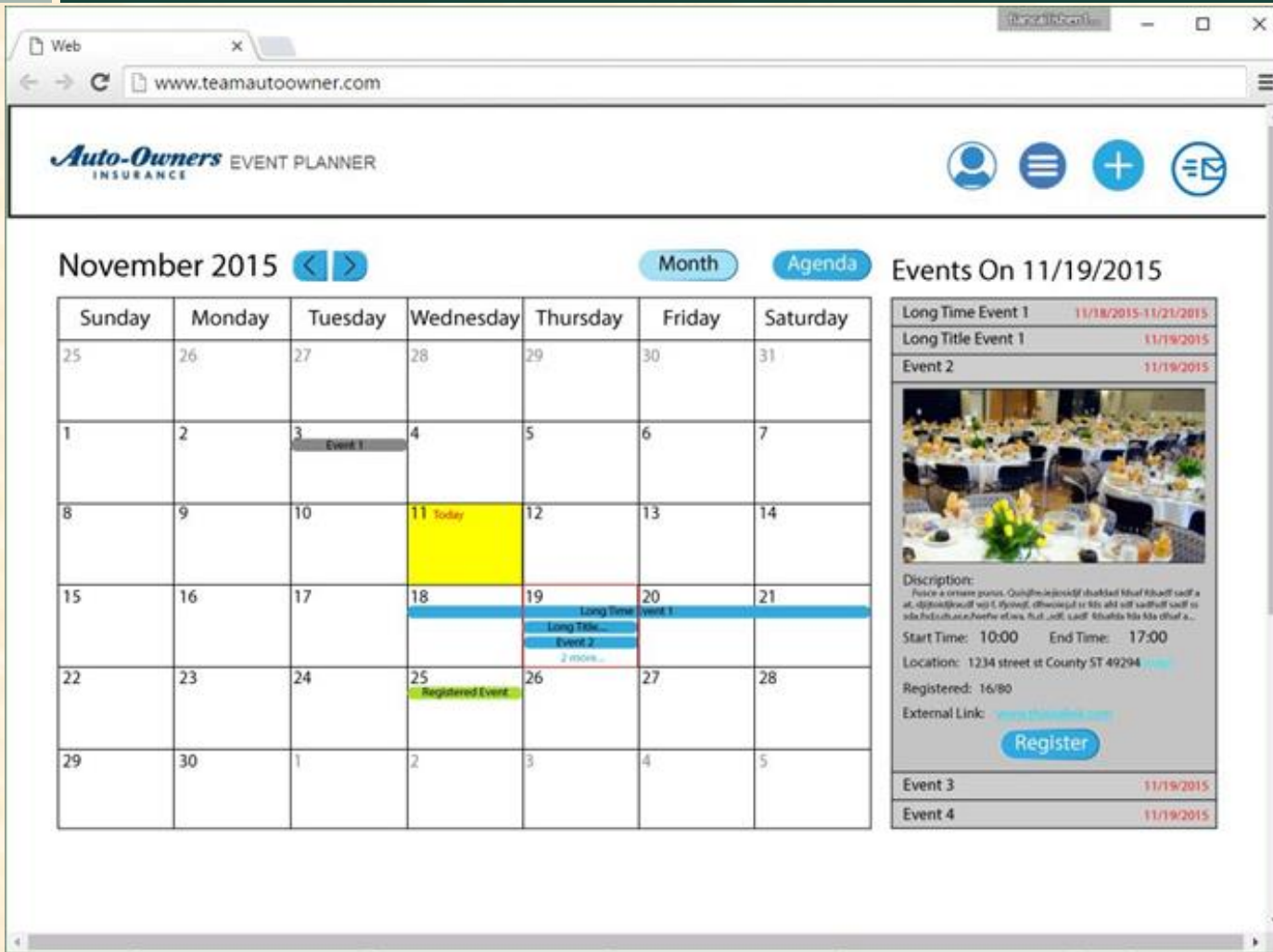
Login page



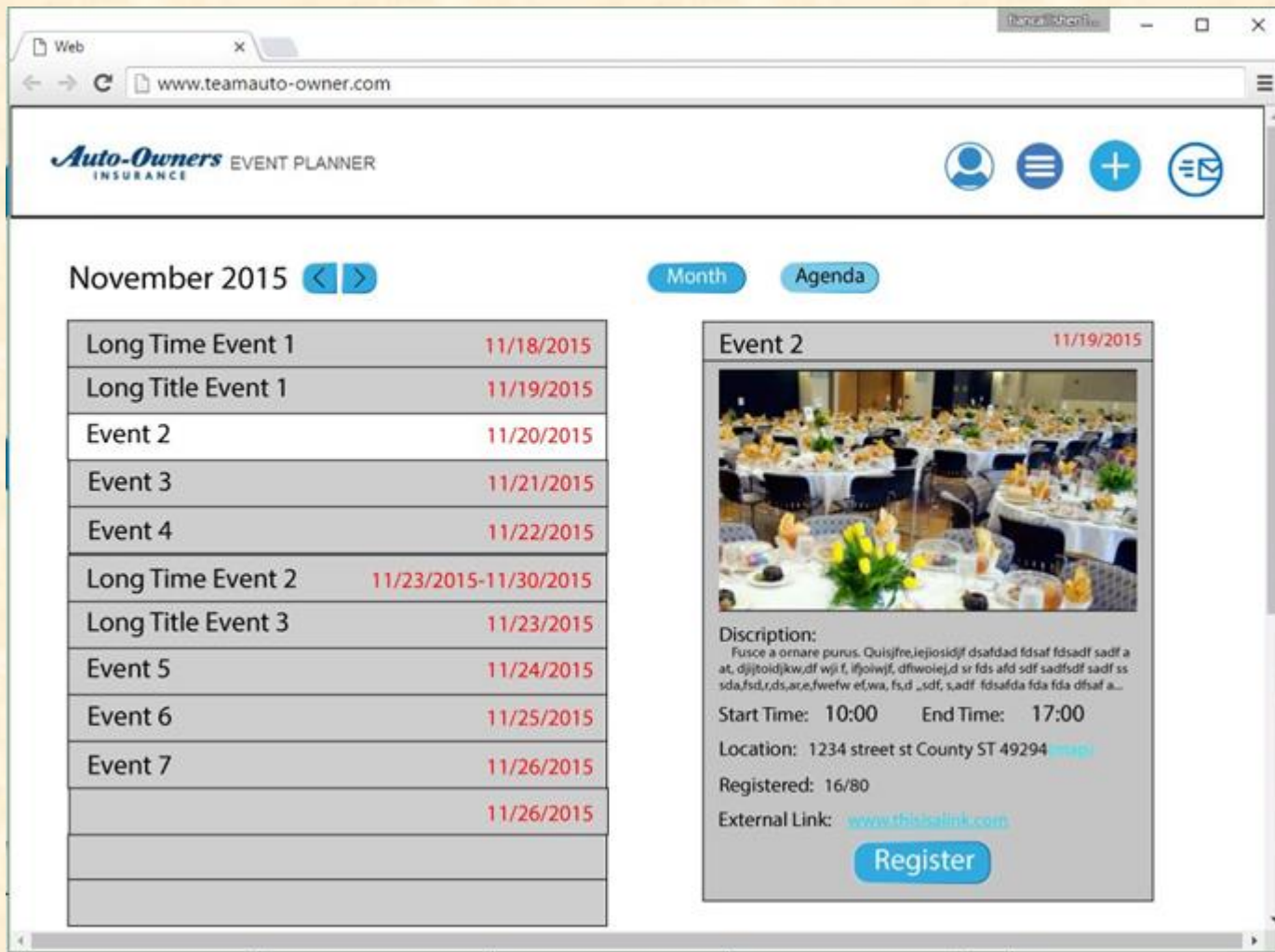
Screen Mockup: Web Application

Main Page

Calendar View



Screen Mockup: Web Application



Main Page Agenda View



Screen Mockup: Web Application


The mockup shows a web browser window with the address bar displaying a file path. The page header includes the 'Auto-Owners INSURANCE' logo and the text 'EVENT PLANNER'. On the right side of the header are four circular icons: a user profile, a menu, a plus sign, and a mail icon. The main content area is titled 'Add Event' and contains a form with the following fields: 'Title' (text input), 'Discription' (text input), 'Date' (dropdown menu with 'Choose Date' selected), 'Time' (dropdown menu with 'Choose Time' selected), 'Location' (text input), 'Capacity' (text input), 'Fee' (text input), 'External Link' (text input), and 'Image' (file upload button labeled 'Choose File'). At the bottom of the form are two blue buttons: 'Add' and 'Reset'.


Add Event Page
Administrator Only



Screen Mockup: Web Application

Edit Profile




"Upload Image Locally" 

Name:

Job Position:

Department:

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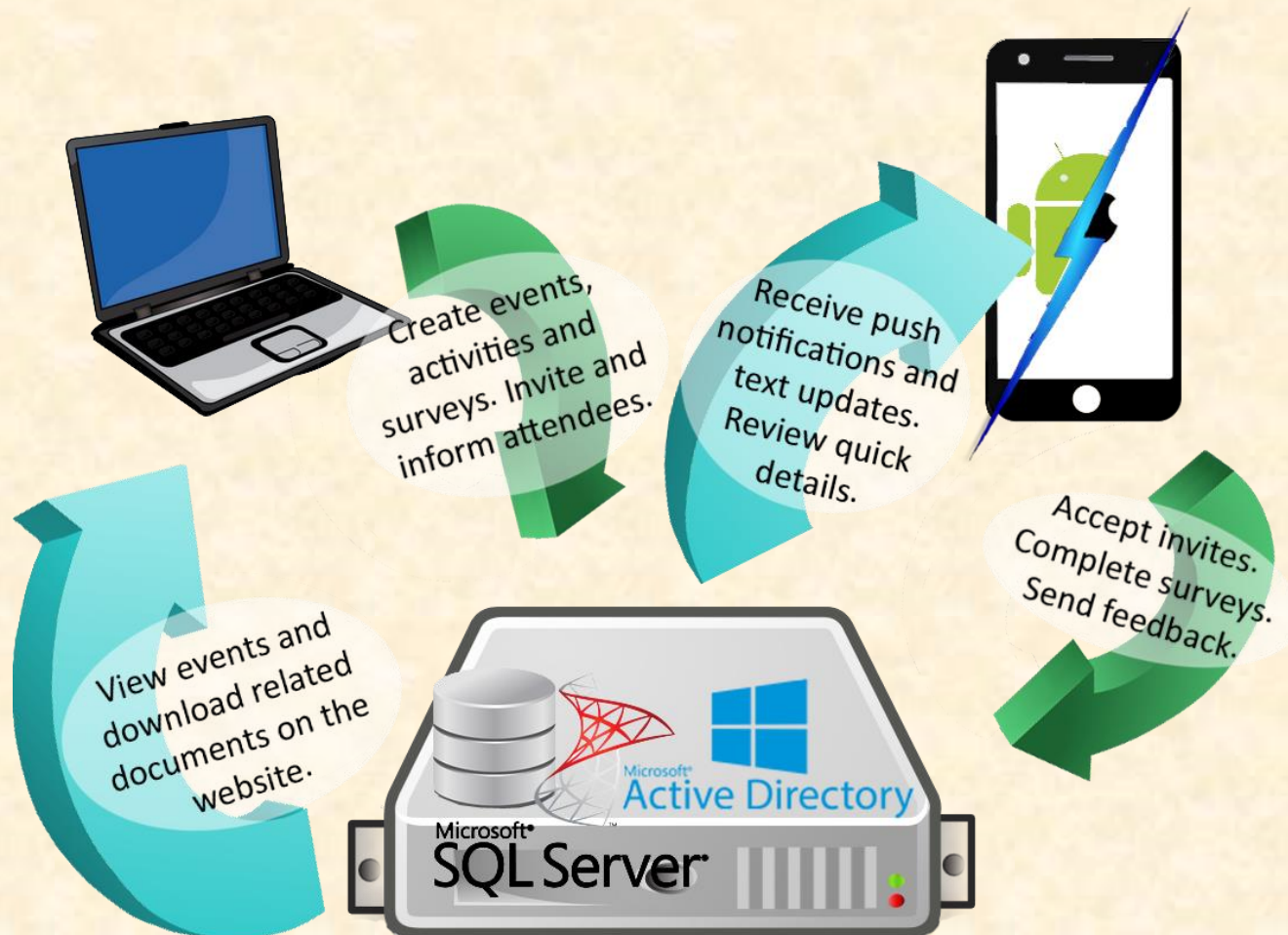
Profile Page

Technical Specifications

- Event and User Information Storage
 - Event information will be stored in an instance of Microsoft SQL 2014
 - User information
 - Basic user information such as name and email will be stored in an instance of Microsoft Active Directory
 - More complex user information, such as personalized agendas, will be stored in the same Microsoft SQL 2014 instance as the event information
- The SQL and Active Directory information will be interfaced with via PHP 5.5.9



System Architecture



System Components

- Hardware Platforms
 - All desktop PCs
 - Android devices capable of running Jelly Bean (4.1) or higher
 - Apple devices capable of running iOS 8 or higher
 - A rack mounted server
- Software Platforms / Technologies
 - Native iOS app developed in XCode
 - Native Android app developed in Android Studio
 - Responsive web app compatible with most browsers
 - Windows Server 2012 R2
 - Microsoft SQL Server 2014
 - Microsoft Active Directory

Testing

- Create a variety of dummy administrator and attendee accounts and test their access by logging in as each one and attempting to access features that should only be available for other users
- Use Kali Linux to perform penetration testing on the SQL database and PHP websites using tools such as SQLMAP and Grabber



Risks

- iOS Development
 - None of the team members has experience developing for iOS
 - Read documentation and view online tutorials
- Database Development
 - Team has very little experience with SQL and Active Directory
 - Read documentation
- User access control
 - All events will be stored in the same database, which will be readable by anyone authenticated by Active Directory
 - Lots and lots of testing to make sure that the way we are restricting users works correctly