

MICHIGAN STATE
UNIVERSITY

Project Plan
Dealership Consultant Mobile App
The Capstone Experience

Team Urban Science

Matt Ao
Zach Kuzmanic
Ryan Tempas
Eric Zipple

Department of Computer Science and Engineering
Michigan State University

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From Students...
...to Professionals

Project Overview

Support Urban Science Consultants

- Before During and After Meetings with Dealerships

Optimize Consultant Interactions with Dealers

- Generate Action Plan Proposals
- Record Dealer Reactions and Agreements to Proposals
- Rate the General Atmosphere of the Meeting

Record Important Dealership Metrics

- Easily track Key Performance Indicator Changes Following Proposal Follow-through



Functional Specifications

- Consultant Profiles with Login Authentication
 - Assigned Dealership Page
- Generation of Action Plans From KPI List
- Graphical Representation of KPI Performance
 - Regional and National Comparisons
- Timeline of Old Action Plans
 - Update Dealer Actions
- Ability to Record Meeting Information
 - Track Dealer Agreements for Comparison to Actual Follow-Through

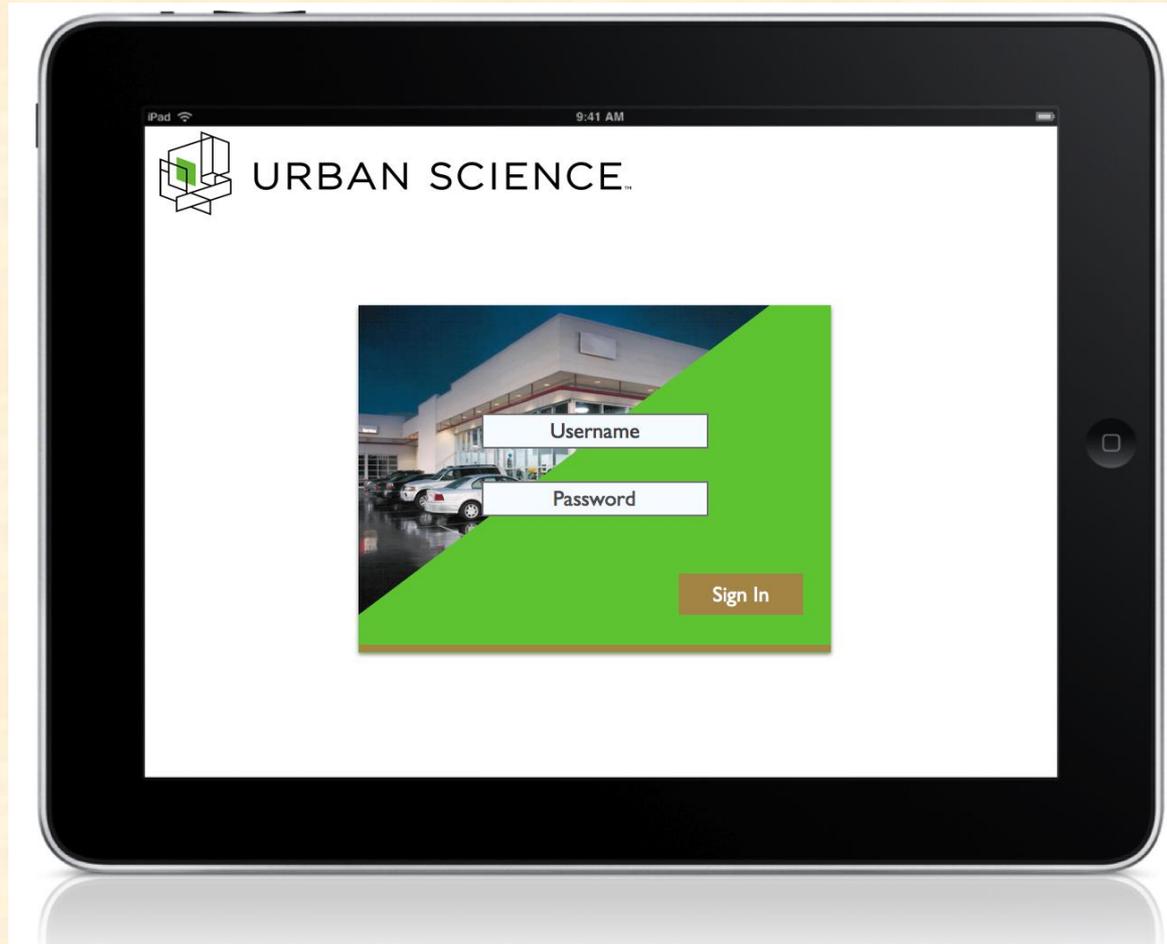


Design Specifications

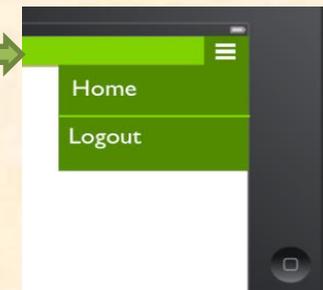
- Authentication on Data Access
- Every Page Grants Ability to Return to Home Screen or Log Out
- Main Application Screens:
 - Dealership Viewing
 - Active Action Plan
 - Dealer Information
 - Action Plan Information
 - KPI Information
 - KPI Action Plan



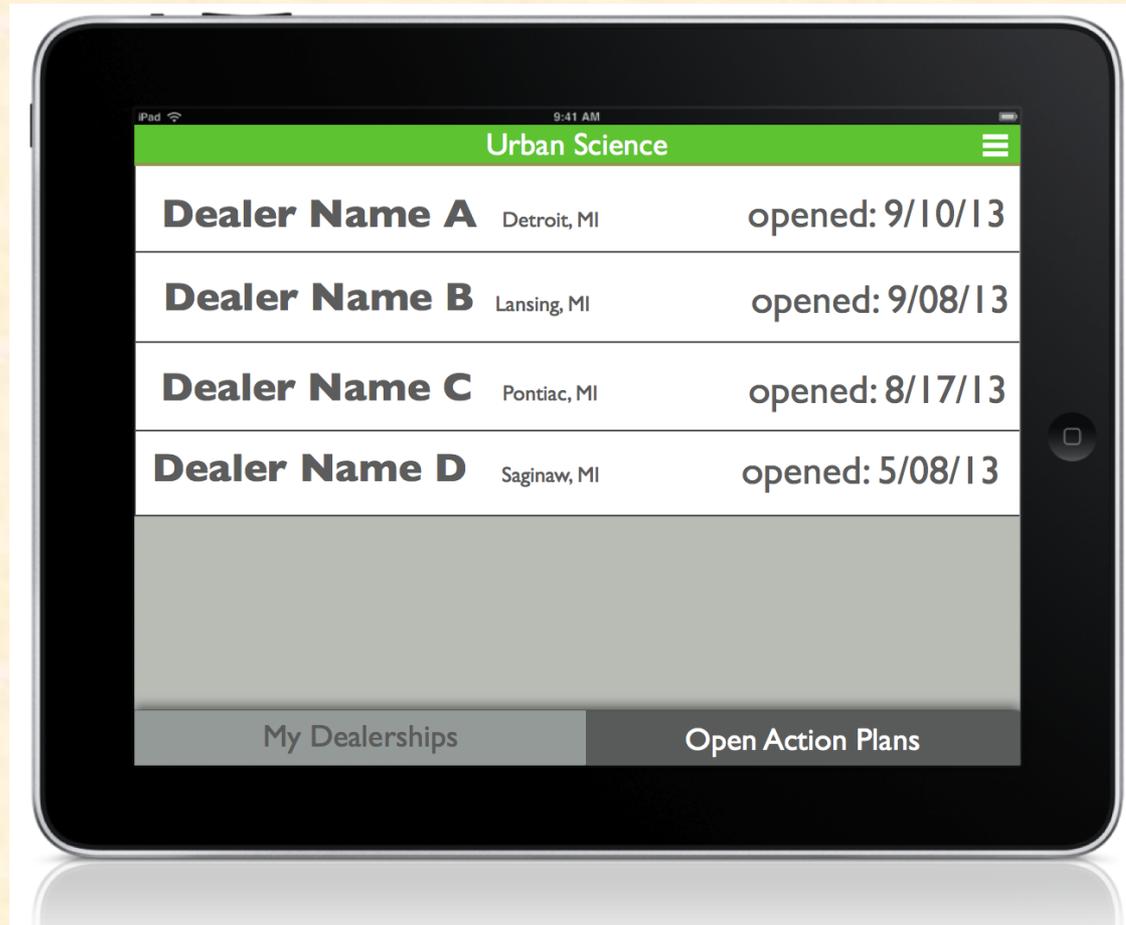
Login



Dealership Viewing (Home)



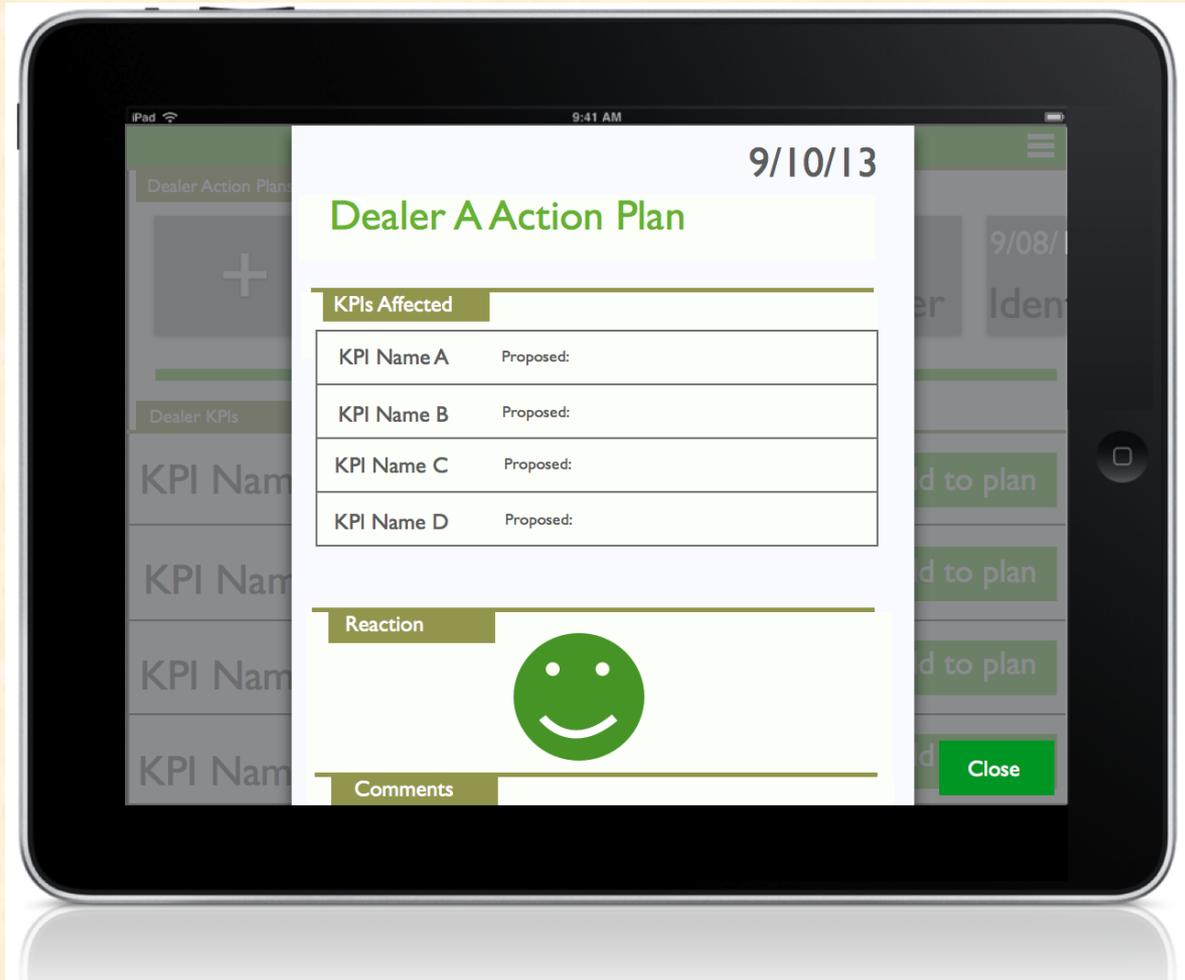
Open Action Plans (Secondary Home)



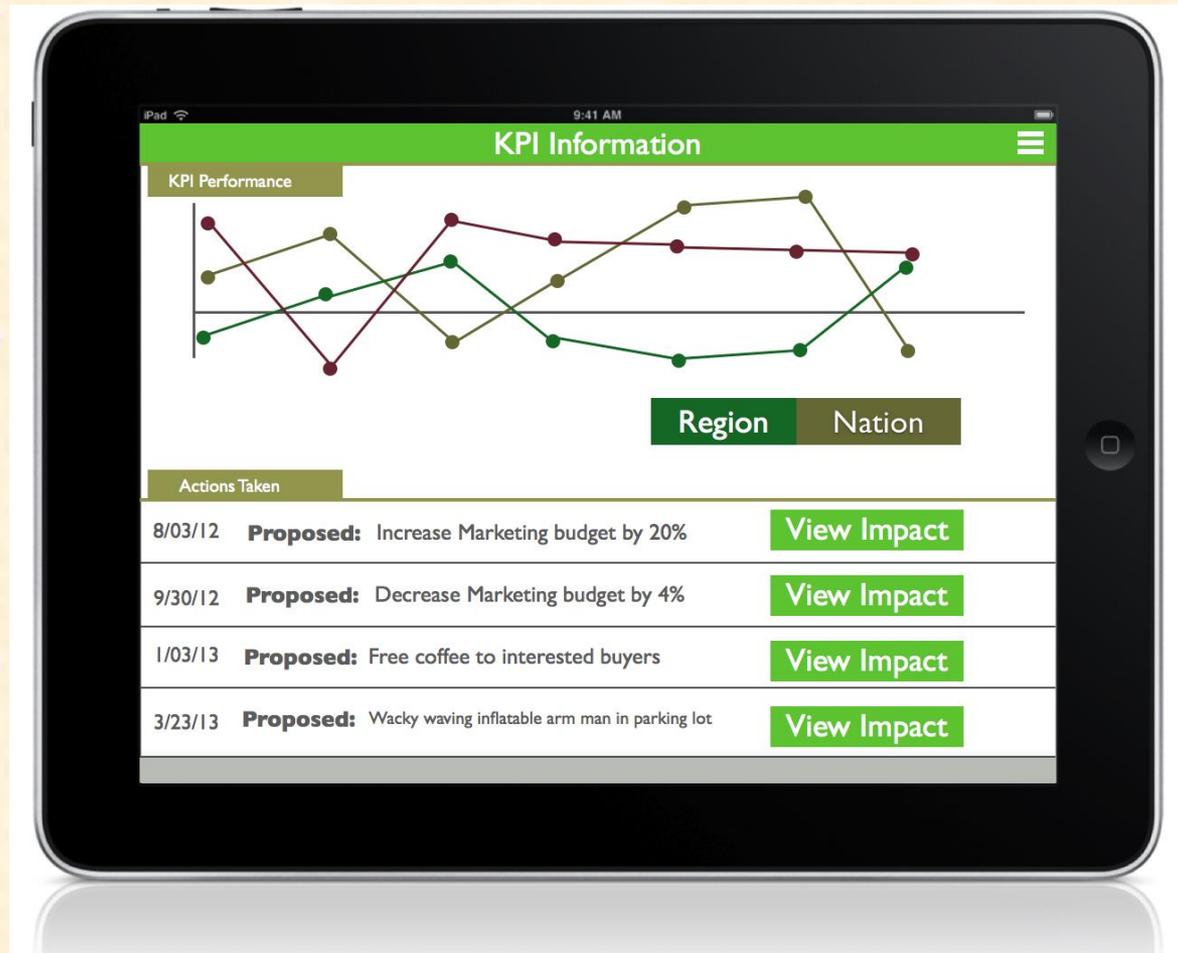
Dealer Information



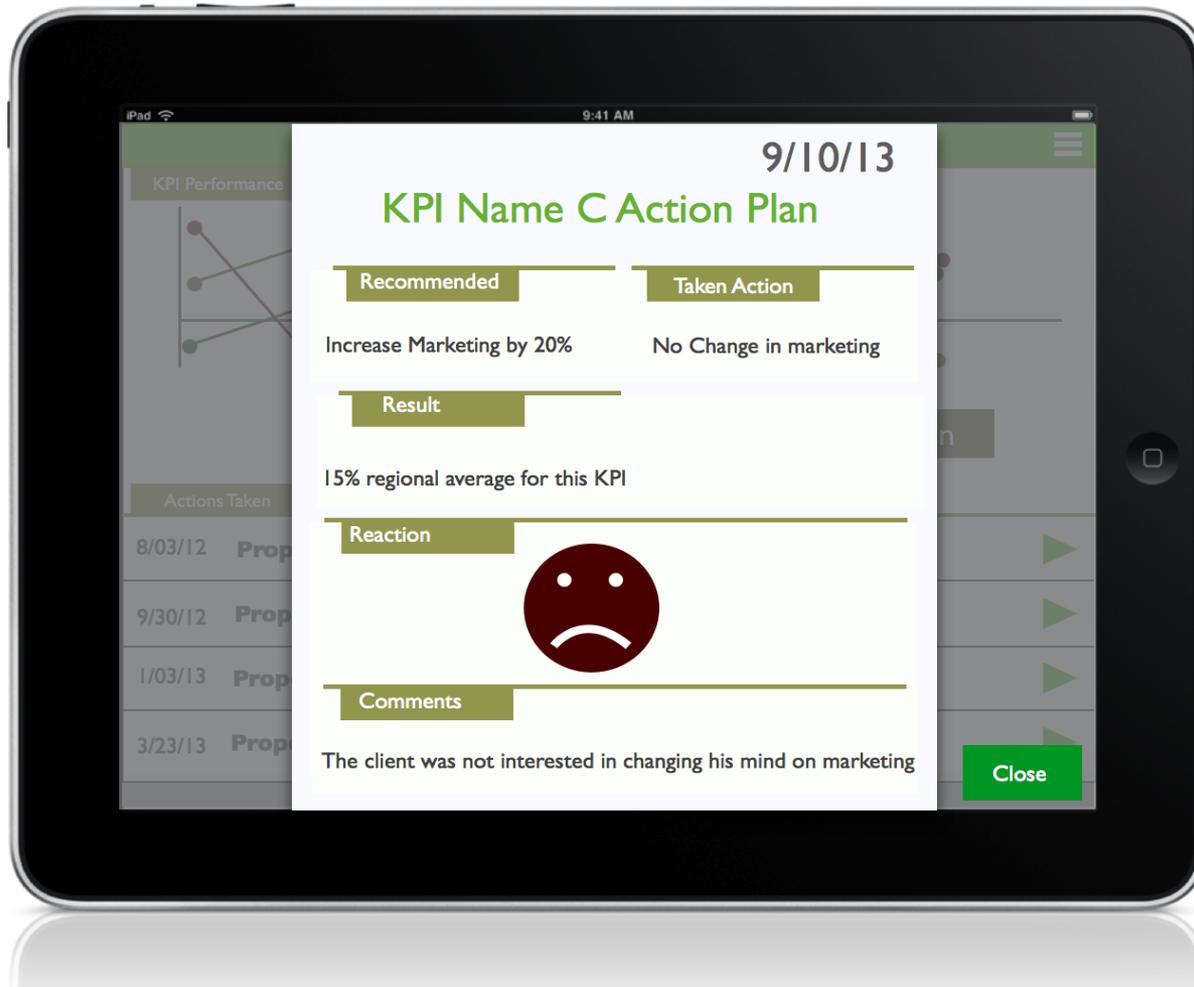
Action Plan Details



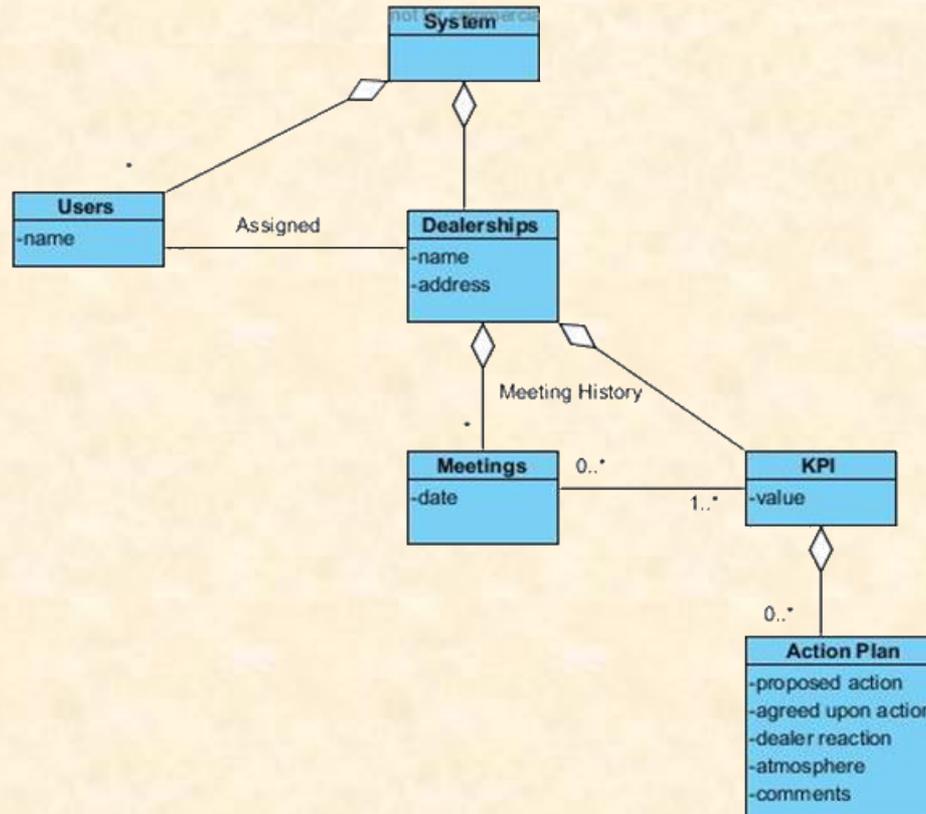
KPI Information



KPI Action Plan



Technical Specifications



Technical Specifications

- iOS and Android User Interfaces
 - iOS 6 Development via XCode
 - Android Development via Java SDK 6 in Eclipse
 - Minimum API 9: Android 2.3 (Gingerbread)
 - Target API: Android 4.1 (Jelly Bean)
- Server with Urban Science Backup Database
 - Microsoft SQL 2014 in .NET Framework



System Architecture



System Components

- Hardware Platforms
 - iPad 3 and iPad 2
 - Samsung Galaxy Tab 7.0 Plus
 - Windows Server 2008 R2
- Software Platforms / Technologies
 - XCode
 - Microsoft SQL Server 2014
 - HTML5
 - Objective-C
 - PHP



Testing

- We Would Like to Work With an Urban Science Consultant to Refine UI
- Unit Testing and Feature Testing will Occur as Development Progresses
- Initial Testing to Revolve Around Validating Previously Approved Specifications

Risks

Understanding the Scope of the Project

- Mitigation: Frequent Specification Approvals
- Status: UI mock-ups passed to Urban Science

Development of Two Native Applications

- Mitigation: Primary focus on iOS development.
- Status: Staggered Android Development.

Implementing Mobile Back-End Communication

- Mitigation: Thorough Testing of Interactions Between Mobile Devices and Server.
- Status: Urban Science has Provided Database Backup for Testing Purposes

