

MICHIGAN STATE
UNIVERSITY

Project Plan

Dealership Consultant Mobile App

The Capstone Experience

Team Urban Science

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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



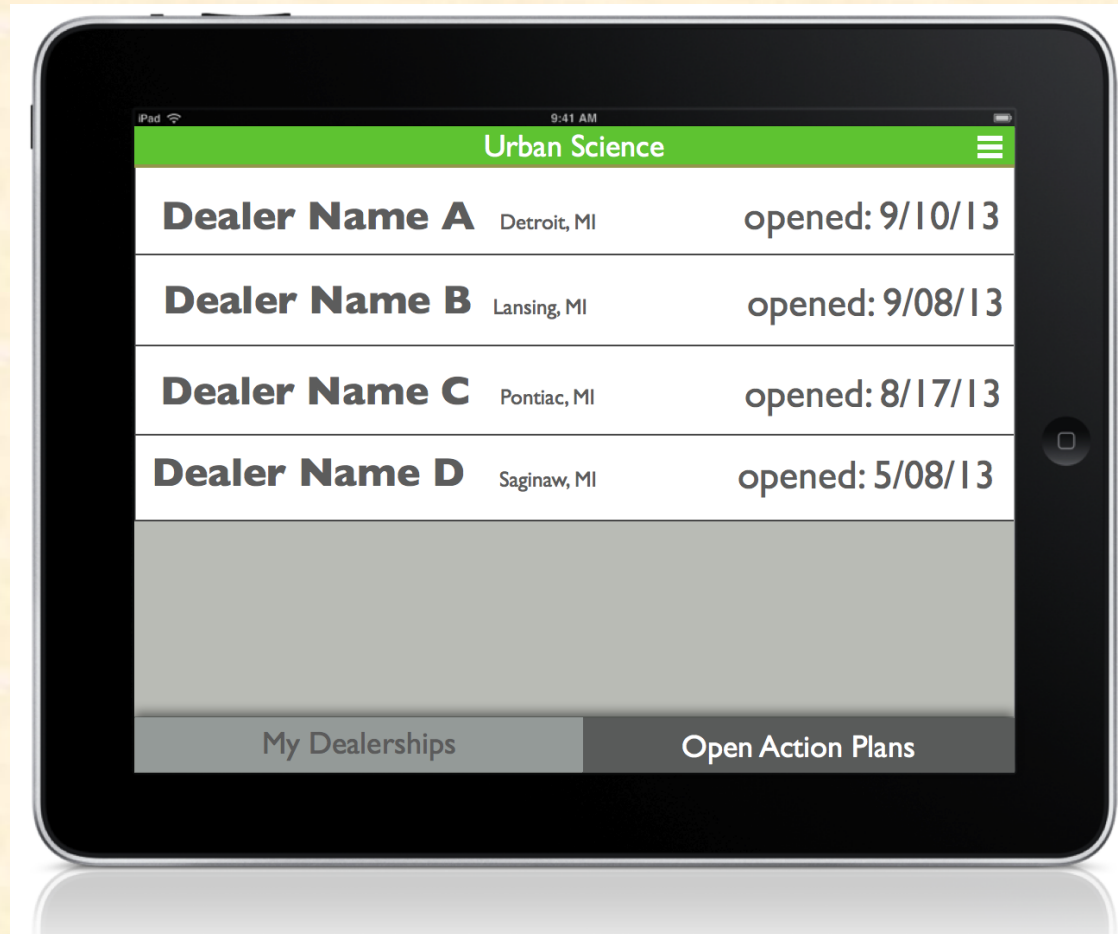
Login



Dealership Viewing (Home)



Open Action Plans (Secondary Home)



Dealer Information



Action Plan Details


The image shows a tablet displaying a mobile application interface. The app is titled 'Dealer A Action Plan' and shows a date of '9/10/13'. The interface includes a section for 'KPIs Affected' with a table of four rows, each containing a KPI name and a 'Proposed:' field. Below this is a 'Reaction' section with a large green smiley face icon. At the bottom, there is a 'Comments' section and a green 'Close' button. The background of the app shows a list of 'Dealer KPIs' with a '+' icon to add more.

9/10/13

Dealer A Action Plan

KPIs Affected	
KPI Name A	Proposed:
KPI Name B	Proposed:
KPI Name C	Proposed:
KPI Name D	Proposed:

Reaction



Comments

Close



KPI Information



KPI Action Plan

9/10/13


KPI Name C Action Plan

Recommended	Taken Action
Increase Marketing by 20%	No Change in marketing

Result

15% regional average for this KPI

Reaction



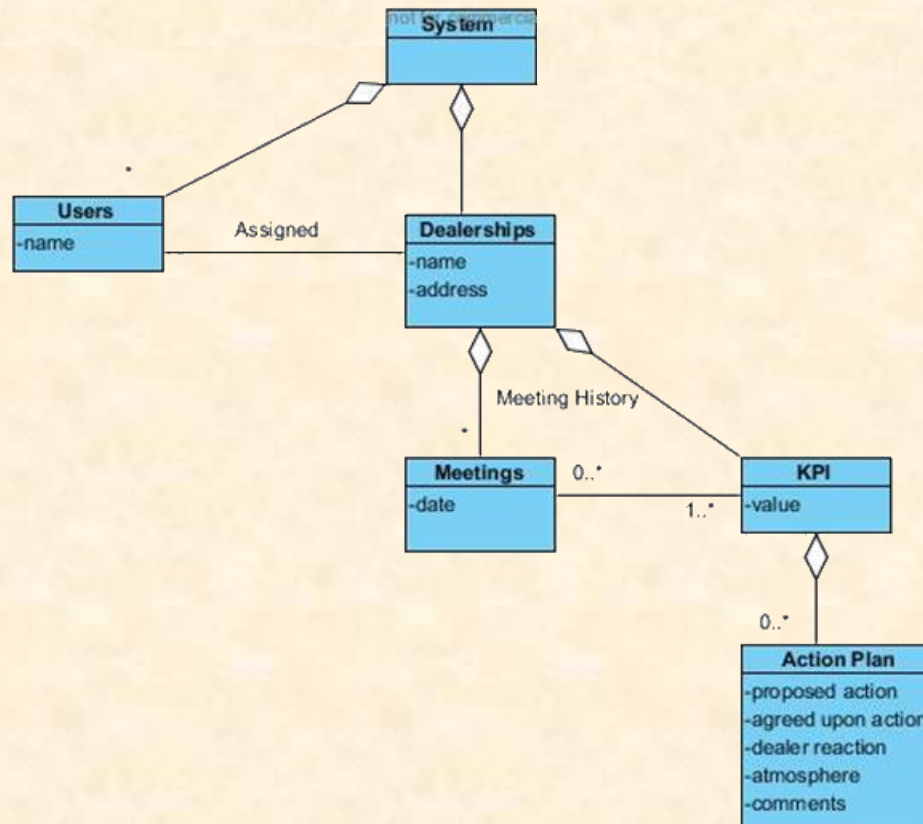
Comments

The client was not interested in changing his mind on marketing

Close



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

