MICHIGAN STATE
U N I V E R S I T Y
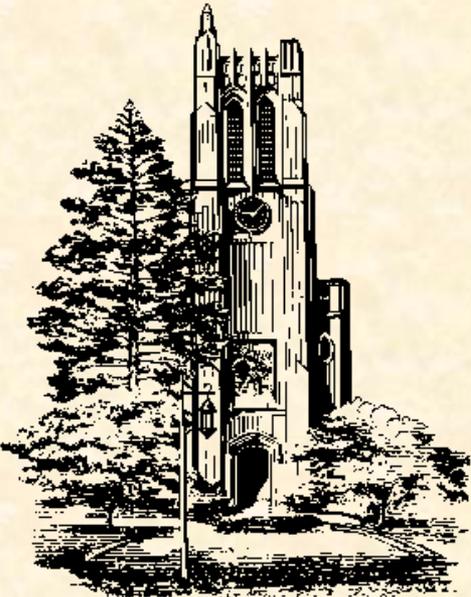
Project Plan
Applications for Mobile Devices

Team Urban Science
CSE 498, Collaborative Design

Shaun Gautz

Kaalem Lucky

Josh Mackaluso

Jeff Meador

Department of Computer Science and Engineering

Michigan State University

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Project Overview

- Develop iPhone and Blackberry app to assist automotive companies in placing dealerships and evaluating their performance.

- Generate media-rich content (maps, charts, tables) that is easy-to-view on mobile devices (Blackberry Bold and iPhone).

- Create novel design that allows for usability but also aesthetics ("sizzle factor").

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Functional Specifications

- Login
- Search
- Bread Crumb Trail
- Chart View
- Data Maps
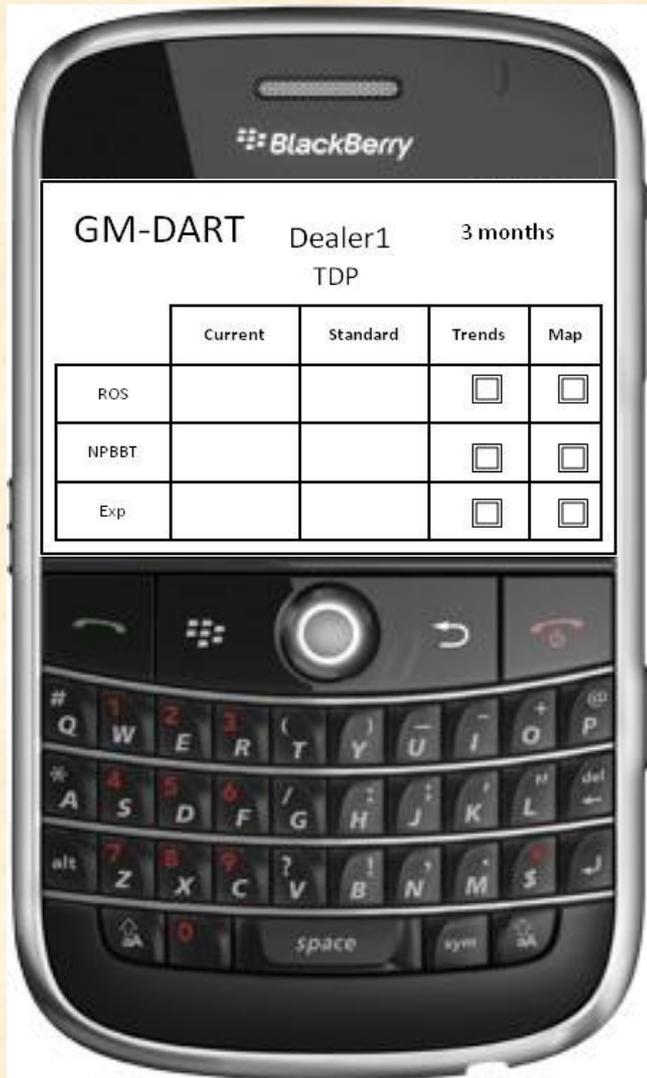- Dedicated Menu

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Design Specifications

- Use Cases
  - Field Employee
  - Dealership
  - Corporate Worker
- Screen Mockups
  - Blackberry
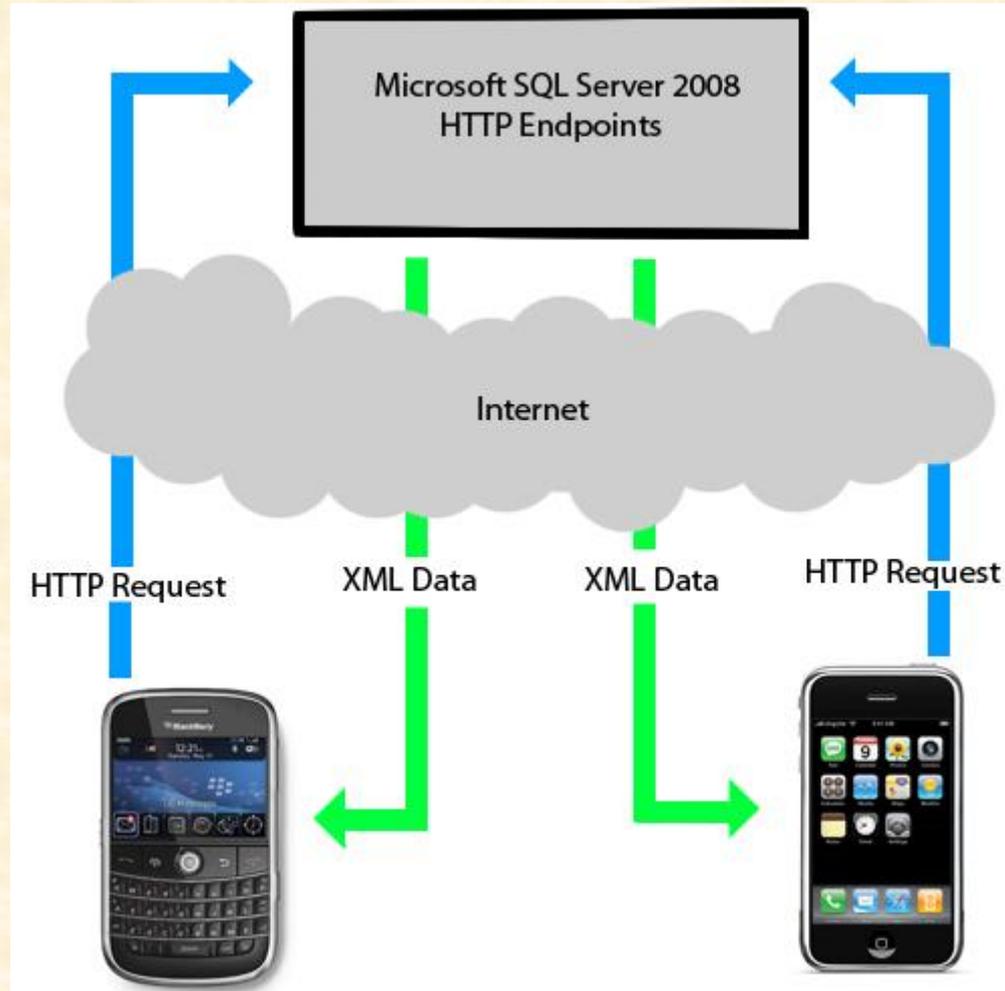 - iPhone
- Data Flow Diagram

Screen Mockups

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Technical Specifications

- Server Setup
    - Microsoft SQL Server 2008
    - HTTP endpoints used to access stored procedures in database
- Client Setup
    - iPhone Client
        - Written in Objective C with the iPhone SDK
    - BlackBerry Client
        - Written in Java with the BlackBerry plug-in for Eclipse
    - Communication with server
        - HTTP calls are used on each client to connect with the SQL server and retrieve XML data

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Architecture Illustrated

System Components

- Hardware Platforms
  - Virtual Windows XP Professional on Intel Core 2 Extreme with 4 GB RAM and NVIDIA 8800 gt
  - Windows 2003 Server with 1 GB RAM
  - Blackberry Bold 9000 and iPhone 3Gs

- Software Platforms / Technologies
  - Eclipse 3.4 with Blackberry SDK 1.7
  - iPhone SDK 3.1.2 with Xcode
  - Blackberry Bold 9000 and iPhone simulators

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Testing

Risks

- iPhone and Blackberry SDKs
- Bing Maps API
- Accessing database from mobile device
- Developing easy-to-use apps for two very different devices

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