

MICHIGAN STATE
UNIVERSITY

Project Plan

Bringing LeadVision to the Web

The Capstone Experience

Team Urban Science

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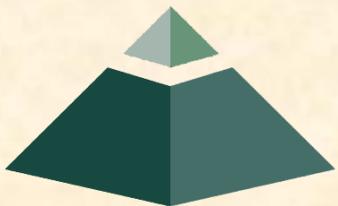
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*From Students...
...to Professionals*

Project Overview

- Creating an interactive version of LeadVision
- Audience: customers walking into a dealership/corporate office
- “Lead” – request sent by customer
- No user input needed
- Daily lead data shown



Functional Specifications

- User Interface
 - Map, cars, bar graph of leads by the hour
- Interactivity
 - Select by car, select by location, etc
- Ticker
 - Statistics scrolling across bottom of screen
- Movement
 - Pans across U.S.
- Layers
 - Lead Layer, Lead Density Layer

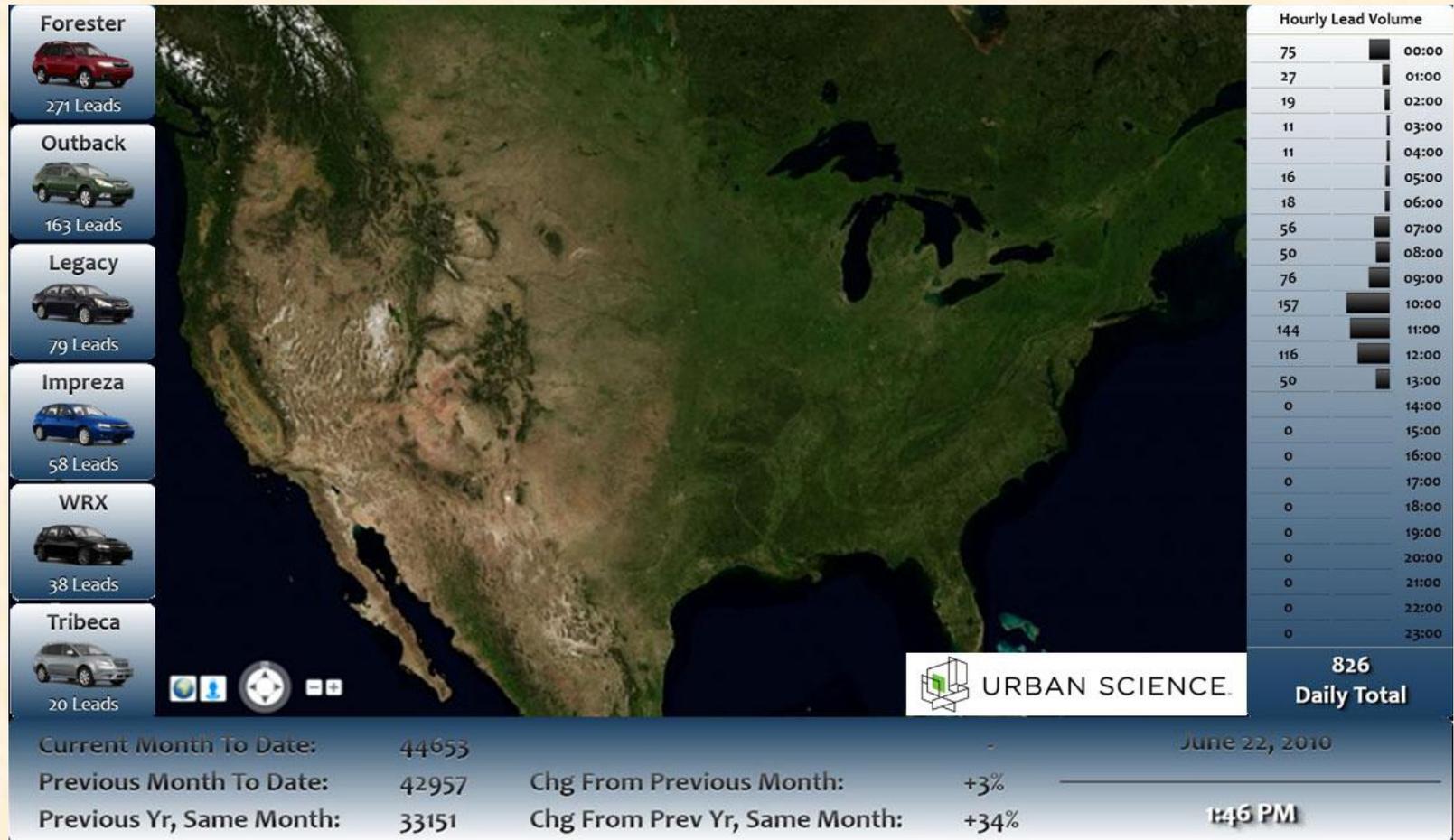


Design Specifications

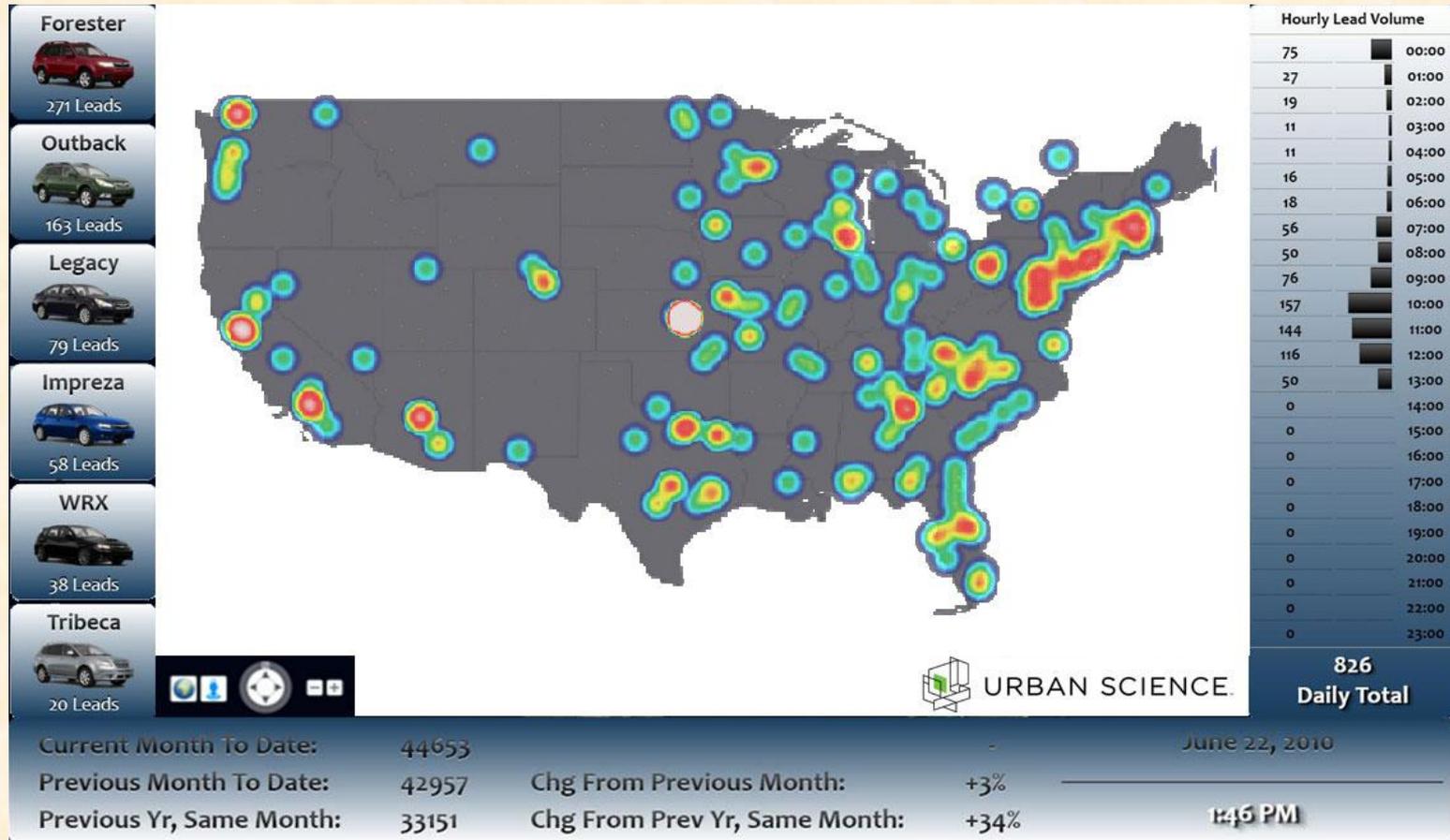
- Leads come in from various auto websites
 - `< Lead LeadId="1" Latitude="41.929614" Longitude="-71.294788" RequestedMake="MB" RequestedModel="C-Class" RequestedColor="Black" DealerName="INSKIP AUTOCENT" FirstName="Derrick" CustomerState="MA" EventTime="2008-08-27T00:03:00" />`
- Enters LeadVision
- “Leads” pop up on an interactive map



Screen Mockups



Screen Mockups

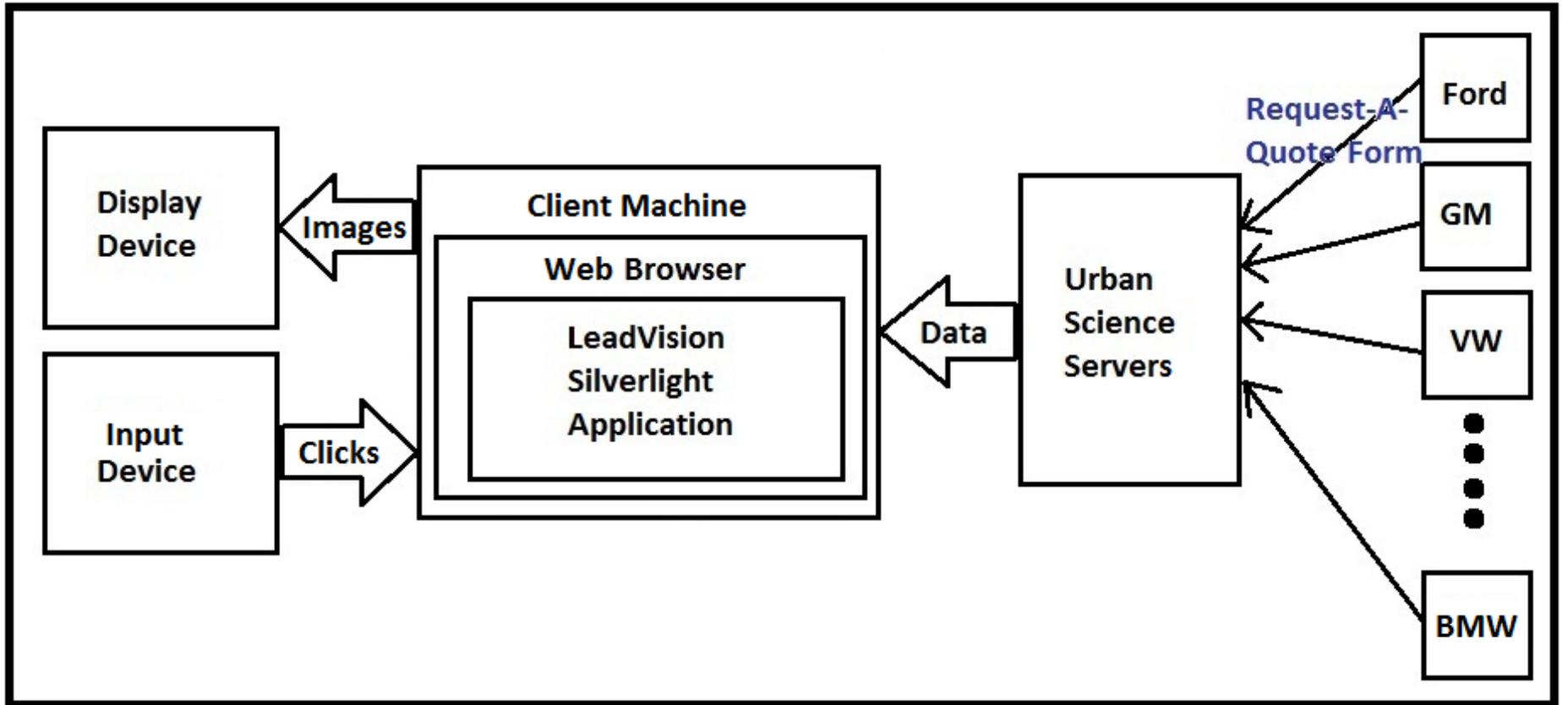


Technical Specifications

- Microsoft Silverlight 4.0 embedded application
- Client can run on Windows or Intel-based OS X
- Silverlight supports most major web browsers
- Geographical data & imagery from Bing Maps API
- Developed in Microsoft Visual Studio 2010
 - Application running in C# with XAML
 - Developed with Silverlight 4.0 Developer Tools
 - Testing with Firefox on ASP.NET Development Server
 - Image data rendered using Silverlight Deep Zoom



System Architecture



System Components

- Hardware Platforms
 - Computer with supported OS and > 1GB free RAM
 - Steady network connectivity
 - Display device and optional input device
- Software Platforms / Technologies
 - Windows >= XP SP2, OS X 10.4+, Linux + Moonlight
 - Modern web browser (IE, FF, Chrome, or Safari)
 - Microsoft Silverlight 4.0 browser plugin



Testing

- Mock Data
 - Simulating one day of Lead information
- Browser use
 - Work across Safari, Firefox, IE, etc.
- “On Site Testing”
 - Big screen TV on site



Risks

- Geographical Data
 - How do we get it? How can we make use of it?
 - Panning and zooming
- Learning Silverlight
 - Displaying map/showing data
- Ticker
 - What kinds of statistics/how to store & load them
- Flexibility/Testing
 - Making it work on different browsers

