

MICHIGAN STATE

U N I V E R S I T Y

Project Plan

Dealer4U

The Capstone Experience

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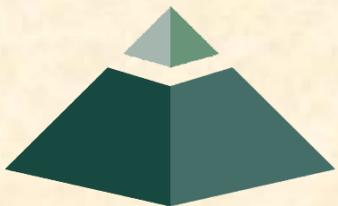
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Spring 2019



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

Functional Specifications

- Marketplace for used vehicle leads
- Our goal is to connect customers and dealers in new way by having customers submit the car they are searching and this alerts nearby dealers who will respond to the post with their offer
- Puts the burden of connection onto the dealer leading to a smoother experience for the customer looking to purchase a vehicle

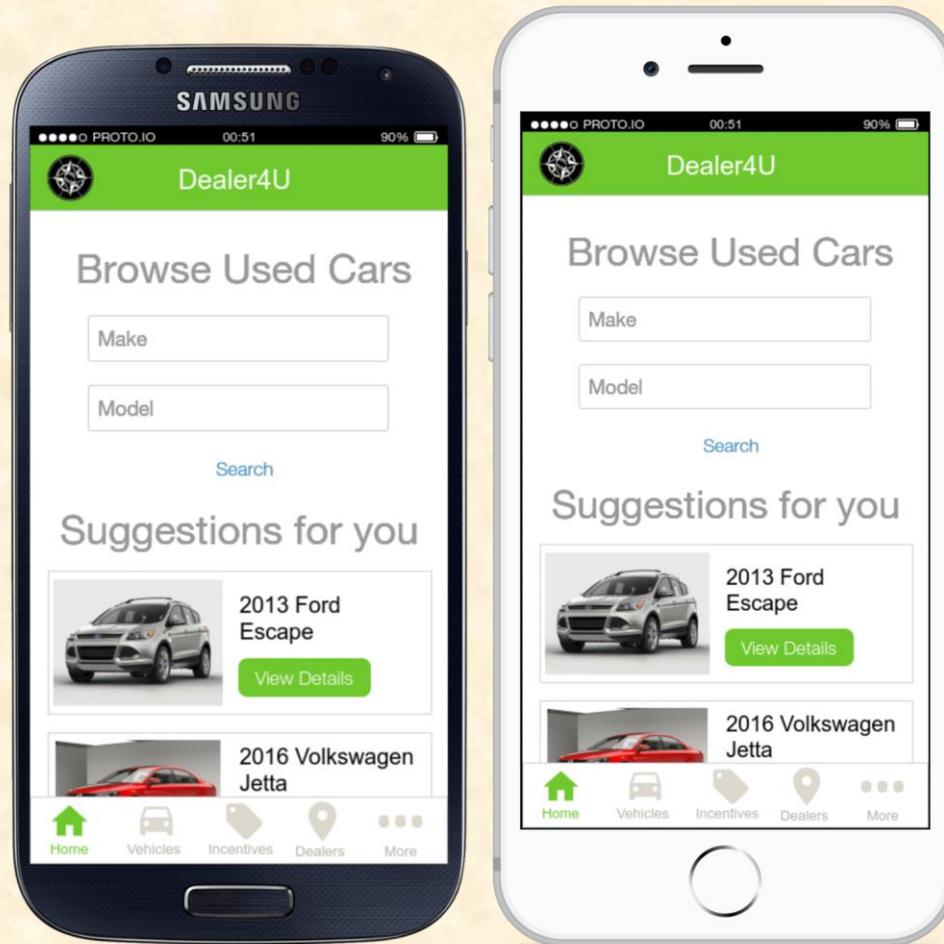


Design Specifications

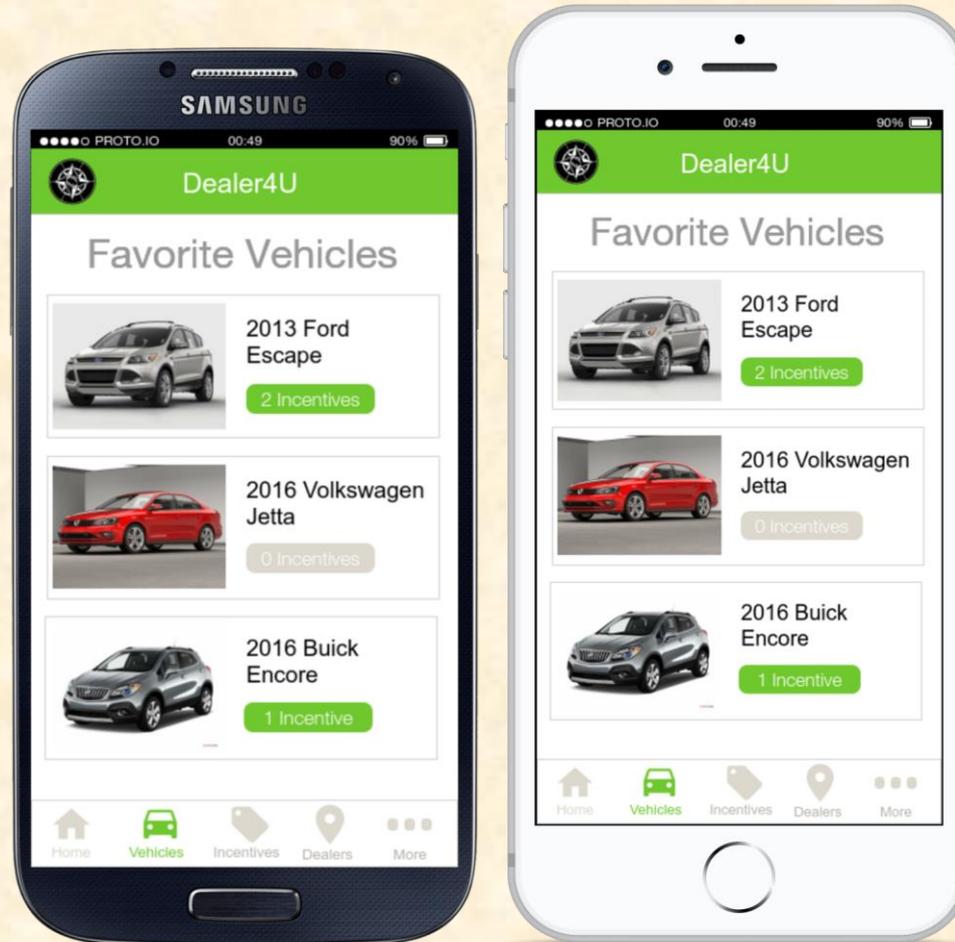
- Mobile application for customer UI
 - Generating leads, displaying incentives
- Web application for dealer UI
 - Displaying leads, creating incentives
- Common backend for both applications
 - RESTful APIs for connection to database
- Database
 - Collections of data (accounts, leads, incentives, dealerships)



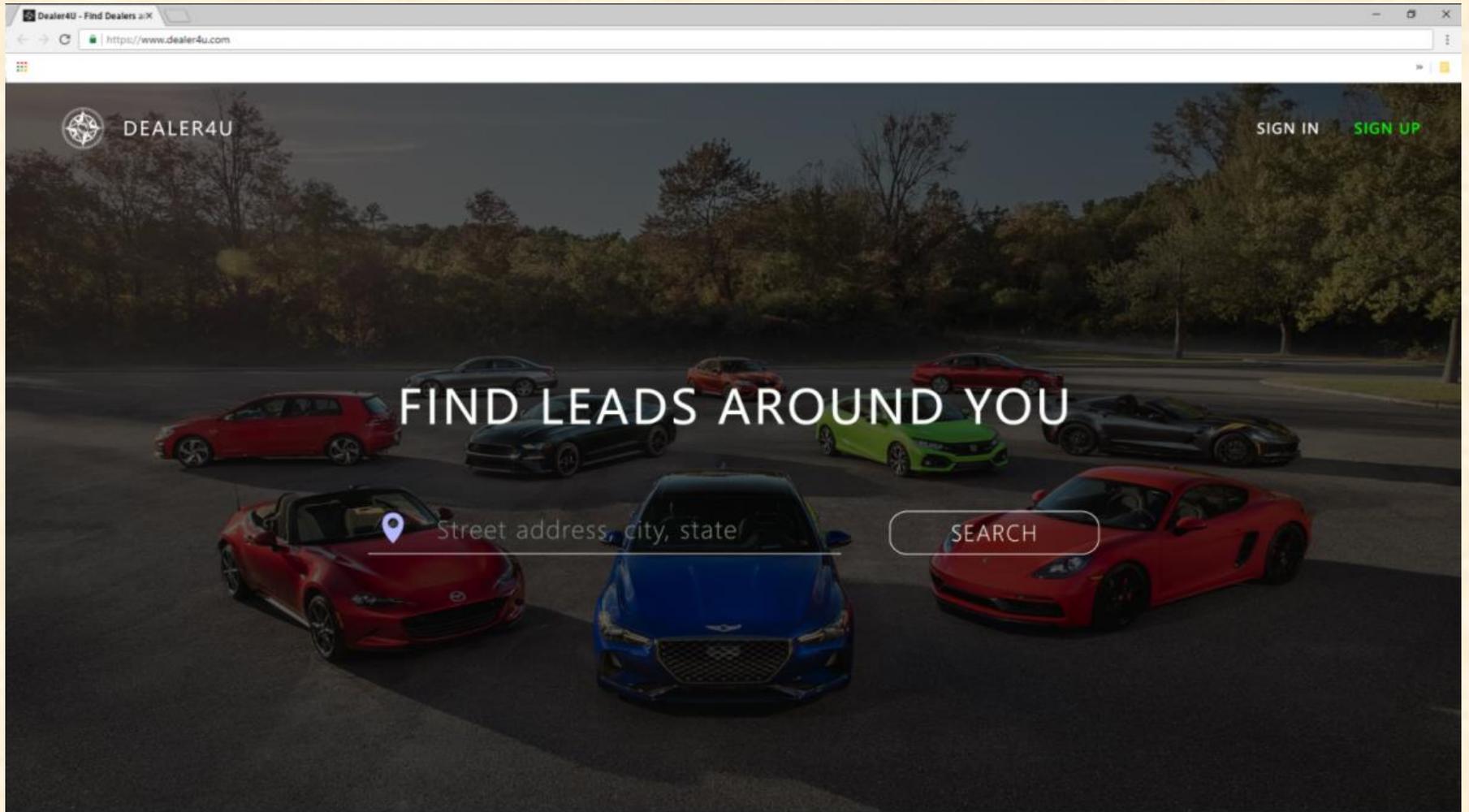
Screen Mockup: Customer Home



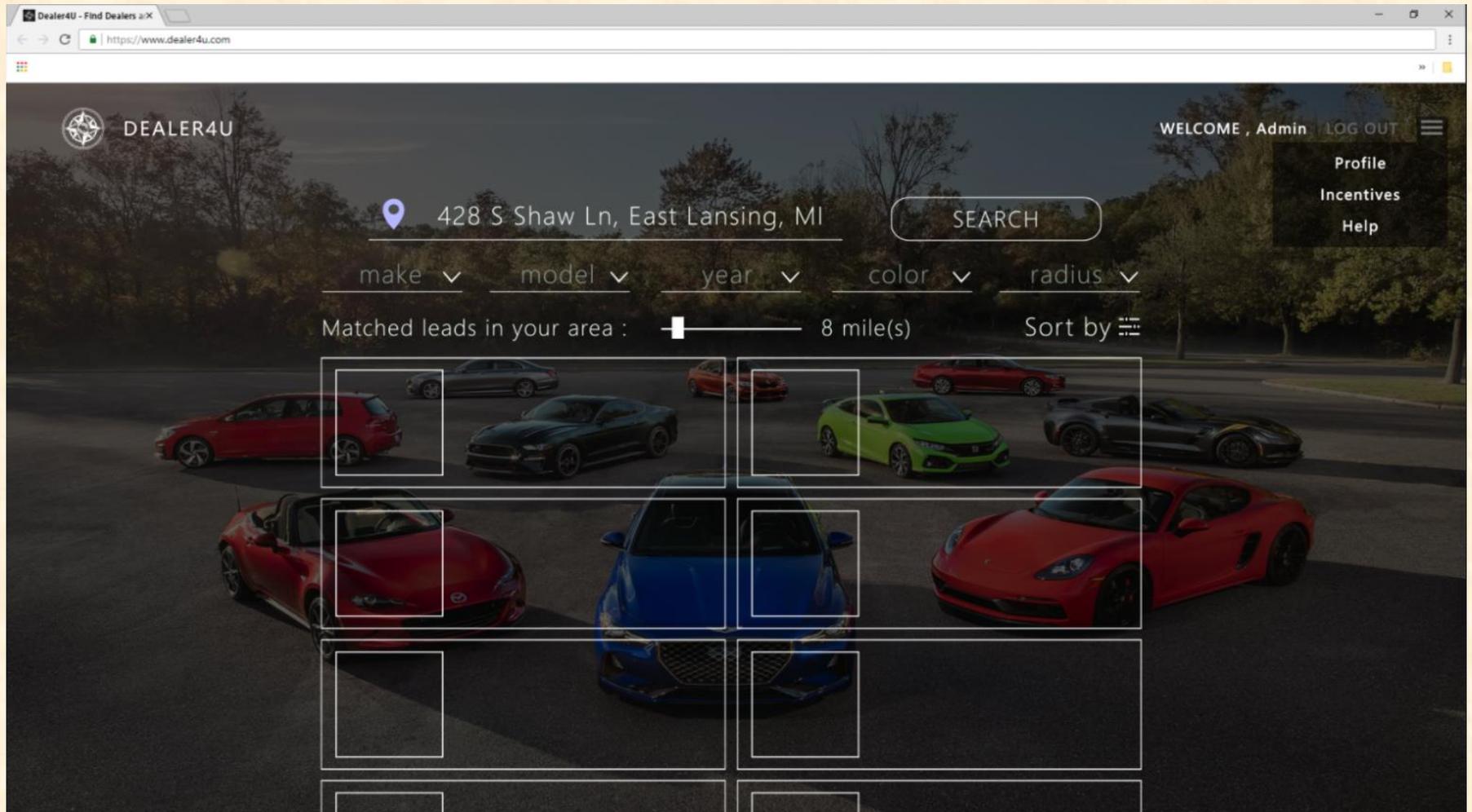
Screen Mockup: Customer Vehicles



Screen Mockup: Dealer Website



Screen Mockup: Dealer Website

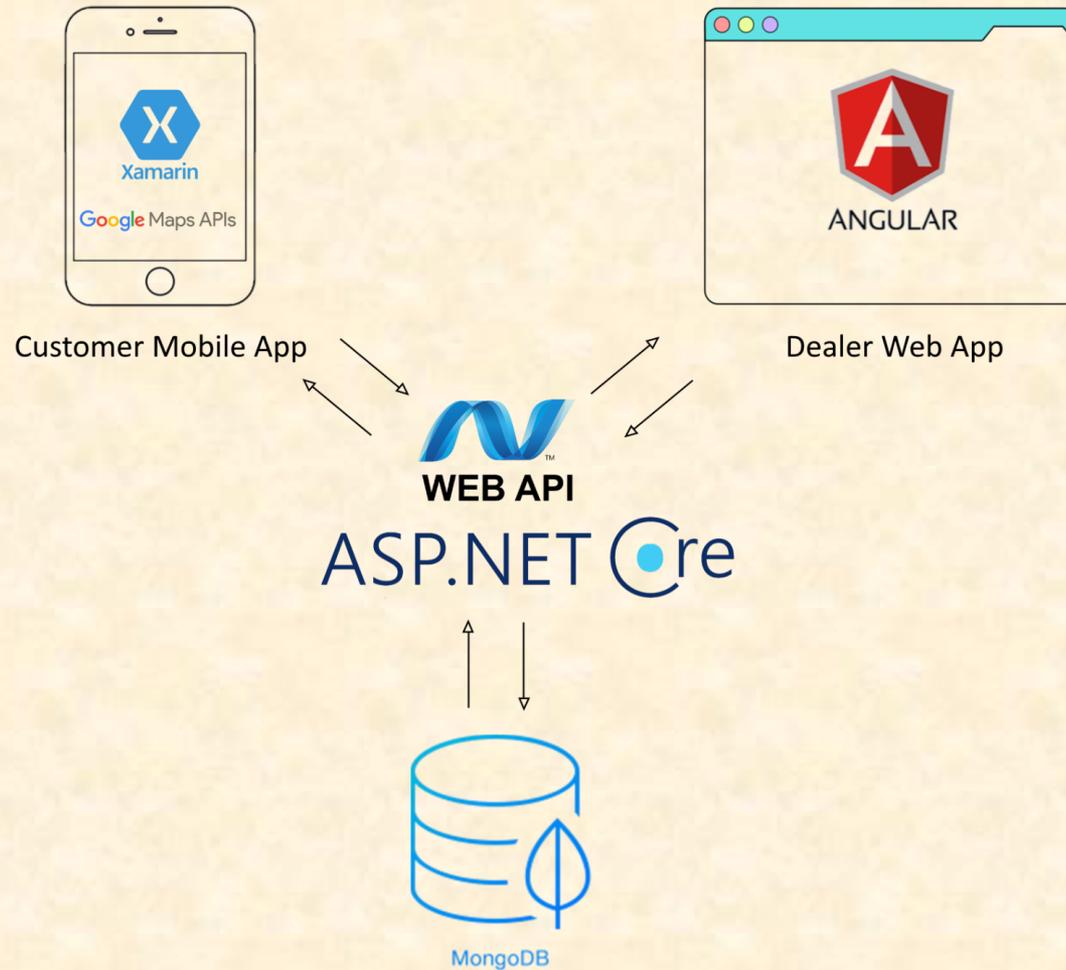


Technical Specifications

- ASP .NET Core
 - Used for backend development
- WebAPI
 - API used for developing RESTful web services
- MongoDB
 - Non-relational database for customer/dealer data
- Angular
 - Frontend web app framework - DealerUI
- Xamarin
 - Frontend mobile app framework - CustomerUI



System Architecture



System Components

- Hardware Platforms
 - Dell PowerEdge R210
 - Android and iOS phones
 - Two iMacs
 - Personal Laptops
- Software Platforms / Technologies
 - macOS Mojave & Windows 10
 - Visual Studio 2017 Education & VS Code
 - Xamarin, Angular, & ASP.NET Core
 - Postman, used for testing server



Risks

- Connecting website and mobile app to server
 - None of us used the technologies in this project to connect to servers
 - Research and experiment, with a known deadline to accomplish the task.
- Designing a modern looking website and Mobile app
 - None of us have experience with car dealership websites or apps
 - Look at popular car dealership websites and apps for references
- Customer Validation
 - Not getting feedback from potential users of our app
 - Asking fellow students and family members to use the product and provide feedback.



Questions?

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