MICHIGAN STATE
UNIVERSITY

Project Plan
AutoHook Mobile Redemption Tool

The Capstone Experience

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From Students…
…to Professionals

Functional Specifications

- Voucher redemption system for auto dealers

- Current system designed for desktop

- Dealers want to redeem from mobile

- Mobile web application

- Voucher barcode scanning

- Helpful statistics and metrics page
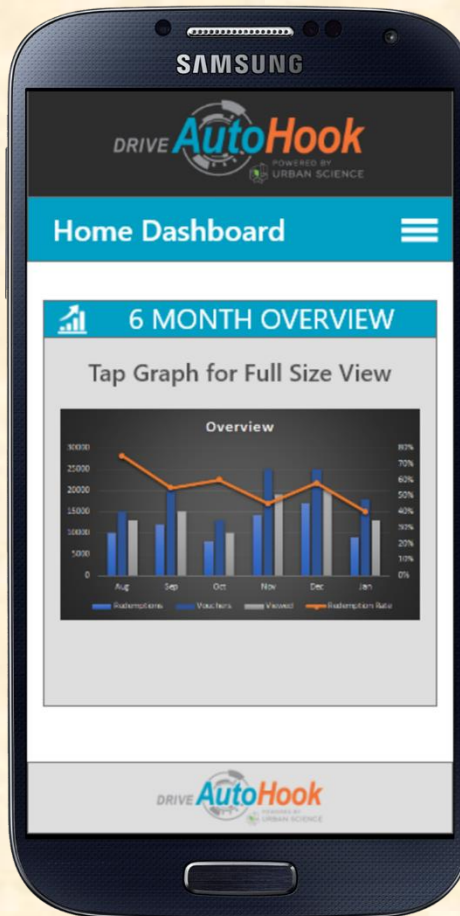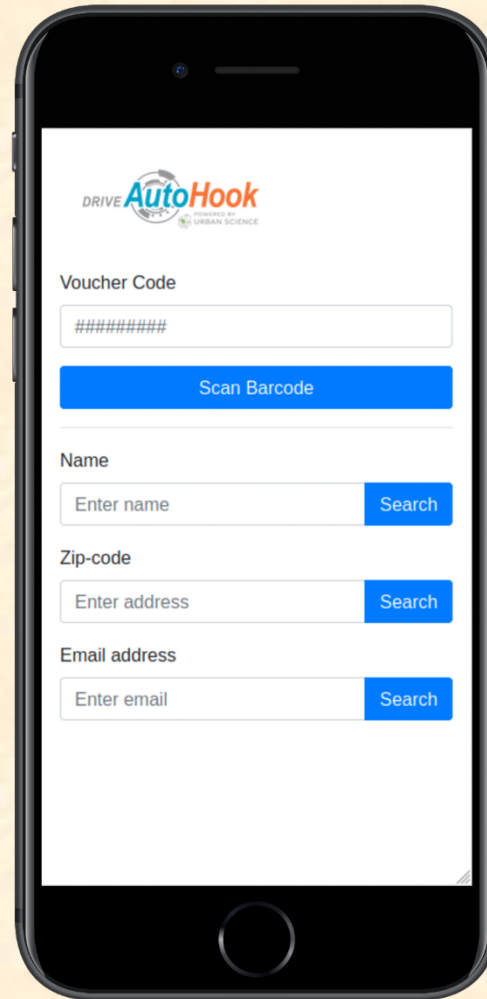
- Help/Q&A documentation

Design Specifications

- Easy to use barcode scanner

- Reactive screen layout

- Graphs and statistics

- Small screen compatibility

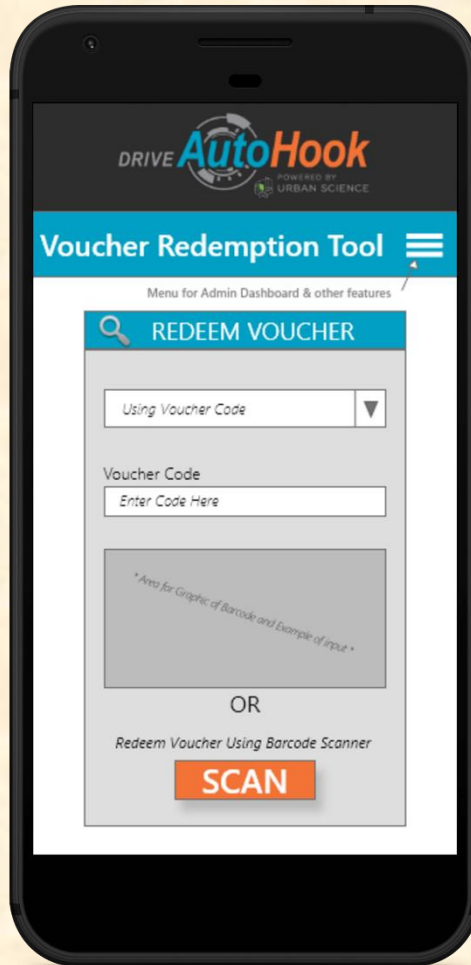- Similar in style to older system
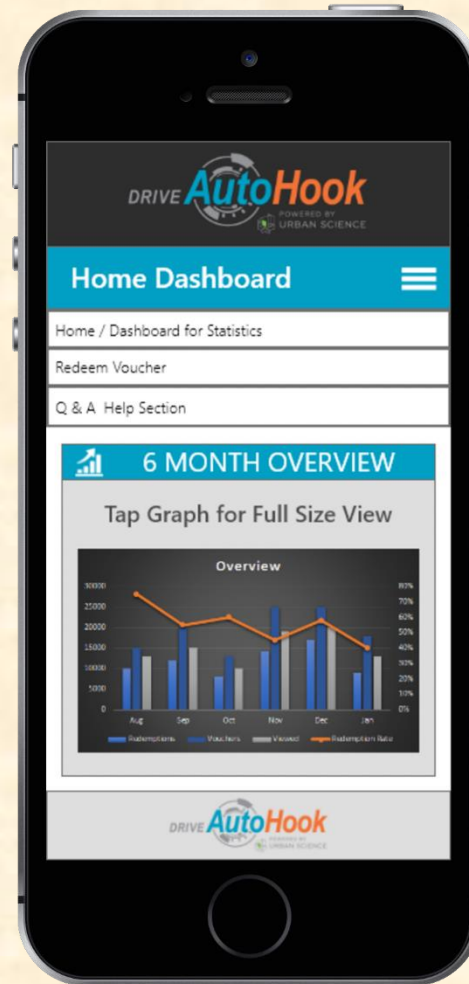
Screen Mockup: Home and Statistics

Screen Mockup: Redemption Page Design 1

Screen Mockup: Redemption Page Design 2

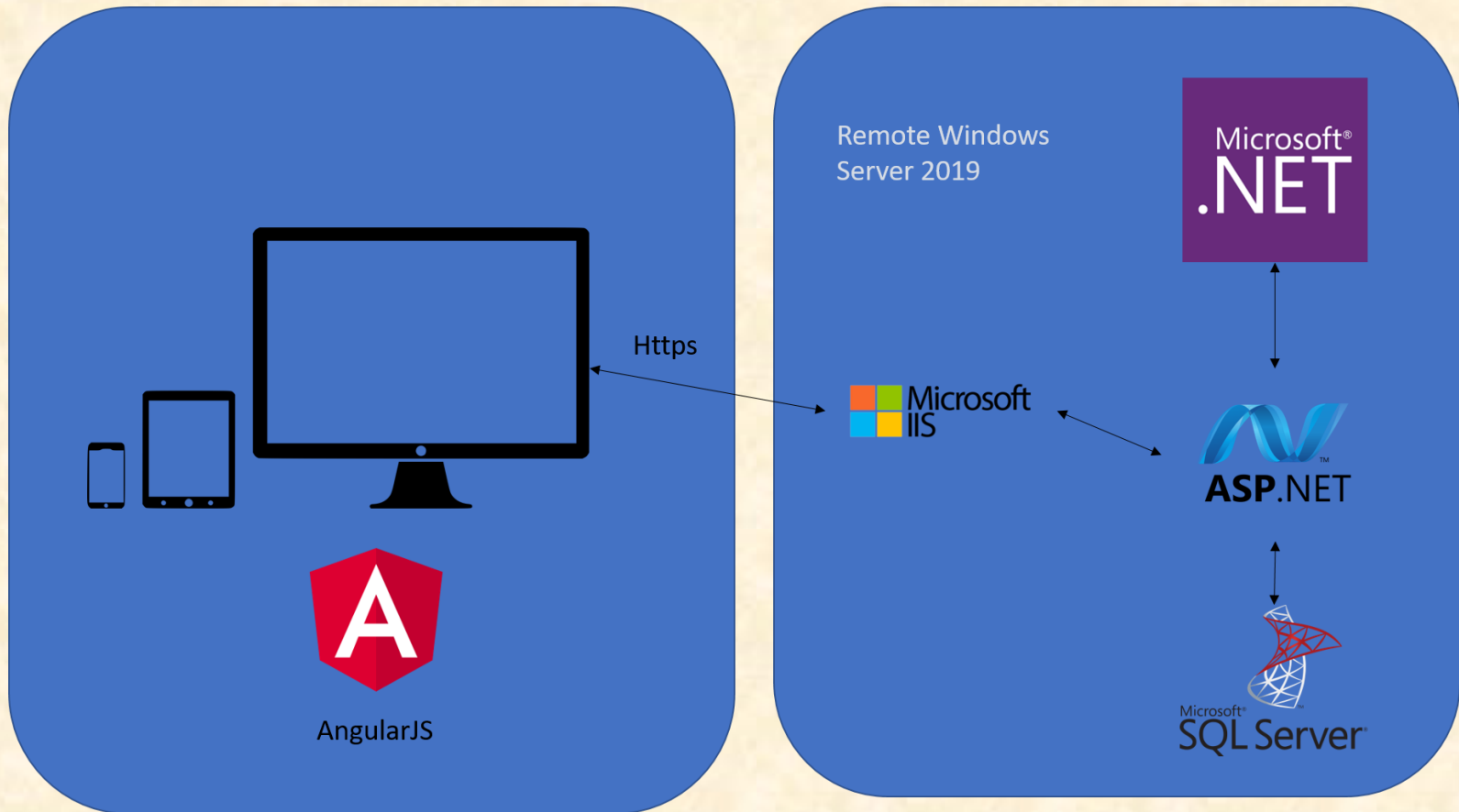# Screen Mockup: Side Menu

Technical Specifications

- Full web framework

- Local SQL and web server

- AngularJS

- ASP. Net

- Webpack

- Local authentication

System Architecture

Remote Windows Server 2019

Https

AngularJS

System Components

- Hardware Platforms
  - Microsoft Server 2019
- Software Platforms / Technologies
  - AngularJS 8
  - quaggaJS
  - D3
  - ASP. Net
  - Dot Net Framework 4.8

Risks

- Barcode Scanner Limitations
  - Limited to newer browsers, Accuracy is questionable
  - Research and prototyping required, Justin assigned
- Small Scope
  - Will run out of things to do
  - Ongoing client communication
- SSL and Https
  - Libraries require a Https connection
  - Research, possible server relocation
- No Access To Client
  - Development/Production server is not exposed
  - Regular presentations to client.

Questions?