

**MICHIGAN STATE**  

---

**UNIVERSITY**

# Project Plan

# Purchase Score Application

The Capstone Experience

Team Urban Science

Marcus Minardi

Jay Kim

Isaac Mayers

Kyle Schmitz

Department of Computer Science and Engineering  
Michigan State University

Fall 2020



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

# Functional Specifications

---

- Sales lead ranking platform
- Direct way of adding leads
- Generates reports based off dealer preferences
- Provides metrics on lead quality
- Finds which leads dealers should focus on



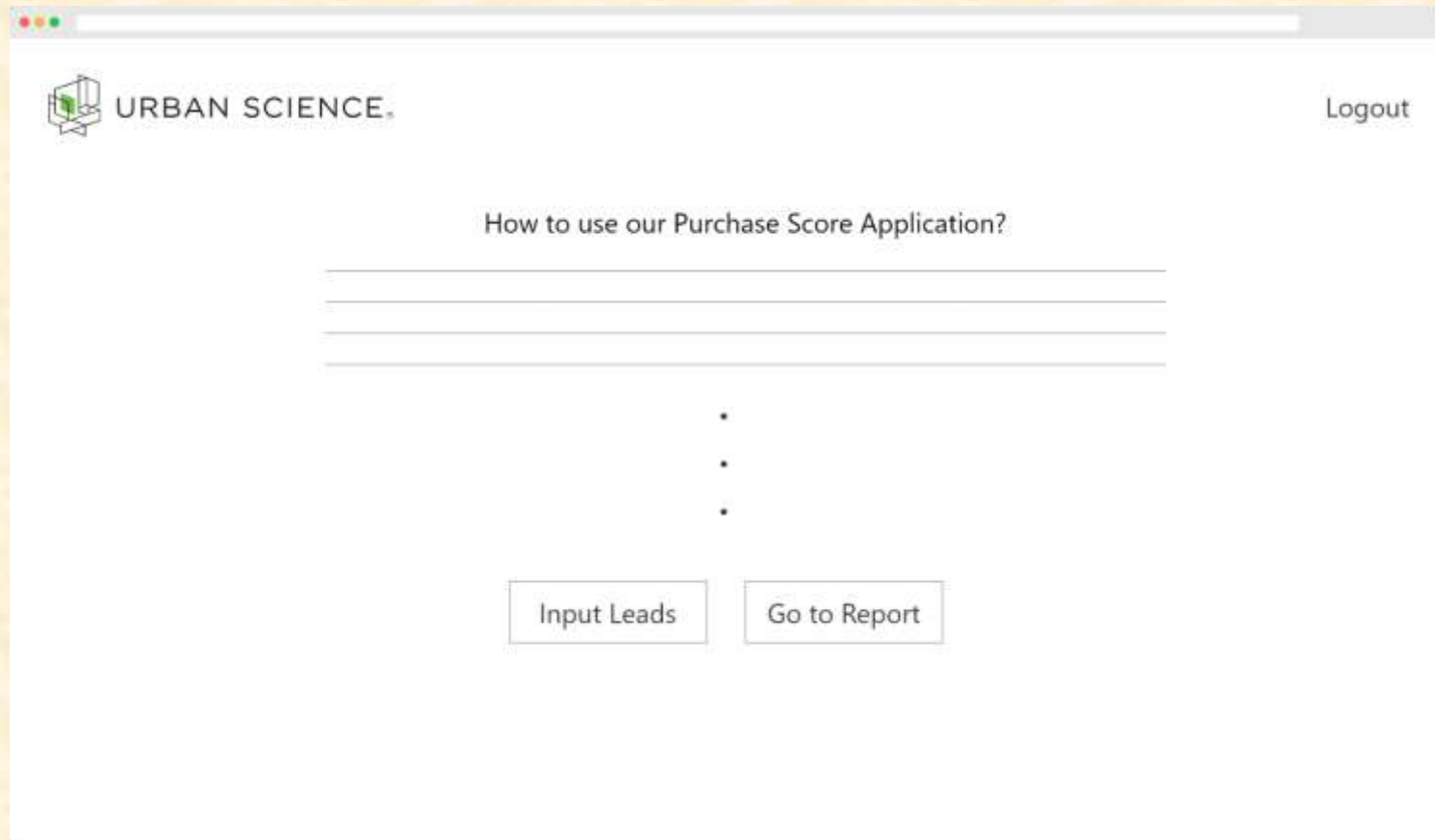
# Design Specifications

---

- Intuitive dashboard for any dealer to use
- Page to input lead information (manually/automatically)
- Page to see leads and use fields to filter leads
- Generate printable reports that show lead data and metrics
- Login to authenticate users



# Screen Mockup: Home Page



# Screen Mockup: Import Leads Page

The screen mockup shows a web browser window with the URBAN SCIENCE. logo in the top left and 'Report' and 'Logout' links in the top right. The main heading is 'Import Lead(s)'. There are two methods for importing leads:

- Method #1:** Labeled 'Manual', it contains three input fields for 'Name', 'Address', and an ellipsis (...), followed by a 'Submit' button.
- Method #2:** Labeled 'Automatic', it contains an empty input field, a 'Choose a File' button, and a 'Submit' button.



# Screen Mockup: Reporting Page

URBAN SCIENCE. Import Logout

**Filters** Score  Date  Others

Name	Address	...	...	...			Score

Create a Report



# Screen Mockup: Reports Page

URBAN SCIENCE. Report Import Logout

## Report

Name _____	Name _____	Name _____
Address _____	Address _____	Address _____
Extra _____	Extra _____	Extra _____
Info _____	Info _____	Info _____
... _____	... _____	... _____
<b>Score: 87</b>	<b>Score: 50</b>	<b>Score: 27</b>

⋮

Print



# Technical Specifications

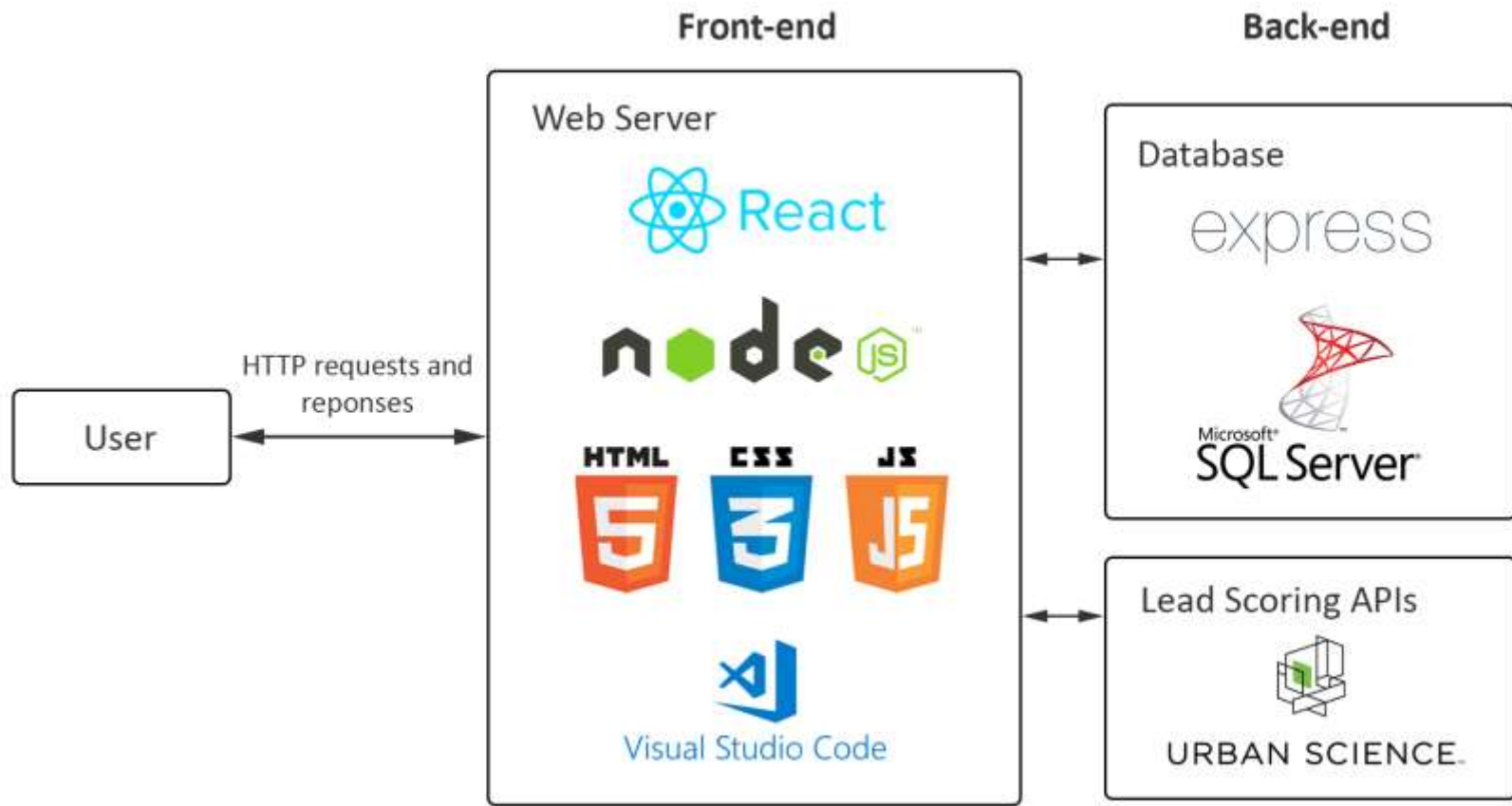
---

- Urban Science APIs to score leads
- SQL Database storage and retrieval of leads
- React for multi-platform usage
- Node.js & Express.js to connect to database





# System Architecture



# System Components

- Hardware Platforms
  - PC
  - Mac
  - Tablet
- Software Platforms / Technologies
  - Visual Studio Code
  - React & Node.js
  - SQL Server
  - Urban Science APIs



# Risks

- Quality of Data
  - Quality of the data given to us by Urban Science isn't sufficient to calculate a prediction
  - Parse through the usable data
- API Issues
  - Not being able to access their APIs for some reason (Updating API)
  - Restricting usage of certain functionalities based on available APIs
- Field Testing
  - Not being able to field test with such a UI focused project on car dealers
  - Show to relatives/non-technologically advanced individuals



# Questions?

---

?

?

?

?

?

?

?

?

?

