MICHIGAN STATE
U N I V E R S I T Y

Project Plan Presentation
A-O Merch Search

The Capstone Experience

Team Auto Owners

Caroline Gormely
Tyler Gyulveszi
John Lin
David Sugai
Samuel Ward
Yuzhen Zhou

Department of Computer Science and Engineering
Michigan State University

Fall 2022

From Students…
…to Professionals

Project Sponsor Overview

- Mutal insurance company that offers life, home, auto, and business insurance
- Recognized nationally as one of the top companies for claim handling
- Headquartered in Lansing, Michigan

Project Functional Specifications

- Improve Process of Purchasing of A-O Merchandise for A-O associates.
  - By Replacing their Pen-and-Paper System
  - With an Easy-to-Use Web App
- Provide A-O administrators with insight about what items associates are purchasing.
  - With an easy-to-use analytics page
    - e.g. What was the most sold shirt last month?
- All this will mitigate disorganization throughout the ordering process.

Project Design Specifications

- React Web Application
- Pages Displaying all Merchandise and Each Item
- With the Ability to Add to Cart, Change Size and Quantity
- Administrative Dashboard that Visualizes Sales Analytics
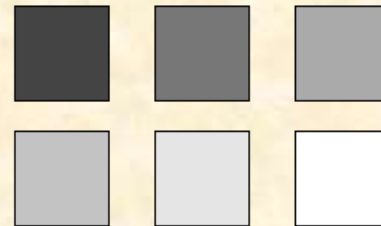- Conforms to Auto Owners Style Guide
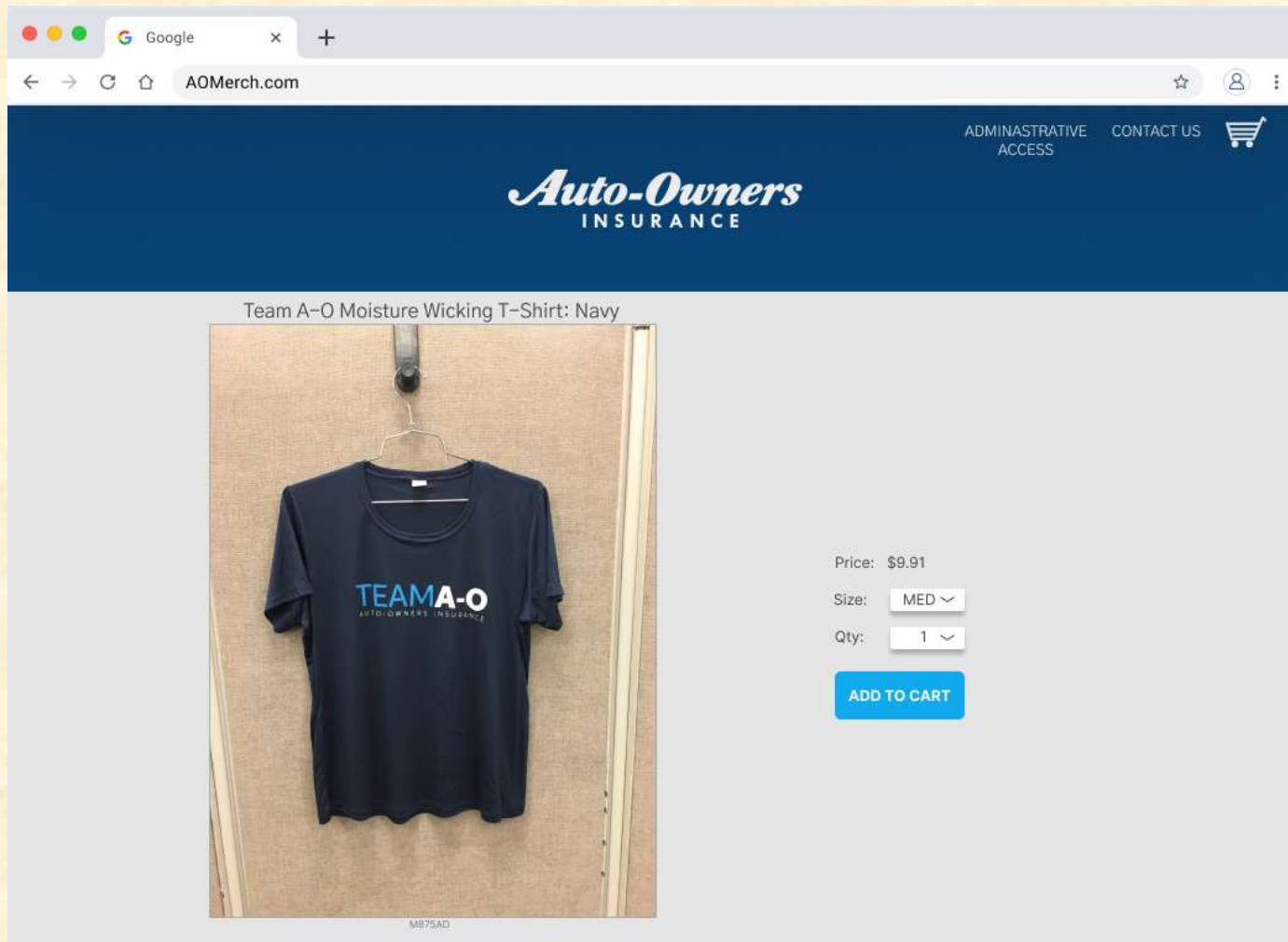
Screen Mockup: Color Scheme

Main Colors
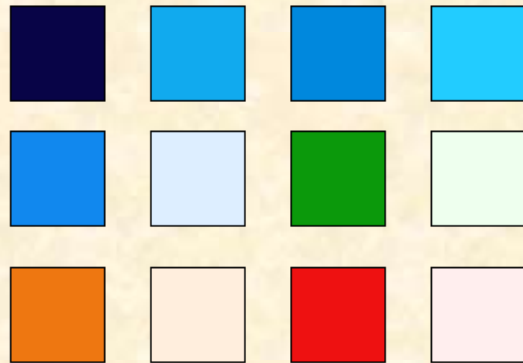
Shades

Screen Mockup: Catalog Page

Screen Mockup: Item Page

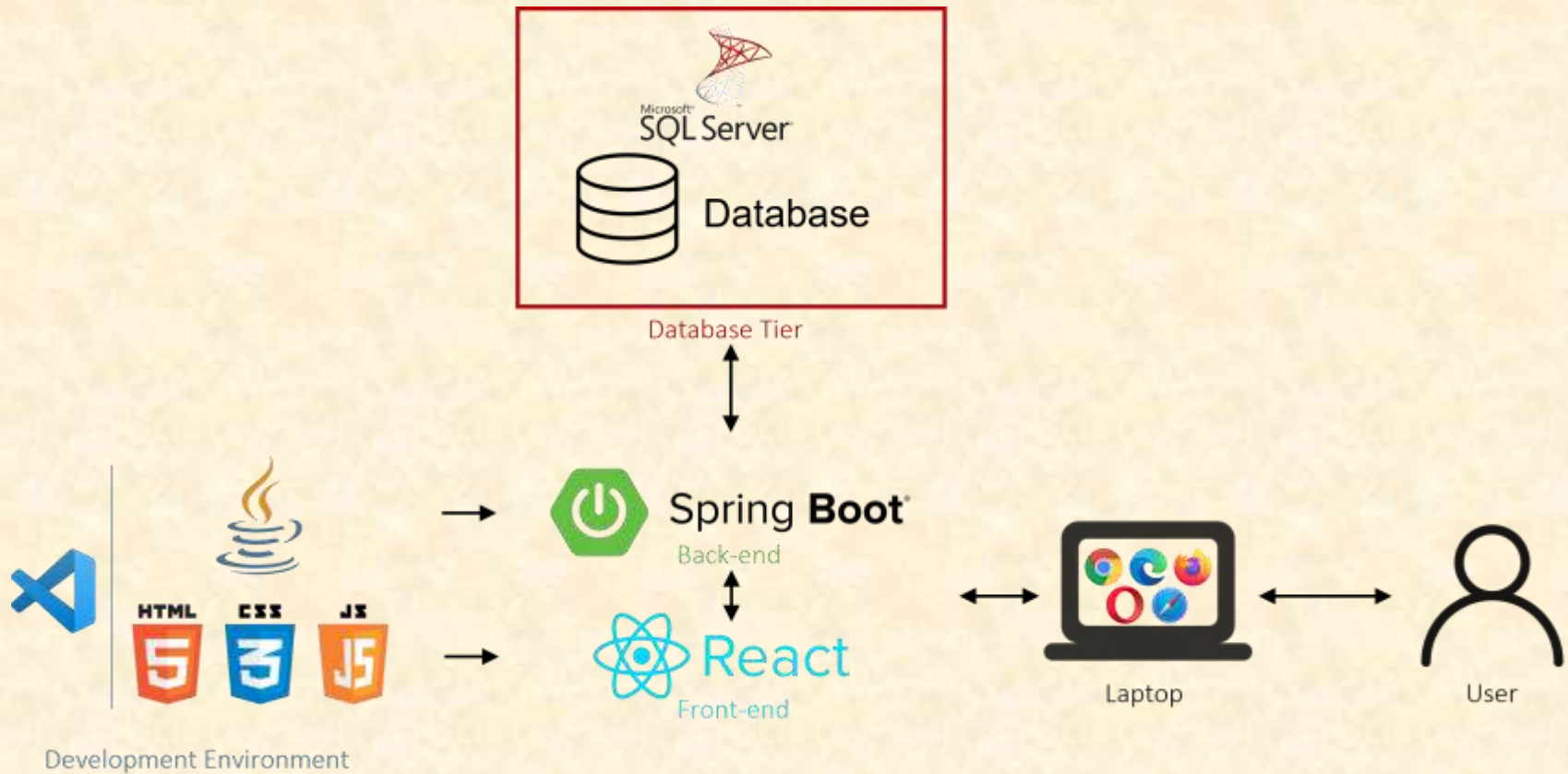# Screen Mockup: Checkout Page

Screen Mockup: Dashboard
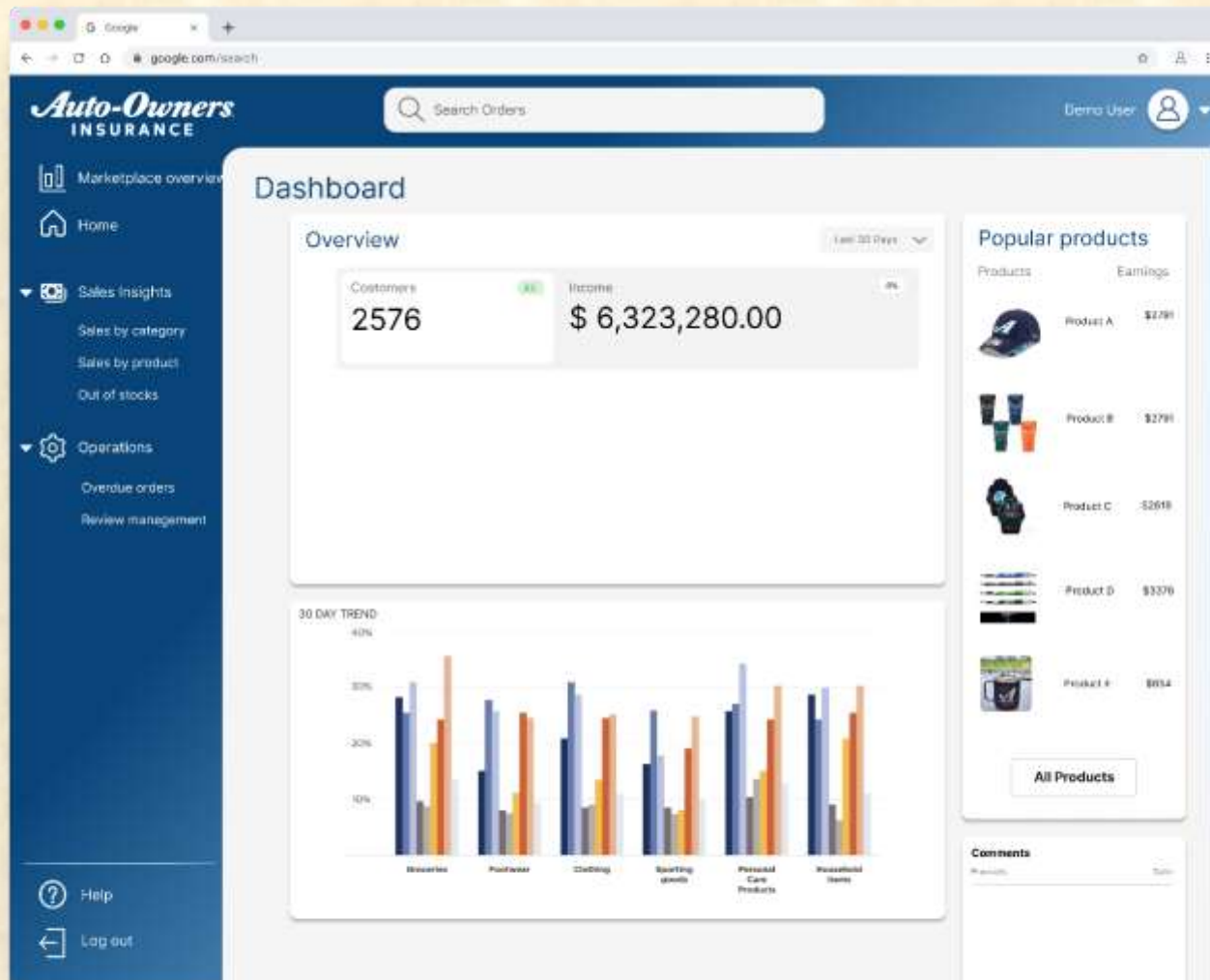
Technical Specifications

- React

- Spring Boot

- HTML/CSS/JavaScript

- Microsoft SQL Server

System Architecture

System Components

- Hardware Platforms
  - Dell PowerEdge R210 Server

- Software Platforms / Technologies
  - React
  - Spring Boot

Risks

Risks

- **Storing payment information**
  - Users will have the ability to check out and purchase the items in their shopping cart. We need to do this without obtaining any sensitive information such as their credit card number.
  - Our application will mock the payment portion and we won't store any payment information anywhere and we won't attempt to authorize or charge a card.

- **Saving user input from the frontend to the database**
  - We are obtaining user information during profile creation and when an order is placed. This information must be sent from the React app to the Microsoft SQL database we are running.
  - To mitigate this risk, our project will use Spring Boot which will communicate with both the front-end and the back-end. Using Spring Boot, the user input can be stored in the database through querying the database.

- **Creating an application that is easy to use**
  - Our application will be used by Auto Owners associates with varying levels of technology experience and online shopping experience.
  - We are building the application with the assumption that the end user is not a tech savvy individual. We are also demoing the application to our client to ensure it's a product that can be used by associates.

Questions?