Project Plan Presentation
Organization Efficiencies Utilizing Wifi Locationing

The Capstone Experience

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Project Sponsor Overview

- Regional Retailer

- Founded in 1934 in Greenville, MI

- Over 265 stores in 6 Midwest states

Project Functional Specifications

- Improve the Customer Experience

- By Adding Smartphone Payment and

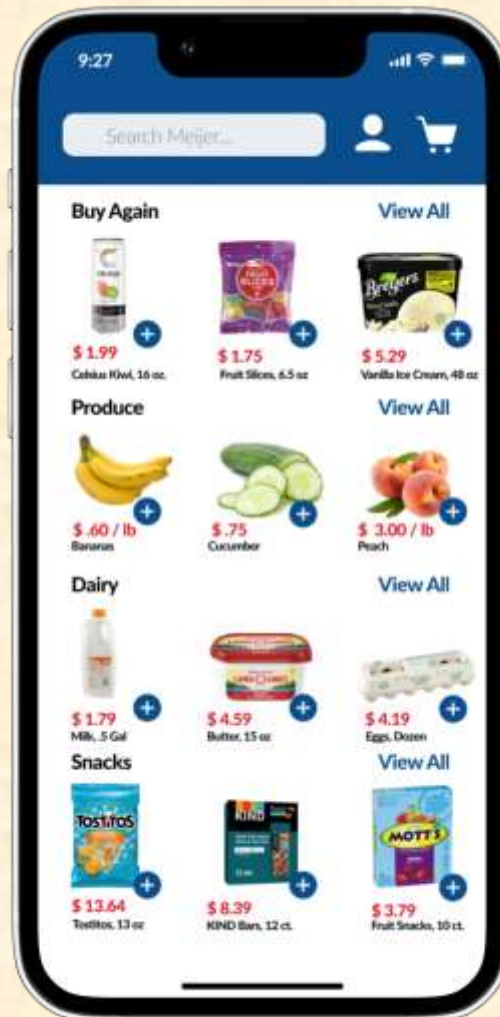- Redirecting Resources to Busy Areas

- Using Real Time Store Traffic Data
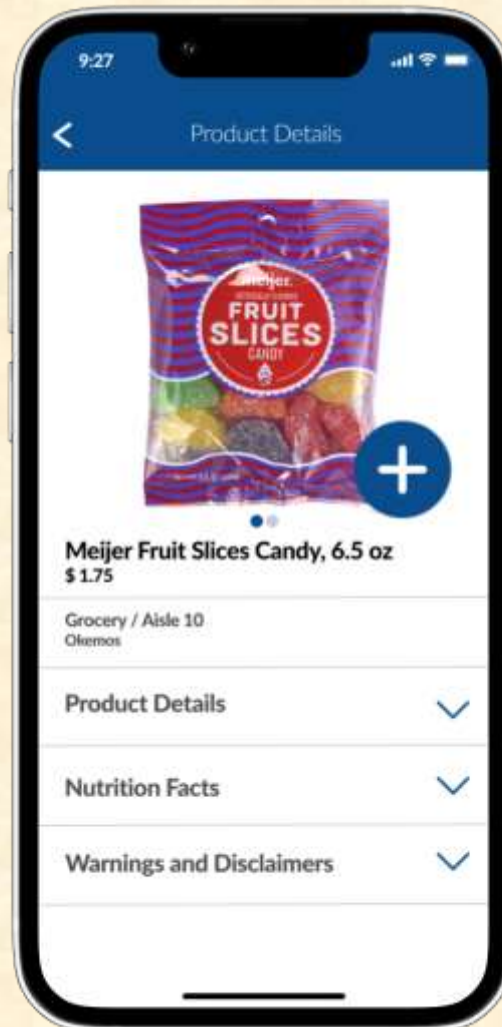
Project Design Specifications

- Enhanced Shop & Scan Functionality by paying directly from phone

- Validation of Customers Credibility

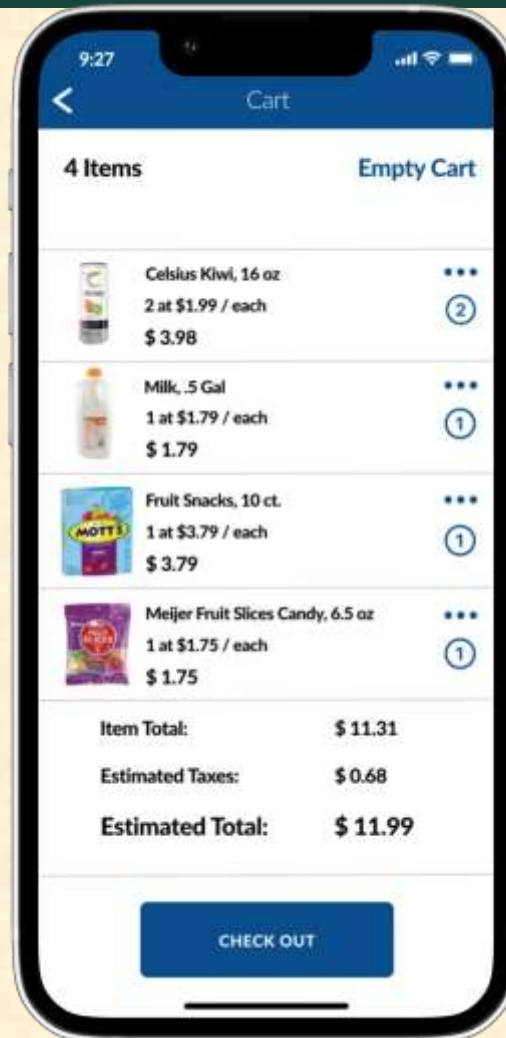- Showcase of Customer Shopping/Payment metrics
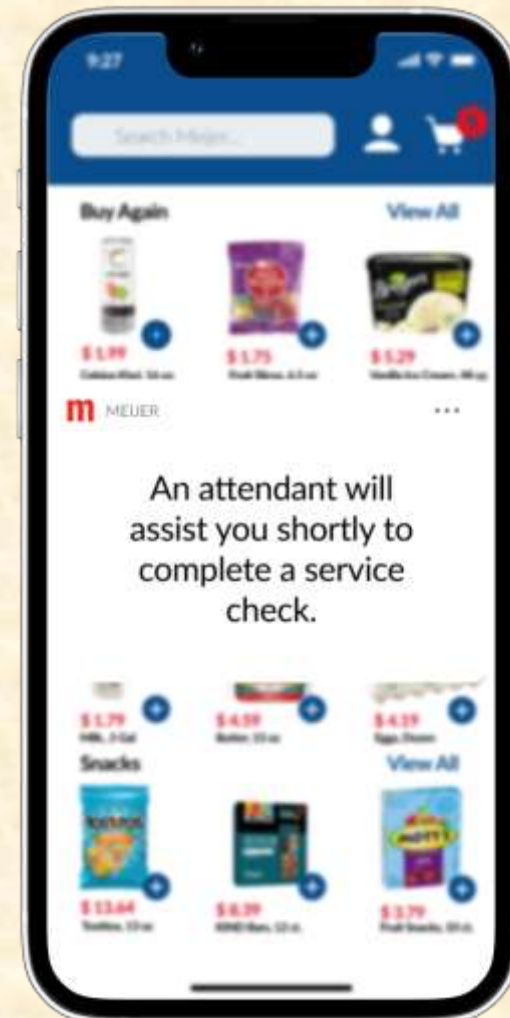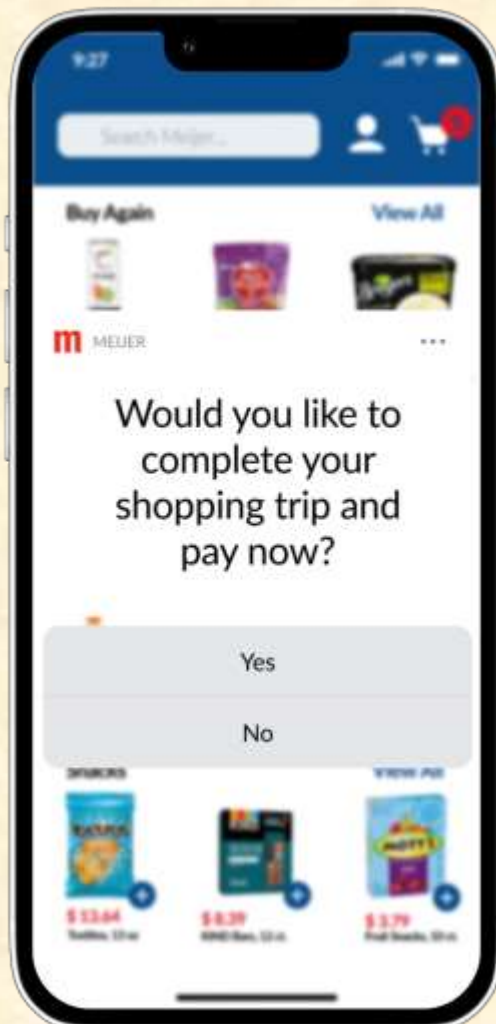
Screen Mockup: Home Screen

Screen Mockup: Item Screen
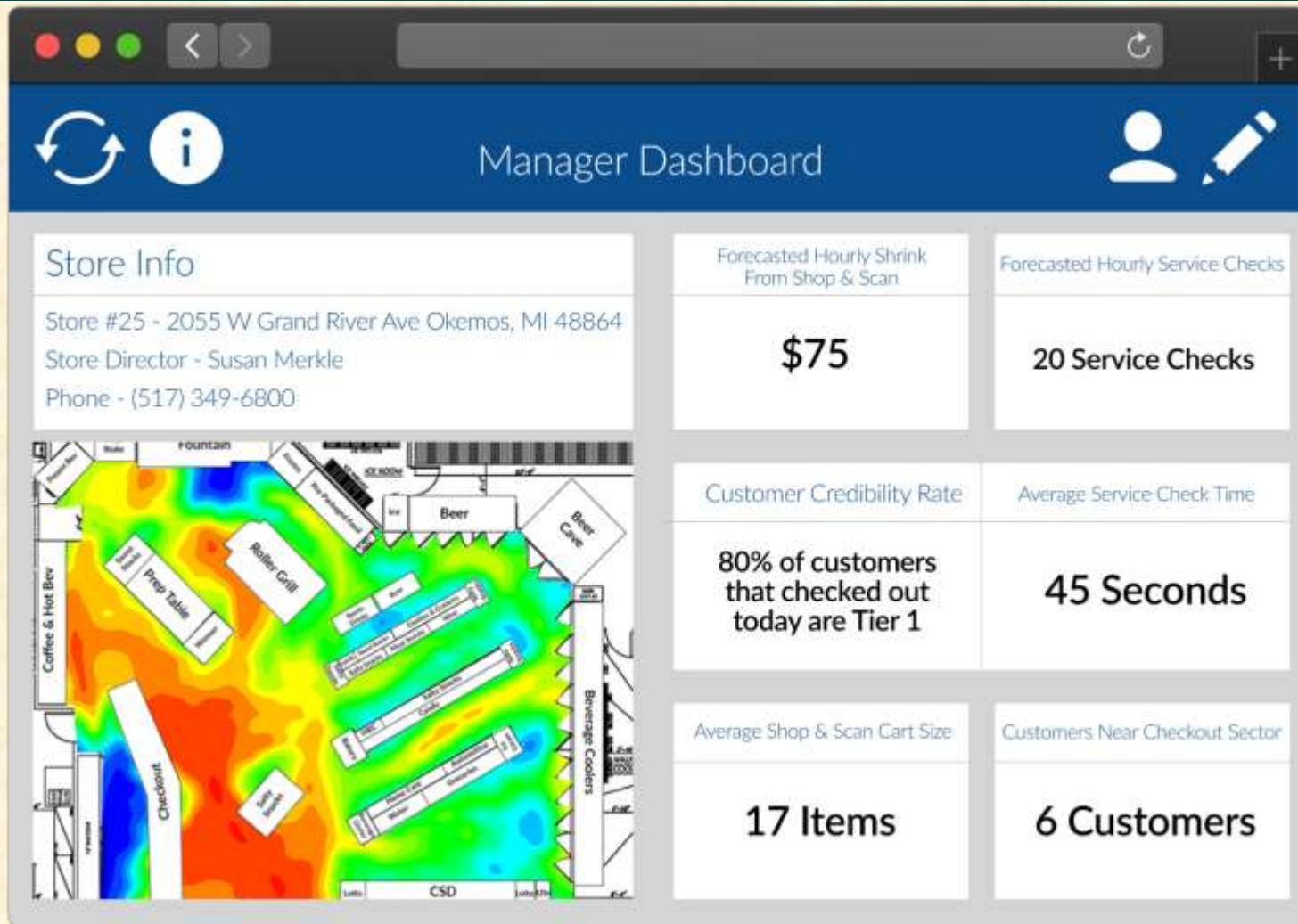
Screen Mockup: Cart Screen
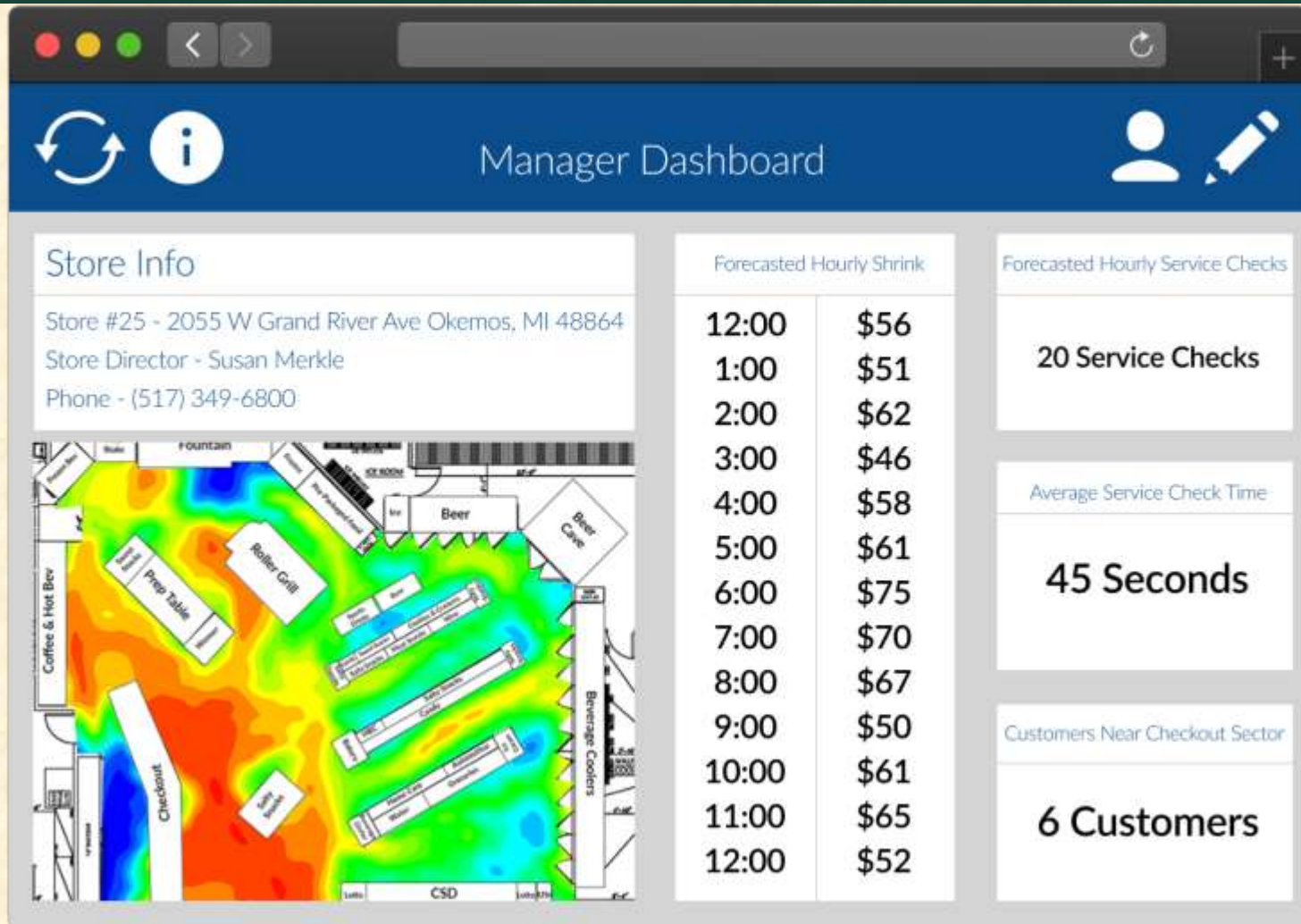
Screen Mockup: Checkout Notification Screen

Screen Mockup: Dashboard Screen #1
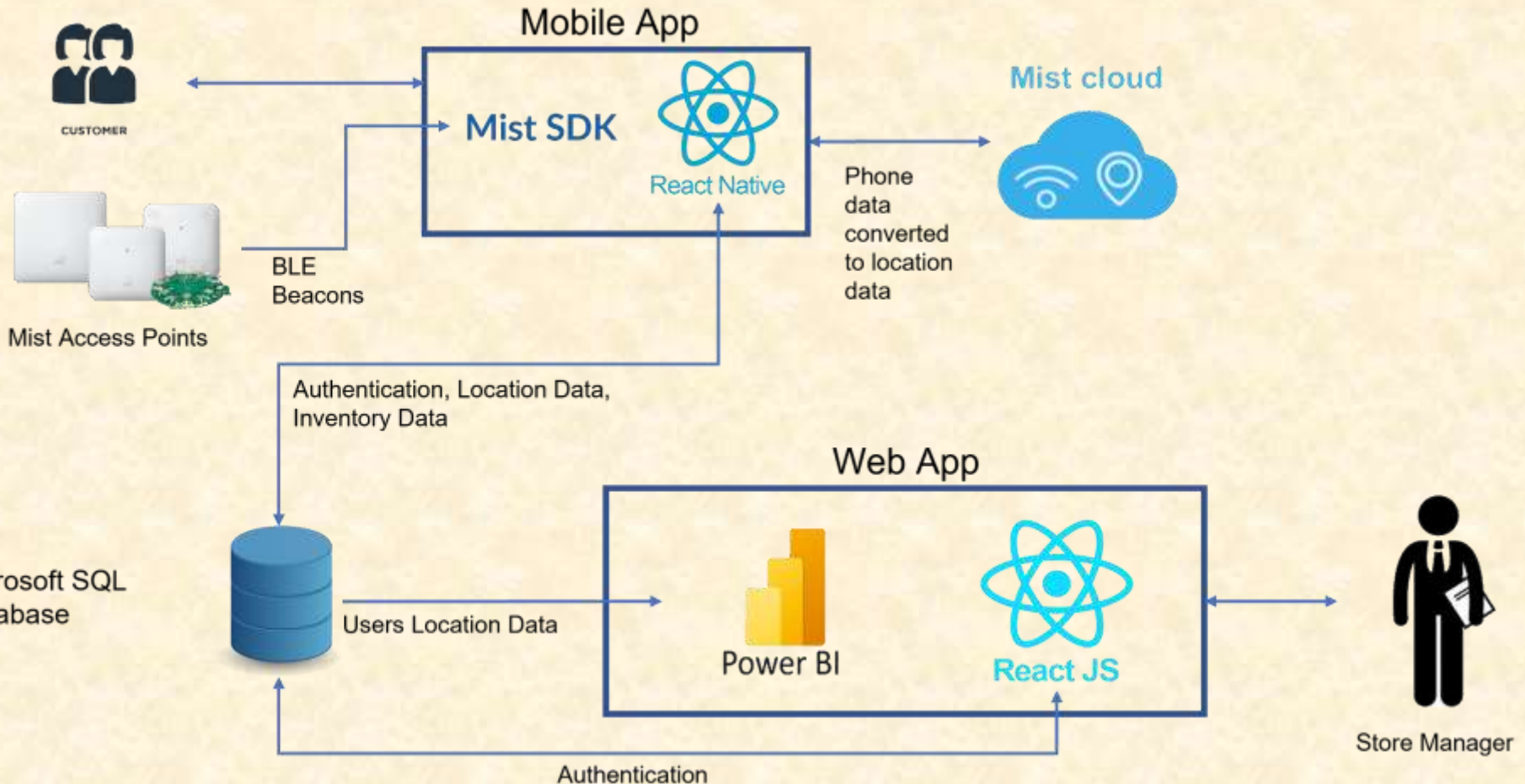
Screen Mockup: Dashboard Screen #2

Project Technical Specifications

- Use react-native to build the basic structure of the app. Target customers by uploading data from Mist-access-point to Mist-cloud.

- Through the data stored in Microsoft-SQL, users can directly use the app to scan and record the price of the product without queuing up to re-scan.

- Through the positioning of Mist-access-point, customers can directly use the app to pay bills in designated areas without queuing for payment.

- Administrators can monitor the region through dashboards generated by Power-BI and ReactJS.

Project System Architecture

Project System Components

- Hardware Platforms
  - Mist Junifer Access Points
- Software Platforms / Technologies
  - Web Application
    - React JS
    - React Router
    - Microsoft SQL Server
    - Microsoft Power BI
  - Phone Application
    - React Native
    - React Navigation
    - Mist Wi-Fi
    - Microsoft SQL Server

Project Risks

- Risk 1
  - Integrating Mist-SDK into React Native App
  - Utilizing Android and iOS documentation, consulting with Juniper-Mist staff
- Risk 2
  - Obtaining, using and updating real-time data on PowerBI dashboard
  - Continue PowerBI research, streamline dataset using Azure Stream
- Risk 3
  - Translating Customer data from the mobile app to the web app
  - Plan: mobile app -> Azure SQL -> PowerBI -> web app
- Risk 4
  - Utilizing customer credibility data in an efficient and user-friendly way
  - Maximize positive customer experience for customer retention while minimizing theft, using customer data and collective experiences

Questions?

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