MICHIGAN STATE UNIVERSITY

Beta Presentation

Greenfields Labs SHARED Locker System

The Capstone Experience

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Project Overview

• Cross platform app Android/iOS/Web
• Check-in/check-out locker items
• RGB led status indicator
• Automated locker unlock
• Showcase items in locker
• Support for multiple lockers
• Admin metrics
System Architecture

Event Stream (AWS Kinesis)
Reservation DB (AWS RDS)
SnipeIT DB (AWS RDS)

SnipeIT
3rd Party Asset Management

Microservices

Notification Service
Reservation Service
Authentication Service
Asset Service
Metrics Service

Mobile React Native App
Web React Native App

Raspberry Pi
Locker
Mobile App Login and Menu
Mobile App Locker Info Page
Web App Basic Dashboard
Web App Lockers Functionalities
What’s left to do?

• Metrics Service
• UI Improvements
Questions?