Project Plan Presentation
Supply Chain Induction Visibility Using Witron

The Capstone Experience

Team Meijer
Paul Williams
Soham Sonar
Nick Marshall
Nick Noga
Le An

Department of Computer Science and Engineering
Michigan State University
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Project Sponsor Overview

- Midwest Big-Box store
- Found in 1934 by Hendrick Meijer
- 14th largest private company in US
- First company to introduce General Mart
- Large Automated Warehousing
- Partnered with Witron
Project Functional Specifications

• Supply Chain issue for Palettes
  ▪ Separate sources for tracking
• Meijer & Witron’s System Unorganized
• 2 Databases (MITIS, Oracle)
• No efficient tracking for workers
Project Design Specifications

• Live Dashboard solution
  ▪ Friendly user interface
  ▪ Viewable from a distance
  ▪ Sign in Page
    ▪ Access advanced induction statistics
  ▪ Mobile Support
Screen Mockup: Simple User Interface

Pallet Induction

80%
1012/1265

meijer

Induction Stations

1 2 3 4
270/300 100/300 150/300 300/300
Screen Mockup: Admin Page

![Pallet Tracker](image)

- **Welcome to Pallet Tracker**: Track the status of your pallets in real-time.
- **Featured Products**: Discover our top-rated products.
- **Recent Updates**: Last updated: Mar 20, 2022
  - Package 1
  - Package 2
Screen Mockup: Alternate UI
Screen Mockup: Web Homepage
Screen Mockup: Simple Dashboard

Current Pallet: Nestle #31232
Previous Pallet: Keebler #43143
Screen Mockup: Mobile Dashboard
Project Technical Specifications

• Web application
• Databases/Information
  ▪ Witron – Oracle DB
  ▪ MWS – API based
Project System Architecture

Meijer Pallet Data → MWS/MITIS → Pallet Induction → Witron System → App Frontend

Meijer Systems

Induction Dashboard

Induction Dashboard

Induction Dashboard
Project System Components

• Hardware Platforms
  ▪ 50-Inch Display

• Software Platforms / Technologies
  ▪ React
  ▪ Node.js
  ▪ Microsoft Azure
  ▪ Docker
  ▪ .NET Framework
Project Risks

Integrating Witron and Meijer Databases
- Need to integrate Witron and Meijer databases into Azure
- Communicating with Meijer/Witron and creating mock databases

Real Time Data Manipulation and Updates
- Dashboard requires constant updates
- Research real-time updates and communicate with Meijer if needed

Efficient Data Access
- Data presented on Dashboard should be efficient / accurate. If data is scraped from website, performance issues could ensue. API's are not promised
- Working with Witron to gain efficient access to data source

Unique Design
- Dashboard propped 10+ Feet in the air, visibility could be unclear
- Experiment with display and poll potential users for feedback/readability of dashboard
Questions?