

**MICHIGAN STATE**  

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**UNIVERSITY**

# Project Plan

## AI Project Matcher

### The Capstone Experience

Team Dow

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Michigan State University

Fall 2020



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

# Functional Specifications

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- Match employees to projects
- Match projects with employees
- Match recommendations based on:
  - Employee's current skills
  - Project's desired skills
  - Availability
  - Employee's desired roles



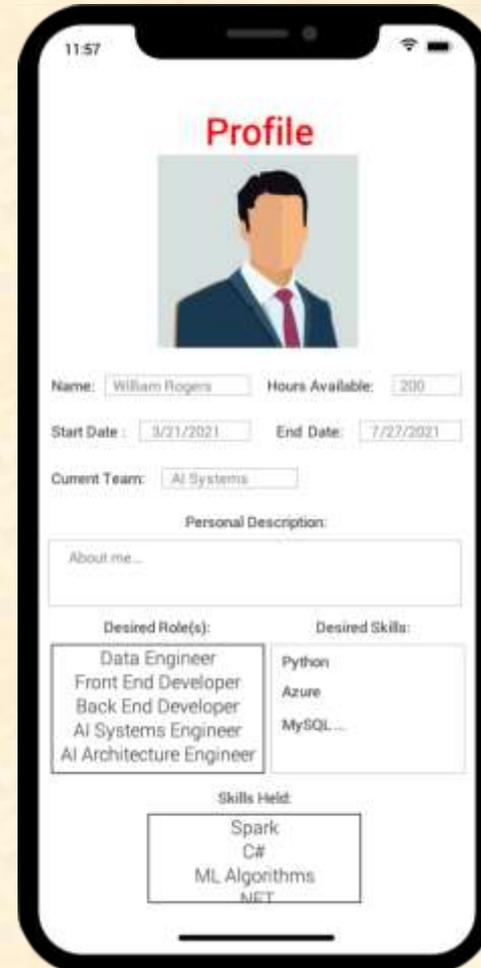
# Design Specifications

Both Employee and Project Manager accounts will have:

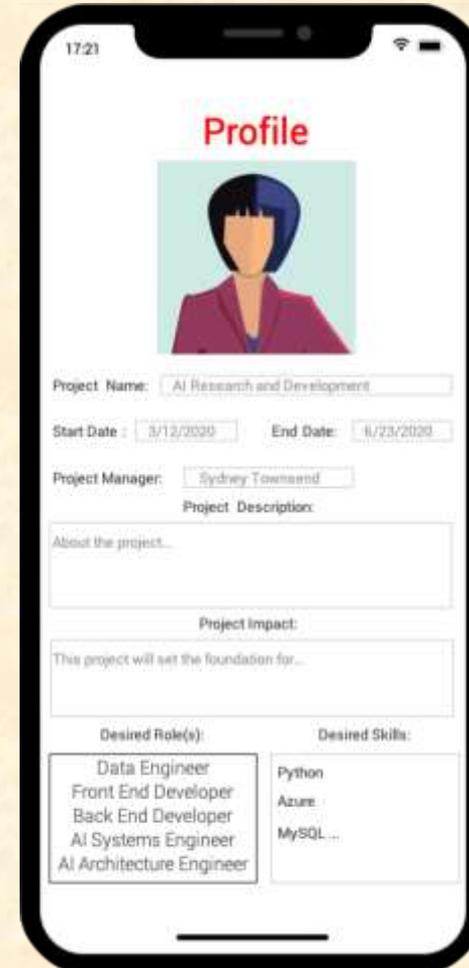
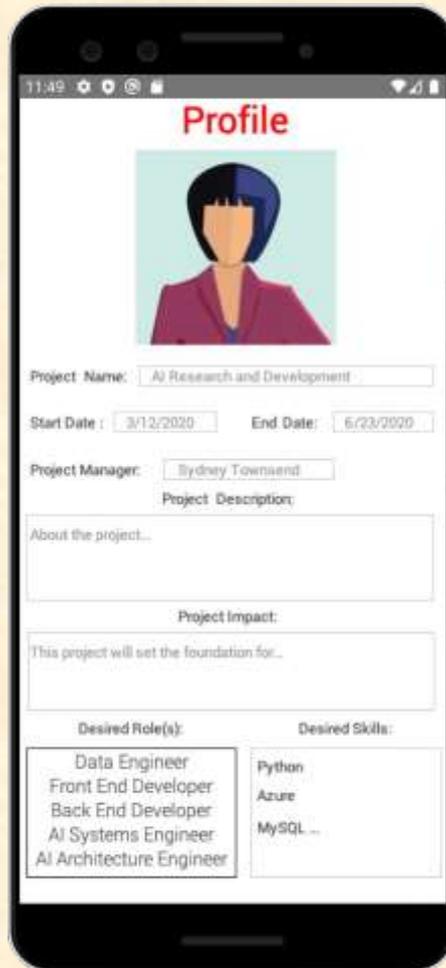
- Profile View
  - Create/edit account
- Matching View
  - Search for projects/employees
- Matches View
  - Review matches and contact



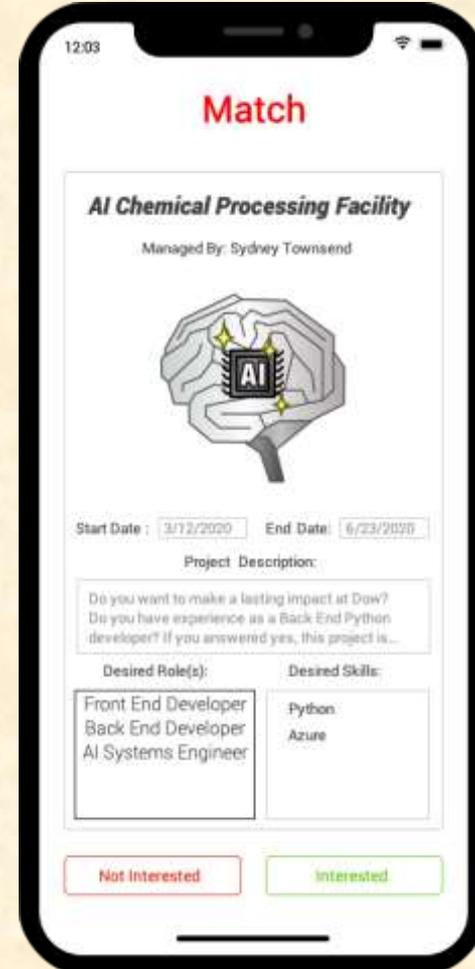
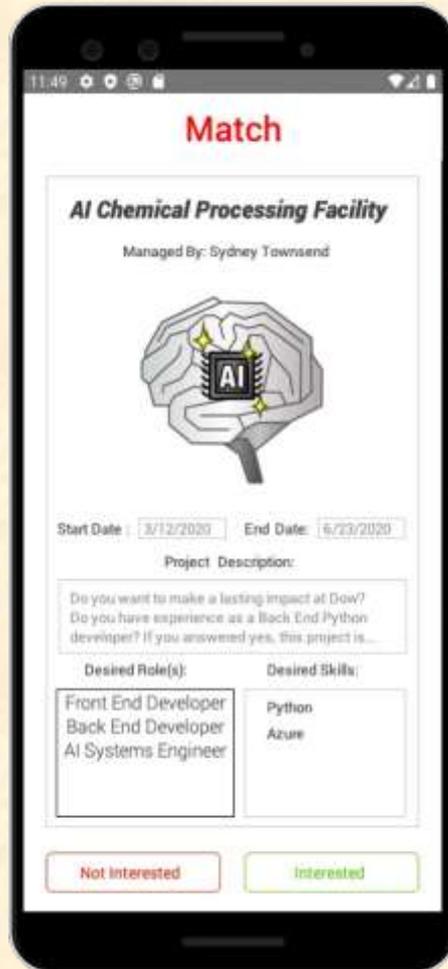
# Screen Mockup: Employee Profile



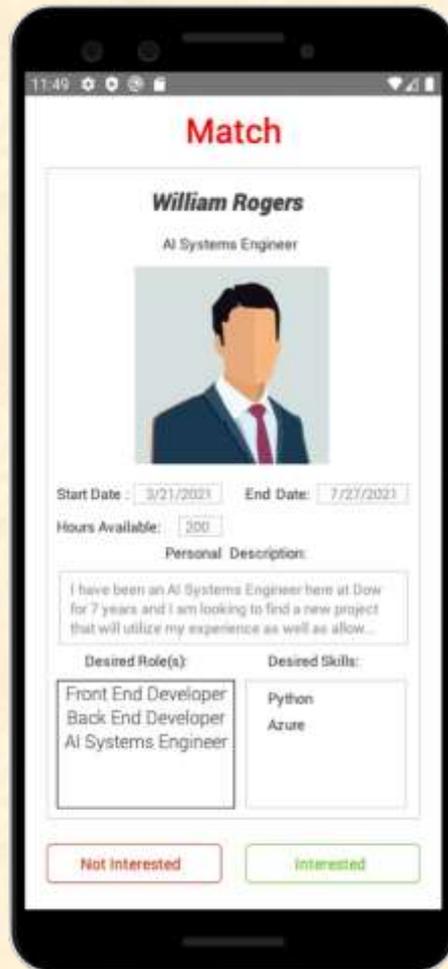
# Screen Mockup: Project Profile



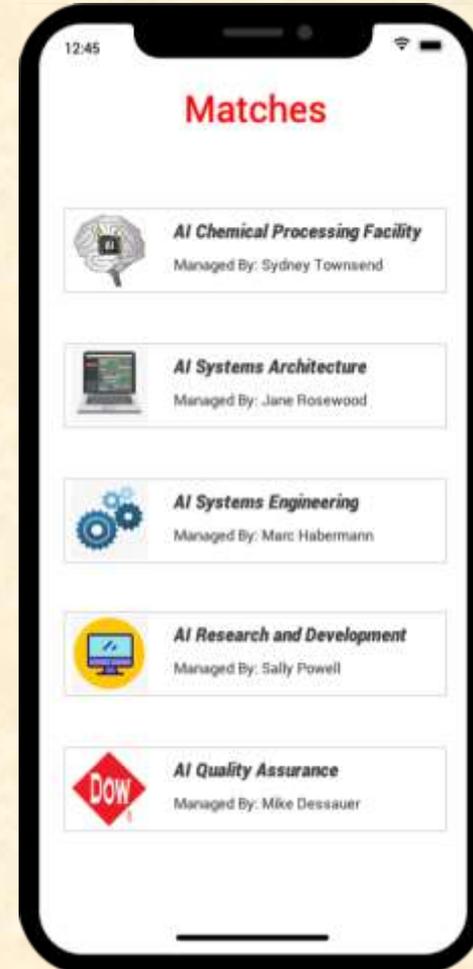
# Screen Mockup: Project Matching



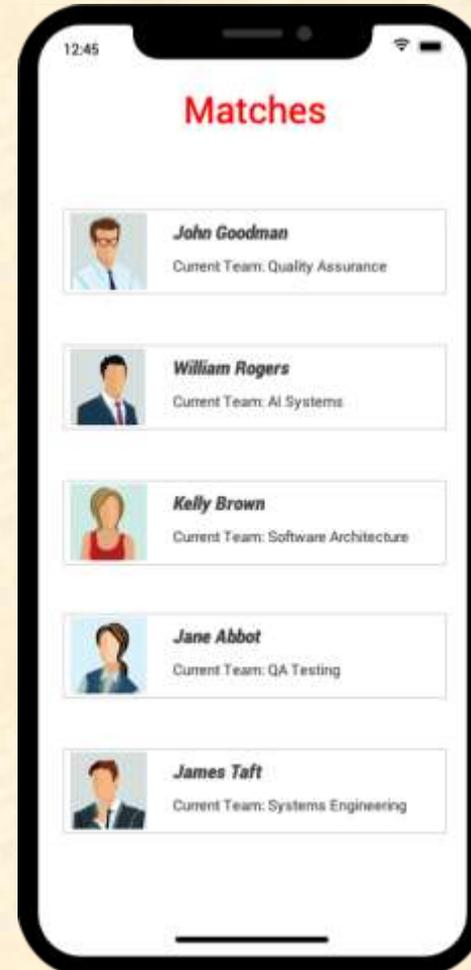
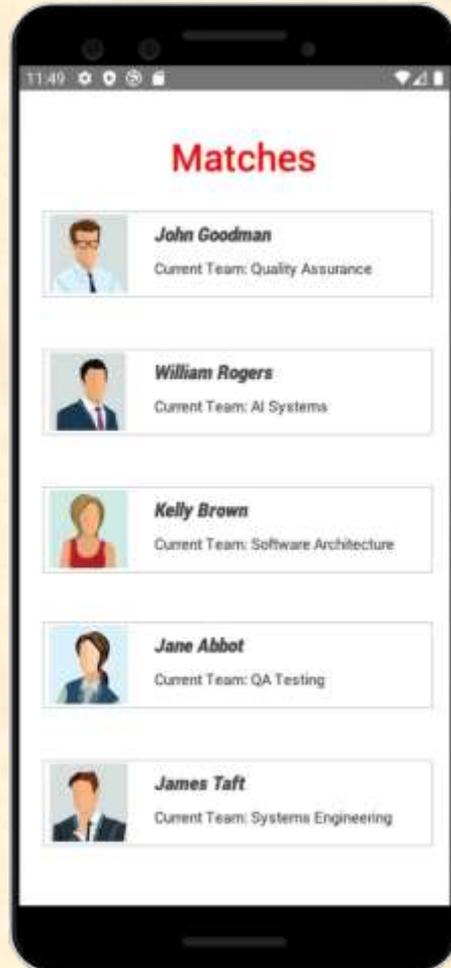
# Screen Mockup: Employee Matching



# Screen Mockup: Employee Matches



# Screen Mockup: Project Matches



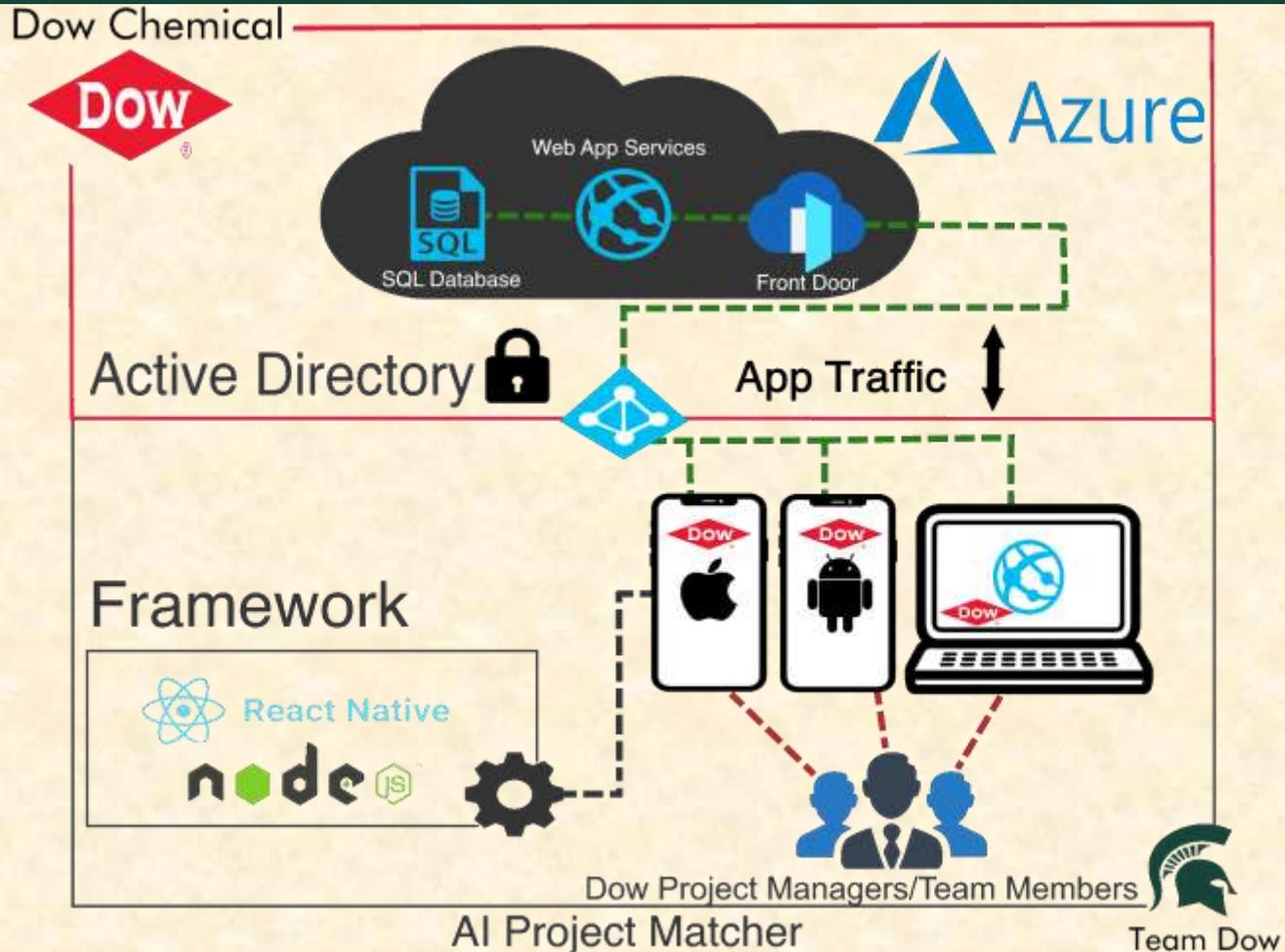
# Technical Specifications

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- Mobile (Android & iOS)
- Front end – Node.JS, React Native
- Back end – MySQL, Azure
- Recommendation Algorithm
  - Tags and Weights



# System Architecture



# System Components

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- Hardware Platforms
  - Windows OS
  - Mac OS
- Software Platforms / Technologies
  - React Native
  - NodeJS
  - MySQL



# Risks

- Unexpected Behavior
  - Recommendation engine will not behave in a predictable way
  - Use a weighting system to keep track of behavior
- Wide Variety of Projects
  - Creating an AI that will be able to suggest user submitted projects
  - Use a tag system to keep projects simple and add more as development progresses
- Connect to Azure SQL Database
  - Cannot gain access to Dow's Azure environment
  - Setting up and testing our own environment as soon as possible



# Questions?

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