MICHIGAN STATE
UNIVERSITY

Project Plan
YelloVision

The Capstone Experience

Team Yello

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Functional Specifications

- Goal: Help users find companies at career fairs that have open positions in their field

- Method:
  - Phone applications for iOS and Android
  - Use logo recognition to identify companies
  - Augmented Reality displays information onscreen
  - Capable of manual searches by text queries
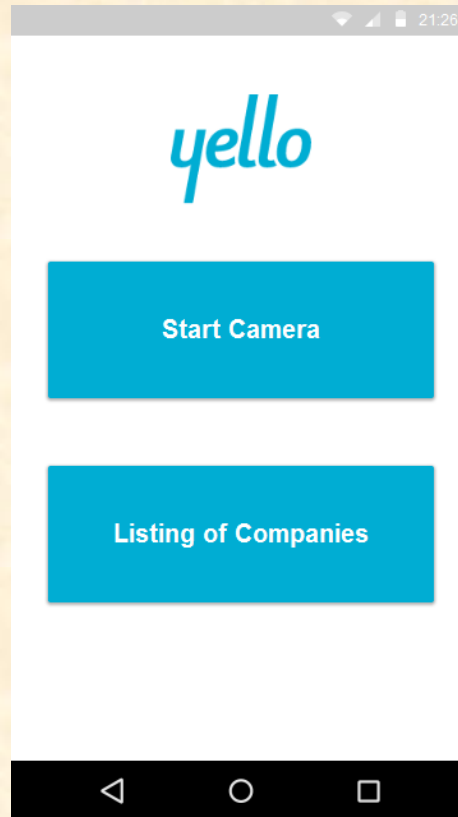 - Additional information can be accessed via "more details"
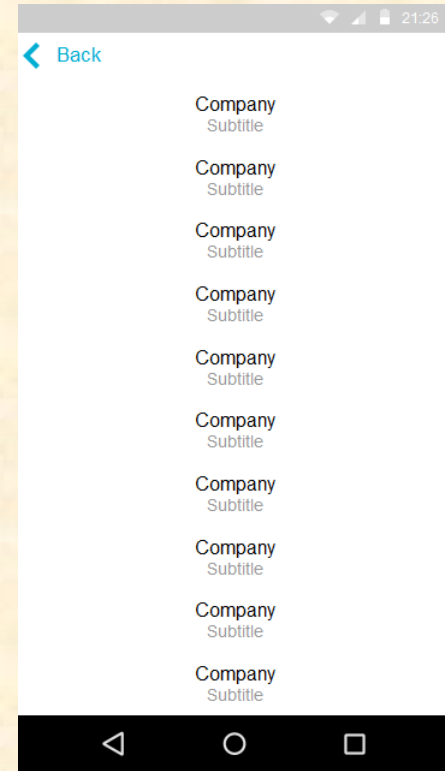
Design Specifications

- Home page will have a choice between camera mode or listing of companies
- If the user chooses to use the camera an augmented reality environment will be useable to find logos and information.
- If The user chooses to use the listing, then they will choose a company to view more info
- Both will lead to more info about the companies and what opportunities are avaliable
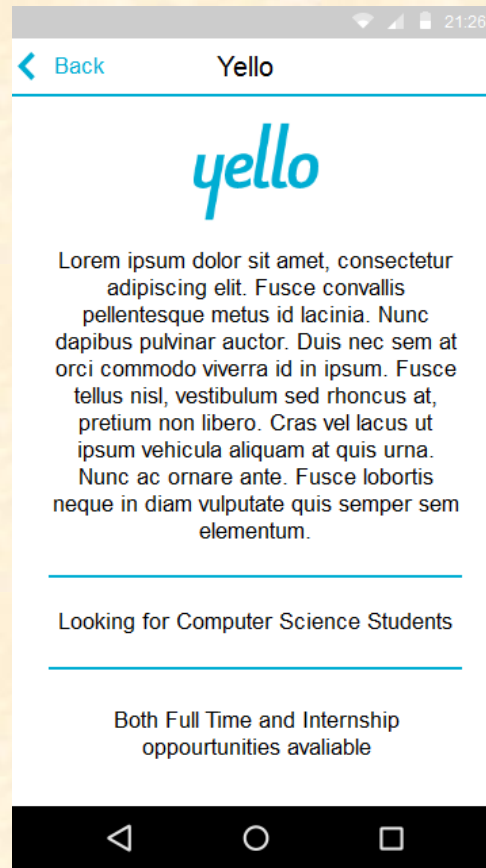
Screen Mockup: Home Page

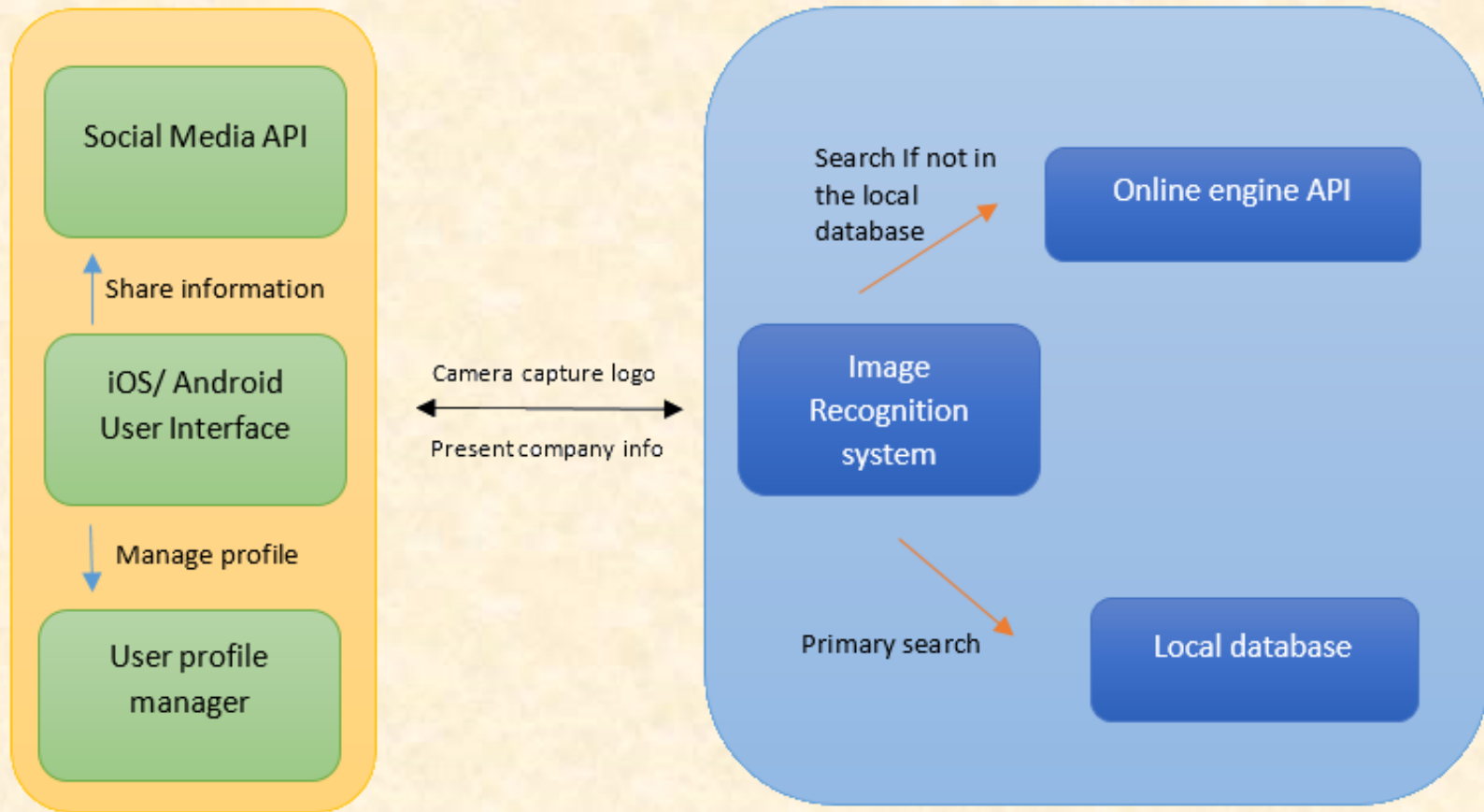# Screen Mockup: Camera And Listing

Screen Mockup: More Info

Technical Specifications

- Software Technologies and Development tools

- System Architecture

- Image Recognition System

- Database

System Architecture

System Components

- Software Platforms / Technologies
  - iOS: swift 3, Xcode
  - Android: Java, Android Studio
  - Software design: UML diagram
  - Database: SQL

Testing

- Connect Android and iOS devices to Android Studio and Xcode to directly test application functionality in real time:
  - Camera Opening
  - Various logos detection
  - Rendering of information around logos
  - Ability to change from augmented reality to non-augmented reality and viceversa

Risks

- Logo Recognition
  - Identifying logos that appear onscreen must happen in real time and must be reliable.
  - Research done into APIs available that have image recognition functionality and are compatible with iOS and Android.
- Mobile Development
  - No team members are experienced with development for iOS mobile devices or Android mobile devices.
  - Divide into iOS development team and Android development team. Write small, testable apps for each platform to familiarize each member with development environment.

Questions?

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