Brainstorm Meeting

Slow-Pitch Softball Camera

Our Team Roles

Sullivan Fair - Individual Component Development

Casey Gehling - Client Interaction

Ethan Gruening - Team Management / Notetaker

Josh Hyde - Research

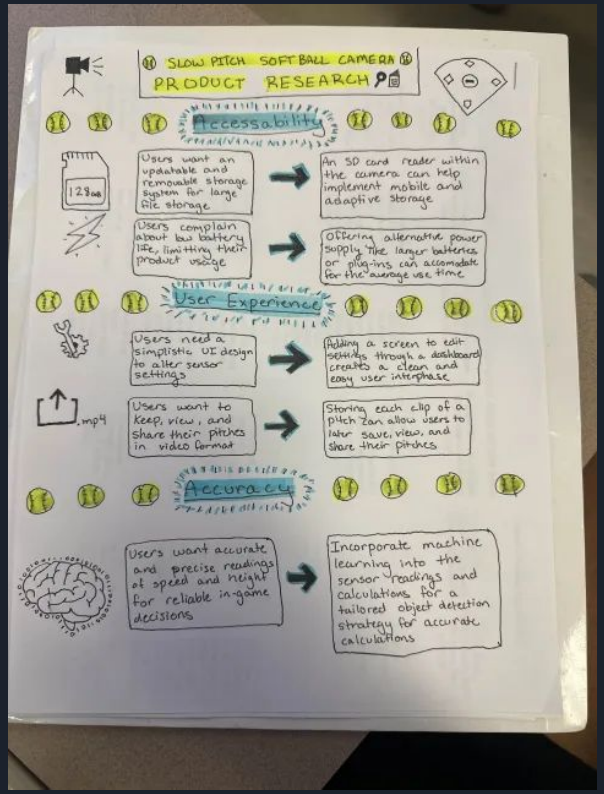
Cameron Mesman - Testing

Andrew Vick - Machine Learning Integration

Product Research Findings

Customer's concerns fall into 3 main categories

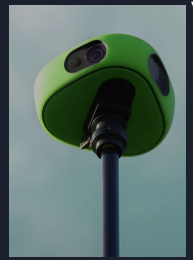
- Accessibility
  - The hardware supports common user needs
    - Long battery life
    - Large data storage
    - Setup and transportation
- User Experience
  - Simplistic sensor adjustments
  - Playback and export of pitch videos
  - Additional features and statistical data
- Accuracy
  - Accurate measurements of object detection



Similar Products - Successes

PocketRadar
- Sensor connects to updatable mobile application

Imaging Tracker 2
- No initialization needed
- Small error bound



Veo3 Sports Cam
- Long battery life and portability

Softball/Tennis/Golf Radar
- Affordable
- Can use for multiple sports

Rapsodo Softball Pitching 2.0
- Connects to Diamond Mobile App for visual display

Potential Prototype - Motion Detecting Camera

Pros	Cons
- High definition videos / more accurate readings	- Models will be difficult to update software - Expensive design - Portability and security of the hardware will be a concern

Potential Prototype - Phone Application

Pros	Cons
- Available to wide range of users - Portable - Easy deployment of future updates - Existing device services (bluetooth, wifi, etc)	- Device specific (Android / iOS) - Varied battery capacity - Varied camera quality

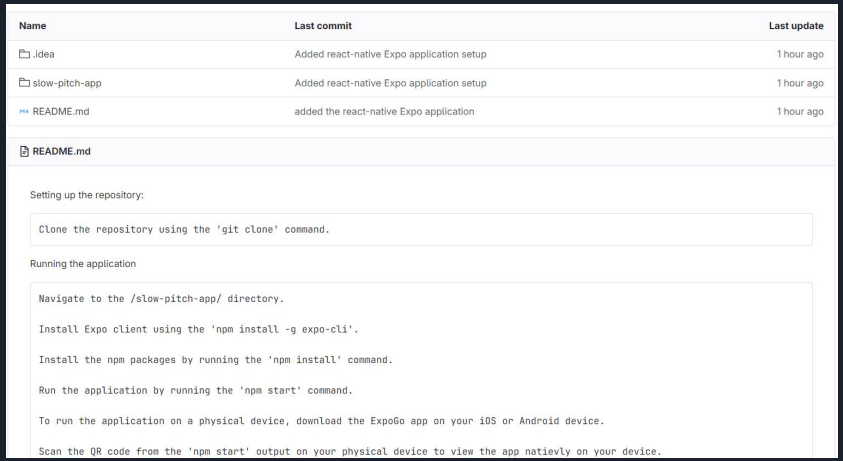
Our Decided Prototype - Mobile Application

Device Compatibility- Android and Apple

- React Native with Expo
- Can be tested with emulated/physical devices
- Expo deployments to web and app stores

External Tools

- Bluetooth or wired speakers provide sound output
- High definition lightweight camera
- Opencv
- COCO dataset



Name	Last commit	Last update
.idea	Added react-native Expo application setup	1 hour ago
slow-pitch-app	Added react-native Expo application setup	1 hour ago
README.md	added the react-native Expo application	1 hour ago

README.md

Setting up the repository:

```
Clone the repository using the 'git clone' command.
```

Running the application

```
Navigate to the /slow-pitch-app/ directory.

Install Expo client using the 'npm install -g expo-cli'.

Install the npm packages by running the 'npm install' command.

Run the application by running the 'npm start' command.

To run the application on a physical device, download the ExpoGo app on your iOS or Android device.

Scan the QR code from the 'npm start' output on your physical device to view the app natievly on your device.
```

Object Detection Tools

Object Detection Tools

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