EE/CprE/SE 491 Status Report 4.5

Mar 13, 2025 12:00 AM-Mar 27, 2025

Group number: 49

Project title: Slowpitch softball device

Client/Advisor: Nicholas Fila

Team Members/Role:

Cael Schreier: Bookkeeper and Code Review

Andrew Kinneer: Lead System Designer

Kyle Nachiengane: Lead Testing Engineer

Sam Skaar: Coordination and Documentation Lead

Kolby Moorman: Lead Frontend Developer

- o **Weekly Summary**

- o **Past week's accomplishments**
  - Andrew Kinneer: Further optimization of OpenCV after testing on a physical Pixel 3 XL. Was able to get a stable frame rate on the Pixel afterwards. Fixed a few issues causing crashes when rotating the phone from vertical to horizontal. Spent most of my time honing in softball tracking on Android.

  - Kyle Nachiengane: Tried one more time to get swift code to use correct library functions.

  - Cael Schreier: Bast on last week's discussion, I added in a replay feature to our application so that we have a way for users to review pitches. I have also continued to experiment with our application UI, and will continue to do so.

  - Kolby Moorman: I got the opencv objective c library installed and communicating with our flutter project. Began doing some softball tracking but noticed it is very light dependent. Talked with Drew about what is being done on android to combat this issue.

  - Sam Skaar: Slightly updated the UI and made changes to the pages. Tracking is now just a button on the home screen. Made a diolog box on android but im getting memory issues.

- o **Pending issues**
  - Universal ball tracking algorithm
  - Height tracking improvements for edge cases
  - OpenCV full mobile implementation
  - UI Upgrades
  - IOS or Android

- o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Andrew Kinneer	- Further Optimization of OpenCV - Fixed a few bugs leading to crashes - Improve softball tracking	10	106

Kyle Nachiengane	Tried one more time to get swift code to use correct library functions.	3	95.5
Cael Schreier	Replay feature and minor UI modifications.	6	97
Kolby Moorman	Got objective c opencv library communicating with front end and began calling these libraries	12	102
Sam Skaar	Updated UI, working on calibration UI.	5	96

- **Plans for the upcoming week**
  - Andrew Kinneer: Going to focus on finding the best methodology for ball tracking in the majority of environments. Currently struggling with finding a universal solution.

  - Kyle Nachiengane: Work on testing the current android app version and debugging.

  - Cael Schreier: Continue to improve the calibration screen UI based on our mockups and continue to test the application with the team. Debug other features as needed

  - Kolby Moorman: Going to be based upon what is discussed in our meeting today.

  - Sam Skaar: Calibration UI, game stat persistence, filling in our actual info in the about tab. Website update as well.

- **Summary of weekly advisor meeting**