

Softball Team 2



EE/CprE/SE 491 Status Report 1.5

Jan 30, 2025 12:00 PM-Feb 6, 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

- **Weekly Summary**

○ **Past week's accomplishments**

- Andrew Kinneer: Looked into a few alternate routes for our C++ OpenCV integration with Flutter. Server side processing, while it would be ideal for ease of development it doesn't seem applicable for real time video processing. Plus there's the added ping. The other option is running our C++ code separately from the flutter app and having them provide inputs and outputs to each other but I'll have to look into that more.
- Kyle Nachiengane: I created a react native app that opens a camera in the android app. Something went wrong with my device setup so it no longer builds. I am working on fixing this device issue and getting open cv integrated to test the speeds compared to flutter.
- Cael Schreier: I began trying to move our opencv application over to Flutter but quickly hit a brick wall in terms of emulator development. It seems that opencv support will be very intuitive to write code-wise, but I was unable to get a simple camera running due to configuration issues. I will work with the team members who are more experienced in this aspect this weekend/next week to solve these issues to catch me up to speed on the mobile end of development.
- Kolby Moorman: I got a very simple home screen created in flutter with a button that once clicked on takes you to a page with the camera open and allows you to record videos.
- Sam Skaar: I tried to figure out flutter flow and it is not easy to use. I got my old flutter app running again on a Pixel.

○ **Pending issues**

- Specific mobile development client
- Universal ball tracking algorithm
- Height tracking improvements for edge cases
- OpenCV full mobile implementation
- Landscape mode on flutter flow.

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Andrew Kinneer	Looked into a few alternate routes for our C++ OpenCV integration with Flutter	3	53
Kyle Nachiengane	Created react native app with button to open camera and started on open cv integration. Also tested flutter code on my emulator.	7	44
Cael Schreier	Began moving opencv code into our flutter application, android debugging	4	53
Kolby Moorman	Got flutter up and running created pages and got camera open	6	51
Sam Skaar	Tried to get flutter flow working. It does not.	3	54

○ **Plans for the upcoming week**

- Andrew Kinneer: Determine if the current Flutter OpenCV library has everything we need implemented
- Kyle Nachiengane: If open cv in react native doesn't run well focus on flutter application build.
- Cael Schreier: Continue to move our current code over to the mobile environment and also continue to hone our height detection algorithm so it works as expected in a new environment.
- Kolby Moorman: Pending frontend questions in meeting today, begin developing a better looking ui with a few more screens and make sure the camera process runs smoothly,

- Sam Skaar: Depends how successful Kolby was. App development stuff.

- **Summary of weekly advisor meeting**

This week we discussed our progress made over winter break, and where we wanted to go with our project early this semester. We discussed various Flutter successes and roadblocks, and are moving toward putting all of our code into a Flutter application as soon as possible to begin full-scale testing.