

Softball Team 2



EE/CprE/SE 491 Status Report 6

Apr 4, 2025 12:00 AM-Apr 17, 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**

These weeks have been spent working heavily on our color calibration and pitch detection. We've finally gotten to the point where we can accurately track a softball, and we are improving our pitch detection algorithm to make sure we are only focusing on that area of the frame. We have also improved our calibration process to add many recalibration options and quick settings to change our height settings.

- **Past week's accomplishments**

- Andrew Kinneer: Built the framework for pitch detection to store pitches per game. Pitches will be discarded if the softball is lost before it reaches near home plate or if the pitch movement is invalid. Still requires some tweaking but the core of it is there
- Kyle Nachiangane: I worked with cael I getting quick setting to update heights and did a little bit of work on the replay to replay last pitch instead of last 5 seconds.
- Cael Schreier: I spent this week heavily testing our calibration code. I fixed many bugs and added some features to allow the user to recalibrate different features without any unwanted menus showing up and without having to recalibrate anything they have already calibrated. Additionally, I worked with Kyle on the quick settings menu implementation.
- Kolby Moorman: I spent this week being a floater, I started with looking into pitch detection to enhance the capabilities of that, didn't get much working quite yet. I then transitioned over to trying to get the data from android activity back to flutter. I don't quite have this done but hope to by our meeting tomorrow.
- Sam Skaar: I have yet again failed to get data back from android. I don't think it's possible? I don't know. I brought Kolby in to help and we will tackle it together.

- **Pending issues**

- Height tracking improvements for edge cases
- Sending game data from Android to Flutter
- Field Testing
- Pitch detection
- Replay last pitch

- **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Andrew Kinneer	Pitch detection and testing	9	131
Kyle Nachiengane	Quick menu bug fixes and replay system	7	116
Cael Schreier	Calibration testing and quick settings help	7	121
Kolby Moorman	Experimented with some pitch detection and trying to figure out pitch data to flutter	6	114
Sam Skaar	Data doesn't work	5	115

○ **Plans for the upcoming week**

- Andrew Kinneer: Further test pitch detection with real world scenarios and fix kinks in the system
- Kyle Nachiengane: continue working on the replay of last pitch.
- Cael Schreier: Helping the team with testing and making any fixes and improvements that we find from testing.
- Kolby Moorman: continue developing pitch detection and android to flutter communication.
- Sam Skaar: Do the poster stuff and design doc.

○ **Summary of weekly advisor meeting**

We have received lots of good feedback on our demos in our advisor meetings, and they are impressed with our application progress thus far. We are being pushed to do in-depth testing and try to "break" our application, so that is what we will be doing moving forward.