



Slow-Pitch Tracker

Ethics and Professional Responsibility



Our Project

Slow-pitch softball has specific specifications for a legal pitch with maximum and minimum height requirements.

Our deliverable for this project is a portable and user interactive application to call illegal pitches with three main requirements:

- Accurately detect a softball's maximum height on a pitch
- Trigger an audible "Illegal" if the pitch is outside of the max/min range
- Acts as a faster and more accurate height officary than umpires



Our Client and Advisors



Dr. Nicholas Fila

Client / Advisor



Dr. Phillip Jones

Technical Advisor

Our Presentation

01

Ideal 1

Our top performing
ideal attributed to the
Slow-Pitch project

02

Ideal 2

Our worst performing
ideal we are looking to
improve upon

03

Four Principles

Our Broader Context
Four Principle Chart

04

Ethical Issues

Our outstanding
ethical issues we are
concerned about





01

Social responsibility

Our most supported ideal professional responsibility area





Social Responsibility



Produce products and services that benefit society and communities.

- Our project directly impacts slow-pitch softball leagues and we have an **ethical social responsibility** to produce a product for the specific benefit of local leagues.
- We have chosen to approach this standard by designing our project to **prioritize** the affordability, portability, and easily accessibility for local communities to have access to simple officiating assistance.
- Although this further complicates our software tracking model, it simplifies the application for the community. This decision in our development was **ethically driven** with the community in mind rather than solely for efficient development.





02

Sustainability

Our least supported ideal professional responsibility area

Sustainability



Protect environmental and natural resources locally and globally.

- While our app does not directly harm natural resources, it needs to be operated on a phone, which has **negative** impacts on the environment.
- We haven't been prioritizing the efficiency and runtime of our code up to this points as we're trying to get prototypes working, which could result in **more power consumption** and more contribution to negative environmental impacts.
- Our team plans on working to not only write code, but to refine it to be as **efficient** as possible. Thus reducing the amount of power needed to run our app.





Ethical Issues

There are some potential ethical issues regarding the use of our project

- Could impede the normal flow of the game by causing discontent within people that normally wouldn't happen
- Could potentially eventually get rid of the need or use of umpires in the future and their jobs
- Could create uneven playing fields with some teams/leagues having this and others not
- The collection of this data could be used, shared or distributed without the consent and could go to less than ideal places
- The use of what things are being recorded outside of just the game could be seen as unethical



Highlights of the Four Principles

Beneficence	Promotes fair play and cohesion between softball players and referees.
Nonmaleficence	Avoids possible dispute between unruly calls that could occur within a softball game.
Respect for Autonomy	Provides an autonomous and easy to use system, while also allowing options to overrule the decisions made by the application through past pitches.
Justice	Facilitates a fair game of softball where there is no subconscious bias applied to the rulings of the game.

