



# **Sprint 4 - Triathlon Performance**

By: Mark Hendri, Sophia Ramirez, Michael Sherrer

# Challenges

- We had a difficult time figuring out the best block code to make it as accurate as possible, since the robot seemed like it took a different path each time.
- Finding a good schedule for all of us to meet.
- We had problems with the system design document trying to achieve all the requirements.



## Roles of Each Member

- Mark: Block coding for each sprint, tested the robot.
- Michael: Managed GitHub, created algorithm.
- Sophia: Focused on the system design document, created flowchart.





# What we have learned about software engineering

We learned that software engineering is more than just making a program and running. There are a lot more steps in the software engineering process than using code and software. We learned that software engineering is a much broader field that also works on how you manage the product, and the technical and business process of making software system.

A good programmer recognizes a task or subtask and plugs in the solution

- Analysis and specification phase: analyze and specification
- Algorithm development phase: develop and test algorithm
- Implementation phase: code and test algorithm
- Maintenance phase: use and maintain

## What you would do differently

- Organize our time better.
- Check the details before submit it (Sprint checklist).



# Block Code for Sprint 3 - Agility

The image shows a block-based programming interface for a robot. The code starts with an 'on start program' block, followed by a sequence of 'roll' and 'delay for' blocks. Each 'roll' block specifies a target angle, a speed, and a duration. The 'delay for' blocks are all set to 1 second. The interface includes a blue header bar with a back arrow, a green 'Start' button, and icons for AIM, a menu, and a settings icon. A vertical scrollbar is visible on the right side of the code area.

```
on start program
  roll 0° at 75 speed for 1.2s
  delay for 1s
  roll 95° at 75 speed for 1.55s
  delay for 1s
  roll 5° at 75 speed for 1.7s
  delay for 1s
  roll 95° at 125 speed for 2.25s
  delay for 1s
  roll 228° at 175 speed for 2.5s
```



## Video of Sprint 3 - Agility

[https://youtu.be/ivewX3\\_gDPo](https://youtu.be/ivewX3_gDPo)