



# Triathlon Performance

Kristina and Armand

# Challenges Faced



## Sprint 1:

- Having the correct aim, so the robot does not steer in the wrong direction instead of going straight.
- Finding the correct time for the direction the robot has to go.

## Sprint 2:

- Accuracy
- Finding the correct distance.

## Sprint 3:

- Not hitting the bottles.
- Get the robot over the binder without it going too far or too fast after the jump.
- Having the accuracy to knock all the markers down.

# Roles of Each Team Member

- Sprint 1:

**Kristina**- Coder/contributor, Gantt Chart, Develop algorithm, videographer, completing system design

**Armand** - Coder/coder contributor, Gantt Chart, Create code and flowchart, completing system design

- Sprint 2:

**Kristina** - Coder/contributor, Gantt Chart, Develop algorithm, create flowchart, completing system design

**Armand** - Coder/coder contributor, Gantt Chart, Create code, completing system design, videographer

- Sprint 3:

**Kristina** - Coder/contributor, Gantt Chart, Develop algorithm, create flowchart, videographer, completing system design

**Armand** - Coder/coder contributor, Gantt Chart, Create code, completing system design



# What Have We Learned About Software Engineering?

- One thing that was evident throughout all the sprints was that Block Coding makes a great and simple way to create and edit a computer program.
- Block Coding can also pave the way into real world coding when using different code language, like Python
- Groups or coding teams that work on computer programs require lots of teamwork; this includes precise preparation, planning, execution, and presentation of any project.
- Trial and error as well as failure is a huge part of a software engineer's life as a programmer

Overall using the Sphero EDU software was simple and easy, and made it possible to create programs that command the robot in many different scenarios



# What Would We Do Differently?

## Sprint 1:

- We would add the 'spin blocks', as utilized in Sprint 3 at each corner, so that the robot would make each turn more precisely around the rectangle track, instead of jerking through each turn, and straying off course slightly

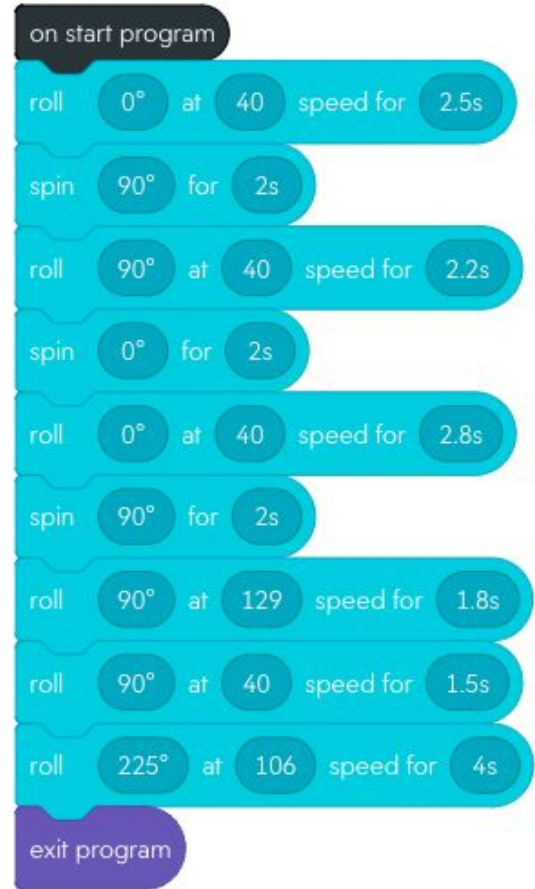
## Sprint 3:

- Not many issues were encountered with Sprint 3. For the most part, everything that was coded performed smoothly as shown in video. If anything, we would only add small adjustments to some of the timings.

## Sprint 2:

- One problem that was encountered in this Sprint was that the robot sort of made ovals instead of circles. The robot also ended program a few inches away from its starting point. We would try to better address these through more testing, but time was limited

# Block Code for Agility (Sprint 3)





## Agility (Sprint 3) Video

[https://www.youtube.com/watch?v=u58mfuK\\_ZA](https://www.youtube.com/watch?v=u58mfuK_ZA)