### Robotics Project

By: Dan Trocchia & Alex Kalina

### Challenges that we have faced

- Making sure the robot stays on course
  - Making sure the robot avoids obstacles
- Adjusting the robot to new courses and different obstacles
- Robot is sometimes temperamental
  - May turn slightly different, travel at different speeds, etc. (although nothing was changed)
- Staff member problems
  - Meeting times, due dates, distributing workload

### Roles of each team member

- Alex Kalina Lead Developer
  - Responsible for the robot
  - Handled performance and accuracy of robot throughout each sprint
- Dan Trocchia Developer
  - Responsible for aiding in the development of the SDD and other online documents
  - Gantt Chart, SDD, Test Table, etc.

# What have you learned about software engineering?

- Concept of coding
  - Although block code was used for this project, the concept of coding is understood
- Importance of understanding a sensor diagram and test plan
- Software will not always agree with you even when everything looks right
- Understanding and applying requirements into code
- Learn to apply results (of test runs etc.) to gain control over the software

## What would you do differently?

- Develop the algorithm separate from the flowchart
  - Mistake I made was trying to develop the flowchart before having an algorithm in order to them in one step
- Have better maintenance for the gantt chart
  - Update the gantt chart actively rather than at the end of the sprint

### Block Code for Sprint 3 Agility



#### Block Code -Accuracy



#### Block Code Endurance

```
on start program
loop 5 times
 spin 360° for 10.6s
  spin -360" for 10.6s
speak I am the winner and continue
         for 0.25s
         for 0.25s 1 times
         for 0.25s 1 fimes
         for 0.25s 1 times
         for 0.25s 1 times
         for 0.25s 1 time
         for 0.25s 1 times
          for 0.25s 1 times
         for 0.25s 1 times
         for 0.25s 1 times
```

#### Video of Robot Sprint

https://github.com/AlexanderK0/Agility.git

https://github.com/DannyTrocchia/Endurance.git

https://github.com/DannyTrocchia/Accuracy.git

### END