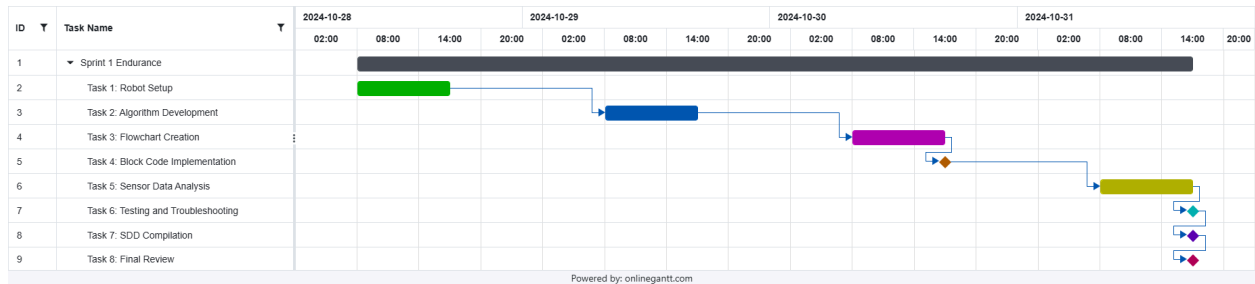


## 1. Gantt Chart



## 2. Requirements Table

| Requirement ID | Description                                | Status   |
|----------------|--|----------|
| R1             | Robot must move in a rectangular pattern   | Complete |
| R2             | Flowchart must match the algorithm steps   | Complete |
| R3             | Block code must drive the Sphero Bolt      | Complete |
| R4             | Sensor data must be collected and analyzed | Complete |

## 3. Requirements Signoff Table

| Requirement ID | Signoff By      | Date    |
|----------------|-----------------|---------|
| R1             | Isaac and Bilal | 11/1/24 |
| R2             | Isaac and Bilal | 11/1/24 |
| R3             | Isaac and Bilal | 11/1/24 |
| R4             | Isaac and Bilal | 11/1/24 |

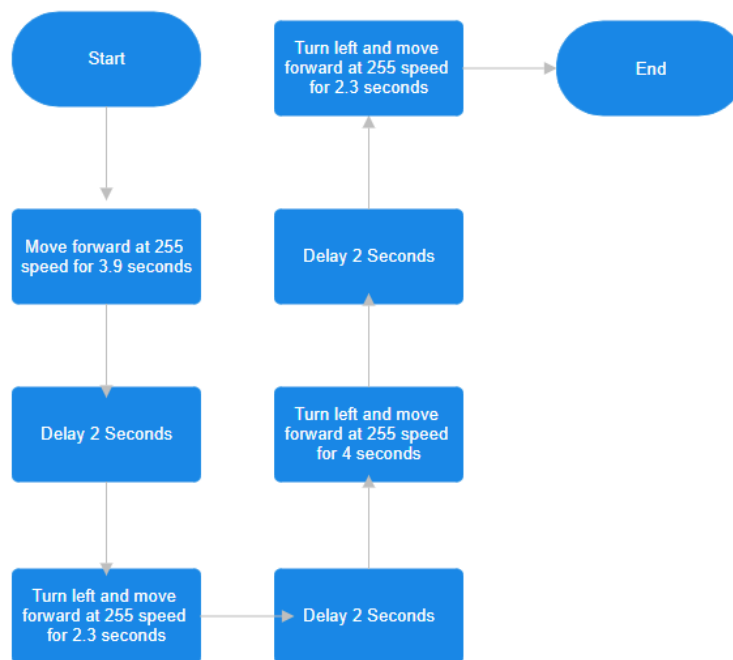
## 4. Algorithm

- Start
- Move forward at 255 speed for 3.9 seconds
- Delay 2 seconds
- Turn left and move forward at 255 speed for 2.3 seconds

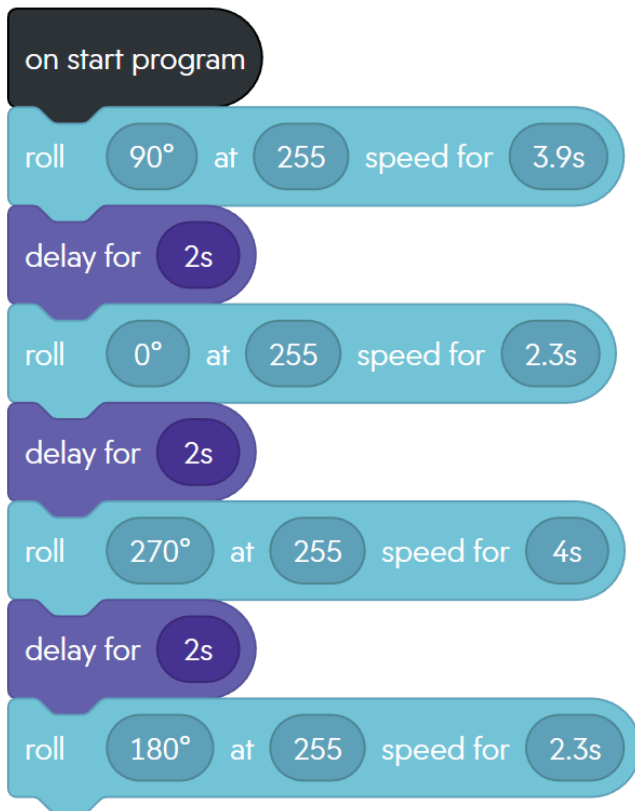
- Delay 2 seconds
- Turn left and move forward at 255 speed for 4 seconds
- Delay 2 seconds
- Turn left and move forward at 255 speed for 2.3 seconds
- End.

## 5. Flowchart

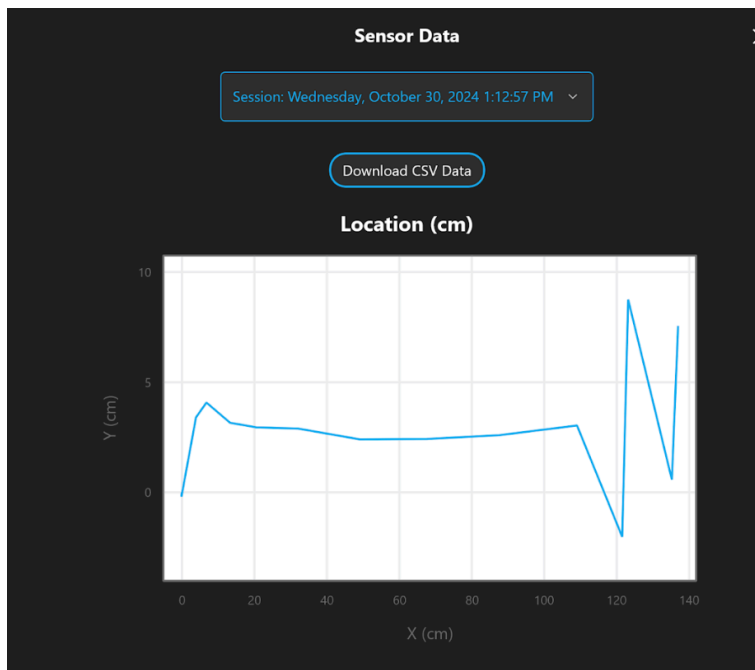
---



## 6. Block Code



**7. Sensor Data Diagram (for some reason it won't update to the new one, so this is a little bit of an older version)**



## 8. Test Table

| Test Case | Description                | Expected Outcome                                    | Actual Outcome   | Pass/Fail |
|-----------|----------------------------|---|--|-----------|
| TC1       | Move forward for 4 seconds | Robot moves perfectly straight for 4 seconds        | Robot moved mostly straight for 4 seconds                              | Pass      |
| TC2       | Turn left and move forward | Robot turns perfectly left and moves forward        | Robot turned left with slight degrees of error                         | Pass      |
| TC3       | Complete full rectangle    | Robot follows the line through the entire rectangle | Robot stayed as close as possible to the line for the entire rectangle | Pass      |

## 9. Staffing Plan

| Name         | Title        | Responsibilities                   |
|--------------|--------------|------------------------------------|
| Isaac Sasson | Group leader | Submit project and create github   |
| Bilal Shweb  | Group member | Assist with the project and github |