



SPHERO ROBOTICS

C O D I N G W I T H R O B O T S



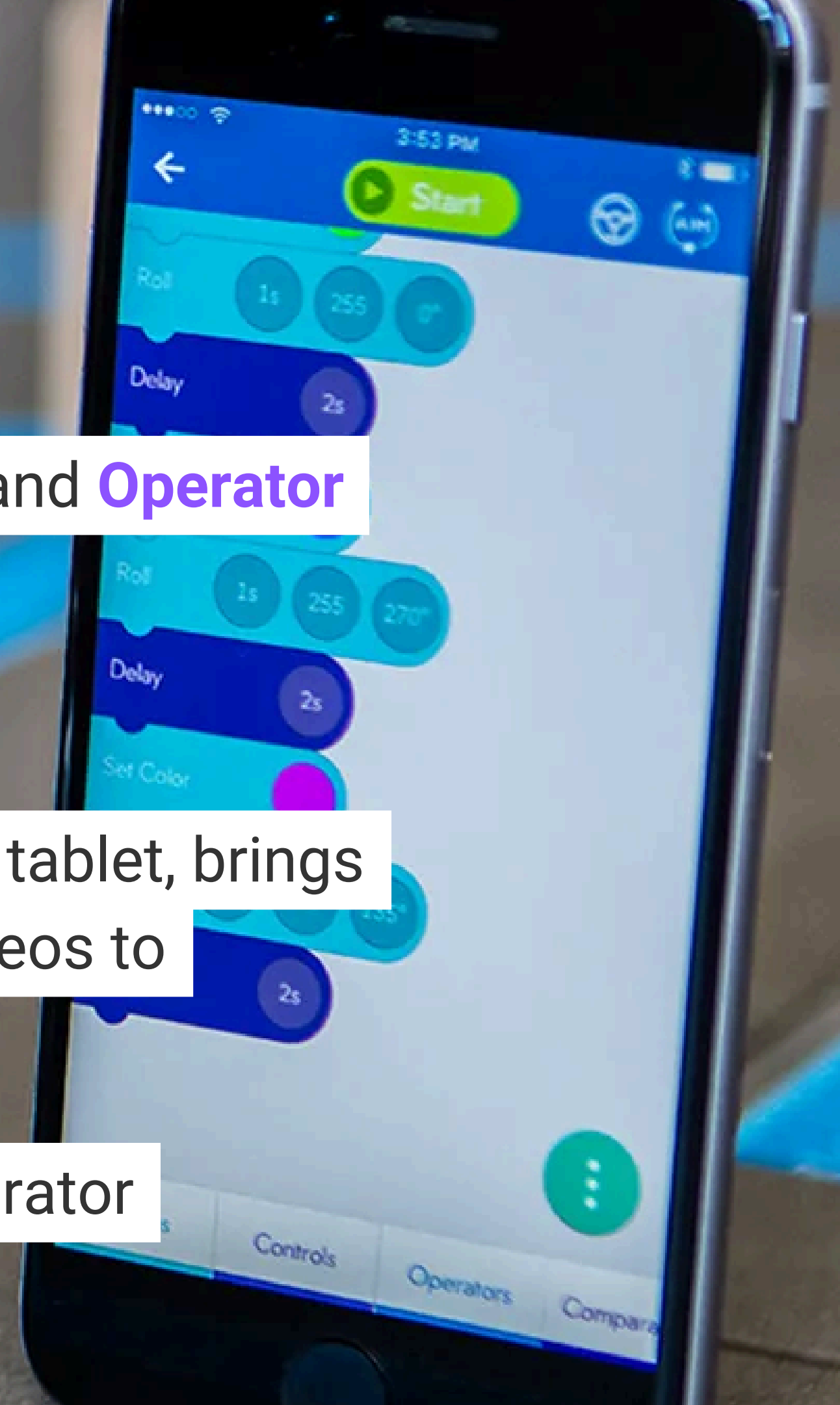
Working as a Team

- For this program, you must work in a team of 2
- There are two roles on your team: **Programmer** and **Operator**

Programmer - Connects their tablet to the Sphero

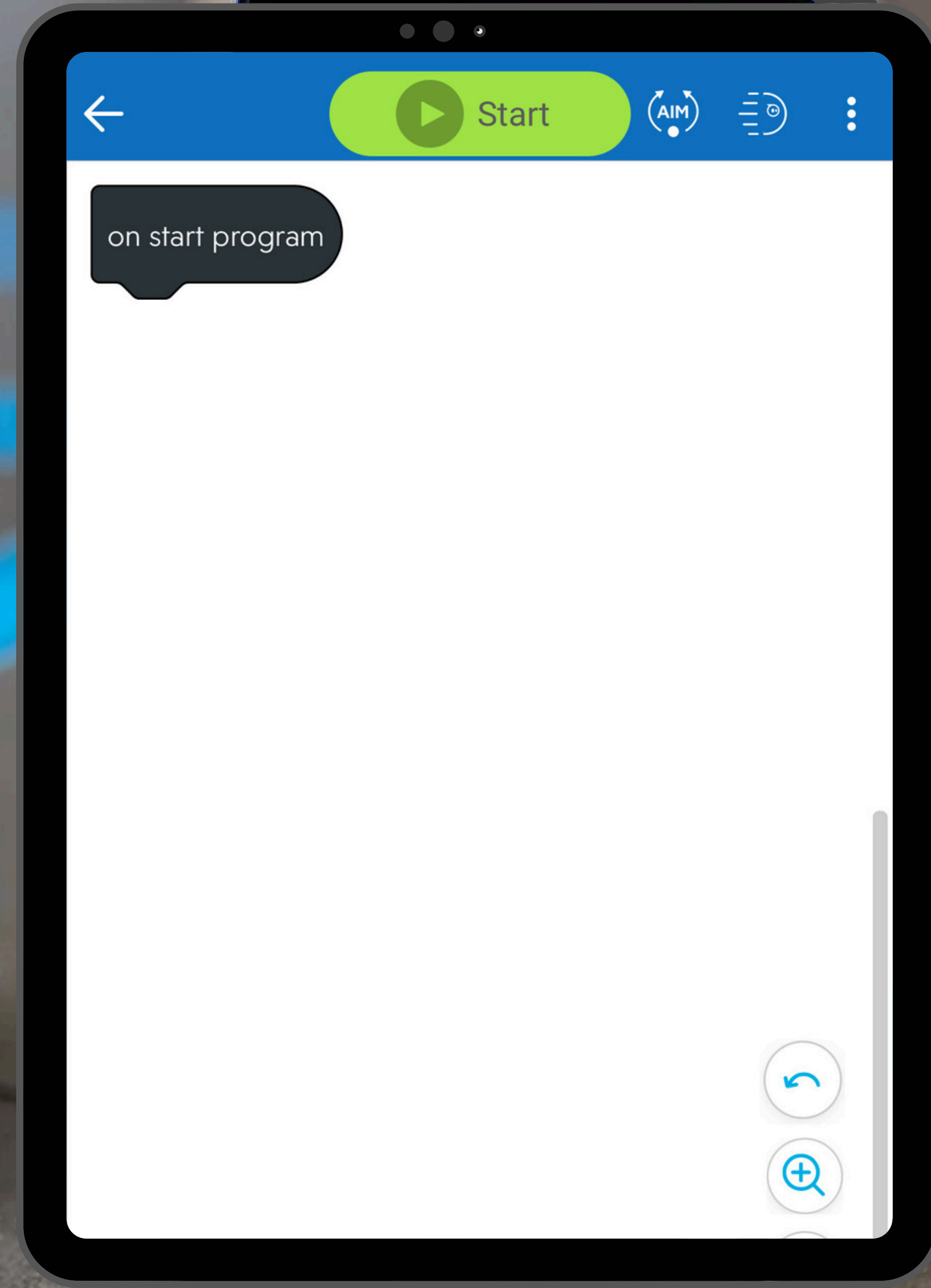
Operator - Records a video of the robot using their tablet, brings the robot back to the starting position, uploads videos to BrainSTEM

Everyone will take turns as a Programmer and Operator



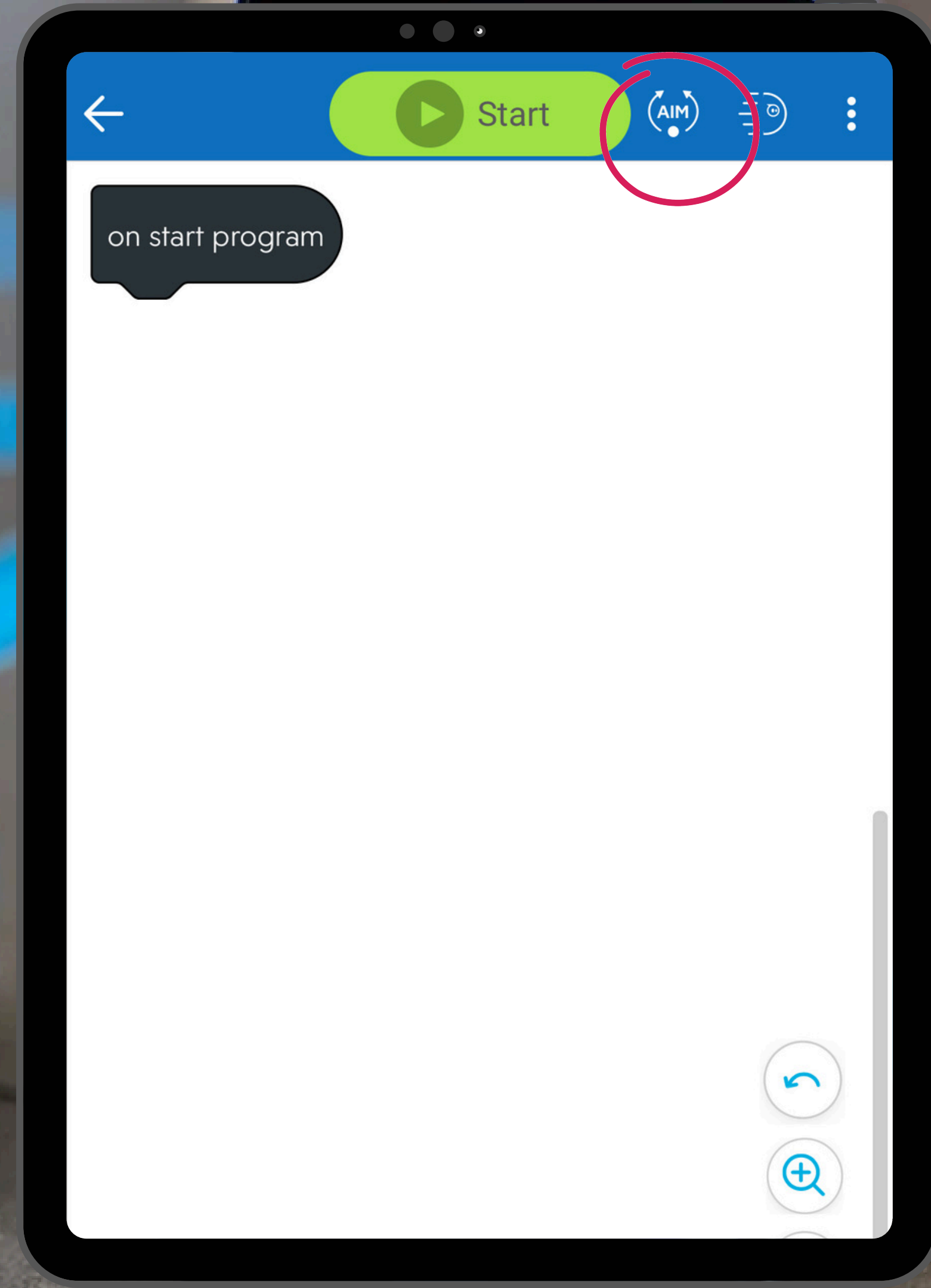
Programming your Sphero Bolt+

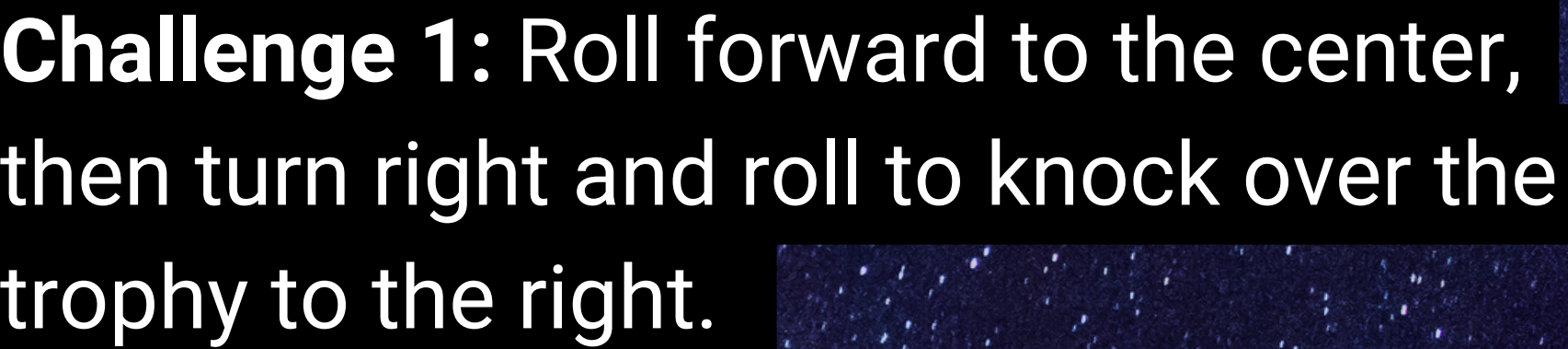
- Click “Create Program”
- Connect to your Sphero Bolt+



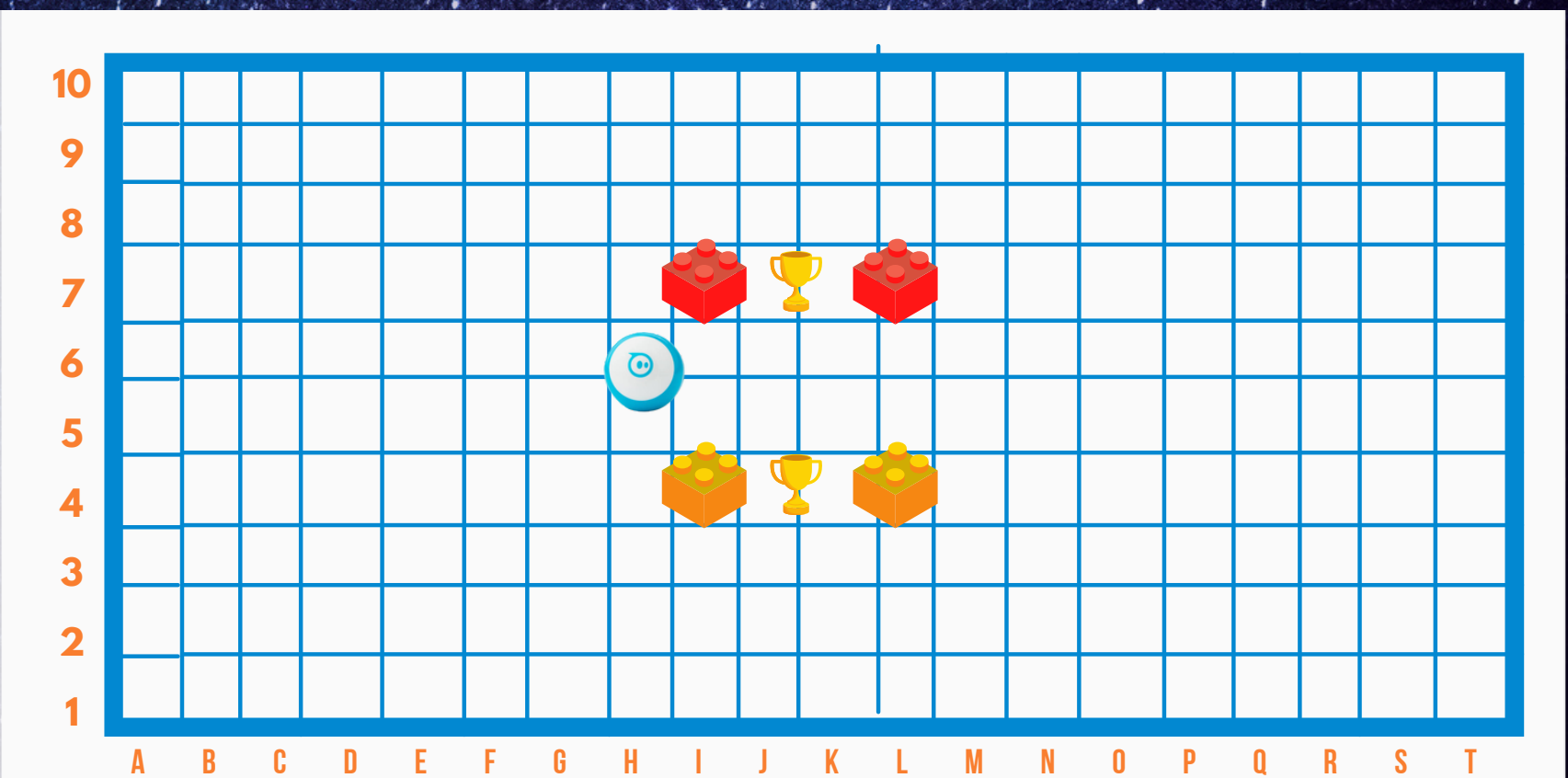
Using AIM

- Using AIM will make your Sphero face the direction you want





Challenge 2: Roll forward to the center, then turn left and roll to knock over the trophy to the left.



Challenge 3: Program the Sphero to complete a square

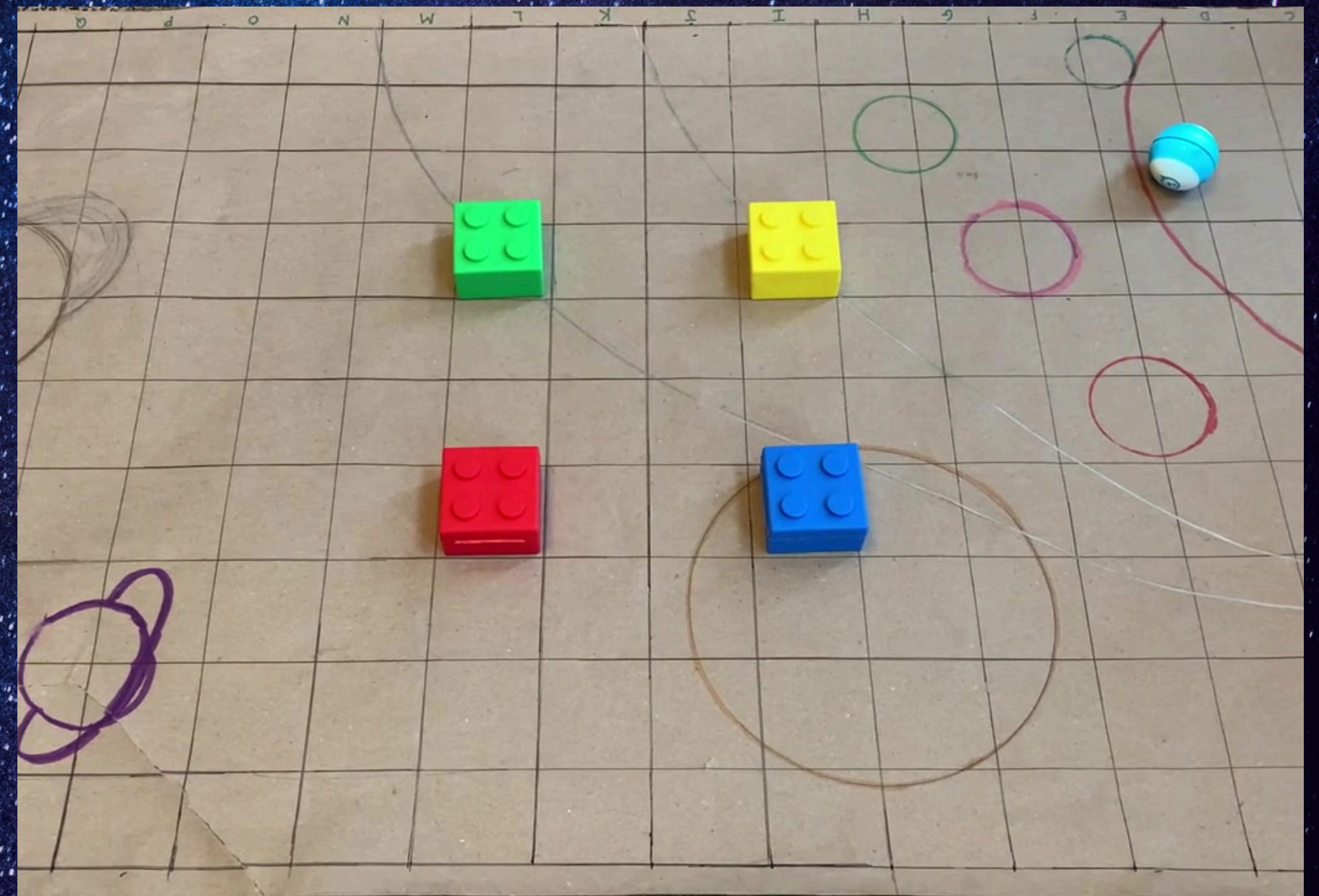
on start program

roll 0° at 50 max speed for 100cm

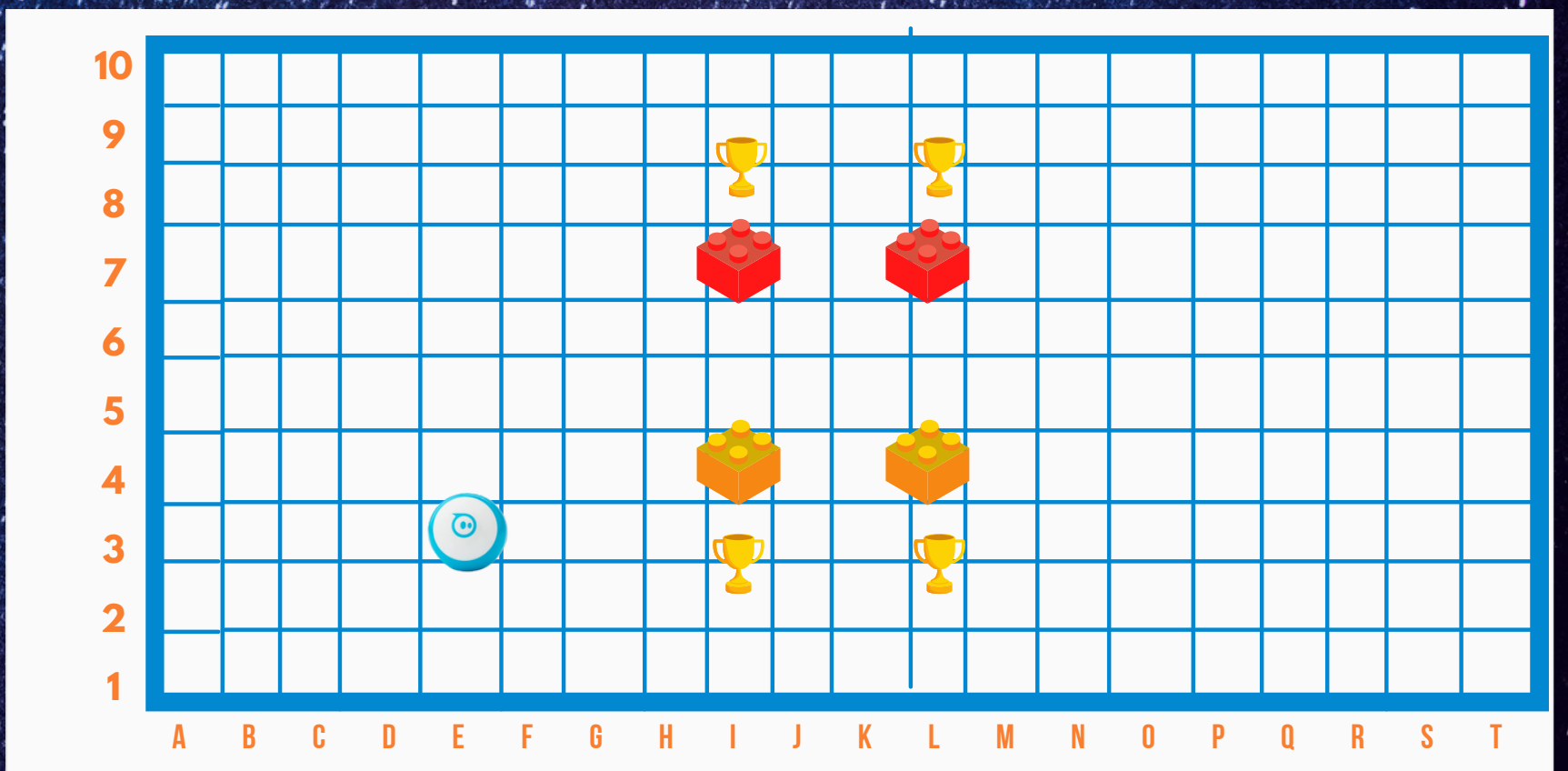
roll 270° at 50 max speed for 100cm

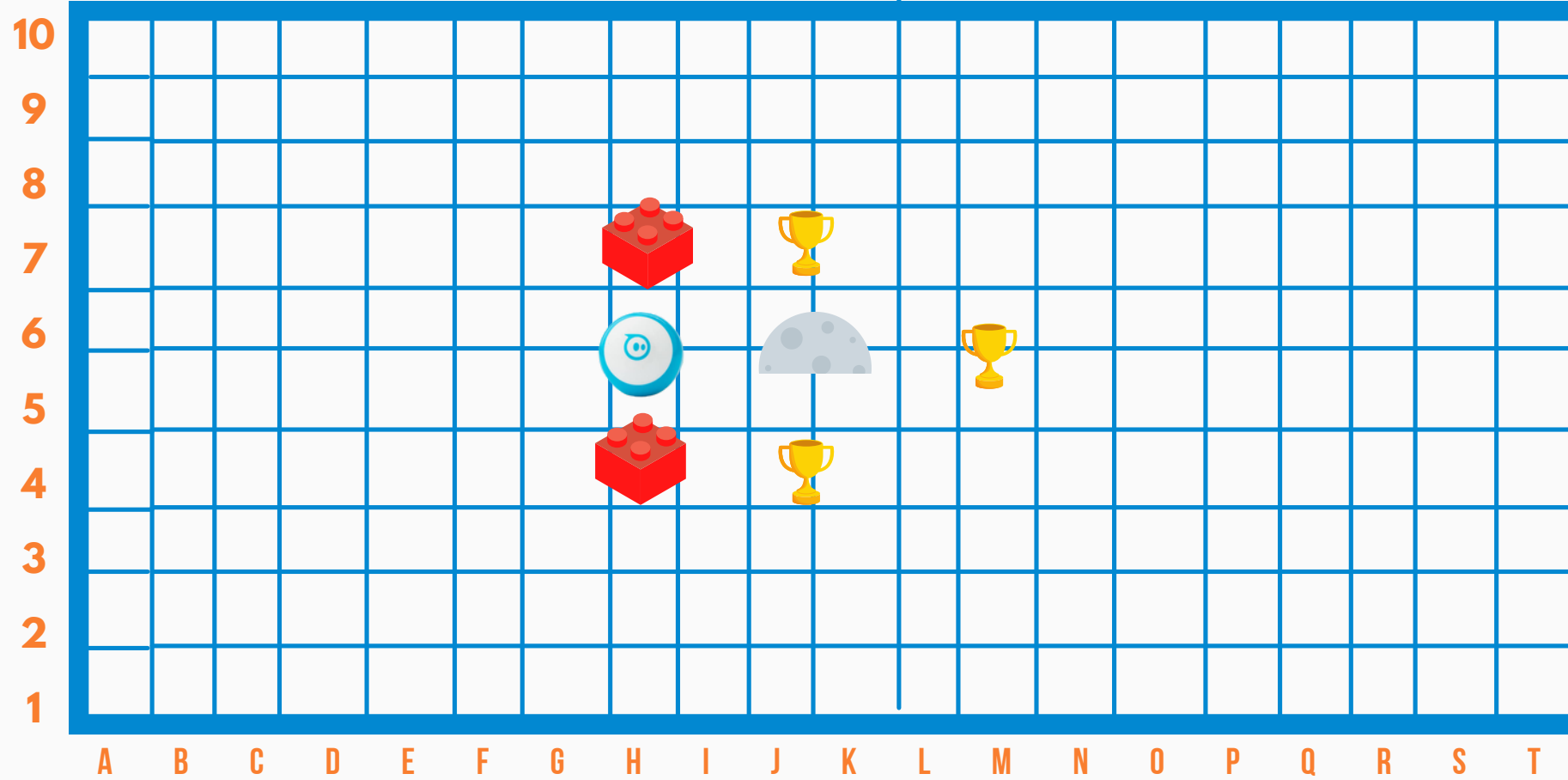
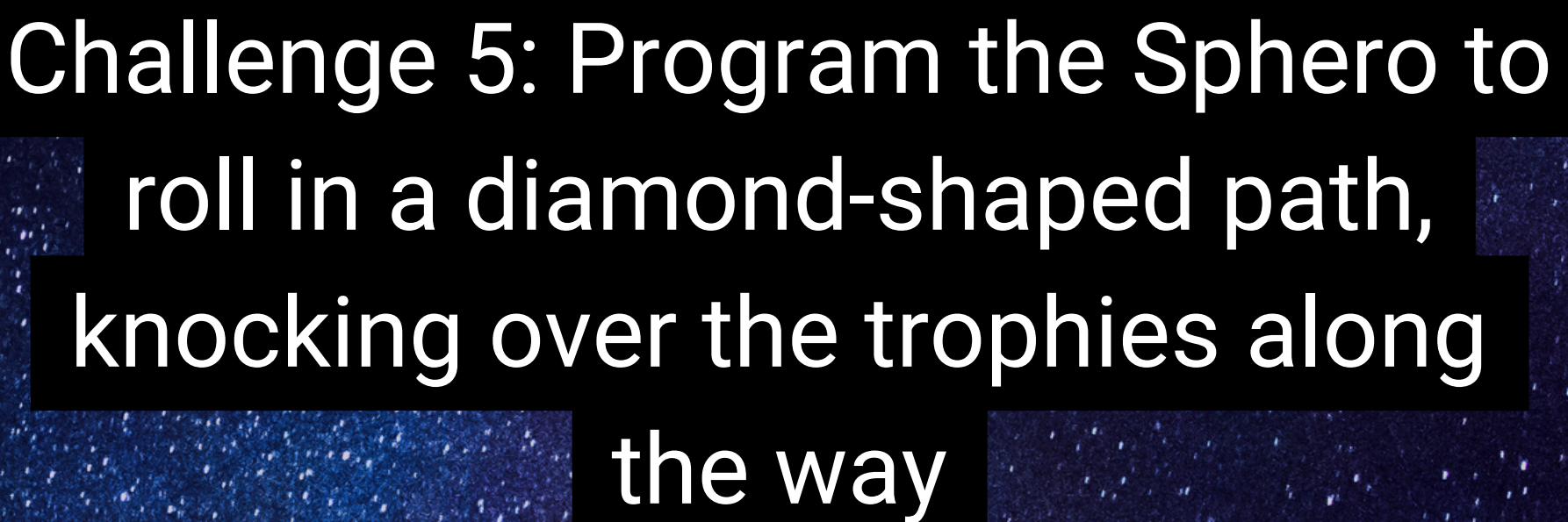
roll 180° at 50 max speed for 100cm

roll 90° at 50 max speed for 100cm



Challenge 4: Program the Sphero to complete a square, knocking over the trophies along the way





Challenge 6: Program the Sphero to roll between the blocks, knocking down the trophies along the way

```
roll 299° at 60 speed for 0.6s
stop
delay for 0.5s
roll 60° at 61 speed for 0.8s
stop
delay for 0.5s
roll 299° at 60 speed for 0.8s
stop
delay for 0.5s
roll 60° at 60 speed for 0.8s
stop
delay for 0.5s
```

