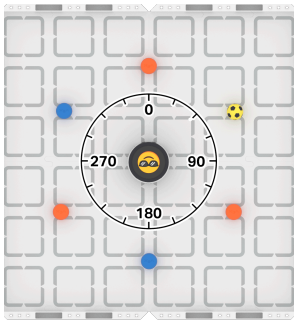
VEX AIM Activity



Counting Objects

Count and show the number of each cargo type!

Step by Step



1. Set up the field as shown above.
   - Place the VEX AIM Coding Robot at the center of the field, facing the top wall.
   - Place six randomly selected cargo objects around the robot.
     - Position one object at each of the following angles relative to the robot's heading: 0°, 60°, 120°, 180°, 240°, and 300°.
2. Code the robot to count the number of each type of cargo and display the results on its screen.
   - Use AI Vision to detect the cargo in front of the robot and identify its cargo type.
   - Use variables to keep track of the count for each specific cargo type.
   - Turn the robot and repeat the above actions until all objects have been counted.
   - Play a sound each time a variable counts up.

'LEVEL UP'

- **AprilTag ID! –** Add AprilTag IDs into the positions and add a new count for total AprilTag IDs.
- **Matching Image –** Make a custom image depending on the total number of cargo pieces to display at the end of the project!

Pro Tips

- View the VEXcode API Reference to learn more about variables.
- Use your Robot Protractor to determine the correct angles for placing each object on the field.

Standards: CSTA 1B-AP-09: Create programs that use variables to store and modify data

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