

Agile User Story

When using this specially made robotic system, the user should experience reliable, quick, and persistent results. Upon following the developer documentation for environmental requirements the user will begin the start-up process. For the start-up, the system should go through two software start-ups. The first, starts the Arduino and homes its components to provide its consistent results. The second, begins the vision system which, once ran, will immediately identify shapes on the provided surface then calculate and send coordinates and shape type to the Arduino. The Arduino should then process the serial information sent and disperse the three values to the correct components. Upon picking up and retrieving the part back to the home location the Arduino evaluates the part shape and determines which side of the robot to place it on. At this point the Arduino code should fall back into the beginning of its loops, re-home the robot, and read the serial information for the next part until the user either ends the program or no shapes are detected.