Outline

Hardware

* Brief overview of every part and how its all connected
* What each parts specific role is
* Arduino, camera, rpis functionality

Software

* Object detection is using YoloV8
* Commands are sent using RabbitMQ
* Overview of what the software does

GUI

* Made in Tkinter
* Grid of buttons
  + Scrollable
  + Searchable
* Gui sends commands to the robot wirelessly over wifi when buttons are clicked

Lessons Learned

* Using servos for wheels
* Learning how to develop for machines other than the pc being used for development
* Learning cross platform techniques (GUI to be run on Linux and Windows)

Future development plans

* Better, more powerful hardware to scan from camera more often
* Better camera with wider FOV
* Better way detect distance from camera
* Having a case