\*\* WAS TOLD TO RESCOPE MY PROJECT SO MY NEW PROJECT PITCH HAS BEEN UPLOADED WITH THE CHANGES AND EXPLANATION WHY THOSE CHANGES WERE MADE. THIS IS THE UPDATED RUBRIC (WHY YOU SEE THINGS CROSSED OUT AND IN RED)

**Rubric**

| **Number** | **Item** | **Points** |
| --- | --- | --- |
| 1 | Can transfer the ~~opencv and camera~~ vision code and all other necessary functions and messages from ROS1 to ROS2 | 10 |
| 2 | Can move in the x,y direction to the correct place (the apple is centered ) (Will be providing a series of images that will be hardcoded into the publisher with the image off center (right), off center (left), then centered) | 15 |
| 3 | Can move in the x,y direction at the specified speed | 10 |
| 4 | Can move forward at the correct specified distance | 15 |
| 5 | ~~All code an functions can interface with each other correctly~~ A publisher is written to publish images | 5 |
| 6 | Can get fake ~~data and~~ images to be used to run the controller | 5 |

I have accomplished number 1, 5, and 6 on the rubric. For number 1, I have a gotten the vision publisher to work and publish the area of interest for the apple. From this info I will be able to determine the center of the apple. The helper functions and custom msgs have also been transferred to ros2. For number 5, I wrote a publishing script to publish an image (predetermined). For number 6, I have 3 fake images, apple too far left, apple centered, apple too far right.

Notes on the code: for the image you have to give it a path, will have to change this if you want to run it on your own. The best\_onyx path it is given is in the share folder, but this file doesn’t actually end up in there. For right now I was putting it in there manually because I wanted to focus on the code and not the file issue.