**Date - 10/08/2022**

**Attendees –** Achyuth Kolluru, Shane Clanton, Brandon Kieng, Tiffany Peng, Christian Guiang

**Team 315**: **Vision System to Detect Product Loss in Tomato Harvesting**

**Discussion:**

*Discussion of achievements since last reporting.* This section follows the progress of the tasks:

1. Created a base model.
2. Created a base database
3. Created a base notification system

Etc…

**Action Items:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tasks (What)** | **Who** | **Due dates** | **Status:**  **Newly assigned /**  **In-progress / Complete** | **Notes:** |
| Finish labeling the tomato images | All | 10/29 | Completed | All members have contributed and finished labeling images.  Now we can move on to creating a model |
| Creating a model | Achyuth | 10/29 | Completed | Created a google collab environment to run the model using tiny yolov4  Only took 30-45 min to generate a base model, without having to optimize or pre-process any of the images.  Even though model had a mean average precision of 40%, it was correctly able to identify many of the tomatoes of the images that have not been pre-processed.  Have tested out the model on images and videos, and they have been able to correctly identify many of the tomatoes on screen based on the labels that we have given.  Will try optimizing the model and try creating different models based on different pre-processing techniques to reach a higher mean average precision. |
| Creating a database | Shane and Tiffany | 11/01 | Completed | Tiffany and Shane were able to create a base database of an excel sheet that generates random values that populates the cells of the sheet.  Excel sheet accurately displays labels of shifts, whole and total tomatoes.  Will try to optimize the database so it will take in the data that the model will be collecting from videos we will be feeding it, as well as properly display the correct shifts. |
| Writing and testing notification system. | Chris and Brandon | 10/29 | In-progress | Brandon and Chris used the windows api to utilize windows 10 built in notification system to notify the user. The conditions have yet to be set and the notifications only stay for the duration the user has set in their windows setting, default 15 seconds.  We will ask the mentor about what needs to be in the notifications and what triggers them. In addition, investigate how to use the windows 10 api to adjust settings to keep the notifications out longer. |

**Next steps:**

Specify your plan for the next meeting in this section.

* Will work on optimizing all parts of our code.
* Will try and have all the code implemented together to see how well it runs together.

Etc…