Capstone Project Weekly Progress Report

|  |  |
| --- | --- |
| Project Title | Air Canvas |
| Group Name | Python Thinkers |
| Student names/Student IDs | Anto Francis (C0825095)  Omer Volkan(C0856373)  Rupesh Chandran(C0826779)  Sachin Sreekumar (C0825096) |
| Reporting Week | Feb 27, 2022 to Mar 12, 2022 |
| Faculty Supervisor | Prof. Parissa Naraei |

# **Tasks Outlined in Previous Weekly Progress Report** using one of the scrum tools listed above(Provide detailed information on the tasks to be completed in this week)

* Enhancing the quality of contour creation by using morphological operations.
* Create data structures for storing pixel values.

# **Progress Made in Reporting Week** (Provide detailed information on the progress that you made in the reporting week. Limit your write-up to no more than two page)

* Created list of contours from the mask, applied dilation and erosion on each of them to remove noise and smoothen the area.
* Identified the biggest contour from the list and set it as the target by showing a circle around them.
* Created queues for storing pixel values.

# What did you learn about your project this week? ( Provide examples of which errors you faced and how you solved it, tasks you did not consider in scope but you ended up adding as a dependency for other components of your project, etc. )

* We learned about different morphological operations like dilation and erosion and learned how to remove noises.
* We struggled to identify the HSV values of colors to be used as marker. Still trying to make it more accurate and efficient.

# What values did you add to your project / team during the past week? ( Provide examples of how you enhanced team collaborations, conflict resolving, task distributions amongst the team members, problems you solved, visions you shared with your mates, etc. )

* Researched about contour detection techniques and contour enhancing techniques.
* We had done code reviews last two weeks to improve code quality and ensure that there is no redundant codes.

# How will you take your project into its next level and what do you need to do so? ( provide examples of how you will enhance the quality of work and what resources you expect requiring to help you do so ).

* Improving code quality is one of the main thing we focused on past weeks. We has multiple peer reviews to understand the part done by each member and added comments to improve quality.
* Pair programming is one of the technique we will be trying to maintain the quality consistently. We are also planning to use open source tools for reviewing the code.