Capstone Project Weekly Progress Report

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| 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 | Mar 13, 2022 to Mar 19, 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)

* Setting the point in contour to draw the pixel on the screen.
* Selection of color by pointing on the color boxes on top of the screen.
* Store pixel values in queues

# **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)

* Queues(data structure) are created for storing the pixel values.
* The deques helped us the position of the contour on each successive frame and we used these stored points to make a line using OpenCV drawing functions.
* We used the position of the contour to make decision; if we want to click on a button or we want to draw on the sheet. We have decided to add buttons on the top of Canvas as front end, if the pointer comes into their area, we will trigger their method.
* We have added a summary of the project in the first page of our ppt and aim to keep it for each presentation sessions

# 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 drawing functions of OpenCV
* We struggle 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 drawing a line in real time ; tracking fingertip and drawing points at each position for air canvas effects.(Frame Processing).
* We had done code reviews during the week to improve code quality and ensure that there is no redundant codes. Fixing the Minor Details of the code to function the program smoothly.

# 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 during the last week. We have 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.