Project title: avant-garde Team number: 3 Members: Nian Ran, Eduardo Battistini, Choi Lam Wong Date: 2020/2/10

Last two weeks our team continued to focus on the designing the functionalities and user interface of our drawing application which is base on eye-tracking technology. During this period we also adjust some small places of the codes to make the code cleaner and run faster. In addition, we managed to find some strange bugs like null pointer reference in c# programming, libraries from wpf cannot be used directly or the totally same in uwp. Therefore for solving the null pointer exception we decided to use another method to accomplish such a functionality, and for libraries issue we tried to find more information about the libraries in uwp to replace the functions in wpf. The user interface of the toolbox and color picker is changed to make it more user-friendly to users using eye-tracking, and adjusted to integrate new features. For the drawing mechanisms, Bezier curves can now be drawn in the application with a control point appearing in the middle of the straight line.

Here are the detail of the content done:

Eduardo Battistini:

- 1. Design new user interface
- 2. New toolbox design for libre
- 3. Colour picking mechanisms remade to be more hands free
- 4. Integration of new features with old mechanisms

Choi Lam Wong:

- 1. Implement algorithm for generating Bezier curve
- 2. Implement control point for creating Bezier curves from straight lines Nian Ran:
- 1. Implement the functionality of saving the picture on canvas as jpg file
- 2. Add a file picker for saving functionality to choose where to save the file
- 3. Fix the bugs and improve the user interface of the saving button

The plan for the next two weeks:

- 1. Implement the shape functionality for both modes in the application so that user can draw all kinds of shapes
- 2. Implement the reposition and resize functionality of the shapes
- 3. Integration the new functionalities both in codes and user interface
- 4. Implement the multiple algorithms in fleur mode
- 5. Browse and edit previously created designs.
- 6. Add drawing mechanism interactions to all the lines that make up shapes