Avant Garde bi-weekly report

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Progress:

In the past two weeks, we focused on implementing the must-have and could-have features and integrating different components. We managed to implement the following features:

- 1. Replay animation
- 2. Curve drawing mechanism
- 3. Autoswitch
- 4. Eye-tracker interaction for fleur

The development of the following features has been started but still in progress:

1. Save / load

Curve drawing mechanism (Choi)

The new drawing mechanism made use of Bezier curve with four control points and enable users to make a curve from a drawn line. The users can move the midpoint and the two control points of the curves will be auto generated by the system. To generate more curves, the users can also move either one of the two control points and the curve will change accordingly.

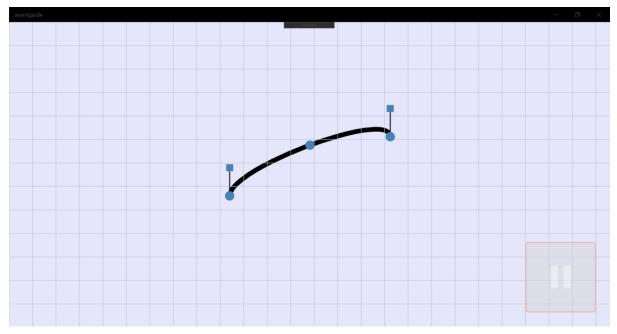


Figure 1. Modifying a curve

Replay (Choi)

The replay functionality generates and display animation for the mandala. The animation shows each stroke in the order they are drawn.

Autoswitch color menu (Nian)

Autoswitch switches the color within a selected set of colors each time the user finishes a stroke. This feature enables users to draw strokes with different color conveniently.

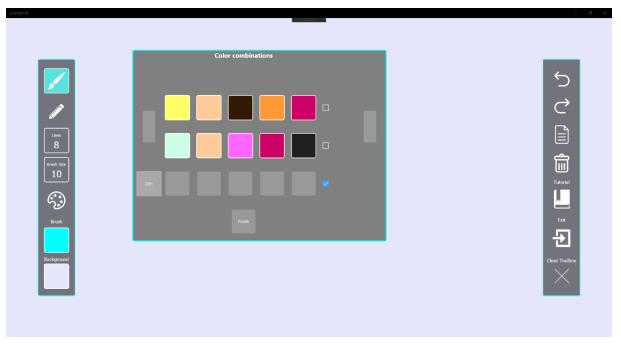


Figure 2. Selecting a color theme for autoswitch

Save / load (Eduardo)

Save / load feature allows user to save and load their work progress. Three saving slots are provided for the user and each slot is saved as a txt in csv format.

Eye tracker Interaction for fleur (Eduardo)

The eye-tracker interaction was integrated into fleur allowing further features such as curve drawing to be implemented.

Further plans:

Our next steps for avant garde will be focused on bug fixing, user experience improvements and testing the program as most of the features have already been implemented. The following are the goals:

- 1. Finish save / load feature
- 2. Make imagery Tutorials
- 3. Experimenting different values of parameter for eye-tracker interaction and make adjustment where necessary
- 4. Implement responsive UI adapting to different resolution