Evaluation Form 3: Visualizing Complex Functions

Members:

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Milestone 3 Task Matrix

Task	Completion %	Paul G	Branden D	Bradley W	To do
Input Field	100%	30%	40%	30%	0%
Finish GUI	100%	30%	30%	35%	00%
Patterns	30%	40%	30%	30%	70%

Milestone 3 Summary

Input Field

> The main goal was to add a field for the user to input their functions. It currently does not error check, will be in a later build. Most of the functionality of the input field was carried over from Milestone 2, since the parser can handle most math functions already.

Finish GUI

> The additions to the GUI are based on making it more user friendly and setting it up for future use. An entry field for new functions are present, and after hitting enter, the GUI updates to show the new current function, and erases the text inside the new function field. A dropdown menu was added for switching between patterns, and a resolution field was given.

Patterns

> The current pattern that was worked on is a basic grid, to see how multiple points map according to a function. The grid transformation is not yet complete, and is not draggable. Clicking on a point changes the center of the grid. The grid and graph are two different planes, with the grid being transparent. In the future when we scan for pictures across the grid, it will ignore the x/y (w/ z) axis and markings, and only focus on the non-transparent field.

Milestone 4 Task Matrix

Task	Paul G	Branden D	Bradley W
Image bending	30%	25%	45%
Image patterns	40%	30%	30%
Resolution	30%	40%	30%
Grid dragging	35%	35%	30%

Milestone 4 Summary

Image bending

> This is scanning a picture pixel by pixel and mapping it according to the user's function. Unlike the grid, there are possibilities of white space within the morphed picture, which need to be avoided.

Image patterns

> This is adding another pattern, in addition to the grid and point. This process is attaching the picture to the grid properly. As described in the patterns section in Milestone 3, the picture will cover a plane, while the grid remains transparent.

Resolution

> While working on how to do inverse functions, we could not see a reasonable way to work with trigonometric functions and finding their inverses. We decided to work on a forward mapping style with resolution attached. This does put some limitations on the user's part, such as wait time, but after a month of research, we could not find a suitable inverse method, and we need to move on to complete the project.

Grid Dragging

> Simple method passed on from milestone 3. Adds functionality to the grid pattern to allow
dragging.

Sponsor Feedback

Signature _____ Date _____

Sponsor Evaluation

Sponsor: detach and return this page to Dr. Chan (HC 322)
- Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real/float number between 0 and 10)

Paul G	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Branden D	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Bradley W	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Additional Comments (if any)

Signature _____ Date _____