**Team 4 – Plotter**

**(James Austin, Nergal Givarkes, Enya Yan, Connor Permuda)**

**Bugs & Enhancements**

**Date Submitted: 4/30/17**

**Bugs Detected**

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| **ID** | **Bug Short Title** | **Priority (1-3)** | **Date Found** | **Reported By** |
| **B01** | Displayed function label is cut off | **3 (low)** | **04/28/2017** | **Connor** |
| Description | On all three visualization types, the label to the left of the function input is cut off | | | |
| Desired Operation | The label should be long enough to show the entire text content | | | |
| Cause | Display label was too narrow to show full text, input field was too far to the left | | | |
| Proposed Fix | Increase the width of the text label, and move the input field to the right | | | |
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| **B02** | Display range label is cut off | **3 (low)** | **04/28/2017** | **Connor** |
| Description | Display range label is cut off on the side of the of the visualizer panel | | | |
| Desired Operation | The text shows it’s full content | | | |
| Cause | The main panel is too small and does not give enough room for the full text | | | |
| Proposed Fix | Make the panel bigger to accommodate for the text’s size, make text label wider | | | |
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| **B03** | Integral panel label is cut off | **3 (low)** | **04/28/2017** | **Connor** |
| Description | On the Integral Panel, the display range label is cut off | | | |
| Desired Operation | The full content of the text label is shown | | | |
| Cause | The test label width is too narrow | | | |
| Proposed Fix | Widen the text label’s boundary to show the full text | | | |
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| **ID** | **Bug Short Title** | **Priority (1-3)** | **Date Found** | **Reported By** |
| **B04** | Displaying functions on X, Y axis | **2(medium)** | **04/28/2017** | **Nergal** |
| Description | Functions are not displayed completely | | | |
| Desired Operation | Functions to be drawn in the appropriate quadrants | | | |
| Cause | Functions were initialized to be drawn from y axis and be displayed in the first and fourth quadrants | | | |
| Proposed Fix | Update the length of the function based on the zoom in zoom out buttons | | | |
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| **B05** | Opening saved files | **3 (low)** | **04/28/2017** | **Nergal** |
| Description | Files are being saved without extension. Difficult to open | | | |
| Desired Operation | Files to be saved with file extension. | | | |
| Cause | Application did not have the feature to add extension to saved files | | | |
| Proposed Fix | Adding the feature to add extension to exported files | | | |
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| **B06** | Limited length of lines | **2 (medium)** | **04/28/2017** | **Nergal** |
| Description | Length of lines are limited to 6.29(2 pi) | | | |
| Desired Operation | Length of lines to be displayed based on the length and width on the window | | | |
| Cause | Initiation the attribute (b) to 6.29 | | | |
| Proposed Fix | Length of the lines to get updated by zooming in and out | | | |
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| **ID** | **Bug Short Title** | **Priority (1-3)** | **Date Found** | **Reported By** |
| **B07** | **Incorrect Trapezium Integration** | **3 (low)** | **04/28/2017** | **Enya** |
| Description | Trapezium Integration returning false answers | | | |
| Desired Operation | Return of correct number | | | |
| Cause | Algorithm used for calculating the integral is incorrect | | | |
| Proposed Fix | Change algorithm so that correct values are returned | | | |
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| **B08** | **Incorrect Simpson Integration** | **3 (low)** | **04/28/2017** | **Enya** |
| Description | Simpson Integration returning false answers | | | |
| Desired Operation | Return of correct number | | | |
| Cause | Algorithm used for calculating the integral is incorrect | | | |
| Proposed Fix |  | | | |
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| **B09** | **Incorrect Gauss Integration** | **3 (low)** | **04/28/2017** | **Enya** |
| Description | Gauss Integration returning false answers | | | |
| Desired Operation | Return of correct number | | | |
| Cause | Algorithm used for calculating the integral is incorrect | | | |
| Proposed Fix | Change algorithm so that correct values are returned | | | |
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| **ID** | **Bug Short Title** | **Priority (1-3)** | **Date Found** | **Reported By** |
| **B10** | **Maximum window size increase** | **3(low)** | **4/28/2017** | **James** |
| Description | Maximum window size is limited | | | |
| Desired Operation | Allow for maximum window size to be 1280 by 720 resolution to allow for full screen viewing on most monitors. | | | |
| Cause | The application frame is set to size 980 by 730. | | | |
| Proposed Fix | Adjust the jPanel frame to the dimensions 1280 by 720. | | | |
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| **B11** | **Zooming feature not centered on origin** | **3(low)** | **4/28/2017** | **James** |
| Description | Zooming in on the graph zooms in on the center point of the screen instead of the point of origin. This causes the user to have to zoom and then adjust the graph and repeat this process after each zoom. | | | |
| Desired Operation | Zooming in on the graph adjust the image size and repositions the center of the screen to the point of origin. | | | |
| Cause | The zoom method zooms based on the center point of the screen. | | | |
| Proposed Fix | Write method that calculates point of origin and centers graph on this point after each zoom. | | | |
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| **B12** | **Changing Visualization resets function to sin(x)** | **2(medium)** | **4/28/2017** | **James** |
| Description | When changing from any visualization to another the Displayed function resets to “sin(x)”. | | | |
| Desired Operation | When changing the visualization, the Displayed function retains the function enetered by the user and the graph updates to the Displayed function value. | | | |
| Cause | When changing visualization style the software resets the value of Displayed function to the default “sin(x)”. | | | |
| Proposed Fix | Save the user entered value for Displayed function and add a method after changing visualization style call method to repopulate the Displayed function value to the user input value. | | | |
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**Enhancements Proposed**

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| **ID** | **Enhancement Short Title** | **Priority (1-3)** | **Date Reported** | **Reported By** |
| **E01** | **Position indicator not needed for Cartesian 3D** | **2 (medium)** | **04/28/2017** | **Connor** |
| Description | The position indicator is not needed for the Cartesian 3D view (it is blank at the moment in this view) | | | |
| Desired Operation | Position indicator is hidden in this view to not confuse the user | | | |
| Cause | Position indicator was left in place for this view even though it does nothing | | | |
| Proposed Fix | Hide the position indicator in Cartesian 3D view | | | |
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| **E02** | **Enable scrolling to left/right** | **3 (low)** | **04/28/2017** | **Connor** |
| Description | Currently, so can scroll in all 4 directions with the arrow keys, but only up and down with a track pad. Since many of our users prefer to use the tack pad to scroll, we would like to enable this functionality | | | |
| Desired Operation | Be able to scroll in the graph (left/right) using track pad | | | |
| Cause | Track pad is only enabled for up and down scrolling | | | |
| Proposed Fix | Create a listener for track pad scrolling for left and right directions | | | |
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| **E03** | **Making more viable the X, Y axis** | **3(low)** | **04/28/2017** | **Nergal** |
| Description | X, Y axis need to be more viable than other horizontal and vertical lines | | | |
| Desired Operation | It would be easier for user to distinguish the X, Y axis from other lines | | | |
| Cause | Using same color and thickness as other lines | | | |
| Proposed Fix | Changing the color and the thickness of the X, Y axis | | | |
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| **E04** | **Save image menu** | **2(medium)** | **04/28/2017** | **Nergal** |
| Description | Save image menu confuse the user with “open” window | | | |
| Desired Operation | To display “save” window and “save” button when is clicked on the save image menu | | | |
| Cause | It could be a mistake by the application developers | | | |
| Proposed Fix | Replace the “open” window and the “open” button to “save” window and button | | | |
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| **E05** | **Displayed function field requires asterik** | **3(low)** | **4/29/2017** | **James** |
| Description | When entering an equation in the “Displayed function: y=” field, an asterisk must be used between variables and coefficients. For example “5x” must be entered as”5\*x” or the program gives an error message. | | | |
| Desired Operation | The program should take the user input as “5x” then submit it to the math class as “5\*x”. | | | |
| Cause | The input that is submitted by the user is directly submitted to the math calculator and must be in the format “5\*x”. | | | |
| Proposed Fix | Save the users input in a variable. Call a method to rewrite the input data to add the asterisk between any coefficients and variables. Then submit the corrected equation to the math calculator. | | | |
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| **E06** | **Visible point of origin** | **3(low)** | **4/29/2017** | **James** |
| Description | When an equation is entered with a point of origin not currently visible on the graph the graph stays with its current orientation and the user must click and drag to locate the new graphs origin. | | | |
| Desired Operation | When a new equation is entered the graph centers itself on the point of origin automatically. | | | |
| Cause | The program never changes the position or zoom of the graph on its own. Changes to the view must be input by the user. | | | |
| Proposed Fix | Write a method that identifies the point of origin. Write a 2nd method that adjusts the view so the point of origin is centered on the display. | | | |
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**Fixes (Bugs and Enhancements) Targeted For Implementation**

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| **ID** | **Short Title** | **Priority (1-3)** | **Implementation Complete Date** | **Assigned To** | **System Test Date** |
| **B07** | **Trapezium Algorithm correction** | **2** | **April 29, 2017** | **Enya** |  |
| **B08** | **Simpson Algorithm correction** | **2** | **April 29, 2017** | **Enya** |  |
| **B09** | **Gauss Algorithm correction** | **2** | **April 29, 2017** | **Enya** |  |
| **B01** | **Displayed Function label** | **3** | **April 28, 2017** | **Connor** | **April 28, 2017** |
| **B02** | **Displayed Range label** | **3** | **April 28, 2017** | **Connor** | **April 28, 2017** |
| **B03** | **Integral Panel label** | **3** | **April 28, 2017** | **Connor** | **April 28, 2017** |
| **B12** | **Changing Visualization** | **2** | **April 28, 2017** | **James** |  |
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