System Test Report

Product Name: 3D Hyperbolic Graph
Team Name: Genesis
Date: December 4th, 2013

User Story 1 from Sprint 1: As a client we need developers to familiarize themselves with the Unity platform - to place geometry on screen and to manipulate at least two parameters with the mouse so that developers can move on to coding for zSpace hardware with confidence.

User Story 2 from Sprint 2: As a client we need developers to familiarize themselves with zSpace— to enable stereoscopic viewing with head and stylus tracking so that developers can substitute the zSpace Stylus for the mouse and do direct 3D manipulation.

User Story 4 from Sprint 3:
As a customer we need developers to implement an interactive hyperbolic graph— to create a set of randomly generated nodes in volume and connect them according to a classification rule so that users can use visual attributes (color, geometry, texture, maps, etc.) to indicate attributes and to implement basic (i.e. not hyperbolic) rotation with the stylus.

Scenario:

1. Put on the zSpace glasses and, while standing, position yourself about a foot away from the zSpace monitor.
2. Using the mouse double click graphDemo1.exe
3. A window will appear with settings that can be changed. Ignore them and click on the button labeled Play!
4. The application should now be running. It will display a graph in the center of the screen. Move your head around. The zSpace monitor will track your head as long as the glasses are within its range. If you move the glasses too far to the right, left, below or above the screen it will stop tracking. If you return into its range it will continue tracking as if nothing happened.
5. If you move your head too close to the graph parts of it will disappear. This is an issue with zSpace and not with our product.
6. You can now pick up the stylus and move it around the screen. The user should see a line on screen representing where the stylus is currently located. Like the head tracking, the zSpace monitor will track the stylus as long as it is within its range. If you move the stylus too far it will stop tracking. If you return the stylus to its range it will continue tracking as if nothing happened.

7. The stylus has three buttons on it. If at any point during this scenario you lose track of the graph on screen press the left rectangular button on the stylus. This will reset the graph to its original position and scale.
8. Move the stylus so that it is touching the graph and click and hold on to the forward round button. You are now able to move the graph's position and rotation as you please. Release the round button.
9. Click and hold the right rectangular button. A number will appear in the top left hand corner of the screen showing the scale of the graph as a percentage of the original scale. If you move the stylus to the right, in the positive x direction, the scale will increase up to a maximum of 200%. If you move the stylus to the left, in the negative x direction, the scale will decrease down to a minimum of 50%. Release the button.
10. Now put down the stylus and grab the mouse and left click once. The user should see the graph turn entirely red. Left click once more. The user should see the graph increase in scale without the number indicator in the top left hand corner of the screen.
11. Hit escape on the keyboard to close the application.