*Florida International University*

*School of Computing and Information Sciences*

CIS 4911 - Senior Capstone Project

Software Engineering Focus

Feature Document

User Story #**824**

**Team Member:**

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**User Story** Fix remaining bugs, from previous user story #801, with app responsiveness while resizing the app window

* **As a User I would like to** not run into bugs while resizing the application window **so that I** can resize the app without any frustration

Acceptance Criteria

* Fix bug with memory which causes pixels to be drawn randomly while resizing
* Fix any other remaining bugs related to window responsiveness

**Use Case** #**824 – Fix remaining bugs with app responsiveness while resizing the app window**

Use Case:

Fix remaining bugs with app responsiveness while resizing the app window

Details:

Actor: User

Pre-conditions:

* Project working on VS2015
* Program Running

Description:

* Use case begins anytime a user runs the program and the application opens into a window (instead of full screen). This will affect the users control over the program window and size .
* The user story ends when the user resize the window responsively without affecting the user's drawings

Post-conditions:

A user can now minimize, maximize, and resize the windows as needed without being affected by certain bugs.

Decision Support:

Frequency: Often. Users need to be able to resize the app window without affecting their drawing

Criticality: High. Enables users to freely manipulate the size of the app window

Risk:Low. Team members need to get used to new structure

Constraints:

Reliability: Very Reliable.

Performance: There may need to be performance improvements

Supportability:

Must work with ACER Multitouch, Leap, RealSense and Eyex

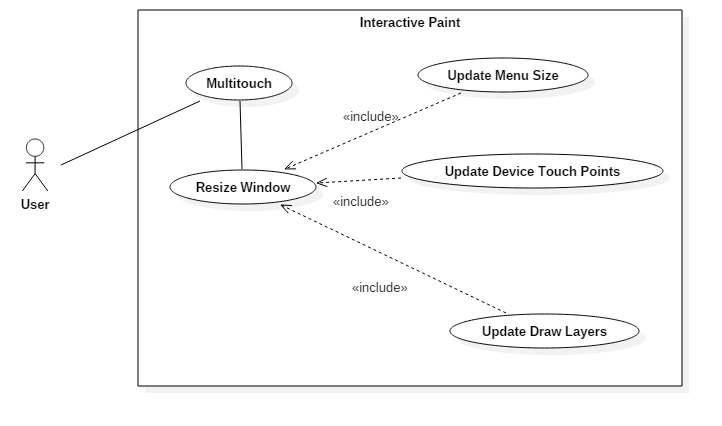
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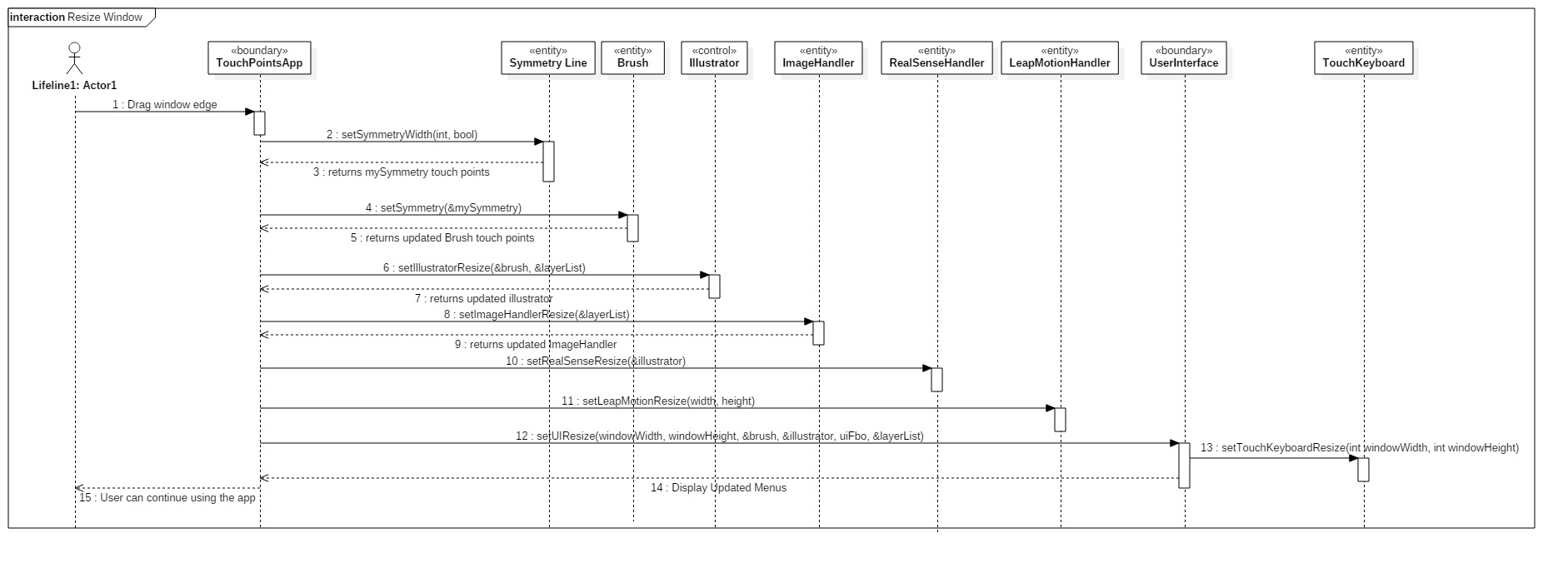
Owner: Eric Aguiar

Initiation date: 07/1/2016

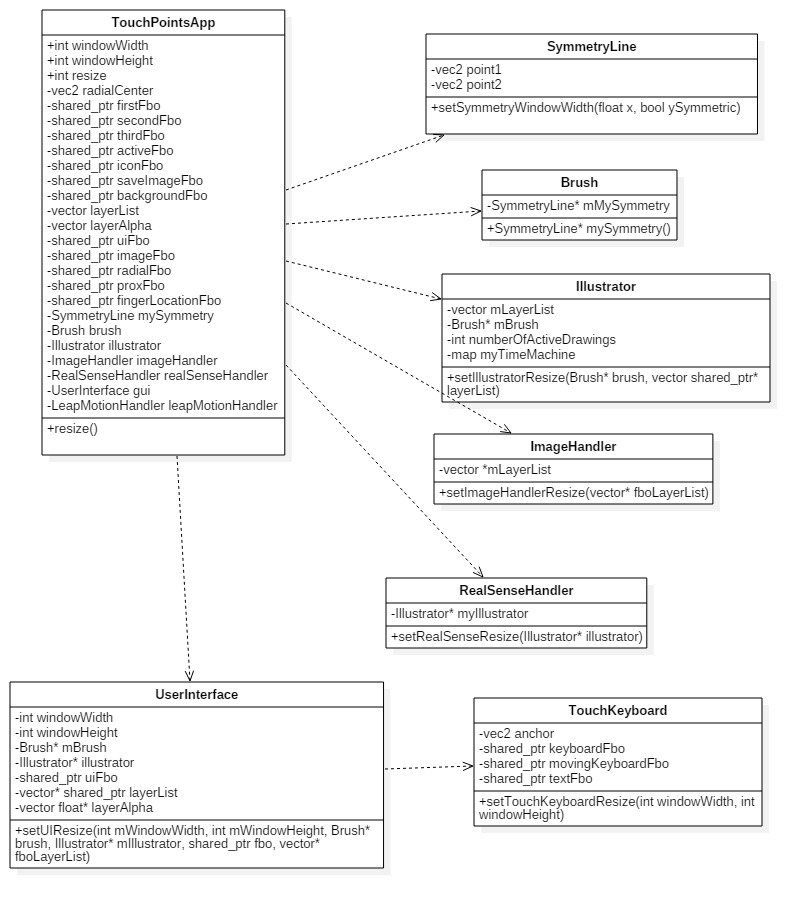
Date last modified: 07/5/2016

Use Case Diagram



Sequence Diagram  


Class Diagram



Unit Test

Sunny Day Tests

Test Case 1: Devices Still Work

Test Purpose: Ensure that user can still use the devices to draw on screen after the window is resized

Test Setup:

⦁ run program

Test Output:

Every line drawn correctly

Expected Output:

After testing all integrated devices, i.e. the RealSense, Leap and Eyex can still contribute to drawing, the screen should draw correctly

Test Case 2: Window can be minimized without crashing the application.

Test Purpose: Ensure that user can minimize the window without crashing the app

Test Setup:

⦁ run program

Test Output:

Any shape can be drawn correctly anywhere on the screen and the application can be minimized without crashing the app.

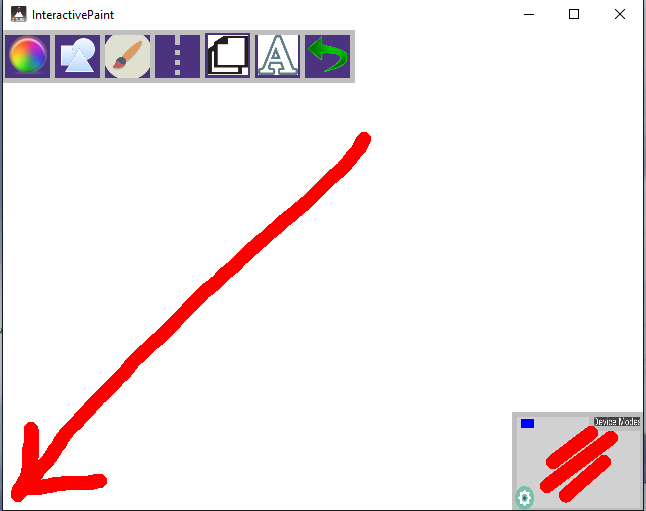
Expected Output:

After testing all integrated devices, i.e. the RealSense, Leap and Eyex can still contribute to drawing anywhere on the screen correctly. The application can be minimized without crashing the app.

**Integration Test**

Devices can still be used to draw in the application, i.e. the RealSense, Leap and Eyex can still contribute to drawing. The UI has less bugs which were affecting the a menu, crashing the application when the window is minimized, and causing a memory leak which affected drawing. The application is now initialized to the size of the screen.

**Visual User Guide**



Resize the window by clicking and dragging any of the four corners of the window. The menus will resize according to the size of the window.