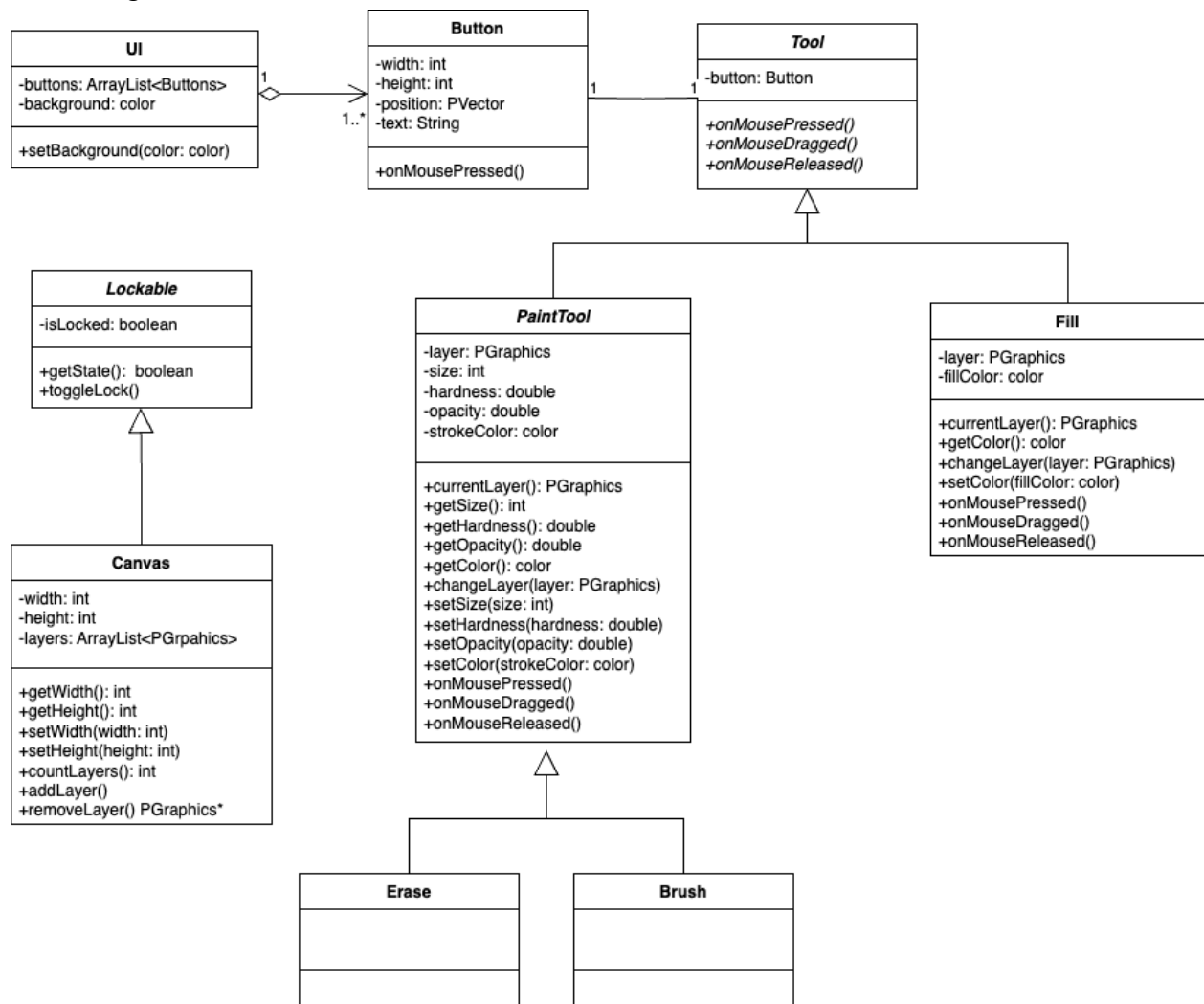


Period 6
Calvin Ye
Calvin.java
Photoshop Lite

Description

My project is a recreation of the well known graphics editor Adobe Photoshop, a software application used for creating and manipulating images. The application allows you to edit an image you upload on a canvas. The application includes many tools that allow for editing. This includes drawing tools such as the brush, paint bucket, and eraser; modify tools such as crop and straighten; and enhance tools such as clone and blur. Finally, the application allows you to save your work and continue editing it later.

UML Diagram



Note: The empty Erase and Brush classes are not mistakes. These classes consist only of constructors and have no additional attributes or methods.

How it Works

When you run the program, you can choose an existing canvas to edit or create a new one. On each canvas, you can click upload to put an image onto the current canvas. You can edit the canvas by selecting from one of the many tools using your mouse or using a keybind. Depending on the tool, you can edit your canvas by pressing, dragging, and/or releasing your mouse. Once you are done, there is a save button that allows you to save your work on your computer.

Functionalities and Issues

- Current Functionalities
 - Draw on a canvas using a preset Brush
- Functionalities Planned to be Done Next Meeting
 - Color picker and eyedropper tool
 - Full implementation of layers using PGraphics, including duplication, renaming, and reordering of layers as well as proper rendering on the canvas
 - Basic UI with Buttons to switch between tools
 - Rectangular and elliptical marquee selection
 - Lasso selection tools
 - Layer transformations (scale, rotate, and flip)
 - Exporting edited images
- Issues
 - PGraphics layers could not be edited. This was resolved by using `layer.beginDraw()` and `layer.endDraw()`.

Log

- Calvin Ye
 - Implemented abstract Lockable class
 - Implemented Canvas class
 - Implemented abstract Tool class
 - Implemented abstract PaintTool class
 - Implemented Brush class
 - Implemented Erase class
 - Implemented Fill class
 - Created UML diagram
 - Updated design document