

Team 26 Semester Project Outline

Over these five milestones, students will create a Drawing App similar to MS Paint or Photoshop using Android Studio or JavaFX. The app will have the ability to create a canvas of a chosen size, and load and save images. A toolbar will contain all of the tools available for use. The toolbar will contain items such as paintbrushes, at least three shapes, and an eraser. Users will be able to transform the image in a variety of ways. They can flip it horizontally, vertically, and rotate it 90 degrees. Additionally, they will be able to invert the colors for the entire image. Users will be able to draw their own artwork or design, or edit an existing work. For more detailed requirements, see the project outline below.

M2

- Create a canvas creation screen
 - A way to create a blank canvas
 - Users can choose the dimensions of the canvas
- Blank Canvas
 - A blank screen where users will be able to draw
 - Must be the same dimensions as specified in the canvas creation screen
- Toolbar
 - Include icons for at least a paintbrush, eraser, and pencil
 - Clicking a tool highlights it
 - Does not have to be functional or connected yet
 - Displayed next to the canvas

M3

- Three types of paint brushes
 - Brushes must vary in texture or opacity
 - Each brush must be adjustable in size
- Color selection
 - Users should be able to choose any possible RGB color for their brush
- Eraser
 - Anything under the eraser should revert back to the original canvas color

M4

- Shape tools
 - Shapes can be placed and transformed on the canvas

- Can be any color
 - Must have at least three types of shapes
- Save images
 - Images can be saved as JPEGs

M5

- Image color invert button
 - Inverts all RGB colors on the screen
- Flip
 - Horizontal and vertical flip
- Rotate
 - Rotates image and canvas 90 degrees

M6

- Screen after saving image
 - Create another image option
 - View Image
- Load Image
 - Load existing art from a JPEG
- One additional creative tool
 - Should impact the usage of the app in a significant way
 - Allows for a variety of new types of drawings or makes an existing drawing method easier
 - Must be complex (Ask TA if unsure)