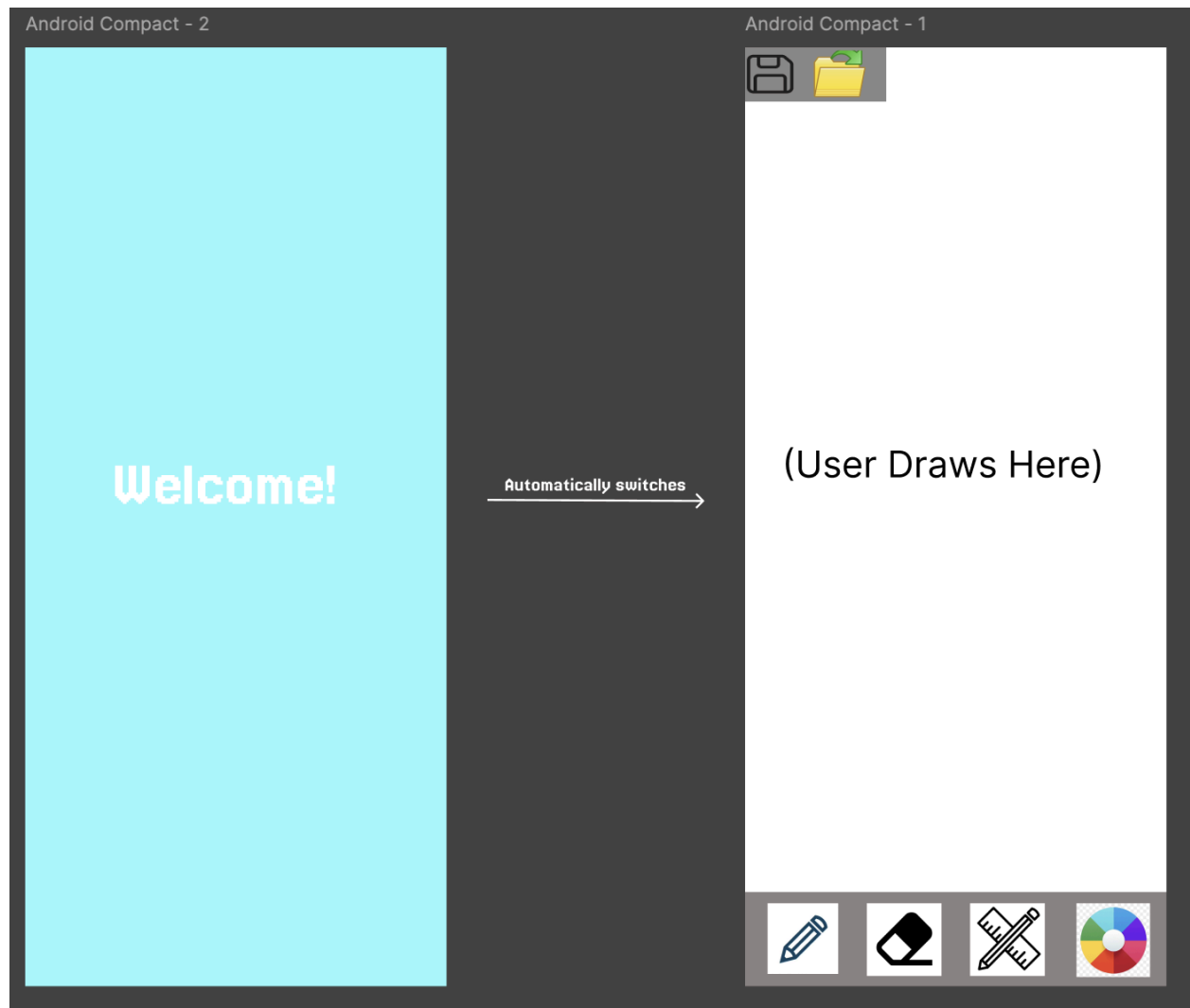


# Wireframe:



## GIT PROCEDURE:

- Pull from main branch into main branch on your local repo(your computer) to make sure you are up to date
- Merge main into your current branch you are working on or make a new branch based on that one
- Then make changes to your branch...
- Then pull from main again to make sure no one made any pushed while you were working
- Then handle any merge conflicts on your local repo
- Once they are fixed you are good to merge to the remote repo(github) !

### Task Breakdown by Team Member

Team Member	Files to Modify/Create	Tasks & Implementation	Testing Tasks
<b>Pooja</b> (Drawing & Erasing)	<ul style="list-style-type: none"><li>◆ CustomCanvas.kt</li><li>◆ DrawActivity.kt</li><li>◆ DrawTool.kt (New)</li><li>◆ DrawViewModel.kt(New)</li><li>◆ CustomCanvasTest.kt(New)</li></ul>	<ul style="list-style-type: none"><li>✓ Implement <b>touch handling</b> in CustomCanvas.kt</li><li>✓ Add <b>drawing &amp; eraser logic</b></li><li>✓ Create DrawTool.kt to manage <b>PENCIL, ERASER, etc.</b></li><li>✓ Store canvas state in DrawViewModel.kt (MVVM)</li><li>✓ Modify DrawActivity.kt to connect UI &amp; canvas</li></ul>	<ul style="list-style-type: none"><li>✓ <b>Unit tests in CustomCanvasTest.kt</b></li><li>➤ Test if drawing <b>updates canvas</b></li><li>➤ Test if eraser <b>removes strokes</b></li><li>➤ Test undo/redo functionality</li></ul>

<b>Calvin</b> (File Saving & Loading + Splash Screen)	<ul style="list-style-type: none"> <li>◆ <code>FileHandler.kt</code> (New)</li> <li>◆ <code>DrawActivity.kt</code></li> <li>◆ <code>SplashScreenActivity.kt</code></li> <li>◆ <code>FileHandlerTest.kt</code> (New)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Implement <b>saving/loading</b> in <code>FileHandler.kt</code></li> <li>✓ Store drawings in <b>internal storage</b></li> <li>✓ Add <b>Save/Load buttons</b> to <code>DrawActivity.kt</code></li> <li>✓ Implement <b>Splash Screen transition</b> in <code>SplashScreenActivity.kt</code></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Unit tests in <code>FileHandlerTest.kt</code></b> <ul style="list-style-type: none"> <li>➤ Test if files <b>save/load correctly</b></li> <li>➤ Test error handling (e.g., file missing)</li> </ul> </li> <li>✓ <b>Manually test Splash Screen</b></li> </ul>
<b>Sam</b> (Brush Settings: Color & Size)	<ul style="list-style-type: none"> <li>◆ <code>BrushSettings.kt</code> (New)</li> <li>◆ <code>DrawActivity.kt</code></li> <li>◆ <code>CustomCanvas.kt</code></li> <li>◆ <code>BrushSettingsTest.kt</code> (New)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Implement <code>BrushSettings.kt</code> to store <b>color &amp; size</b></li> <li>✓ Modify <code>CustomCanvas.kt</code> to <b>use selected brush</b></li> <li>✓ Add <b>buttons/sliders</b> in <code>DrawActivity.kt</code> to change color &amp; size</li> <li>✓ Ensure brush settings <b>update in real-time</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Unit tests in <code>BrushSettingsTest.kt</code></b> <ul style="list-style-type: none"> <li>➤ Test if brush <b>color changes properly</b></li> <li>➤ Test if brush <b>size updates correctly</b></li> <li>➤ Test for invalid values (e.g., negative size)</li> </ul> </li> </ul>

## Weekly Timeline

Day	Task
Day 1-2	Implement <code>CustomCanvas.kt</code> , <code>BrushSettings.kt</code> , <code>FileHandler.kt</code> , and <code>SplashScreenActivity.kt</code>
Day 3	Connect everything inside <code>DrawActivity.kt</code> (integrate drawing, saving, and brush settings)
Day 4	Write <b>unit tests</b> for all features
Day 5	Run tests and fix any <b>bugs</b>

<b>Day 6-7</b>	<b>Final review &amp; polishing</b>
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### Project structure:

- Layouts: We will use the Linear layout on the splash screen and for the draw screen we are going to use the Frame layout.
- Classes: We are going to make a custom canvas class(view) as the main surface for the user to draw on. We will also have another class dedicated to file handling for retrieving old drawings and making new ones. Additionally, we will have a brush settings class that allows the user to modify the pencil properties. In addition to those classes we will have an activity each for both the welcome splash screen and the main draw screen.
- Tests: For most of our unit tests we are going to test the drawing tools and confirm whether or not they actually change the canvas values. For example, checking if the canvas gets updated when the user

touches(draws) it in the correct place and the inverse for erase. We could also check that the values changed are the correct color to confirm whether or not the color was changed correctly. Finally, we are going to make tests for file saving and opening. For the rest of the functionality, we plan on testing it visually.

## Who is doing what:

- Pooja: Draw/Erase along with associated tests. Custom canvas class
- Calvin: File saving/opening along with associated tests. Splash screen and transition.
- Sam: Pencil Size and color changing and associated tests.