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Semester Project Reflective Document

**Overall Team Experience**

The overall team experience was one that fell very par for the course in terms of group projects. With all group projects, members are going to have different work ethics, schedules, and directions they want the project to take. We understand that these matters must be handled with respect, and worked through these differences in due time.

**Communication Methods**

We communicated through a group text and a discord server. The discord server was useful for communication because it allowed us to separate topics into channels, address particular members, and talk in voice chat if necessary. We made sure to keep each other informed when we made significant changes to the code.

**What Was Effective**

We found that splitting up the categories of the app to be effective for each person’s contribution. Sam was in charge of the database, Michael was in charge of the art and design, and Austin was in charge of the in-between. We each offered our thoughts and opinions on how other members in the group would be able to improve or implement their ideas. Another way that we were effective was in not procrastinating the project. If you look at our repository you will see we had a substantial portion of the project completed in the first few weeks of it being assigned. This came at the expense of a little bit of burnout and complacency, but overall it was definitely a good thing because we feel that our project was kind of ambitious.

**What Was Not Effective**

We were not very efficient when it came to the technical details of project management, based off of some minor GitHub and Android Studio issues that came up throughout the process. For example, there was an incident where 2 classes were overwritten in someone’s push, and then another member pulled this code and created the 2 classes that had already been done. When the person who wrote the original ones pulled/pushed again, he removed the 2 new ones and returned the old 2, causing mass confusion.

We also found that attempting to all meet in a group and work in the same room lowered our efficiency. We made few attempts to do this, which meant that it was each individual’s responsibility to contribute their share of the work.

**Features We Intended to Implement**

We intended to have the home screen have a preview of the wallpaper instead of a button taking the user to that activity, but were not able to figure out how to do it.

We intended to have the user only be able to use default icons, and in order to upload their own they would have to pay a dollar. We also wanted to have all the icons be vector graphics. These were never done due to time constraints.

**Unforeseen Challenges and How We Dealt with Them**

There was an issue with interacting with the wallpaper service built into Android. We wanted to manage the toolbar and canvas that were inside the service, but it was difficult to understand how to do that. We dealt with this problem by having a separate activity for the wallpaper service, which works just as well but looks worse navigationally.

After implementing the navigation drawer, we came to the conclusion that having the same navigation drawer for each activity would be difficult to manage the different intents and logical structure of the app, so we agreed on implementing a home button on the toolbar of several activities rather than the navigation drawer.

When implementing the database, we found that we could not store blobs into the database because our images were too large. We dealt with this issue by using the filenames of the blobs instead of the actual image data.