Subject:

Smart Devices development

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Introduction:

This document will describe the design of a “To-do list” application for mobile phones, focusing on the design philosophy followed throughout the design process. Since the app will be design to be used in Android phones, the design will be based on different elements from Google’s “Material Design”. Regardless, the general purpose of the design will be to offer a simple design that all kinds of users can easily understand and interact with.

Implementation:

When thinking of the design for the app, Google’s “Material Design” principles were used as a guide to ensure that the design wasn’t only aesthetically pleasing, but also functional. These were the ways in which each core principle was followed:

- **Accessibility**

  The apps accessibility held a heavy weight during the design process. As a team, we wanted our app to be easy to use for as much people as possible. This meant designing with more than just our own experience in mind. We decided to focus on making our app’s elements easily identifiable for colorblind people, as well as people with poor eyesight. To achieve this, we chose colors with heavy contrasts, as they would make it easy for everyone to see clearly where one element starts and ends. It also helps drive attention to the ActionButton on the bottom-right corner of the screen.

- **Content design**

  This refers to an app’s content being clear to everyone. Since all of our app’s content is small phrases, we ensured clarity by increasing the font size and giving the text a **bold** font weight, thus making it easier for everyone to read the app’s text.

- **Customizing Material**

  This principle wasn’t applied to the app because it involves using *Dynamic Color* to choose the app’s colors instead of choosing the in the design process. The reasoning behind this decision was that *Dynamic Color* could affect the app’s accessibility, since it takes colors from the user’s background image. The resulting themes could include color groups with little variety, so we opted for avoiding it to ensure clarity.

- **Interaction states**

  Since the app works with tasks that must be completed/pending, the use of interaction states was a cornerstone of the design. To clearly show a task’s state, a checkbox (which

would appear empty/filled depending on the task's state) was used. Additionally, completed tasks are "decorated" with a horizontal center line to show that they are no longer "important".

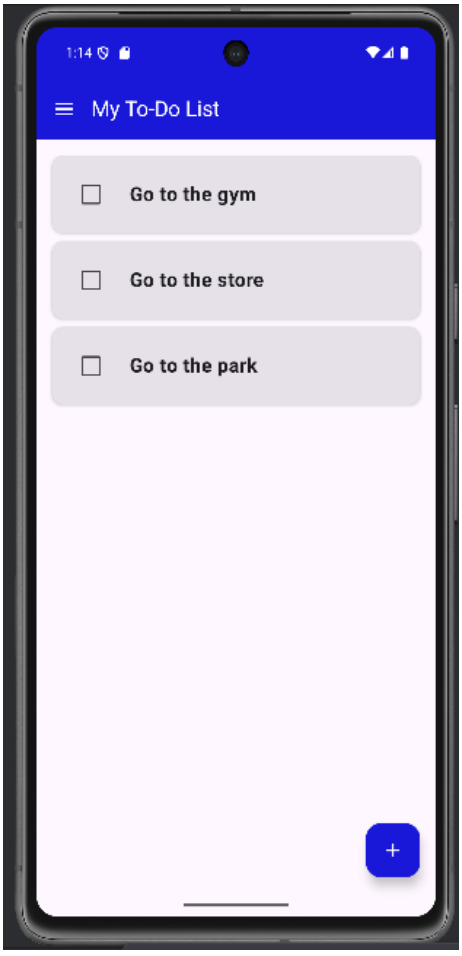
- **Layout**

Since the app isn't too complex, the resulting layout was also very simple. A top bar shows the apps title, which also encapsulates its main purpose. The app's main content is shown in a column that takes up most of the screen. This was done because that's the only section of the app that should be focused at all times.

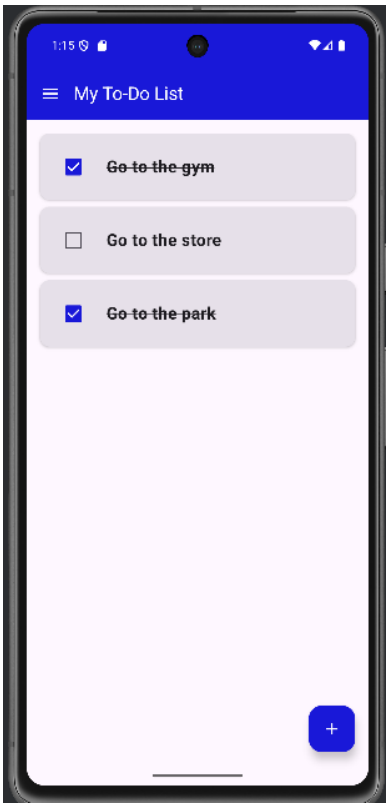
Screenshots

The following images are screenshots of the app in three different states:

Task list (no completed tasks):



Task list (some completed tasks):



Visible sidebar:

Conclusions:

During this assignment we gained valuable knowledge in two main subjects: design principles and mobile development. Regarding design principles, we were able to experience all of the things that must be taken into account when designing an app aside from the expected “it must look good”. This will help us design better, more accessible apps in future projects. On the topic of mobile design, we were able to see the similarities and differences between changing a website’s design and changing a mobile app’s design. This has opened our eyes to all the room for growth that we still have as beginner developers and will guide us into more in depth learning.