**GNG2101**

Deliverable D: Detailed Design, Prototype 1, and BOM

Submitted by Team A12

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# 1. Introduction

After meeting with the client and receiving feedback, the team was able to make some improvements to the product concept and begin prototyping and testing. This report will address the client feedback and present a detailed version of the newly improved design concept. There will also be a clearly defined flow chart diagram of the overall design concept that shows how all the subfunctions are linked. A prototype will be presented and compared to the target specifications for this product. Finally the report will address a future client meeting.

# 2. Client Feedback

Client was content with the initial product concept; however, he did provide some suggestions for improvement. He proposed using a larger font to allow him to use the app without glasses. He also suggested that we put each task in a coloured box to clearly differentiate different tasks. This allows the user to focus their attention on a specific task without getting distracted too easily. The client also proposed a landscape view that would have more details; however, after discussing the technicality, the team determined that it may be infeasible due to the time constraint. Overall, the client meeting was very helpful and the team received a lot of constructive criticism and feedback.

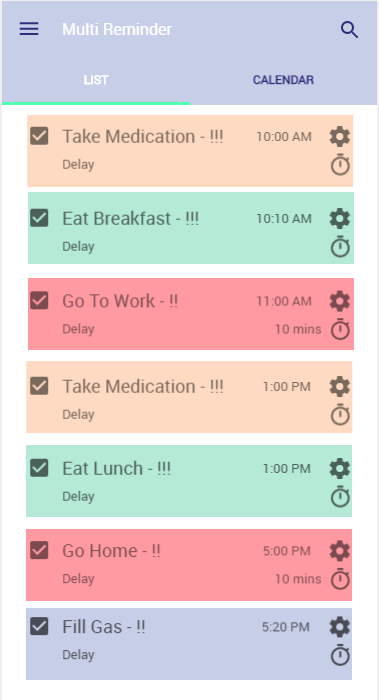
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# 3. Design Concept

## 3.1 Interfaces

### Tasks List

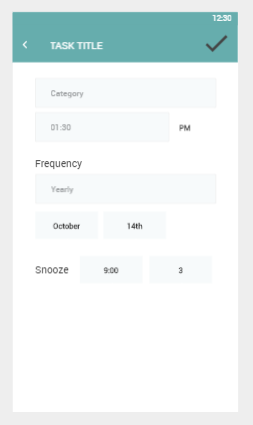
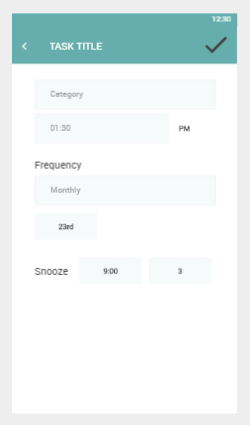
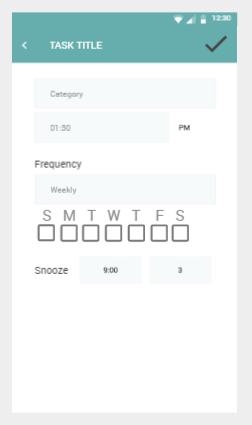
Each task is clearly divided by the colour blocks and displays the priority, reminder time, and snooze time. Clicking on the tasks will show more detail about the task. Each task can be edited using the gear icon.



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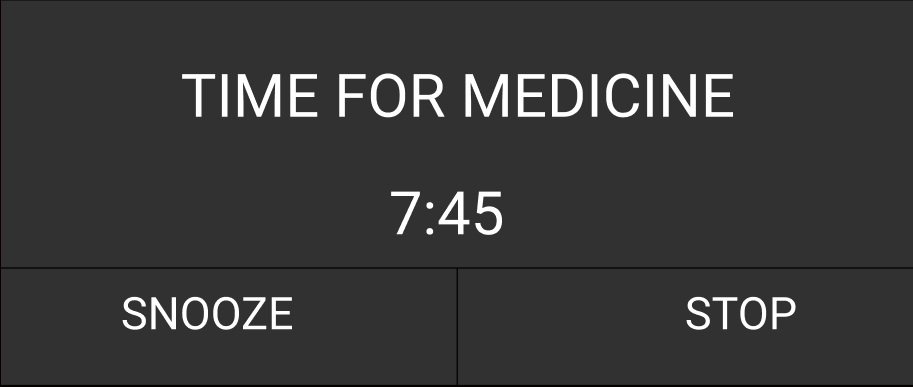
### Task Settings

Depending on the frequency the user chooses, different settings and options are available.

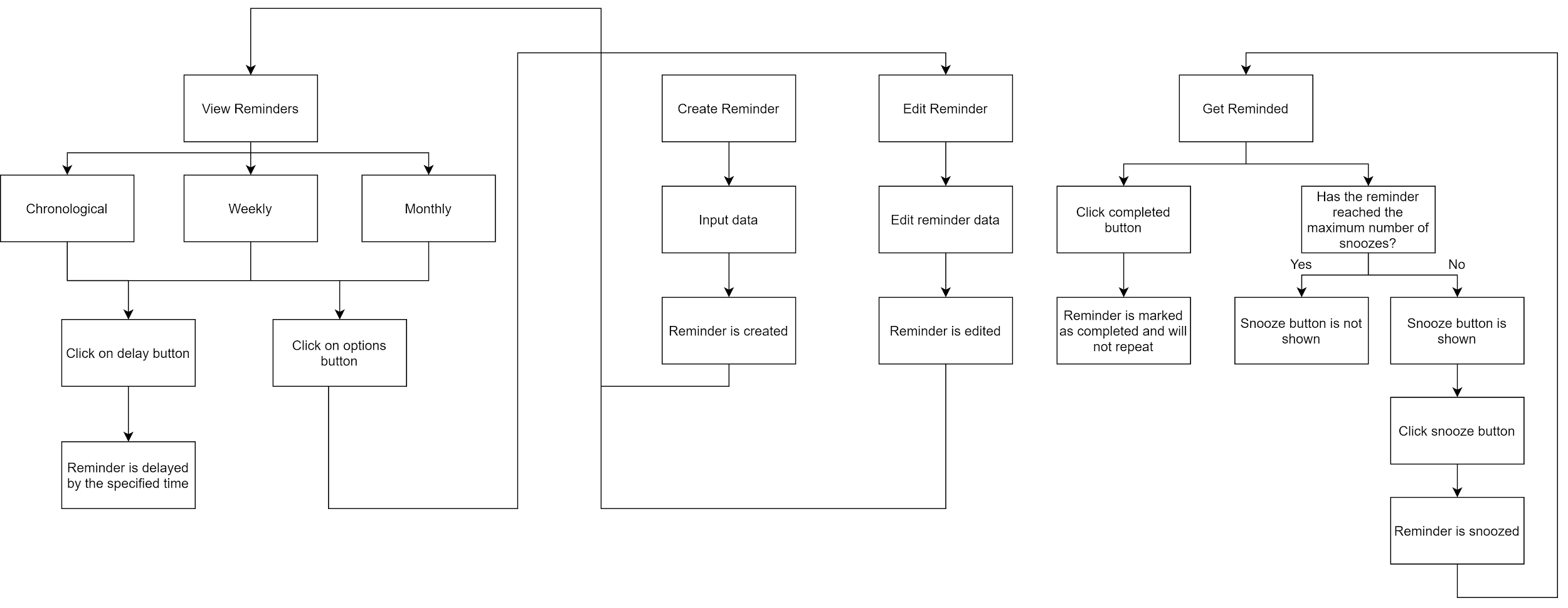


### Reminder Alert

The reminder alert allows the user to either snooze the reminder or stop it. The snooze button may not always be available depending on the setting of the reminder.



## 3.2 Flow Chart



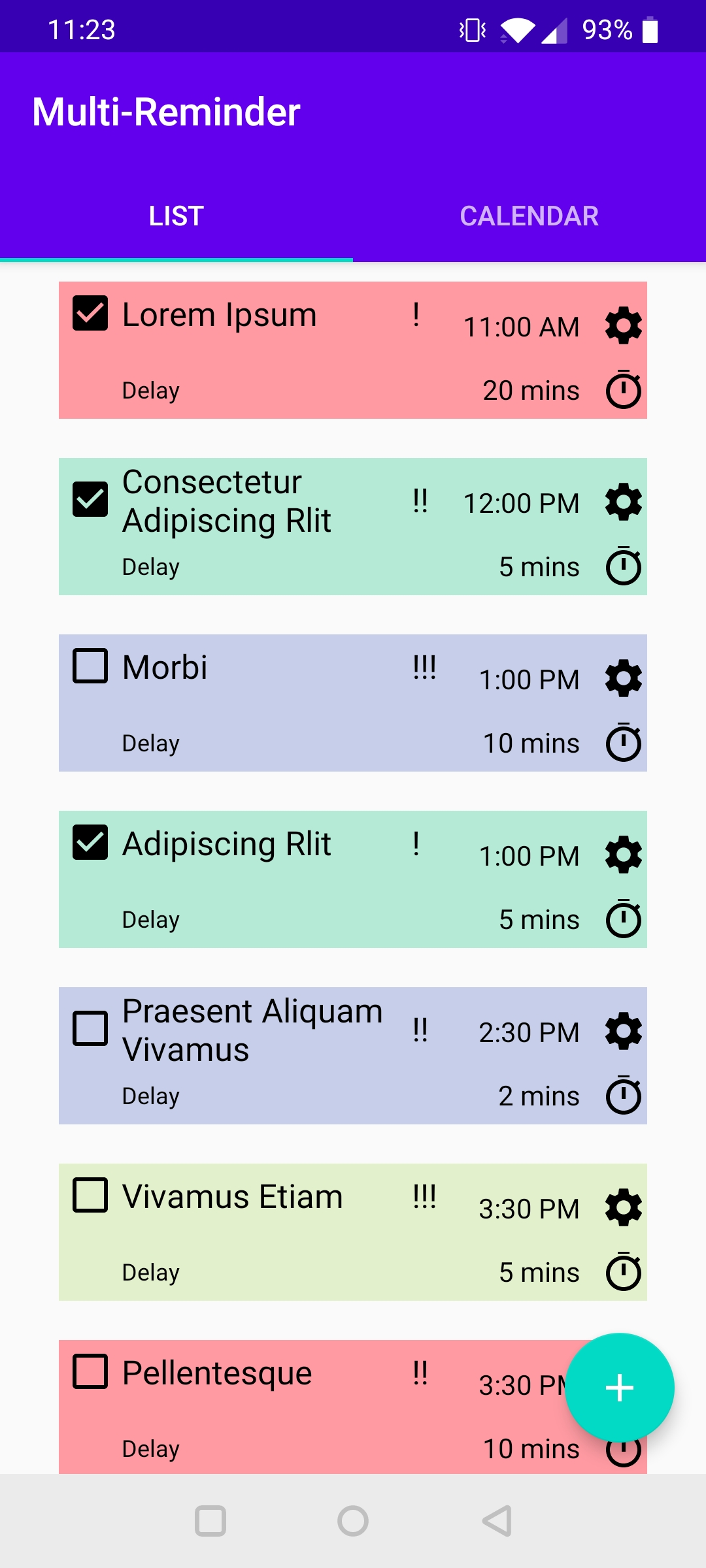
# 4. Critical Product Assumptions and Testing

We are assuming that these plans are feasible to implement. We are assuming that the reminder list interface and creating a reminder will be easy to understand and use. We will use icons that are commonly associated with a given function, such as a gear for settings. Common key words or phrases will also be used, allowing the user to interact with the app without a detailed tutorial. We will test this prototype by showing the interfaces to people and asking them to complete small tasks without guidance.

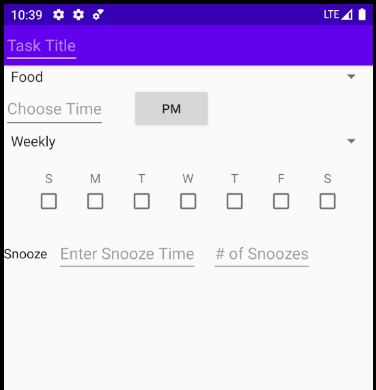
# 5. Prototype

We then started implementing our design concept into the app.

The reminder list interface with each reminder as a coloured block based on category running on a phone



The “create a reminder” interface with drop downs for category and frequency of reminder, choose task day and enter how long to snooze and how many times you can snooze.



# 6. Test Against Target Specifications

This prototype is very heavily interface based; therefore only one target specification was really met. This prototype currently provides users with four colour options which is in the marginal value of the target specification. However, two more colours will be added to meet the ideal target specifications. Since this prototype was focused on the interface, it does not offer any way to edit reminders at this time, but just served to demonstrate that the reminder list and reminder creation user interfaces are feasible.

Seeing this design on the device confirmed that the colours work to differentiate different tasks. The priority level is also easy to understand when seen on a device.

Some other features from the target specifications are implemented in the interface; however, the functionality of it is not implemented yet. These features include an option for how long to snooze when getting reminded, option to have reminders set as recurring, and calendar overview. The functionality of these features will be implemented in future prototypes.

# 7. Next Client Meet

All the interfaces will be completed for the next client meet, some will be interactive while some will just be to display what the interface looks like. The team can receive feedback from the client about what he likes about the interfaces and what he would like to be changed. He can also interact with the interfaces that are interactive to see if he likes that way that they have been coded. From there, the team can make the necessary adjustments to improve the product.

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# 8. Bill of Materials

Due to the fact that the team’s project is software-based, we will instead list the services we plan on using.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item #** | **Part Name/Service** | **Description** | **Quantity** | **Unit Cost** | **Cost** |
| 1 | Android Studio | An Integrated development environment for Google's Android operating system. | N/A | $0 | $0 |
| 2 | Google Cloud API | Access to Google’s Cloud services to interact with Google Home. | N/A | $0 | $0 |
| 3 | GitHub | Code hosting and version control platform. | N/A | $0 | $0 |
| Total | | | | | $0 |

# 9. Conclusions

During our second client meeting, we presented our group design to the client and used the feedback from him to improve our design. Something he wanted to see were the reminders blocked off so they’re properly distinguishable from one another. We also came up with designs for the other interfaces, such as creating a reminder and the reminder alert itself. We then created a flow chart to help us better understand and create the first prototype. The creation of the first prototype relies on the assumption that all our plans are feasible.

To make the first prototype, we chose to begin making and coding the app in Android Studio. For this prototype, we have the Reminder List View and Create a Reminder interface created. These interfaces were tested against our target specifications and proved to be successful. This first prototype is what will be presented to the client during the next meet with the addition of interactivity for further feedback and to help us set up the next iteration of prototypes.