**GNG2101**

Deliverable C1: Conceptual Design

Submitted by Team A12

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October 1st, 2020

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# Table of Contents

[1. Introduction](#_h1tthpmhg6ph) 2

[2. Functional Decomposition](#_gt6kmalb369j) 2

[2.1 Create Reminder Functional Decomposition](#_t3db7251do25) 2

[2.2 Editing Reminder Functional Decomposition](#_hs1l9zpxp6rg) 3

[2.3 View Reminders](#_75jf6yisqude) 3

[2.4 Getting Reminded](#_79zobh3iab2r) 4

[3. Product Concepts](#_flrg374z5iik) 4

[3.1 Ajay](#_91ah9ldupqpn) 4

[3.2 Alexis](#_g062qcwsdo4c) 6

[3.3 Farina](#_f0ek3b85iwdi) 7

[3.4 Lynne](#_cykh5d43x6aq) 9

[3.5 Mashood](#_hzu5rcm4niw5) 10

[4. Analysis and Evaluation](#_9621193571dl) 12

[5. Solution](#_acd30t5k6pz9) 13

[5.1 Group Design Concept](#_ymnnaxs0yoag) 13

[5.3 Relating to Target Specifications](#_r6l2wuhfmg10) 14

[6. Conclusion](#_j0dx9lxv7wop) 16

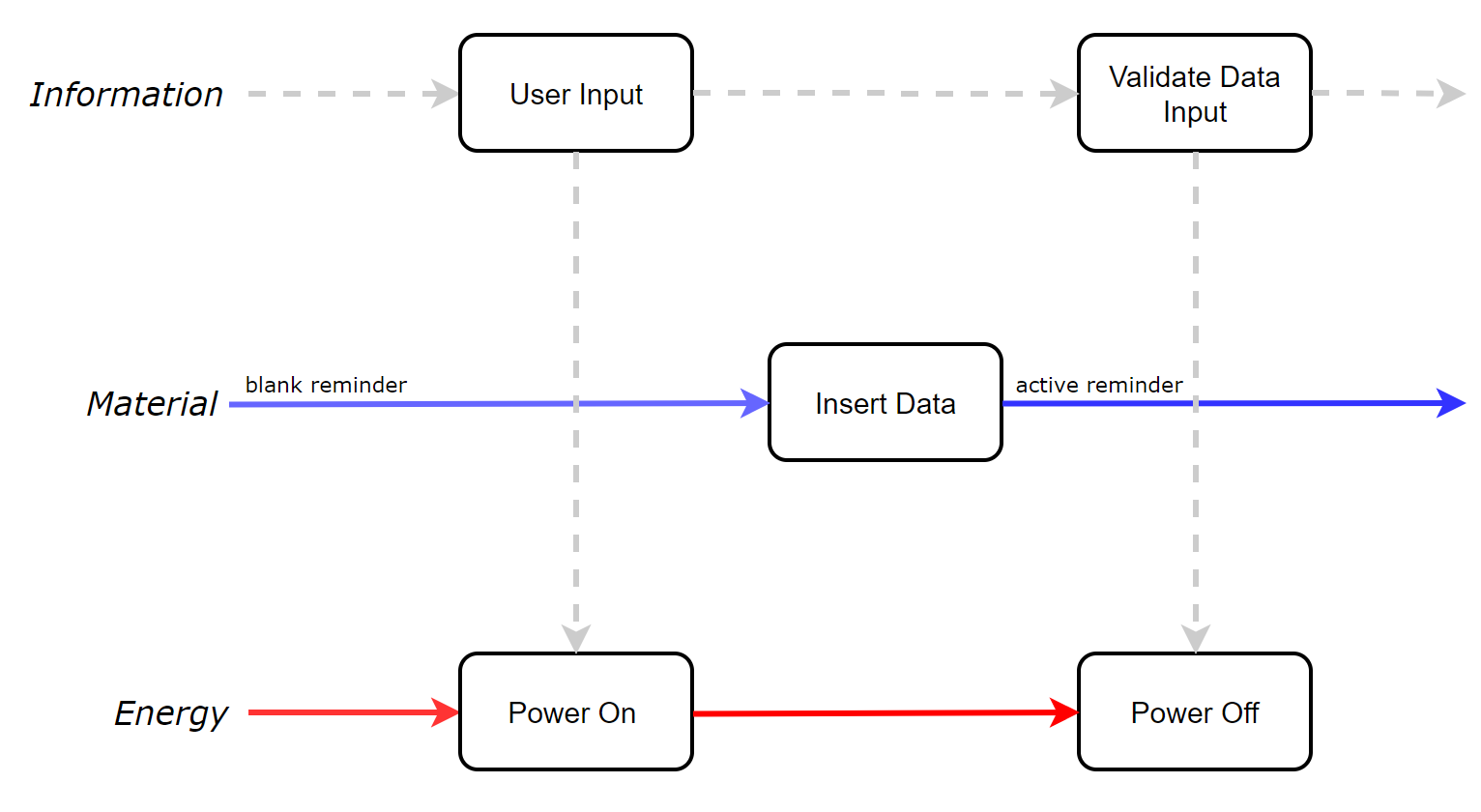
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# 1. Introduction

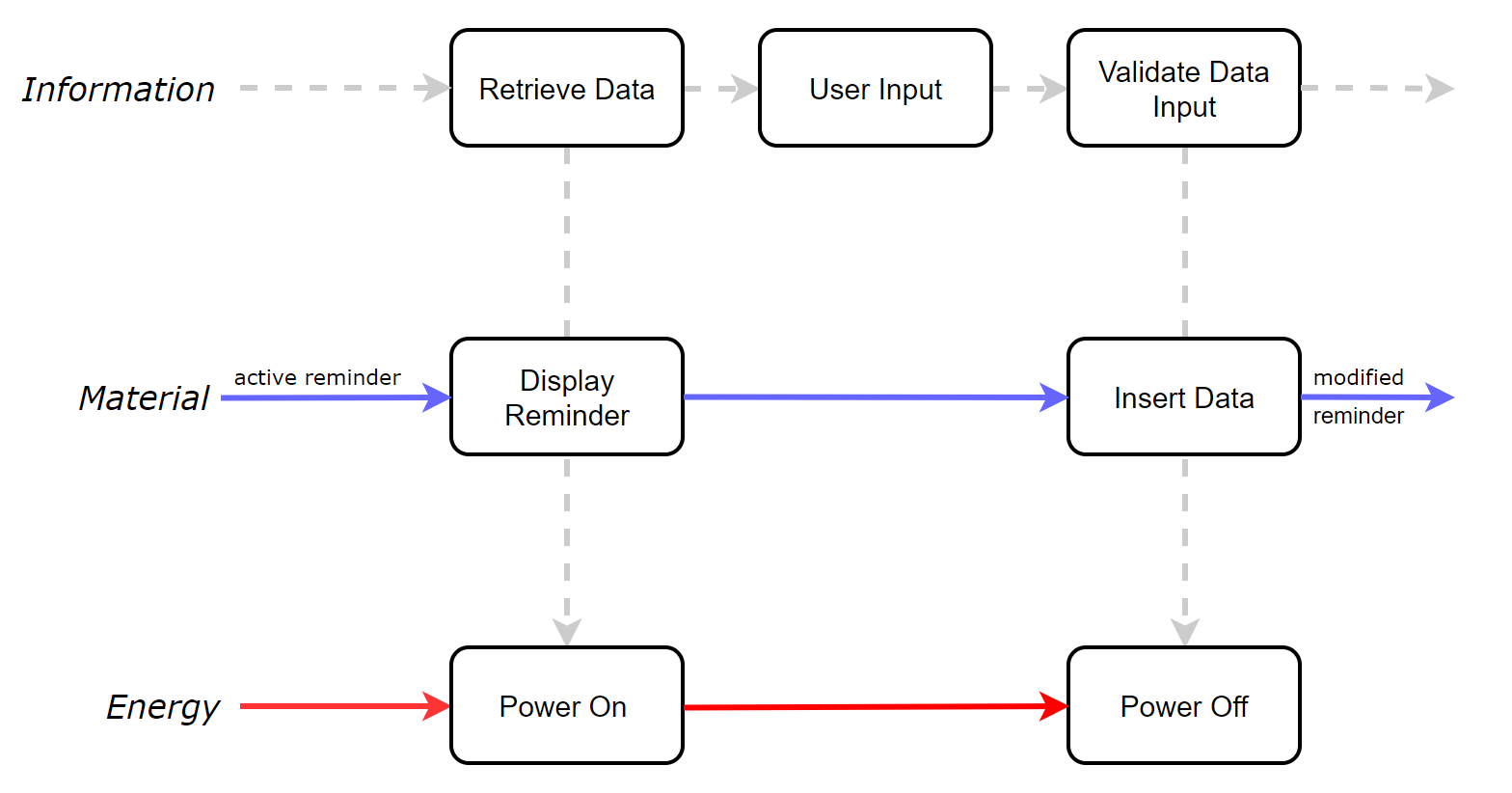
Creating a new product requires generating many ideas and modifying them before prototyping. This ensures that all ideas and concepts are thought of and explored. This report will go through the process of obtaining a product idea to pursue. This process starts with a functional decomposition to identify the small tasks that need to be accomplished so that the final product will work. With this in mind, each team member generated three product concepts. All the concepts were ranked using the same system and the products that had the highest ranks were further developed. Then a final design was chosen and some modifications were made to improve the design. This design was compared to the target specifications to ensure that it met the requirements.

# 2. Functional Decomposition

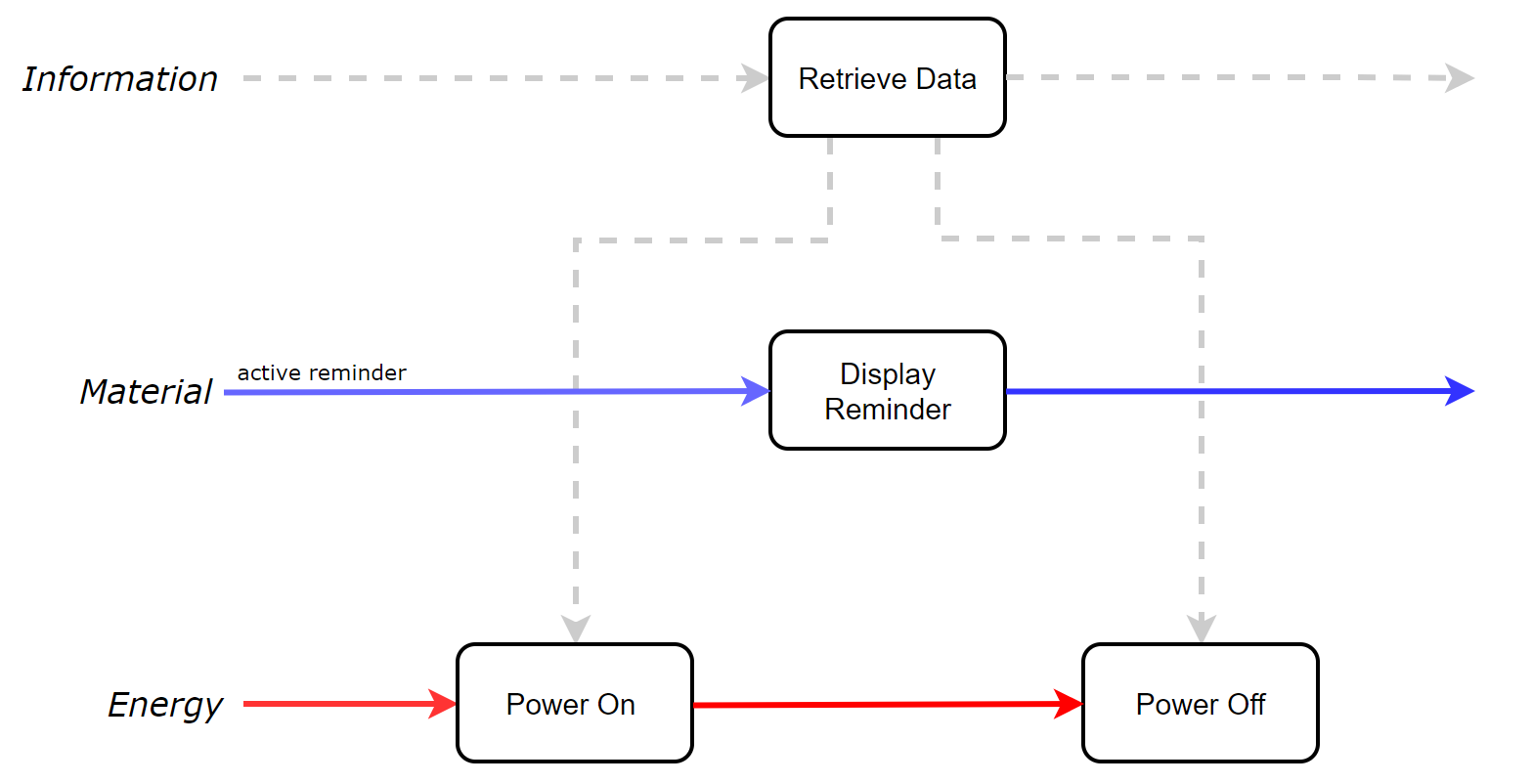
## 2.1 Create Reminder Functional Decomposition



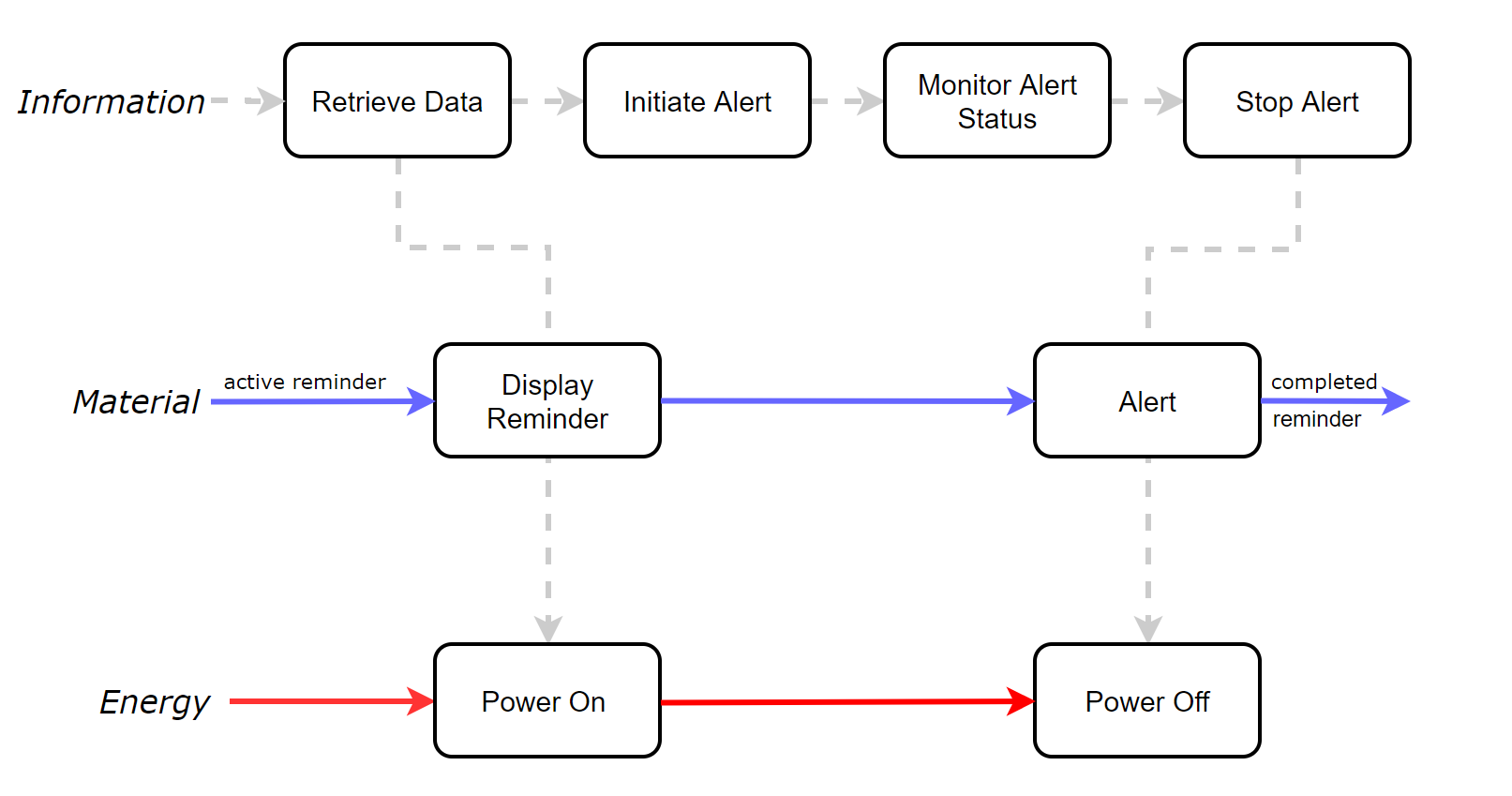
## 2.2 Editing Reminder Functional Decomposition



## 2.3 View Reminders



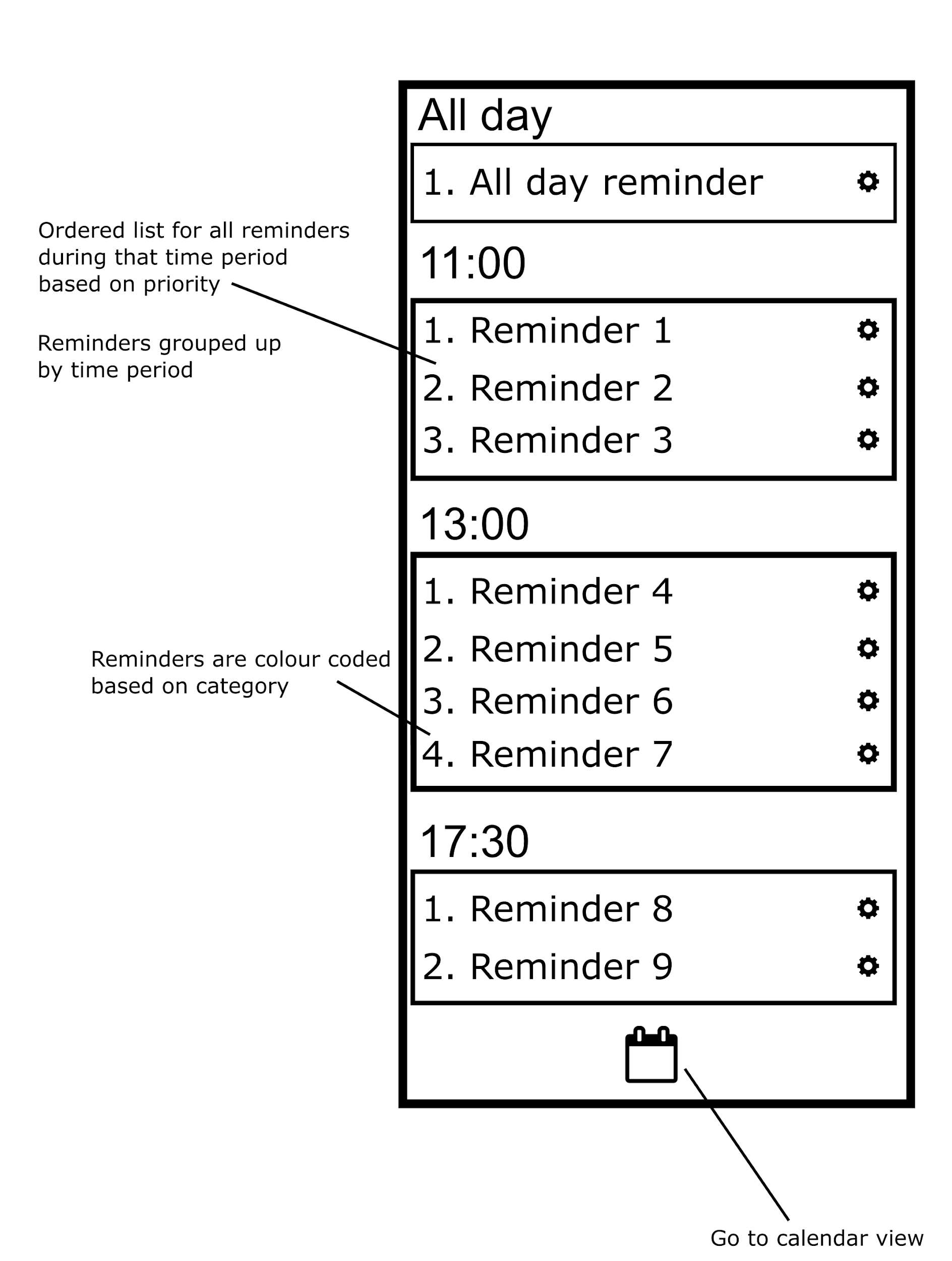
## 2.4 Getting Reminded



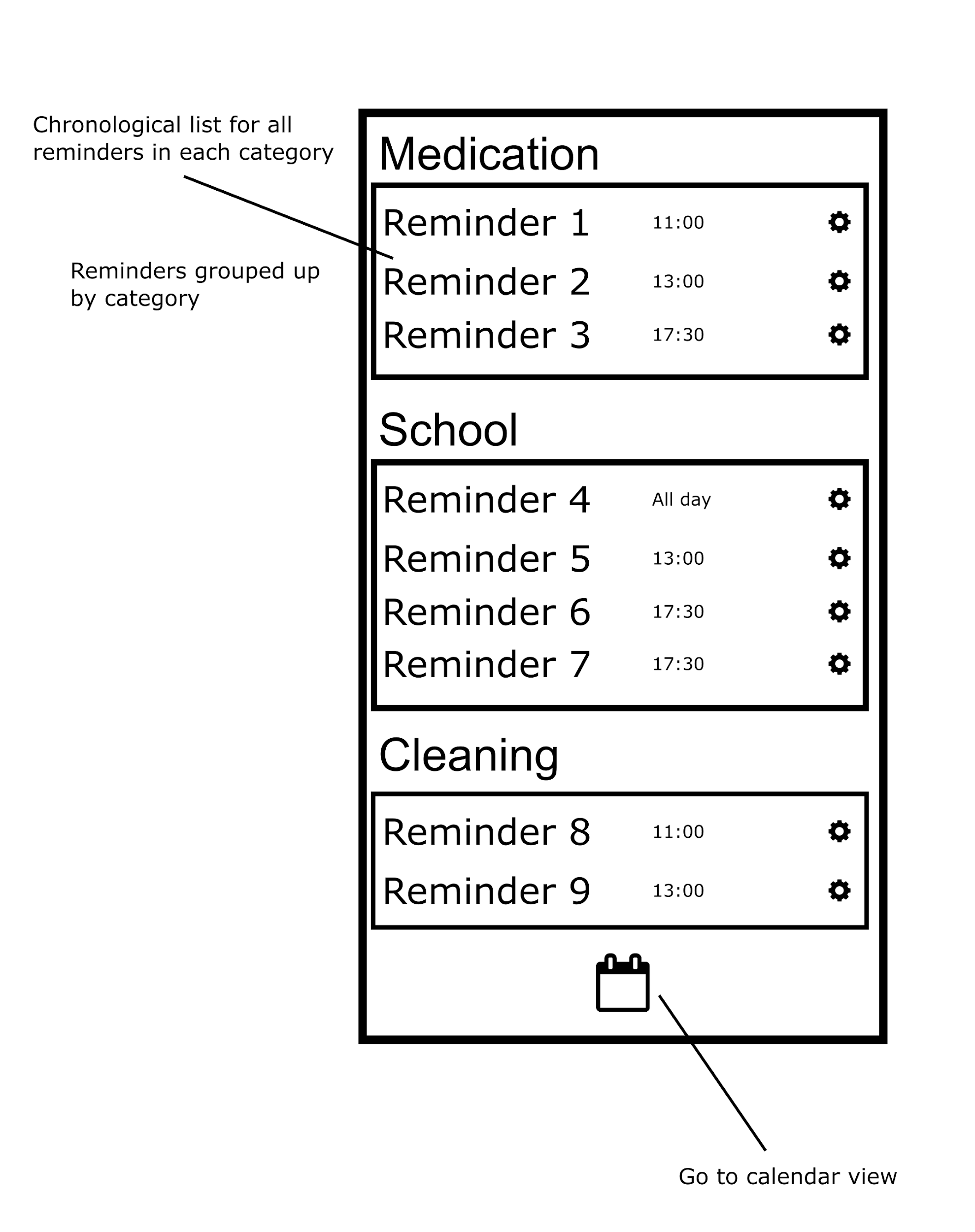
# 3. Product Concepts

## 3.1 Ajay

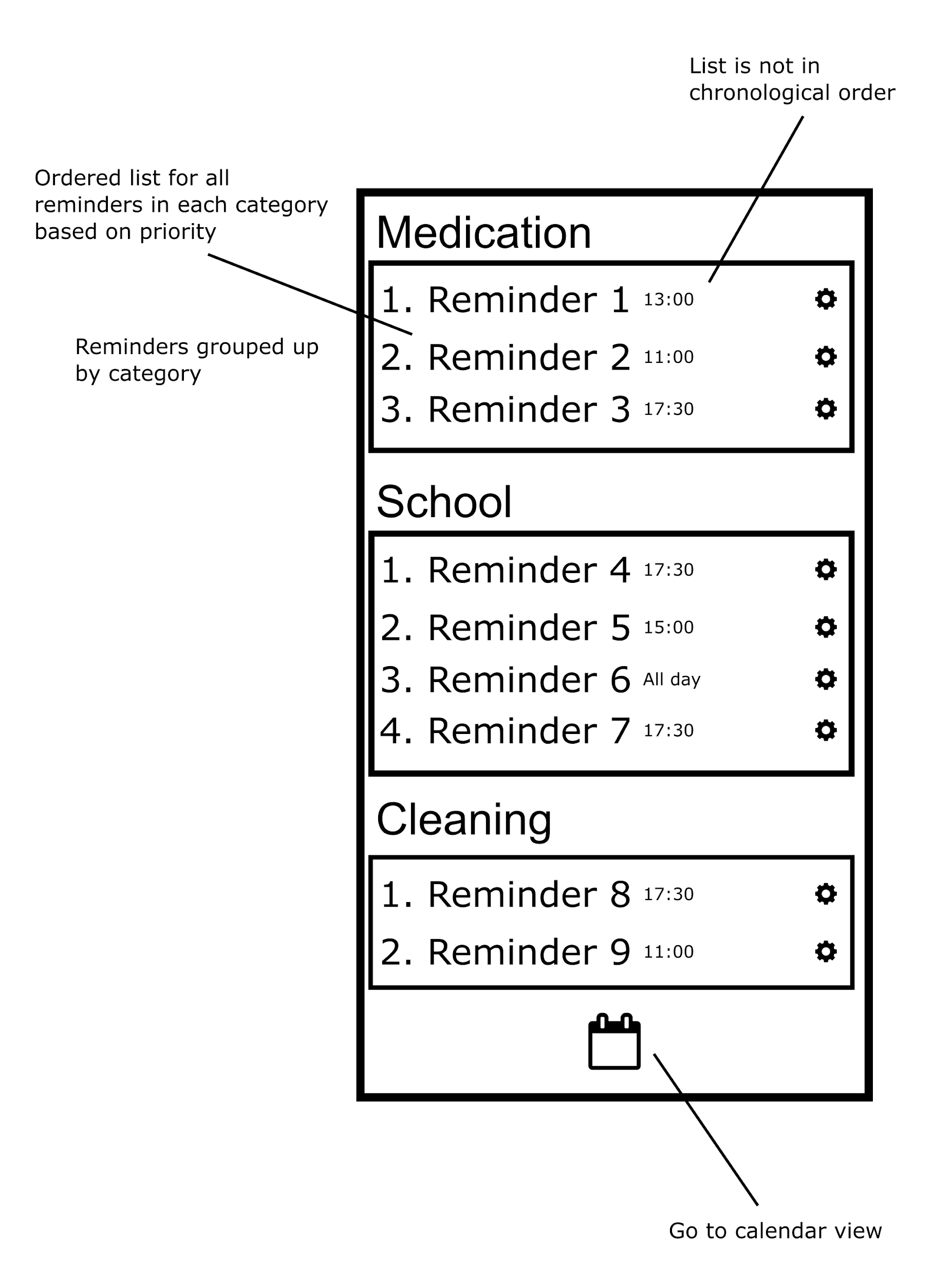
Concept #1: Chronological reminders grouped by reminders set for the same time



Concept #2: Category grouped chronological reminders

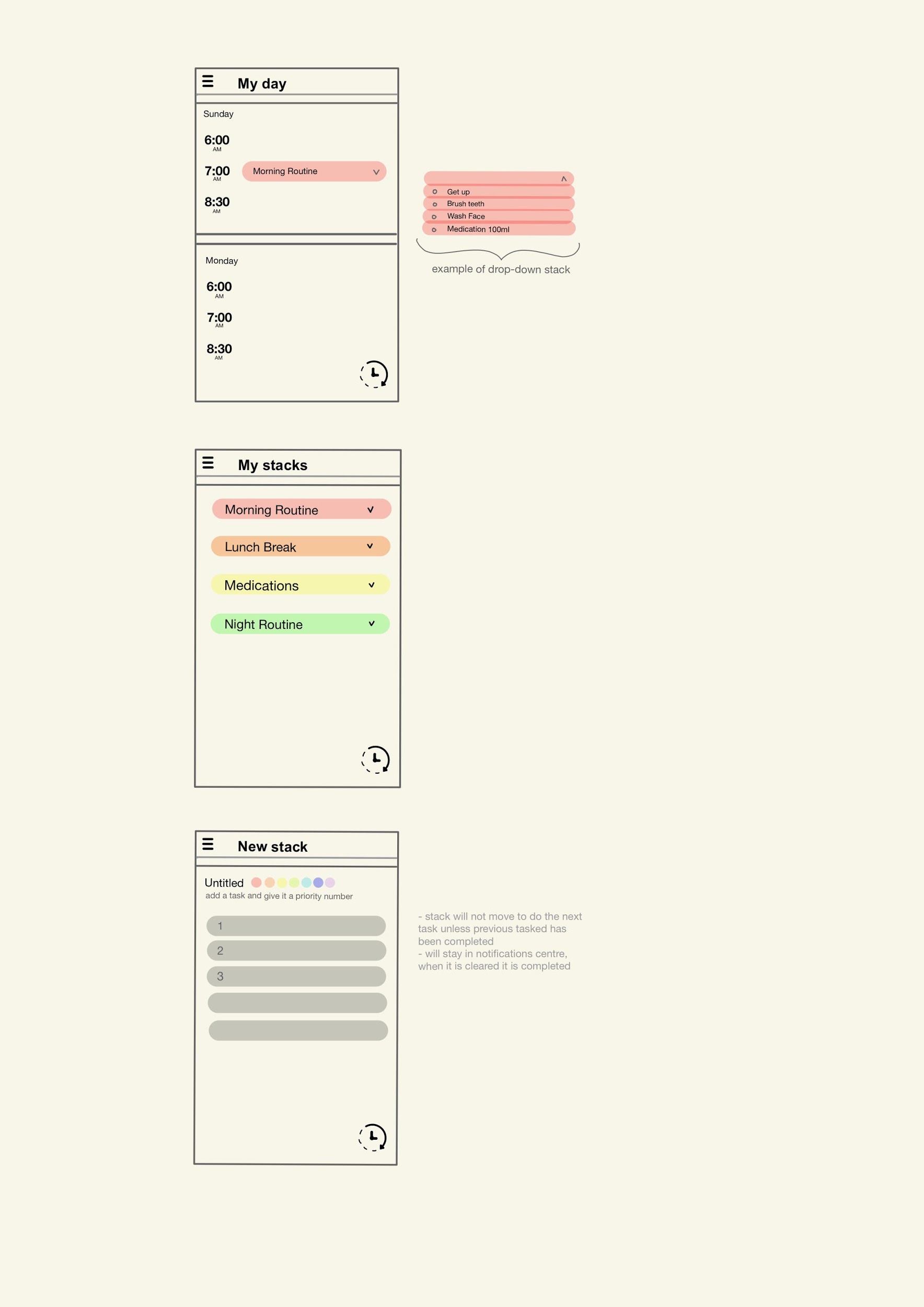


Concept #3: Category grouped prioritised reminders

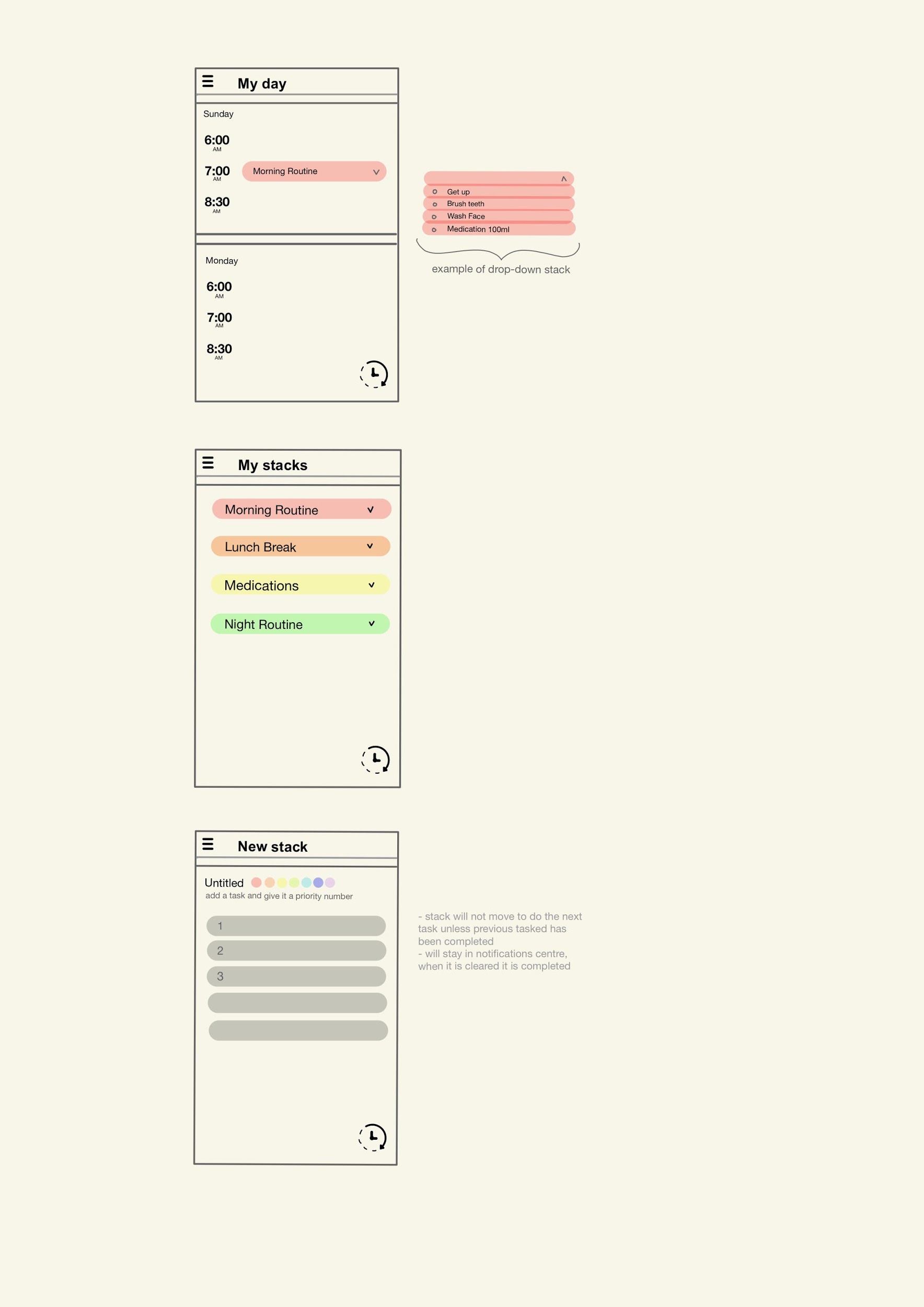


## 3.2 Alexis

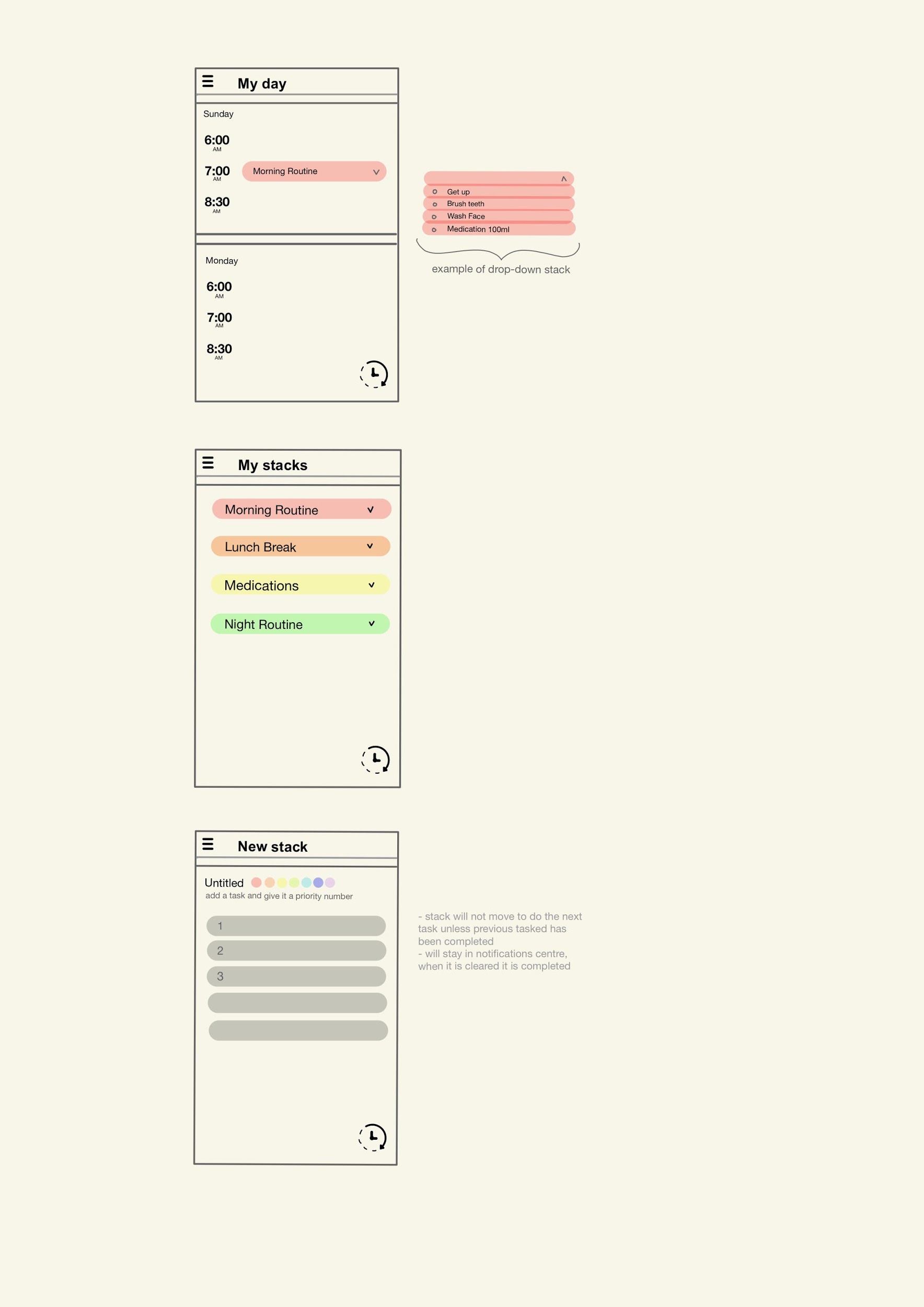
Concept #4: Day view with stack example



Concept #5: Display of stacks

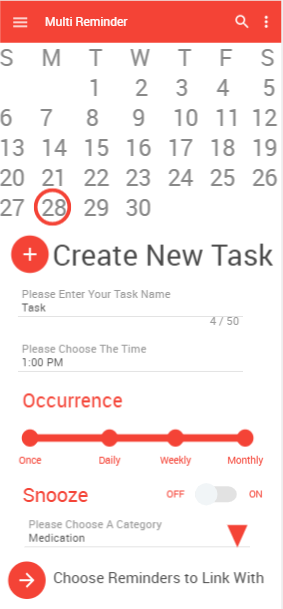


Concept #6: Creating a new stack with ability to organize by priority



## 3.3 Farina

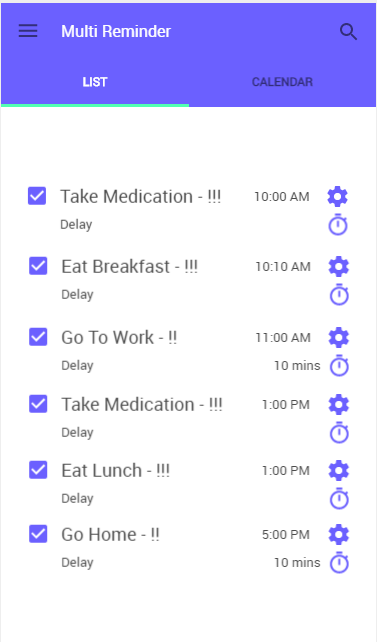
Concept #7: Creating a new task



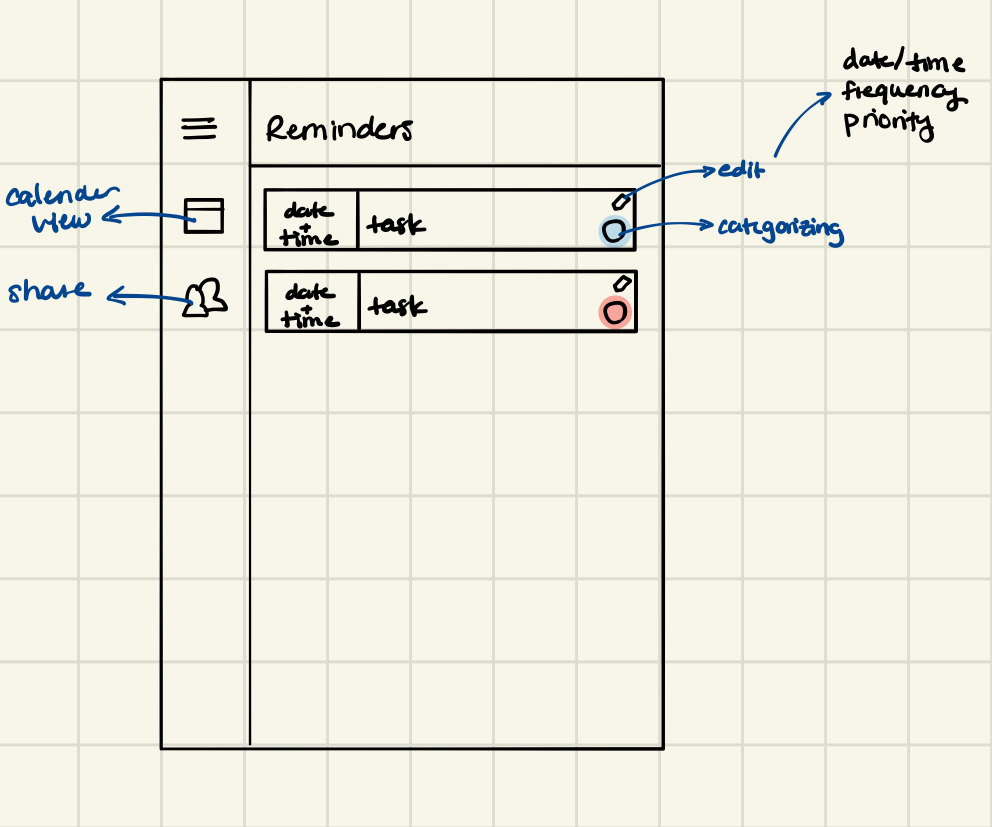
Concept #8: Tasks are organized by categories and within each category they’re organized chronologically



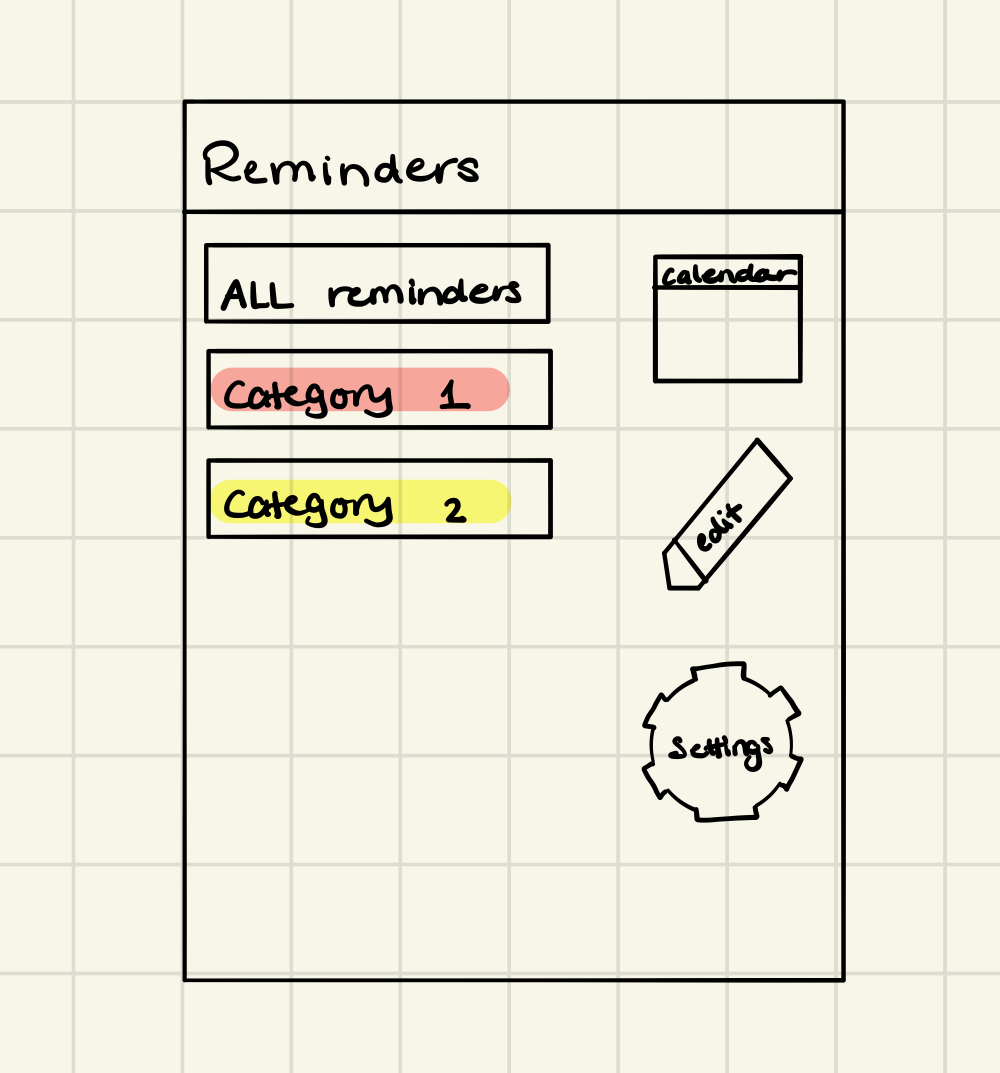
Concept #9: Tasks are organized chronologically



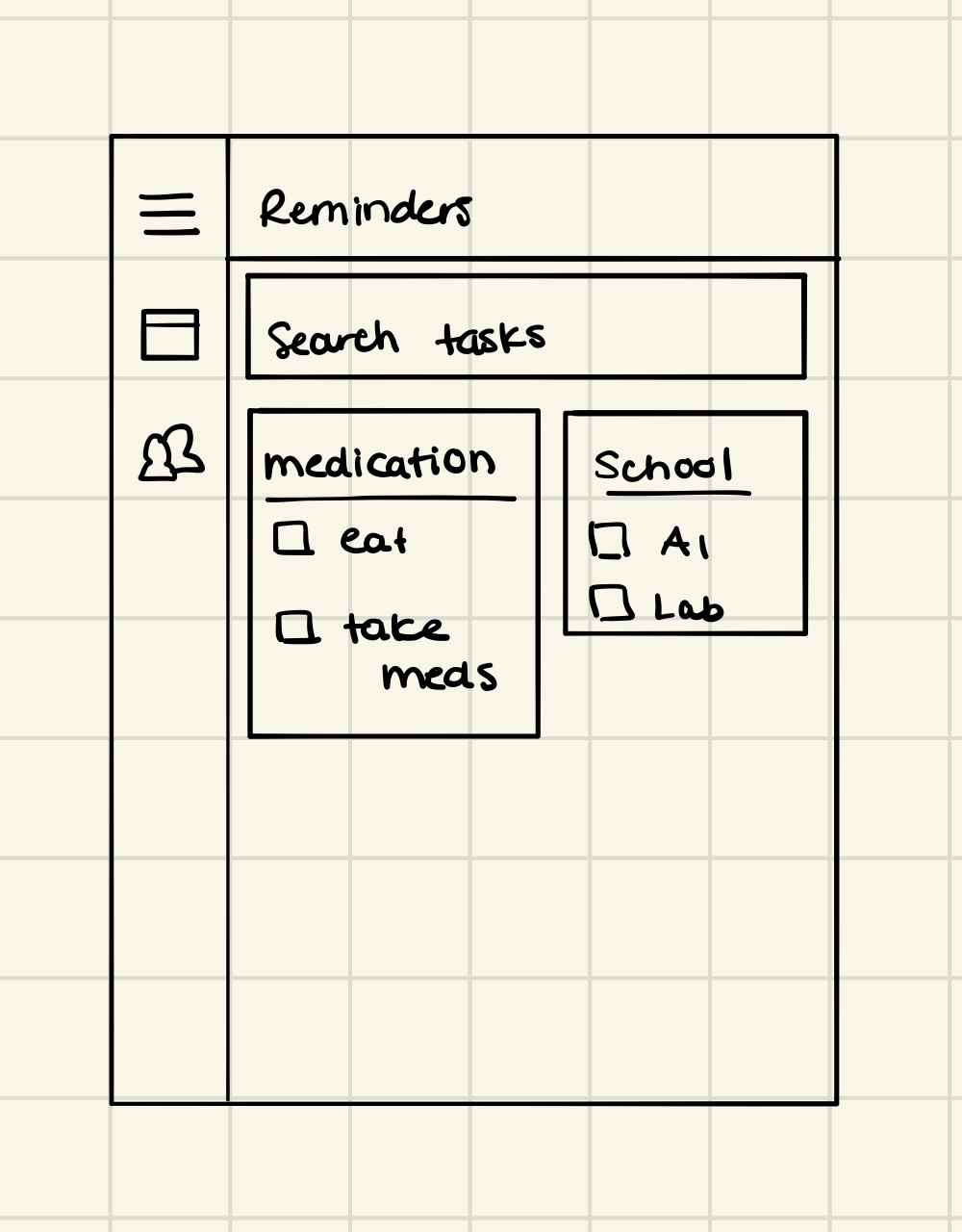
## 3.4 Lynne

Concept #10: Tasks are displayed in chronological order

Concept #11: Categories of tasks are displayed



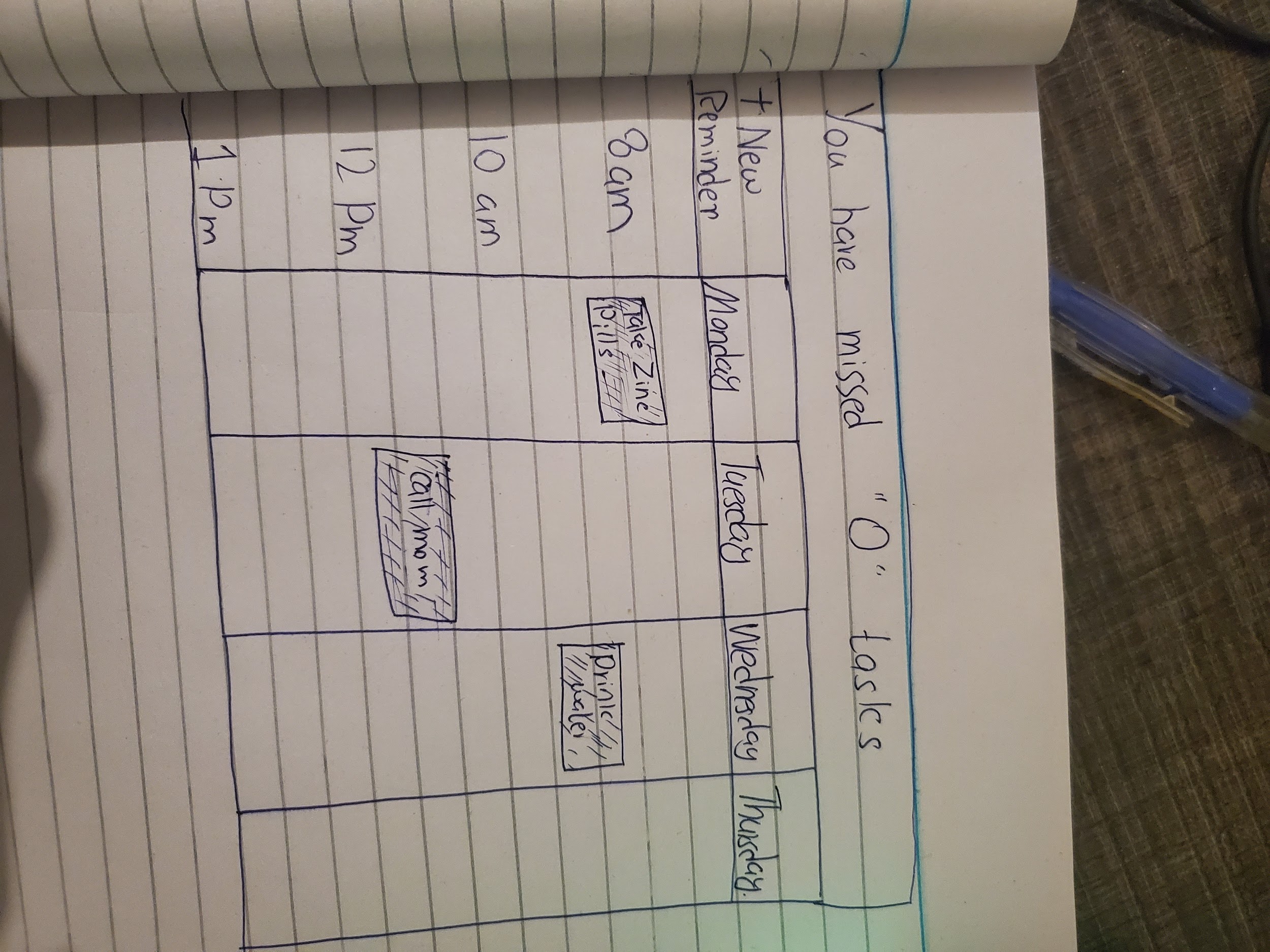
Concept #12: Tasks are displayed in categories



## 3.5 Mashood

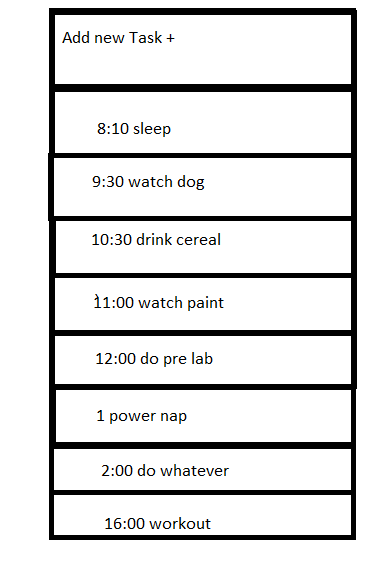
Concept #13: Weekly Calendar view

The multi reminder app would display all the reminders in the format of a standard calendar. Tapping on the reminder will give all of the information of said reminder , is it recurring , can it be snoozed , how long is the bell duration etc. to add new reminders there will be a giant plus button on the top right of the screen.

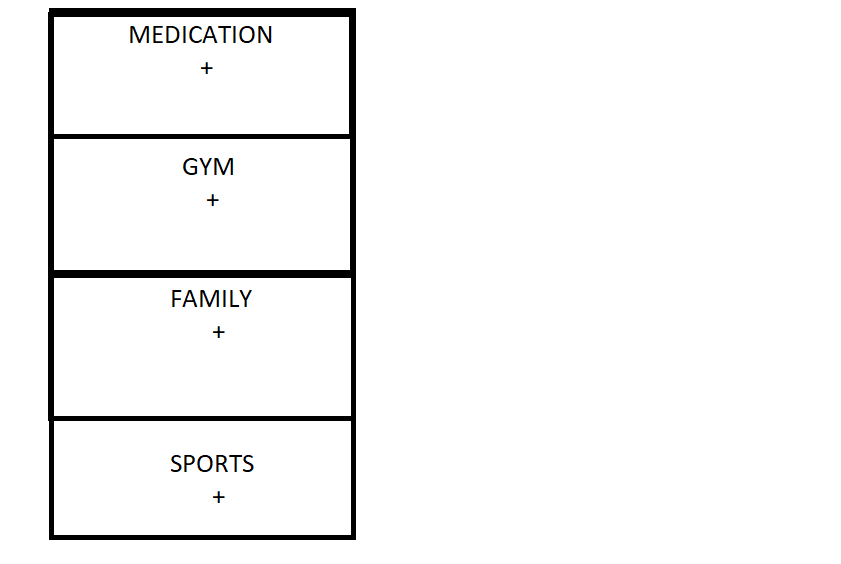


Concept #14 Tabular view(standard):

The multi reminder app would display the reminder in standard tabular format



Concept #15 Grouping Tabular:

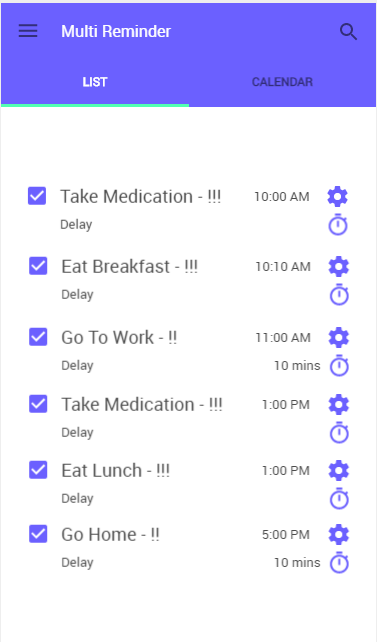
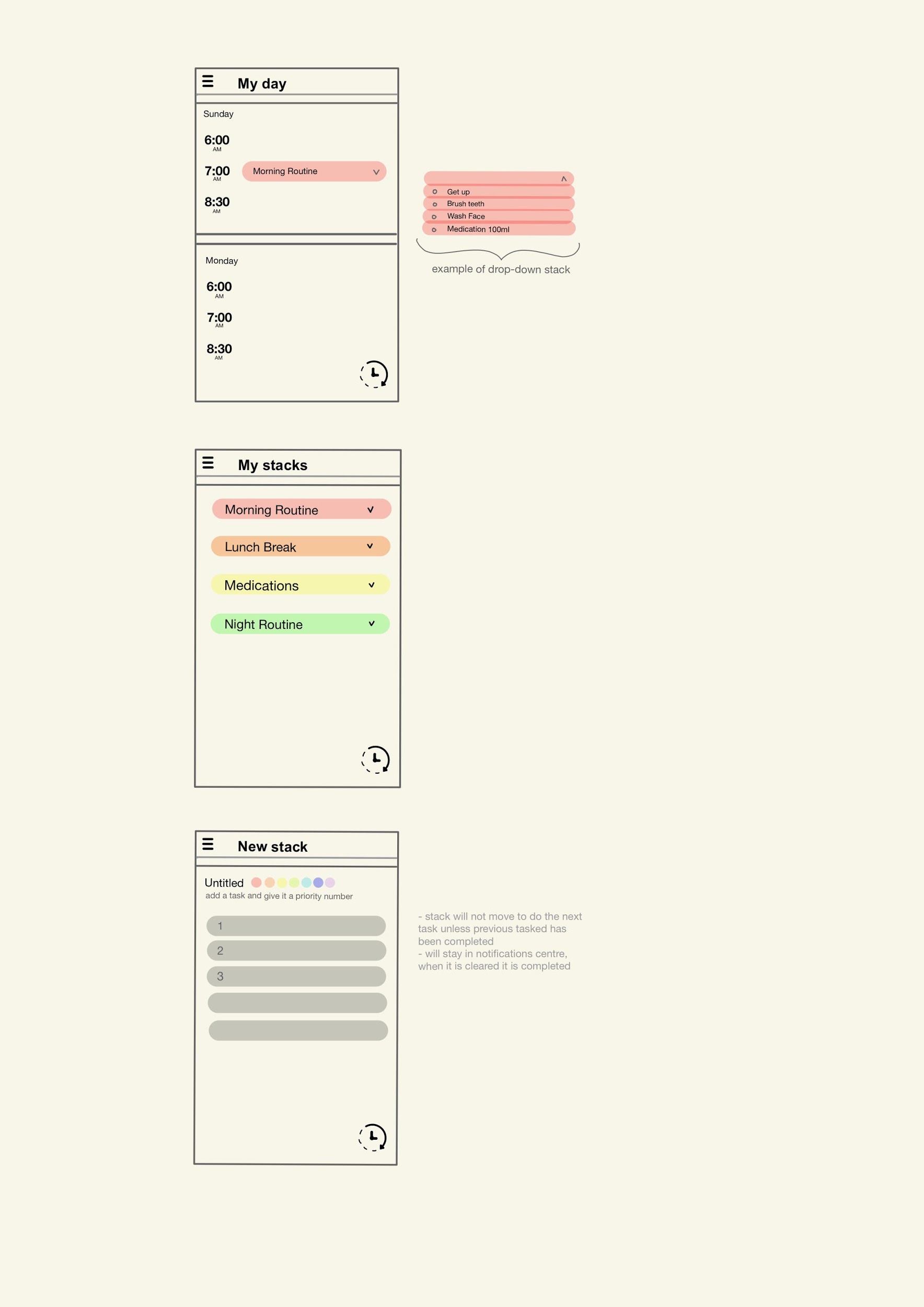
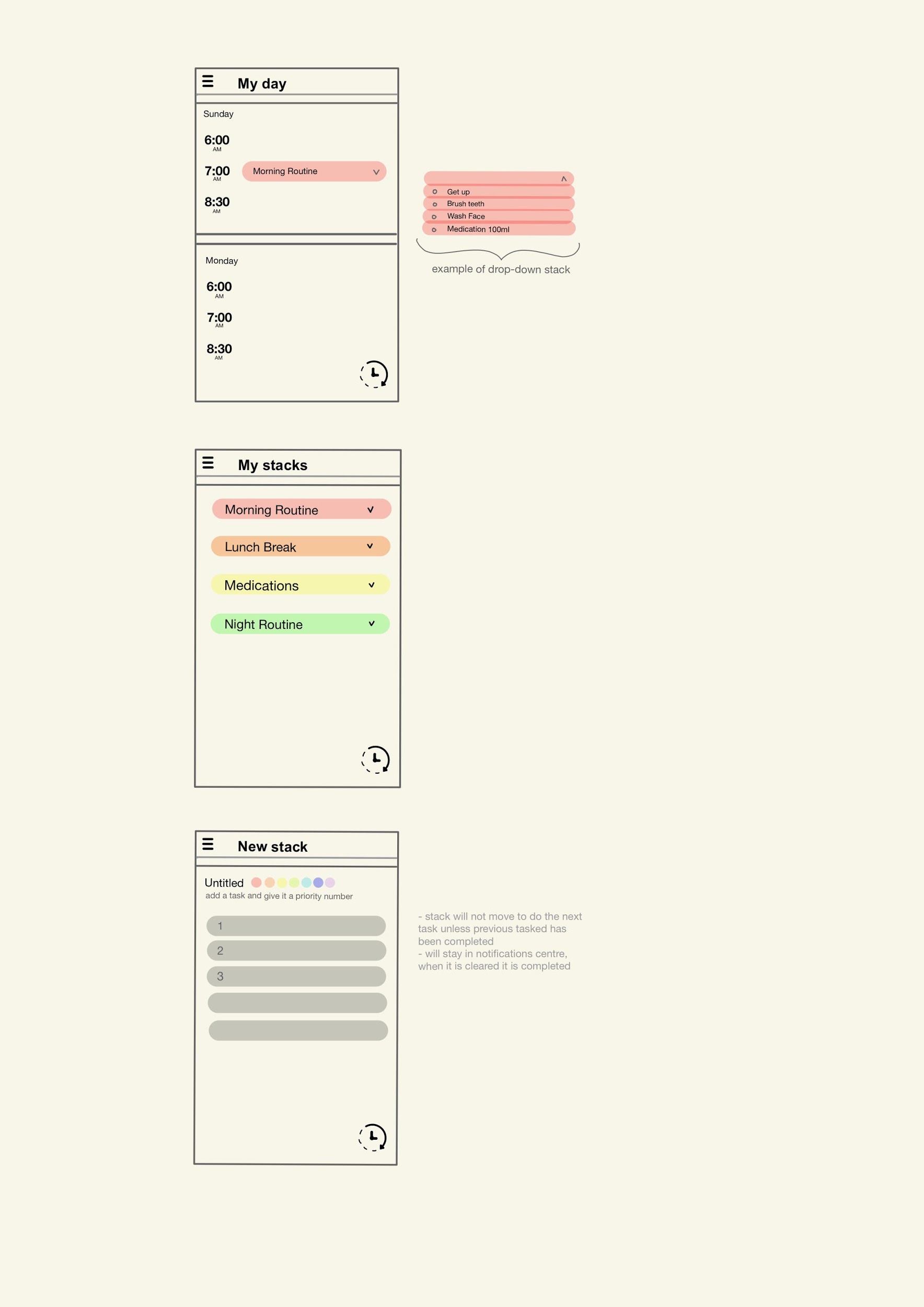
Tabular format but tasks are grouped together

# 4. Analysis and Evaluation

Table 1: Analyzing and evaluating our proposed designs with a rating out of 3 for each target specification

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Metric** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| Reminders set to remind at the same time | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 |
| Reminders grouped in a category | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 2 | 3 |
| Options for how long to snooze when getting reminded | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Sharing reminders with others | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| Reminders that can be set as recurring | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Reminders that can be stored offline | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Colours available to set reminders to | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 2 |
| Calendar overview | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |
| People that can have write access to your reminders | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Time setting reminders from google home | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| **TOTAL** | 29 | 29 | 29 | 30 | 30 | 27 | 29 | 28 | 30 | 29 | 29 | 29 | 26 | 27 | 26 |

The top 3 product concepts based on the rankings are Concept #4, Concept #5, and Concept #9.



We chose these three designs to analyse due to them having the highest rating for each target specification. Concept #4 and #5 focus on grouping reminders into categories. This would allow breaking the day into different categories and help organise tasks. Concept #9 instead lists all reminders chronologically without categories.

After discussing how grouping categories would function, we found several issues. One issue with grouping by category, as reminders in categories might not all be set for the same time.

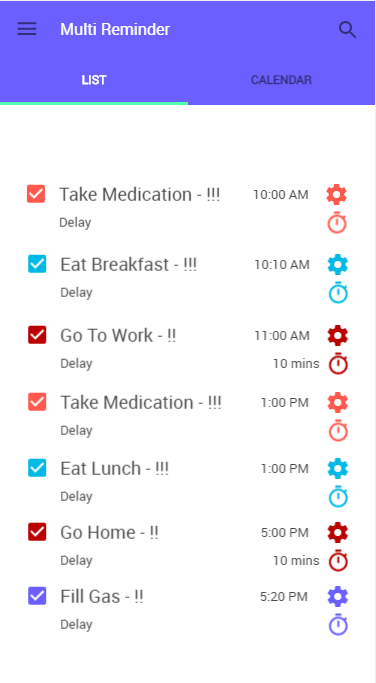
# 5. Solution

## 5.1 Group Design Concept

Based on the top three designs chosen from the previous section, our team has decided to proceed with having reminders chronologically ordered. Tasks that occur at the same task are prioritized as indicated by the number exclamation marks.

We modified the original design to add colours and categories that can better group the reminders. Category colours will allow users to associate specific colours with their routines. This concept also includes a calendar view of the tasks. Users can also go into the settings to share their with friends, family, nurses, and doctors.

5.2 Visual Representation



## 5.3 Relating to Target Specifications

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metric | Unit | Marginal Values | Ideal Values | Associated needs # |
| Reminders set to remind at the same time | # of reminders | 5 | No limit | 4 |
| **Our concept** allows the display of any number of reminders that occur at the same time degrading the appearance of the user interface. | | | | |
| Reminders grouped in a category | # of reminders | 5 | No limit | 6 |
| **Our concept** allows users to categorize their tasks into any number of categories using colouring. | | | | |
| Options for how long to snooze when getting reminded | # of options | 2 | 5 | 1 |
| **Our concept** allows reminders to change places when the timing is adjusted. | | | | |
| Sharing reminders with others | # of people | 0 | 5 | 2, 10 |
| **Our concept** allows the user to share any of their tasks with any amount of people. | | | | |
| Reminders that can be set as recurring | # of reminders | 25 | 100 | 7 |
| **Our concept** allows the user to pick a frequency that they want the reminder to occur. | | | | |
| Reminders that can be stored offline | # of reminders | 50 | No limit | 3 |
| **Our concept** allows all tasks and reminders to be stored offline. | | | | |
| Colours available to set reminders to | # of colours | 4 | 6 | 8 |
| **Our concept** keeps the colour selection discrete and relatively small to make it easy to make a choice. | | | | |
| Calendar overview | # of calendar views (day, week, month) | 2 (day, month) | 3 (day, week, month) | 5 |
| **Our concept** has a calendar view as a separate tab next to the main list view. The number of tabs can be increased to add more calendar views. | | | | |
| People that can have write access to your reminders | # of people | 0 | 2 | 10 |
| **Our concept** allows the user to give certain people access to edit their reminder information. | | | | |
| Time setting reminders from Google Home | seconds | 30 | 5 | 9 |
| **Our concept** can support this, but it is not our priority as it is a “nice to have” feature according to our client. | | | | |

# 6. Conclusion

After going through each members’ design concepts, we decided to go with a chronological design with colour coded reminders indicating each category. The colour coding allows reminders to be grouped up without them having to be next to each other in the timeline. With a list of all reminders, having multiple reminders set for the time works well, which is a core feature in this multi-reminder app. This design will allow us to reach all of our target specifications.