**GNG2101**

Deliverable B: Needs, Problem Statement, Metrics, Benchmarking and Target Specifications

Submitted by Team A12

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# 1. Introduction

People with ADHD have trouble remembering and focusing, making it difficult to do everyday tasks such as paying rent, getting groceries, and other mundane tasks without reminders. These reminders are especially essential for people who have diabetes and must take medical regularly. However, reminder software and apps on the market now are not highly customizable and limit what the user can do. Therefore, a multi-reminder that can be set up and modified to fit the user's lifestyle is needed. This report will go through the process of interviewing a client with ADHD and diabetes and generating a list of target specifications for a multi-reminder app for the client. Interviewing the client allows the team to obtain a better understanding of the client and what they want. With this information, the team will be able to generate a list of needs that the product should have. Then using these client needs, a problem statement can be made that will guide the team when creating the multi-reminder app. The team will conduct benchmarking to see what is available in the market and create a list of metrics and target specifications that will allow the team to see if proposed solutions meet the client’s needs.

# 2. Client Statements and Needs

Table 1: List of Client Statements and Needs

|  |  |  |  |
| --- | --- | --- | --- |
| Need # | Client Statements | Client Needs | Rank |
| 1 | Forgets when not repeatedly reminded | Ability to snooze certain reminders for a limited amount of time | 3 |
| 2 | Wants to share reminders with friends and family | Reminders can be exported to Google Calendar to share with others | 10 |
|  | Likes buttons, does not like sliders |  |  |
| 3 | Phone must be on airplane mode at work | App can operate without service and Wifi | 2 |
| 4 | Wants to be able to prioritize reminders when there are multiple reminders at the same time | Multiple ordered reminders should be able to be set to the time | 1 |
| 5 | Likes calendar overview | Reminders can be viewed in a calendar | 6 |
| 6 | Wants to be able to group up reminders | Reminders can be categorized/connected | 5 |
|  | Wants to be able to snooze and have other related reminders follow |  |  |
| 7 | Forgets monthly, weekly, and daily tasks | Reminders can be set to go off at different frequencies | 4 |
| 8 | Likes colours | Reminders are colour coordinated | 8 |
| 9 | Wants to be able to set reminders through Google Home | Reminders can be set from Google Home | 9 |
| 10 | Wants the doctors and nurses to be able to edit reminder information | Doctors and nurses can have write access to reminders for the client | 7 |
|  | Likes writing |  |  |

# 3. Problem Statement

People with ADHD and diabetes have trouble remembering to complete important tasks and require a multi-reminder app that is highly flexible and customizable to their lifestyle.

# 4. List of Metrics

Table 2: List of Metrics Developed from Client Needs

|  |  |  |
| --- | --- | --- |
| Metric | Unit | Need # |
| Reminders set to remind at the same time | # of reminders | 4 |
| Reminders grouped in a category | # of reminders | 6 |
| Options for how long to snooze when getting reminded | # of options | 1 |
| Sharing reminders with others | # of people | 2, 10 |
| Reminders that can be set as recurring | # of reminders | 7 |
| Reminders that can be stored offline | # of reminders | 3 |
| Colours available to set reminders to | # of colours | 8 |
| Calendar overview | # of calendar views (day, week, month) | 5 |
| People that can have write access to your reminders | # of people | 10 |
| Time setting reminders from google home | seconds | 9 |

# 5. Benchmarking

Table 3: List of Metrics from Competitors

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Need # | Metric | Unit | Google Calendar [[1]](https://paperpile.com/c/20T1Lw/vC53) | Bz Reminder [[2]](https://paperpile.com/c/20T1Lw/OPA4) | iPhone Reminders [[3]](https://paperpile.com/c/20T1Lw/wonW) |
| 4 | Reminders set to remind at the same time | # of reminders | No limit | No limit | No limit |
| 6 | Reminders grouped in a category | # of reminders | 0 | 0 | 0 |
| 1 | Options for how long to snooze when getting reminded | # of options | 0 | 2 | 0 |
| 2, 10 | Sharing reminders with others | # of people | No limit | No limit (manual per reminder) | 0 |
| 7 | Reminders that can be set as recurring | # of reminders | No limit | No limit | No limit |
| 3 | Reminders that can be stored offline | # of reminders | No limit | No limit | No limit |
| 8 | Colours available to set reminders to | # of colours | 11 | 6 | 7 |
| 5 | Calendar overview | # of calendar views (day, week, month) | 3 (day, week, month) | 1 (month) | 0 |
| 10 | People that can have write access to your reminders | # of people | No limit | 0 | 0 |
| 9 | Time setting reminders from google home | seconds | 30 | Not possible | Not possible |

## 

## 5.1 Google Calendar

Google Calendar is an online calendar service created by Google.

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Figure 1: Monthly view on Google Calendar [[1]](https://paperpile.com/c/20T1Lw/vC53)

## 5.2 Bz Reminder

A customizable offline to-do list with repeating reminders and a calendar view.

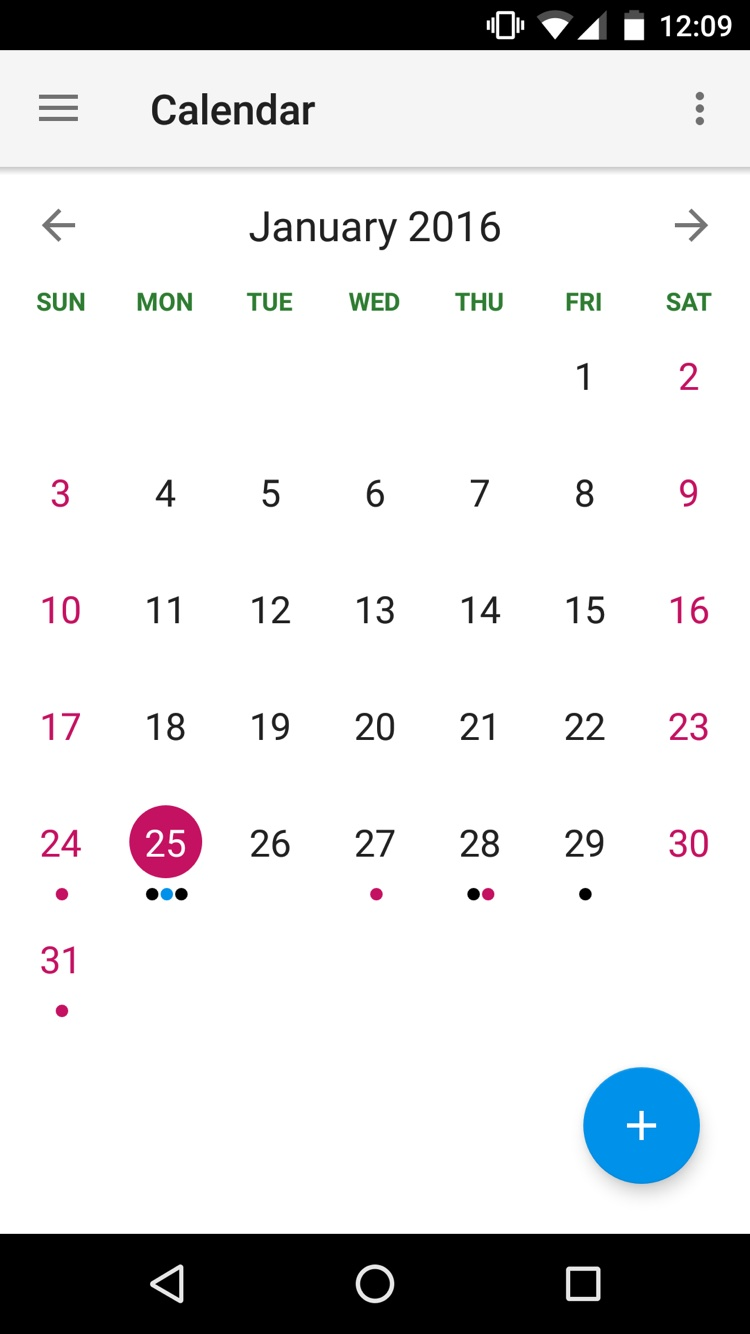
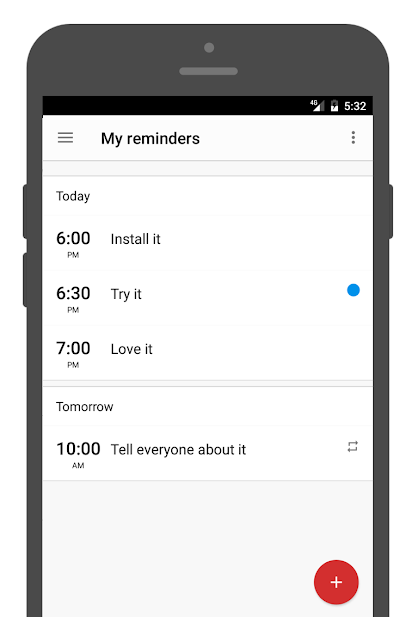


Figure 2: Daily and calendar view of the BZ Reminder app [[2]](https://paperpile.com/c/20T1Lw/OPA4)

## 

## 5.3 iPhone Reminders

An app available for apple products that allow the user to create and organize reminders.

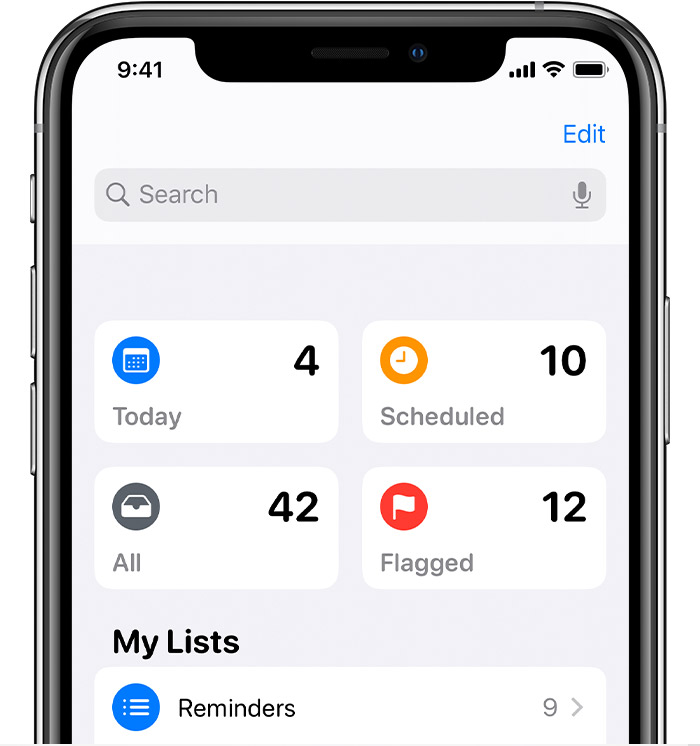


Figure 3: Default home menu of iPhone Reminders app [[3]](https://paperpile.com/c/20T1Lw/wonW)

# 6. Target Specifications

Table 4: List of Target Specifications to meet Client Needs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metric | Unit | Marginal Values | Ideal Values | Associated needs # |
| Reminders set to remind at the same time | # of reminders | 5 | No limit | 4 |
| **Reasoning**: A core need for this app is to be able to have reminders set for the same time | | | | |
| Reminders grouped in a category | # of reminders | 5 | No limit | 6 |
| **Reasoning**: Grouping reminders into a category is important for the snoozing functionality to be able to keep reminders sequential. | | | | |
| Options for how long to snooze when getting reminded | # of options | 2 | 5 | 1 |
| **Reasoning**: The more options provided, the more cluttered the interface becomes, and the harder it is to use. Careful consideration will have to be made to reach the ideal number of options. | | | | |
| Sharing reminders with others | # of people | 0 | 5 | 2, 10 |
| **Reasoning**: Our client indicated this need as a “nice to have”. | | | | |
| Reminders that can be set as recurring | # of reminders | 25 | 100 | 7 |
| **Reasoning**: Recurring reminders are important for those with ADHD as recurring tasks can be forgotten about. | | | | |
| Reminders that can be stored offline | # of reminders | 50 | No limit | 3 |
| **Reasoning**: Our client’s phone will be on Airplane mode while at work, so it is important that the app still functions as expected without the internet or service. | | | | |
| Colours available to set reminders to | # of colours | 4 | 6 | 8 |
| **Reasoning**: Our client said that he likes colours and does not like sliders. It is important to keep 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 |
| **Reasoning**: A monthly calendar view is very important to keep the multi-reminder app similar to our client’s current physical task management system using a calendar. | | | | |
| People that can have write access to your reminders | # of people | 0 | 2 | 10 |
| **Reasoning**: Our client indicated this need as a “nice to have”. | | | | |
| Time setting reminders from Google Home | seconds | 30 | 5 | 9 |
| **Reasoning:** If it takes too long to set reminders, then setting multiple reminders at once through voice would not be easy. | | | | |

# 7. Conclusions

Reminder apps, that are highly flexible and customizable, are highly essential to those who have ADHD as it allows them to complete mundane tasks that they may otherwise forget without an alert. Through the first client meeting, it was made very apparent that being able to stack reminders is vital to the app. A few of the client’s statements include: needing multiple nudges to complete a task, wanting to be able to prioritize reminders, and being able to share his calendar with others. A series of small tasks like doing the laundry, then taking out the laundry can be overlooked. A multi-reminder app will allow users to easily customize their calendars to fit their daily needs and tasks, by having the ability to set and prioritize a series of reminders at one time. Having a client that also struggles with diabetes, requires the app to be able to have reminders that cannot be snoozed. As well as having the ability to share calendars with his health care team, so they can have the accessibility to adjust the dosage of medication. Alongside these two essential features, other needs of the client were thoroughly discussed to allow the app to assist as much as it can to his daily life.

While searching for similar apps on the market, it is easy to see there are numerous reminder apps. However, having the ability to have a series of reminders at one time and being able to disable the snooze option on a reminder, are some of the essential features this app will have an upper hand at. Through listing the client’s needs, it was easy to get intimidated by advanced features such as having the ability to store reminders offline. In the future, it is important to focus on the most essential parts first and add complexity and extra features at a later time. Having the client's needs and problem statement in mind, the team will be able to successfully develop an app that is useful for the client.

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# 8. References

[1] [Google, “What can you do with Calendar?” [Online]. Available:](http://paperpile.com/b/20T1Lw/vC53) <https://support.google.com/a/users/answer/9302892>[. [Accessed: 24-Sep-2020]](http://paperpile.com/b/20T1Lw/vC53)

[2] [“BZ Reminder.” [Online]. Available:](http://paperpile.com/b/20T1Lw/OPA4) <https://bzreminder.com/>[. [Accessed: 24-Sep-2020]](http://paperpile.com/b/20T1Lw/OPA4)

[3] [Apple Inc., “Use Reminders on your iPhone, iPad, or iPod touch,” 16-Sep-2020. [Online]. Available:](http://paperpile.com/b/20T1Lw/wonW) <https://support.apple.com/en-ca/HT205890>[. [Accessed: 24-Sep-2020]](http://paperpile.com/b/20T1Lw/wonW)