Product Backlog

Alarm2

# Table of Contents

[**Table of Contents**](#_6q7n6hlh43c8) **2**

[**Problem Statement**](#_3emmmrye1gik) **3**

[**Background Information**](#_lgnuw5xua27p) **3**

[**Requirements**](#_ibdk66v0vdk3) **4**

[Functional Requirements:](#_gaw2r646zi3l) 4

[Call a friend](#_ttslnet4q41r) 4

[Security Related](#_gl74xycqf1ax) 5

[Group feature](#_ggl4119o3vrr) 5

[Location feature](#_uotwcx4zm69w) 5

[Analytics](#_t9m1ubls16s2) 5

[LED lights](#_k5m880jkkzun) 6

[General features](#_fjhyfntapb69) 6

[Non Functional Requirements:](#_l0sbkln3lizd) 6

[Integrated Application](#_dtcbe5lsdlt3) 6

[Architecture](#_anuhxpfucod8) 7

[Performance](#_tjhhjpiw1ln5) 7

[Scalability](#_86peddpjdq74) 7

[Usability](#_f0nl00hz4jhm) 8

[Security](#_ird6z9todve4) 8

[**Legend for markings on requirements**](#_g0xpettgswta) **8**

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# Problem Statement

The modern alarm clock is usually the built in alarm app of a person’s smartphone. However, there are limitations to this that can be improved. This project tackles the issue by focusing on smarter ways to wake a person up. This primarily includes (currently) the ability place calls/text on other people’s devices to wake you and notify them, in case a person fails to wake up.

# Background Information

The application is intended to be used by anybody who needs the features of a digital system to alert them. This is not restricted to special age groups. Even so, there are special kind of people that would find some features meaningful. A family would utilize the group based feature, in which parents can do a host of features such as set alarms and voice messages for the children. Any group or team can similarly utilize this feature too.

Similar Platforms

There are certainly other creative alarm apps available, such as Alarmy, including solving puzzles to deactivate the alarm, taking the phone to a specific location, etc., we were unable to find any alarm app based on location rather than time.

*Alarmy* makes the user do challenges and take photos to uniquely wake up the person.

*Sleep Cycle* is an alarm app that “analyzes your sleep and wakes you in the lightest sleep phase”

Note: It is interesting to note that there isn’t any application in which a user can actually place calls and texts to other people based on their inability to wake up.

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# Requirements

This document is the source of all requirements for the project, from a developer’s point of view, but can be easily seen by other stakeholders too, such as UX designers, end users, critiques of the application, so on.

Note: some requirements are marked bold and bold and underlined, that means that they were taken up in the previous version of the project, and that code may be reused/salvaged.

## Functional Requirements:

### Call a friend

1. **As a user, I would like to be able to set contacts who would be notified to wake me up if I sleep past my alarm**
2. **As a user, I would like to be able to set my own message for notifications to callees**
3. As a user, I would like to revert to a single previous version of notifications to correct any blunders that I might have made.
4. **As a user, I would like to have a separate list of callees for sending messages and a separate list for sending call notifications, and be able to set different custom messages for both.**
5. **As a user, I would like to have order in the sequence of notifying people.**
6. As a user, I want to set default text and voice messages for new alarms so that I do not have to create a custom message/recorded message for every new alarm
7. As a user, I want to have templates for text and voice messages for any alarm, old or new, so that I can quickly choose these to notify people
8. As a user, I would like to be able to have a call log so that I can conveniently see the people I have been calling and the people who have been calling me
9. **As a callee, I would like to be able to accept or decline to receive notifications when a person sets me as their backup contact**
10. As a developer, I would like to stop sending notifications to contacts once the user wakes up.
11. As a user, I would like to allow the snooze feature
12. **As a user, I would like to set a time only after which it is considered that I overslept**
13. As a user, I would like to see which of my contacts accepted my request to set them as backup contacts
14. As a user, I would like to set a custom ringtone
15. **As a user, I would like to resend notifications to contacts who have not yet shown their acceptance**
16. **As a contact set by the user, I would like to block a particular user if I so desire**
17. **As a contact, I would like to contact Alarm 2 if there is a severe case of spamming**
18. **As a developer, I would like to prevent the user from overly sending requests again and again to particular contacts**
19. As a developer, I would like to charge users for use calling and sms services offered to them by the developers
20. **As a user, I would not like my number to be used for programmatic sending of notifications as there is danger associated to me and my number**

### *Security Related*

1. **As a developer, I would like to make sure that request coming to the server are only originating from a client**
2. **As a developer, I would like to make sure that use of Twilio is restricted with the server only**
3. **As a developer, I would like to restrict requests coming to the Firebase Realtime Database to originate from the server or a client only.**

### General features

1. As a user, I would like to set an alarm based on time, so that I can be woken like how traditional alarms wake us up
2. As a user, I would like to set ringtones for normal alarms, so that I can choose for the same
3. As a user, I would like to be able to easily view all my alarms so that I can conveniently check and update them
4. As a user, I would like to set an unlimited amount of alarms
5. If time allows: As a user, I would like be able to connect to Spotify so I can use a playlist as an alarm.
6. As a user, I would like a SMS verification when first using the app to prevent others from using my phone number.
7. If time allows: as a user, I would like to I would like to have the option to use the same alarm more than once so that I do not have to reset the same alarm every time
8. If time allows: as a user, I would like to set an alarm that resets itself over a time period. (i.e. the same alarm automatically gets set every Tuesday at 6pm.) so that I do not have to reset the same alarm every time

## 

# Legend for markings on requirements

**Bold** - will be done in the upcoming sprint, but only partially

**Bold and underline** - will be done in the upcoming sprint, completely. So, it will have a strikethrough after the upcoming sprint.

**~~Strikethrough with bold~~** - has been done upto roughly 3 levels of indirection. Indirection is basically saying if this requirement is indirectly related to some other requirement