# Mobile App Development I Project Proposal

Amy Chan Taren Chen

### The Problem

Many people use their smartphone before going to bed and stay up late scrolling. This prevents people from having a regular sleep schedule.

There are many reasons why using your smartphone before bed can impact your health:

- Keeps your mind active and engaged
- The blue light from the phone suppresses melatonin and increases alertness, which leads to taking longer to fall asleep
- Interferes with circadian rhythm
- Causes you to feel more tired the next day
- Leads to developing poor sleeping habits and screen-time habits

Our project aims to incentivize following a healthy sleep schedule and help people form regular sleep habits.

### The Market

Everyone can benefit from having a healthy sleep schedule, but the expected "market" are those who have trouble putting their phone down at bedtime, or those who do not have a regular sleep schedule and want to form healthy habits.

These people are also motivated by incentives and gamification to continue a "streak" of following their sleeping schedule goals.

Additionally, they are also interested in seeing their progress and keeping a log to review their sleep quality (how they feel when waking up).

# Other Apps



#### 1. SleepTown:

- Incentivizes by allowing users to "construct" buildings while sleeping and collect as a reward by waking up on time
- Buildings collapse if using phone during sleeping hours or by not waking up on time
- Allows you to customize sleeping schedule (bedtime, wake-up time, off days)
- Work with friends to construct special buildings together to keep each other accountable

# **Planned Changes**

#### Shortcomings:

- Some users thought that "collapsed buildings" were too negative
- 2. "need more ways to interact with friends"
- 3. "not enough customization", some reviews mentioned that their sleep schedule varied week by week due to their work schedule
- 4. "too rigid", users reported that buildings will collapse even if only a minute late to their alarms
- 5. No cancel button, punished with collapsed building for needing to do other things on phone

- 1. Provide an alternative to a "collapsed building" that is more positive and prevents discouraging the user but still shows that they did not reach their goal
- 2. At this time, we do not intend on addressing this issue, but will consider it if we have time
- 3. Provide more customization in the sleep schedule, allow users to edit as needed to account for inconsistent schedules
- 4. Give users a little leeway in responding to the alarms when waking up, similar to a snooze button
- 5. Provide a cancel button to users

# **Technology**

#### What we considered:

- React Native (Created by Facebook)
- Flutter (Created by Google)
- Kotlin

Cross Platform - Single code base for both Android and IOS

Too Slow

#### What we will use:

- Android User Interface
- Java

### **Elevator Pitch**

We are making a platform that helps and encourages people to have healthy sleeping schedules.

To do that we will create an Android application that will motivate the user to reach their sleep goals in a fun and rewarding way.

