

VB-5 Team Proposal



TEAM COMPETENCY

Wei Xian Lim:

- Database internship experience
- Java, C, C++, SQL
- Courses Completed:
 - COM S 227, COM S 228, COM S 230, COM S 311, COM S 321, COM S 363
- Courses Ongoing:
 - COM S 309, COM S 327, COM S 331, COM S 342

Evelyn Khew:

- No prior work/internship experience
- Java, C, C++
- Courses Completed:
 - COM S 227, COM S 228, COM S 230, COM S 311
- Courses Ongoing:
 - COM S 309, COM S 327, COM S 342

Khanh Tran:

- No prior work/internship experience
- Java, C, C++
- Courses Completed:

- COM S 227, COM S 228, COM S 230
- Courses Ongoing:
 - COM S 309, COM S 321 COM S 331

Varuna Rao:

- No prior work/internship experience
- Java, C, C++, C#, SQL
- Courses Completed:
 - COM S 227, COM S 228, COM S 230, COM S 311, COM S 327
- Courses Ongoing:
 - COM S 309, COM S 321

PROJECT DESCRIPTION

Proposal 1

Name of project:

SleepTight

Problems Addressed:

- Helps to monitor health concerns/fitness concerns in regards to sleep patterns

Description of Project:

The goal of this project is to help individuals who find themselves interested in their sleeping patterns, and find difficulty waking up to their normal alarms. This app will provide several solutions to address these issues such as providing a tracker for their sleep, offering them analytics regarding the user's average wake up time and average amount of sleep.

Aside from the features described above, we are also thinking of adding a "hard alarm" feature to the project. The reason for this feature is because some people may find it hard to wake up to normal alarms, or may keep snoozing their alarms and then fall back asleep, thus missing their desired wake-up time. The alarm may allow the user to snooze it for a few times, but when it gets up to a certain amount of snoozes, the user may need to complete a task such as solving a complex math problem, solve a puzzle or launch a URL to obtain a specific QR code which they then have to scan in order to turn the alarm off. Should the user fail to do these tasks, they may be prompted to donate a dollar to a charity of their choosing instead. Another feature is providing soft reminders for the user that it is time for bed at a user-selected time. We are also thinking of adding a "SleepTight™ KIDS" feature. With this feature, concerned parents will be able to check whether their child is sleeping during bedtime instead of playing on their phones when they're not supposed to. The GUI will also be more child-friendly.

Languages, platforms, libraries:

Java and SQL, Android platform

Complexity:

- Requires creation of database to track past sleep patterns for obtaining data regarding sleeping patterns, average amount of sleep, average wake up time, etc.
- Intuitive GUI for users, separate GUI for children
- Ability to have multiple users as in the case of "SleepTight™ KIDS", users should be able to interact/view each other's activity levels

Proposal 2

Name of project:

StudyBuddies

Problems Addressed:

Helps motivate users to be more productive, combats procrastination and promotes a relaxing environment to remove themselves from unwanted white noise.

Description of Project:

The basis of this project is to be a positive push for users to cut down on time spent on digital devices. Although it is primarily targeted at users who wish to get an app that could help them concentrate on their studies, it is also compatible for anyone who wishes to be more mindful about how much time they're spending on their devices.

At a user-specified period of time, the project should track whether the user is working on their computer or mobile device or not. If the user succeeds on not using their devices during the specified time, they will obtain one ticket to get a new "pet" in their "pet collection". The goal is to continue earning pets so that they can have the most amount of pets possible. This app will also have a "gacha" aspect behind it, where the pets earned can be duplicates of each other and that different pets have different rarities behind obtaining them. The flip-side of this is that if the user spends too much time on their devices even though they already made a commitment that they will not do so, they risk losing a pet to "the Wild". We were also thinking of implementing an "extreme mode", where the pet dies instead. The user will also be able to whitelist other apps or websites of their choice that will not interfere with the progress of their pet collection.

Languages, platforms, libraries:

Java, SQL, Android and Web compatible platforms

Complexity:

- Requires creation of database to track past usage periods and amount of pets owned
- GUI for users
- Multiple users/accounts
- Users should be able to whitelist certain apps that may help with their productivity purposes such as Google or Dictionary. Using these apps will not interfere with their earned pets.
- Method to track whether user is using phone for purposes other than basic features like checking time or other user-set, whitelisted apps

SleepTight? - sleeping patterns over time, average wake up time, average amount of sleep, Alarms > with math/games to shut off?

Problems addressed: Helps to monitor health concerns/fitness concerns, helps promote better sleep

Description: xxx

Platform: Android

Language: Java and SQL

Complexity:

- Requires creation of database to track past sleeping patterns
- GUI for users
- Ability to have multiple users
- SleepTight™ KIDS
 - Ability for parents to check-in on children's sleeping time
- Have interactive alarm that doesn't shut off until
 - A math problem is solved
 - A specific QR code is scanned
 - A puzzle is solved
 - Shuts off for one minute as a snooze as user starts walking, but goes off again if no movement detected

StudyBuddy

Problem being addressed: Helps motivate users to be more productive

Description: An app to help users spend less time on their phones or other digital devices. As user uses their devices less, they will earn more pets to their "pet store". Use their devices too much during the allocated times and they will risk losing their pets to buyers. Extreme mode: the pets pass away. Features: SPECIAL PETS!

Platform: Android and Web

Language: Java, SQL

Complexity:

- Requires creation of database to track past usage periods and amount of pets owned
- GUI for users
- Multiple users/accounts
- Users should be able to whitelist certain apps that may help with their productivity purposes such as Google or Dictionary. Using these apps will not interfere with their earned pets.

- Method to track whether user is using phone for purposes other than basic features like checking time or other whitelisted apps