**Sleeping Application Requirements**

**Stakeholders: Shanshan Yu(Administrator & Programmer), Kim Nguyen(Programmer & Public Relationship), Yu-Che Liu(Programmer & Web Server), Seyoung Nam(Mascot)**

**Version History**

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Date** |
| 0.1 | The first Version | **3/9** |
| 0.2 | The second Version. Shanshan adjusted the due date and added more requirements features according to the app design. | **3/25** |
| 0.3 | Updated the status, and modified User Permanent data description, added Shanshan’s new tasks on 3/26/2021. | **3/26** |

1. Project Description

The sleeping application will help users to build a healthy sleeping habit by playing a game.

1. Timeline

3/12 Four Core Front-end Interfaces

3/20 All Core Function Code & Interfaces

3/27 Testing & Demo

3/31 Check & Release

1. Modules

Front-end User Interface

Back-end code

App Server (Optional)

Data Analysis (Optional)

Game Module (Partial Optional)

1. Tasks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task Name | Description | Priority | Deadline | Member |
| Front-end Interfaces-1 | The first front-end interface of the four core interfaces with a clock, sleeping time period and Alice. | 1 | 3/12 | Kim |
| Front-end Interfaces-2, 3 | The second and third front-end interface of the four core interfaces, locking the screen during sleep | 1 | 3/12 | Spencer |
| Front-end Interfaces-4 | The fourth interface of the for core interfaces, showing a gift received by the user. | 1 | 3/12 | Shanshan |
| Locking Screen Function | Locking Screen | 1 | 3/20 | Spencer |
| Gift Function | Giving Random Gift to User | 2 | 3/20 | Shanshan |
| Clock and Count Down Function | Set up Sleeping time and Connect it with Locking Function | 1 | 3/24 | Spencer |
| Clock’s onClick Method | When the user click the clock, the function will invoke the lock screen activity | 2 | 3/25 | Kim |
| Merge MainPage and TimePicker |  | 2 | 3/25 | Kim & Spencer |
| Game Interfaces | Simple Store and Virtual Coins | 4 | 3/25 | Shanshan |
| User Permanent Data | 1. Virtual Coins (int) get, set 2. Start\_Time, End\_Time (hours, minutes) get, set 3. Duration (hours) get set 4. Items Collection ( ArrayList<Item>) get, set   Average Sleeping Duration = Total durations / recorded days | 1 | 3/26 | Spencer |
| Unit Testing | Unit Test for the Merged Interface | 2 | 3/26 | Shanshan |
| Stacking Items | Stacking Items for Grid Views  Update the feature in:   * Gift Activity * Item Inventory Activity * Item Adapter * Linear item layout   Add amount attributes to the Item Class | 3 | 3/26 | Shanshan |
| Data Interfaces | Data Bar Chart for every days sleeping, average sleeping time of the data | 1 | 3/27 | Kim |
| Data Analysis Feature(Optional) | Simple Chart: Option 1 Use Database and Fake Data for testing; Option 2 Store 7 Days Data in local | 4 | 3/27 | Kim |
| Integration Testing | After all core features have been developed | 1 | 3/28 | Spencer & Shanshan & Kim |
| Testing on Device | After all core features have been developed | 1 | 3/29 |  |
| Fix Demo | 2 mins demo | 1 | 3/29 |  |
| Submission |  |  | 3/30 | Shanshan Yu |

Tool

Android Studio

GitHub

Google

Stack Overflow (:D)