Sleep Tracker Customer Handoff

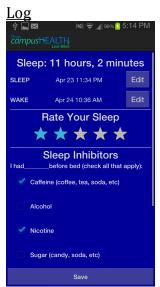
Part I: User Manual



This is the home screen of the app. When the user goes to sleep, he/she should click the "Go To Sleep" button. When the user wakes up, he/she should click that same button (which will now read "Wake Up"). After the user has clicked "Wake Up," a sleep log will be recorded in the database. Clicking "View Data" will take the user to the *Data* screen. Clicking "View Graphs" will take the user to the *Graphing* Screen. When accessing "View Data" while "Asleep" the application occasionally crashes when trying to "Wake Up."

Data SLEEP Apr 24 11:37 PM WAKE Apr 25 08:44 AM Sleep 9 hours, 7 minutes SLEEP Apr 23 11:34 PM Sleep 11 hours, 2 minutes WAKE Apr 24 10:36 AM SLEEP Apr 23 12:41 AM WAKE Apr 23 09:29 AM Sleep 8 hours, 48 minutes Sleep SLEEP Mar 25 01:26 AM WAKE Mar 25 11:26 AM 10 hours, 0 minutes SLEEP Mar 19 09:40 PM WAKE Mar 20 08:40 AM 11 hours, 0 minutes SLEEP Mar 19 04:20 PM Nap 1 hours, 6 minutes

This screen shows a list of sleep logs, sorted by how recent the log is. Clicking one of the logs will take the user to the *Log* screen. Long clicking one of the logs will prompt a dialog to pop up that asks the user if he/she would like to delete the log.

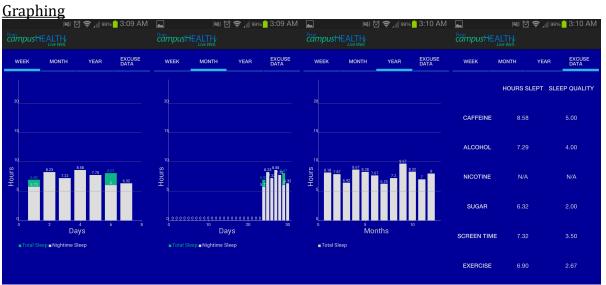


This screen displays all of the details of a sleep log and allows the editing of some of these values. Clicking "Edit" will take the user to the *Modify Time* screen. The user can rate his/her sleep by clicking on the stars. The user can check/uncheck typical sleep inhibitors that he/she may have engaged in before this particular sleep. The user can also type in additional comments in the comments box. Clicking "Save" will save the rating, sleep inhibitors, and comments and return the user to the previous screen.

Modify Time



This screen allows the user to modify either the time the user went to sleep or the time the user woke up for a particular sleep log. Clicking "Save" will return the user to the *Log* screen.



This screen displays a tab structure with 4 different tabs. The "WEEK," "MONTH," and "YEAR" tabs display the sleep logs over the past week, month, and year, respectively. The "YEAR" tab, however, does not display napping data, because the fact that users do not sleep every day will cause the napping averages to be skewed and, hence, valueless to the user. The "EXCUSE DATA" tab shows a table with typical sleep inhibitors as rows and the corresponding average number of hours slept and average sleep quality as columns. Clicking the back button will return the user to the *Home Screen*.

Part II: Technical Documentation

Home Screen

- Activity: MainActivity
- Helper Classes:
 - •—SleepLogHelper: This class is an SQLiteDatabase helper class, which allows querying and editing of an SQLiteDatabase.
- JUnit Test Class: MainActivityTests.java

<u>Data</u>

- Activity: DataActivity
- Helper Classes:
 - •—SleepLogHelper: This class is an SQLiteDatabase helper class, which allows querying and editing of an SQLiteDatabase.
- JUnit Test Class: No test class because all functionality contained in onResume() and onCreate() and we could not create meaningful tests for the Android Activity lifecycle.

Log

- Activity: LogActivity
- Helper Classes:
 - •—SleepLogHelper: This class is an SQLiteDatabase helper class, which allows querying and editing of an SQLiteDatabase.
- JUnit Test Class: No test class because Activity required Intent to run correctly, but we needed to initialize a SleepLogHelper object with the Activity in the test class, so the reasoning was circular.

Modify Time

- —Activity: ModifyTimeActivity
- **●**-Helper Classes:
 - ←—SleepLogHelper: This class is an SQLiteDatabase helper class, which allows querying and editing of an SQLiteDatabase.
- JUnit Test Class: ModifyTimeActivityTests.java

Graphing

- Activity: ChartActivity
- **●**-Helper Classes:
 - •—SleepLogHelper: This class is an SQLiteDatabase helper class, which allows querying and editing of an SQLiteDatabase.
- JUnit Test Class: GraphActivityTests.java, MoreGraphActivityTests.java

SOLiteDatabase

- Helper Class: SleepLogHelper
- **●**—**Table Name:** sleep_log
- Columns:
 - ○—asleep_time: The time the user went to sleep in milliseconds.
 - ← awake_time: The time the user woke up in milliseconds.
 - •—time_slept: The total amount of milliseconds that the user slept.
 - \bullet —nap: A boolean value representing whether the log was a nap or not.

- •—rating: An integer from 0 to 5 representing the quality of sleep.
- •—caffeine: A boolean value representing whether the user drank caffeine before bed.
- •—alcohol: A boolean value representing whether the user drank alcohol before bed.
- •—nicotine: A boolean value representing whether the user consumed nicotine before bed.
- •—sugar: A boolean value representing whether the user consumed sugar before bed.
- •—screen_time: A boolean value representing whether the user stared at a screen before bed.
- •—exercise: A boolean value representing whether the user exercised before hed.
- •—comments: A 255 character string that allows the user to make additional comments on his/her sleep.