Client Vision:

Give students a way to better understand how certain triggers impact their sleep habits and how sleep patterns impact their subsequent actions, such as concentration, fatigue and productivity.

User Stories (structure borrowed from Mike Cohn’s “User Stories Applied”):

1. As a user, I want to log my sleep or my naps.

2. As a user, I do not want use of the application to itself be an inhibitor to my sleep

3. As a user, I want to set up my user profile with my birthday, year in school, whether or not I’m a smoker, etc.

4. As a user, I want to be able to modify my user profile at any time while using the application.

5. As a user, I want to look at a graphical representation of my sleep patterns over the past week/month/year.

6. As a user, I want to be log any sleep inhibitors I used close to bedtime for any previously logged night of sleep or nap.

7. As a user, I want to get tips on improving my sleep, tailored to my user profile and data logged so far, so that I can better manage my sleep cycle.

8. As a user, I want to be able to rate my concentration, fatigue and productivity for a given day.

9. As a user, I want to be able to view a summary of my data that shows how my sleep patterns affect my concentration, fatigue, and productivity the following day.

10. As an SHS administrator, I want to be able to view anonymized, aggregated data from users so that I can better understand sleep habits and use of sleep inhibitors in the student population.

11. As a user, I want to be sure that I cannot be identified from any of the information submitted by the application to the central datastore

12. As a user, I want to be able to listen to the sleep podcast as I’m going to sleep, if I would like, to help me get to sleep faster.

Proposed goals for First Iteration:

• General UI improvements (targeting US #2) – switching color scheme to an amber tone, rather than blue; reducing screen brightness and fluorescence when using the application

• Bug/crash fixes (targeting US #1 primarily)

• Refactoring existing code (lay the groundwork for implementing new features such as US #3, #4, #7, #8, #9, #10, #11)

• Implement user profile creation and update activities (targeting US #3, #4)

Ideas for future iterations:

• Integrate alarm clock functionality to minimize user time spent entering data/user error

• Implement nap logging as any period of sleep < X hours (where X is some medically defined length of time after which a full sleep cycle can reasonably be said to have occurred) or as defined by the time of day that the sleep begins, to again minimize user effort

• Aggregate and anonymize data locally on device and periodically send to central repository

• Select sleep tips based on user’s data and profile, including Penn-specific tips

• Visualization of correlation of sleep patterns to concentration, fatigue, productivity on subsequent days