

Team Number: 112-1

Team Name: Gloomie

Team Members:

- RJ Sampson
- Kyle Pfromer
- Reiko Matsuda-Dunn
- Sarah Litz
- Hunter Rohlman

Application Name: Bed Buddy

Application Description:

This application will help users log sleeping data. Users will be able to create a user profile with their age, location, and chronotype (whether they are a morning or night person). The application will prompt the user daily for the following questions: did you dream, how many hours did you sleep, how many times did you wake up, on a scale from zero to rested, how do you feel? The application will conditionally ask the user, based on their user settings, for caffeine intake, anxiety, stress, excitement levels, and travel.

Additionally, the application will provide a slick data visualization page to help users learn more from their data to improve their sleep. This page will consist of a calendar to show which days were good or bad, show relationships between user entered attributes (e.g. caffeine intake) and sleep quality, a weekly display to show the start and end times of their sleep, and total hours slept. Another goal of the project is to keep all user data secure. This will be accomplished by encrypting the user's data. Users can opt in to share their anonymized data with others and benefit from personalized analysis and feedback.

Vision Statement: Bed Buddy is a sleeping application that provides users with complete control over their sleeping statistics with customized suggestions. If you're sick of listening to white noise every night come try Bed Buddy.

Version Control: <https://github.com/CSCI-3308-CU-Boulder/Gloomie>

Development Method: Agile. We will be Specific, Measurable, Achievable, Relevant and Time-bound.

[Project Board](#)

Communication Plan: Discord is the platform we will use to organize communication. Discord is very flexible as a platform and allows for the organization of the layers of our application. We can utilize Discord to share code, research, and any pertinent information. Discord can also be used to host our weekly team meetings.

Meeting Plan: Our team will be meeting weekly on Mondays for 2 hours over Discord from 6:00 to 8:00 PM.

Architecture:

- Backend:
 - [ExpressJS](#)
 - [Graphql](#)
 - [TypeScript](#)
 - SQL Database
 - Libraries:
 - [type-graphql](#) (handles graphql route creation)
 - [typeorm](#) (handles sql database model creation)
- Frontend:
 - ReactJS
 - Libraries:
 - [Apollo](#) (state management works for graphql)
 - [Graphql code generator](#) (generates boilerplate code for graphql)
 - Graphing libraries?

Use Case Diagram:

