

## **CFGDegree Final Project**

Team members:

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### **1. What are you building?**

In our basic version of this project we are creating a self-care tracking interface that tracks various aspects of the user's daily life, such as mood, sleep, water intake, and activity tracking in the form of a step count. We also aim to be able to have graphs and summaries to display the inputted information over a period of time (e.g. last 7 days, last month, last year).

We have ambitions to further develop this to include a Tamagotchi/virtual pet element, which the user will interact with and be able to play a simple game with. Our ultimate aim is for the data entered by the user in terms of their own tracking will affect the virtual pet - so every glass of water you drink, is also drunk by the pet. The pet will have various stats that decay over time that the user will be encouraged to improve the pet's mood by performing acts of self care.

### **2. What does it do or what kind of problem does it solve?**

This is a self-care monitoring/encouragement app - we are all so overly scheduled it can be difficult to make time to exercise, drink water or reflect on our moods. This helps to encourage users to look after themselves and to examine the data behind this activity, but also uses the virtual pet element as a fun way of encouraging self care.

### **3. What are the key features of your system?**

The basic mood tracker will have a web front end, mainly executed in Python logic, and a database to store and retrieve data. The app includes an overall calendar that allows users to drill down into individual data types.

Diving deeper into the features that will be recorded; for mood tracking, users can select from a range of icons representing different moods, such as happy, sad, angry, sleepy, sick, or anxious, and add short text entries (250 characters) to go with it. The mood entries will also appear on the calendar.

Secondly, for sleep tracking, the app allows users to indicate whether they had a good or bad sleep by selecting an appropriate emoji and time stamps, user categories are: 1-5, 5-8, 8-10, or 10+ hours.

Water tracking is represented by a bottle icon that fills up throughout the day, indicating how much water the user has consumed.

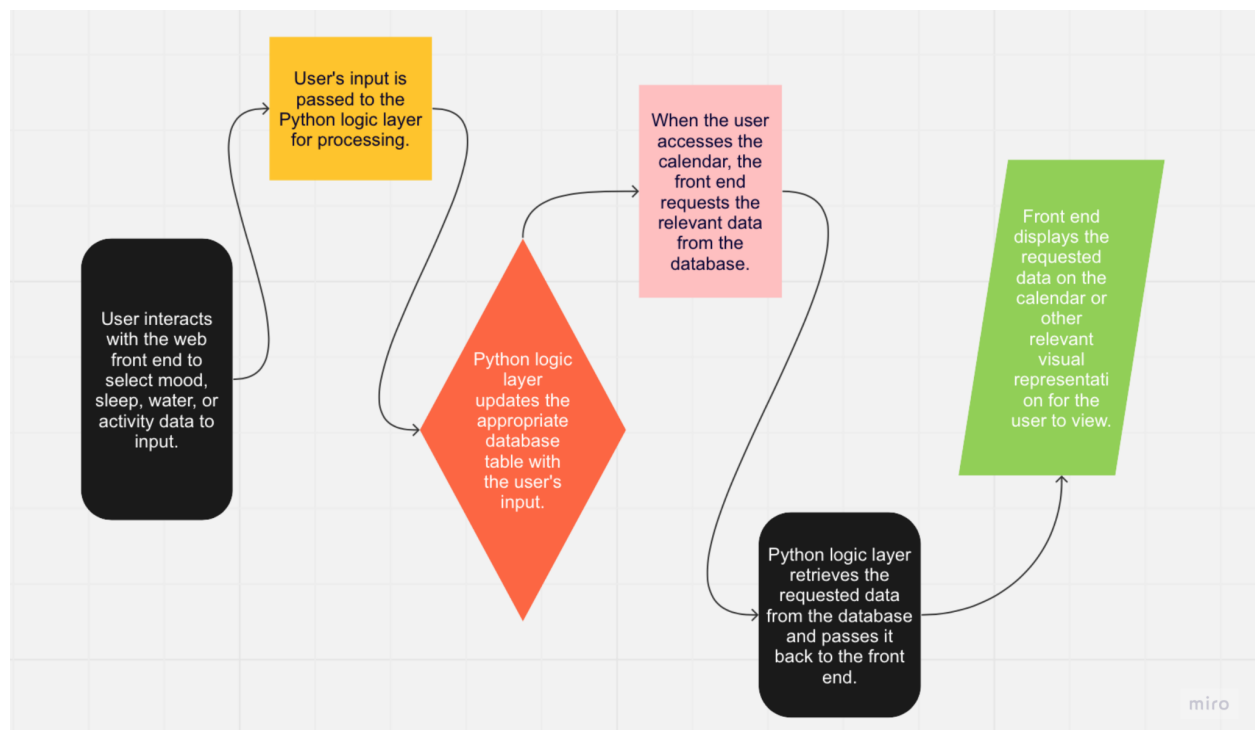
Lastly, the app includes an activity tracker that measures the amount of steps taken. Overall, the app offers a simple and efficient way for users to track their mood, sleep, water intake, and physical activity.

We are looking to integrate a weather API, which will change the appearance of the website based on the current weather.

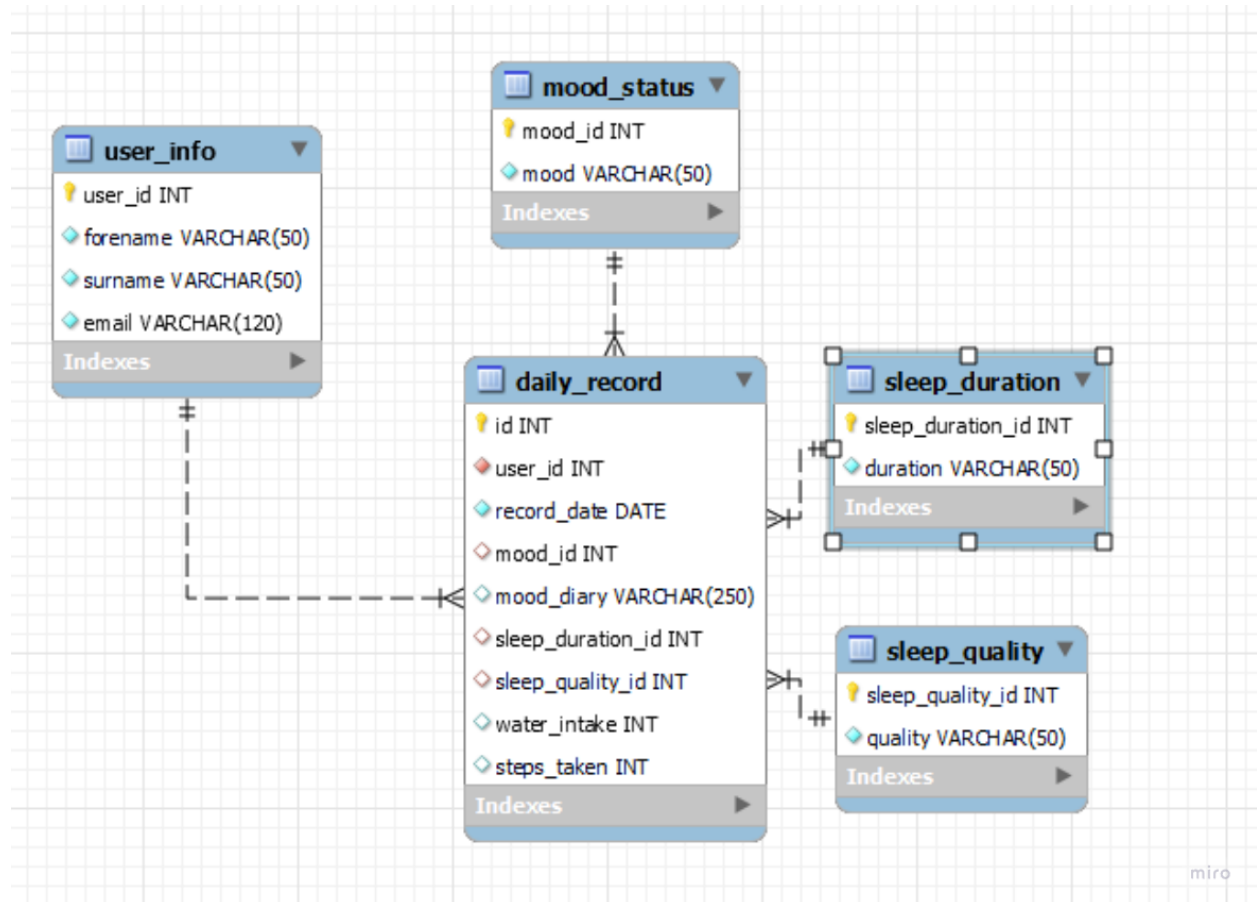
Once we have got this all functional and fully tested we will look to implement the virtual pet element. For the virtual pet, the functionality that we would like to implement includes feeding the pet, giving it water, exercise, sleep, cleaning/bathing, medication reminders and some sort of simple game that you can play with the pet to fulfill its Entertainment stat. We are aiming to have all of the user-entered data about their own activities feed into the virtual pet's stats, but if we are unable to fully implement this our fallback position is for the virtual pet to be a separate entity to the user tracking functionality.

#### 4. Provide a sample architecture diagram of your system (a simplified flow of your system)

Basic tracking iteration:



#### Basic db structure for 1st iteration



**5. Describe the team approach to the project work: how are you planning to distribute the workload, how are you managing your code, how are you planning to test your system.**

We are going to work using Agile principles, over four sprints - we will have a 10 minute standup 4 days per week (straight after our CFG teaching) and a longer meeting each week to do a sprint retrospective and future sprint planning. We will be determining who does what in each sprint together, based on interests, existing knowledge and time commitments.

We are using Miro to coordinate and record everything collaboratively (board can be viewed here: [https://miro.com/app/board/uXjVMOL\\_6-l/?share\\_link\\_id=706244211842](https://miro.com/app/board/uXjVMOL_6-l/?share_link_id=706244211842) ).

We will be using GitHub to manage our code (repo is <https://github.com/JodyBroad/CFG-Degree-Final-Project> but set to private - Yuri has been given access as a collaborator already).

We plan on doing extensive testing throughout and this will be built-in from the start of the project.