**SOFT10101 Computer Science Programming**

**Coursework 2020/21**

Title: *Nutrition App*

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The aim of this project is to track calories for users. I will be creating a login system so that many different users can use the app. There will also be a goal function which will allow users to set up their daily calories by their goals. The goals will either be losing weight, gaining weight or maintaining weight.

Key features:

* BMI
* Login system including being able to register and ensuring that the login is correct
* Being able to add calories and exercises
* Can track the calories and exercises
* Can update details if needed
* Reset calories
* Log out
* Exit

**Design and Implementation**

**Menu**

**Text

Description automatically generated**



**Classes/structures**

**Structure**

|  |
| --- |
| Users |
| **int** age; |
| **float** weight; |
| **float** height; |
| **Float** daily\_calories; |

**File Structure**

There are many text files that will be used for this program. Each user will have 4 text files.

1 text file is for the login system which will be saved as

("data\\" + username + ".txt") and will store the username and the 2nd line stores the password.

The 2nd file is where all the users’ details will be stored. The first line of this file will store the age then the weight then the height and finally the daily calories.

The 3rd file is where the calories will be stored so that the computer knows how many calories are left.

The 4th file Is where all the calories are tracked. The number of lines depends on how much data has been inputted.

**Testing**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test** | **Successful?** | **Changes?** | **proof** |
| When registered can you login | **Yes** | **No** |  |
| Does BMI work | **Yes** | **No** |  |
| If logged in wrong does is not let you enter | **Yes** | **NO** |  |
| Can you add calories by inputting food | **Yes** | **No** |  |
| Can you add exercises | **Yes** | **No** |  |
| Does the history/food log work | **Yes** | **No** |  |
| Can I reset the calories | **Yes** | **No** |  |
| Can I update my information | **Yes** | **No** | To check if the weight updated, I am going to use the  Bmi function |
| Can I log out | **Yes** | **No** |  |

**Evaluation-**

Overall, I believe that the program is a success as it successfully completes the objective of tracking and adding calories. I really like that I have added separate text files for each user so they can see their own calories history. To improve this program, I will add more functions such as more nutrition values so users can add and track protein, carb and fats. I will also add a networking system so users can add friends and message each other.