Introduction

This is a nutrition and recipe app for anyone who is keen to monitor their calorie intake as well as keep track of their favourite recipes.

Simply enter your details on the user page and you are ready to start using all the features on offer. These include a recipe finder (specific to your food preferences and/ or any allergies you may have) a BMI calculator (which allows you to compare your weight against the NHS guidelines) and a tracking page where you are able to view everything you have eaten (giving you easy access to recipes you have enjoyed – and allowing you to delete any you did not!).

As a group we deliberated over whether to make a command line app or whether the features we had in mind for our app were more suited to a Flask framework-based app in Python. We ultimately decided to use Flask as we felt that this would allow us to utilise everything we had learned on the nanodegree, implement the list of objectives we had for our project, and provide a better user experience overall.

In order to ensure that we completed all of our desired tasks efficiently and in time, we adopted the Agile methodology during this project. This allowed us to delegate tasks and continually review our achievements and remaining work. It also meant that we were meeting regularly, and this created a really supportive network which we have all enjoyed being a part of. We adopted the use of Trello board to hold ourselves to account with regards to the tasks at hand. And we used GitHub for version control allowing us to update each other on any changes to our application’s code, test each these changes and leave comments for each other.

This report will outline the rationale behind out project idea and choices, the specifications and design, how we implemented and executed our code and how we tested it. We also consider what we would have added if we had more time as we are firm in our belief that everything can be improved. Overall, we were able to achieve a fully working app in the set time which we believe is both attractive and informative to the user. We hope you enjoy using it as much as we have enjoyed working on it!

Background

Our project is a Flask based app. We have both a frontend and backend (which we have implemented using HTML and CSS). The app is incredibly intuitive to use. The user is first directed to the ‘Home’ page where they are given the instructions as to how to navigate the app for the best possible experience. These simply ask that the user inputs their details on the ‘User’ page. These details include a username, age, whether the user is a diabetic or not, whether the user is allergic to any of the suggested food types and the user’s level of activity. The inputs by the users are then saved below the form. The reason for this is that in the future we envision that a nutritionist may use this app and it may be helpful to have all of their clients’ information displayed in front of them. For now, we are still able to protect user privacy given our use of usernames as opposed to actual names.

The next stage is for the user to find some tasty recipes that they can try using the ‘Search’ page. The user simply needs enter a specific food or ingredient and a list of associated recipes will be outputted. Considering the fact that the user has already shared their diet and health needs with the app, these recipes will be filtered according to their particular requirements. For example, if a user is diabetic *and* allergic to peanuts, then the recipes that they are presented with will be ‘low-carb’ (to account for their diabetes) and ‘peanut-free’ (to account for their peanut allergy); the same goes for any other combination of dietary and allergy needs.

Once the user has decided on a recipe, they are able to save this and view their saved recipes (along with the date where they saved this recipe) on the ‘Track’ page. As evident from the name, we implemented the ‘Track’ page in our app because we wanted users to be able to see the recipes they were using as well as number of calories contained within each of them. When combined with the other features of the app, we hope that over time our users would make better choices (in line with the NHS guidelines) regarding their daily calorie consumption. Being able to view their calorie intake and their recipe choices will provide the user with a sense of accountability as to what health choices they have been making (and what health choices they should be making – more on this in the next section on BMI) and we hope that this will motivate them to live healthier lifestyles over time.

The final page in our app is the ‘BMI’ calculator page. Here the user is asked to enter their height and weight in order to calculate their BMI (body mass index). They are subsequently told which range their BMI falls in, e.g., ‘underweight’ and this is based on the NHS’ guidelines. Since we are committed to enabling users to improve their lifestyles and have healthier diets, this page is hyperlinked to the NHS website and the user is directed to the page corresponding to their BMI category. Here they can find further information to guide them on how best to proceed in order to reach a ‘healthy’ BMI.