Final Project Technical Implementation Plan

Project Description: Our project is a web application helps user for health tracking, where user sets a target weight or calorie to achieve and enters what he ate for lunch, suppose "I ate bananas for lunch" so our API does NLP functions on the text and returns calories for the banana and we display total of all the calories in the web application. Also, there is a water reminder facility for our users.

Group Members:

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Core features:
● Login/Sign up
It will be the first page a user sees where he can sign up or sign in if he is already registered

● Main page
The main page will give description about usage of website, there will sidebar which will have different tabs such as user profile, history, water reminder. Also, there would be enter food data button which would take them to Food entry page.

● Food Entry Page
Here the user will write inside the form what he ate and for what time ex: lunch, dinner or breakfast.

● Water Reminder Page
Here the user will be able to set water intake target for himself and would be reminded every time he login about remaining water consumption

● History Page
Here the user will be able to see all the previous entries of food items he has entered previously and would be able to see calorie data for the same.

●User Detail Page
Here the user would have his information such as username, name, weight, height and if user is logging for the first time he would see this page to enter his data in the record. We would count BMI using this information.

PS: All the pages would show Target Weight or Calorie, Current Weight or Calorie and Logout Button.

Extra features:
- PDF report: User would be able to download their pdf report of previous food intake vs calorie report
- Email Reminder: Users would be able to get email regarding water consumption
- Forum: Where users can talk about their diets and interact to achieve a healthier lifestyle
- Diet Plan Recommendation: Custom suggested diet plan based on their diet

Course Technologies:
- React:
  We will use React as our single-page web application framework. We will create components for the elements that we include on our pages.
- Gulp and SaaS:
  We will use gulp and SaaS to easily maintain the CSS and automatic update of CSS and to optimize HTML to make page load faster.
- Firebase
  Firebase Authentication is a framework that allows authentication via email/password credentials or other identity providers. We will be utilizing Firebase authentication system to authorize users for the site. This will include email/password and Google login.
  https://firebase.google.com/docs/auth/
  https://firebase.google.com/docs/auth/web/start
  https://www.npmjs.com/package/firebaseauth

Individual Technologies:
- PDFkit:
  This is a npm library which helps to create pdf from data at the backend.

- Victory:
  Victory is npm library which helps to create different graphical data representation from text data.

Git Repo: https://github.com/deepkakadia/CS554-project