Web Programming CA

1. First Conceptual Design:   
     
   The purpose of the Fitness Tracker app is to give users an all-inclusive platform for goal-setting, tracking, and progress-monitoring their fitness activities. The application is made up of many essential parts:  
     
   Dashboard: A summary of recent exercises and current objectives may be seen on the main dashboard.   
   Workout Log: Users can record new workouts together with information on the kind, length, and intensity of the exercises.   
   Goal-Setting: Users are able to create new fitness objectives by indicating the kind of goal and the desired metrics.   
   Progress Tracking: Users' advancement towards their fitness objectives is visualised in this area.   
   Header and Footer: These sections offer the application's branding and navigation.
2. Diagram of Components:   
   Dashboard: Shows current objectives and workouts completed recently.  
   Users can record new workouts in the Workout Log.   
   Allows individuals to create new objectives for their fitness.   
   Progress tracking: Shows users how far they've come in achieving their objectives.   
   Header: Offers connections for navigation.   
   Footer: Provides copyright details.
3. Modifications to the Application:   
     
   The final application closely adheres to the original design concept. Nonetheless, during development, a few small changes were made in response to usability concerns and user input. To improve the user experience, for instance, extra features were introduced, such filtering choices in the progress tracking area and an easier-to-use structure for the exercise log.
4. Primary CSS Classes:   
     
   .header-nav: Designates the header's navigation links;.workout-form: Designates the form used to log workouts;.goal-form: Designates the form used to define fitness objectives;.progress-chart: Designates the charts used to visualise progress;.footer-text: Designates the text included in the footer.
5. Conclusion:  
     
   The Fitness Tracker project has been gratifying and hard to work on. I had challenges while learning how to deploy the application to Firebase Hosting and an EC2 instance, as well as when connecting the MongoDB database with the Express server. Nevertheless, I was able to get beyond these obstacles by doing study, trying new things, and asking for assistance from internet sites.  
   This project has taught me a lot, especially about backend development, database administration, and deployment procedures. My abilities have also greatly benefited from working with others and getting input on the functionality and design of the programme.   
     
   Overall, despite the difficulties encountered along the route, I am pleased with the finished result and the abilities I acquired over the process. It has been a worthwhile education.

Firebase link: https://fitness-tracker-25f0c.web.app/