FitHub - Fit You, Happy You

Objective :

The aim of this project is to promote a healthy lifestyle for Indian users by providing a web application that helps manage their fitness even in busy schedules. This, in turn, will contribute to the overall health of the public. The web application will utilize the Media-Pipe machine learning library for pose estimation and tracking of user's movements while they perform the exercise or yoga pose.

Scope:

The web application will allow users to track their fitness progress and choose a particular exercise or a yoga pose to perform. The users can choose from a list of pre-defined exercises and yoga poses, or they can create their own custom exercise routine. Once the user has selected an exercise or a yoga pose, the web application will provide a demo model which performs the pose/exercise, and the user has to imitate the model. The application will provide real-time feedback to the user, including information about their form, posture, and movements.

Methodology:

The web application will be built using Flask web framework and HTML, CSS, and JavaScript will be used in the frontend. Media-Pipe machine learning library will be utilized for pose estimation and tracking of user's movements. The application will be hosted on a server, which will ensure that the application can be accessed from anywhere with an internet connection. The frontend will be designed to be intuitive and easy to use, with clear instructions and visual cues to guide users through the process of performing exercises and yoga poses. The backend will handle requests from the frontend, process them using the Media-Pipe library, and return the results to the frontend.

Overall, this project aims to provide a user-friendly and efficient way for Indian users to manage their fitness and promote a healthy lifestyle. The application will be accessible to anyone with an internet connection and will provide a simple and intuitive interface for performing exercises and yoga poses