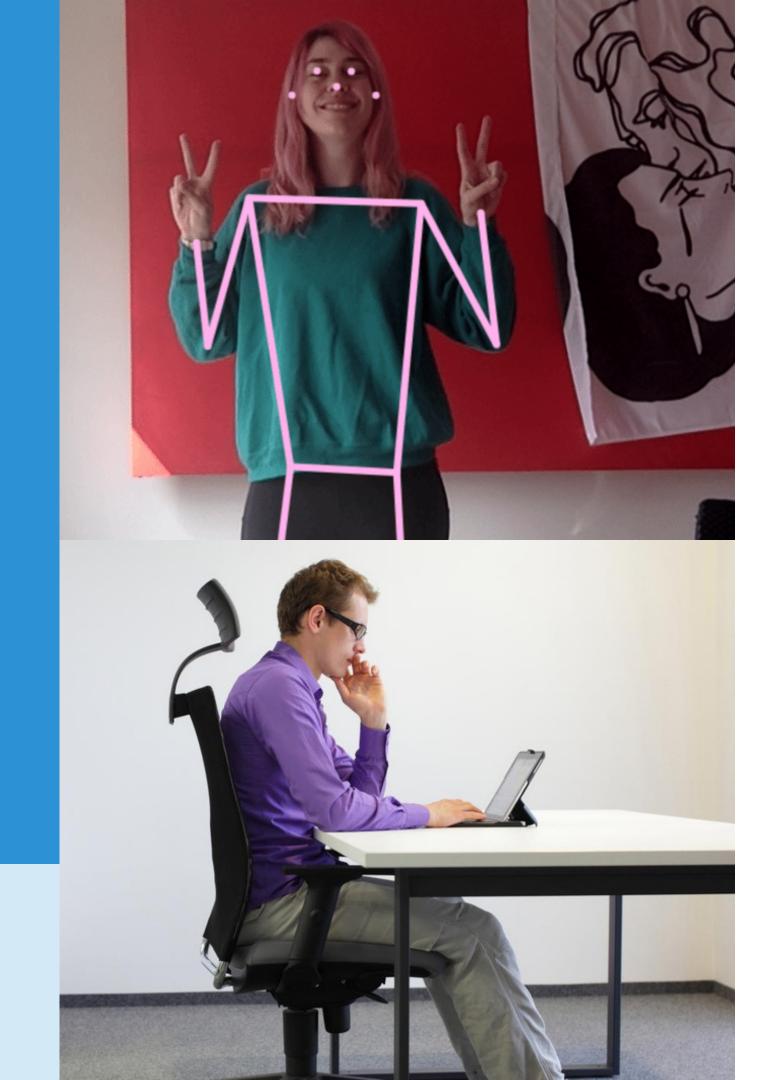
# Project Name: FixYourSelf

Problem Statement:
Posture Detection and Correction

TEAM MEMBERS: JAIWIN SHAH, VEDANT JOLLY, RISHABH JAIN, ABHISHEK CHOPRA





# PROBLEM STATEMENT

#### **Posture Detection**

The head and shoulder are the first to be affected in the wrong posture when one pays attention to the screen.

#### Why is Good Posture so crucial?

Cause bad posture can lead to

Joint Pain Stress and Degenerative Cardiovascular Obesity and Muscle **Arthritis** Depression Disease Strain Bad posture can also lead to Poor position causes Poor posture can When things are out the shortening and people to be fearful, have lead to malalignment of alignment it can lower self-esteem, and of your spine or lead to indigestion, more likely to knees, which can contribute to unhealthy heartburn, and even perience bad mood ightness and lower back increase stress on acid reflux pain your knees.

01

#### Logging in

The user can sign in through his google account.

02

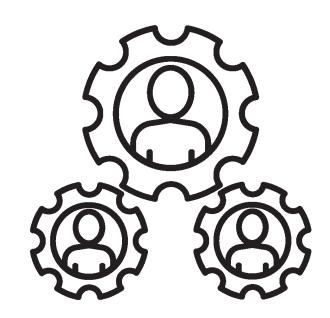
#### Home

The account is automatically created in the backend and user is taken to home page.

03

#### Main Application

User grants
permission and
camera starts.



## Working of the Application

#### Detection

The algorithm begins to detect the user's face.

04

#### Posture Improvisation

User has to correct his/her posture according to the instructions flashed.

05

### **Tech Stack**



### JeelizAR

The face is
detected in real
time using this API
written in
JavaScript.



#### Three.js

It helps us with built in camera controls to create 3D scenes and hence uses collision detection technique.



#### HTML

HTML5 Web audio API in combination with Three.js to visualize audio.



04



#### Flask

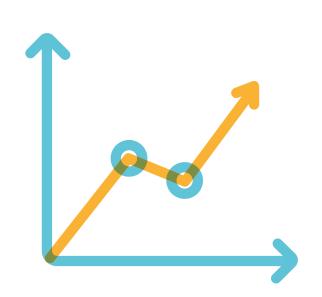
This is the web framework we have made use of to embed the model.

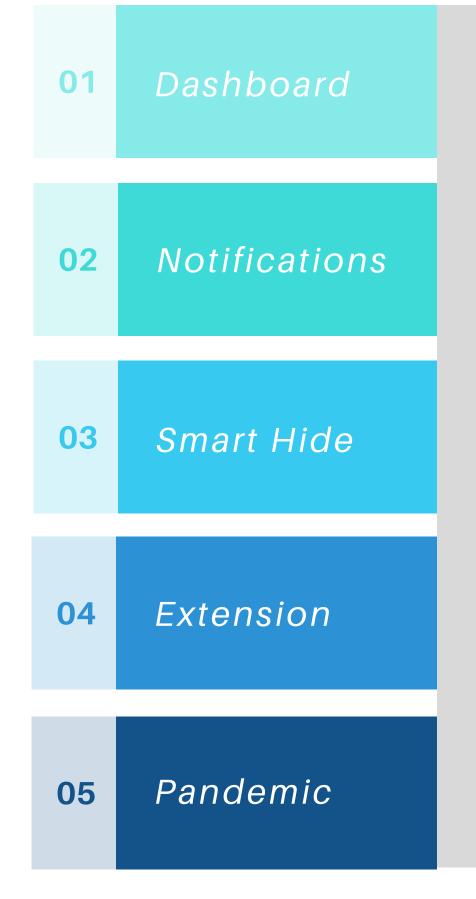
#### SQLite

This is a relational database management system that we use to store the data.



### Future Scope and Market Viability





Additional Dashboard features that would provide statistics to users about their posture.

The web app will send push notifications to users about their posture.

This feature will detect if you have been away from your computer and will not any reminders until you return.

We plan to add a google chrome extension that will alarm the user to correct his/her posture.

There has been an accelerated shift towards the digital world and triggered changes that will last long. In such a situation, maintaining correct posture is crucial for our physical health.

### THANK YOU!



