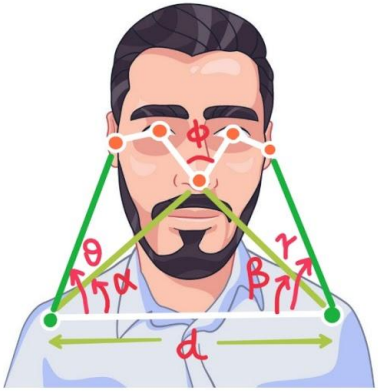
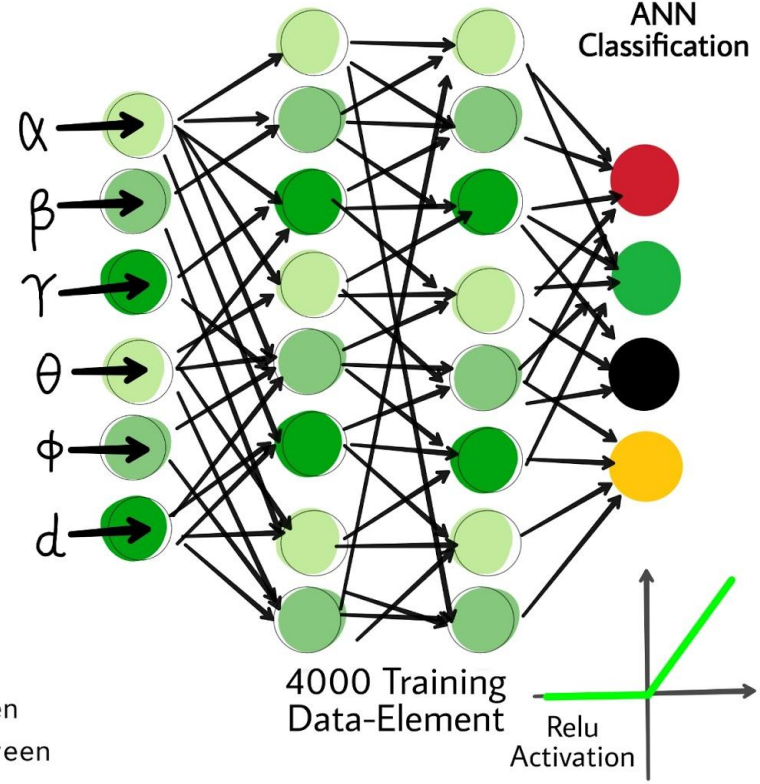
POSEMATE

TensorFlow.js
MoveNet 3.0
CNN Model
KeyPoints Coordinate
Detection

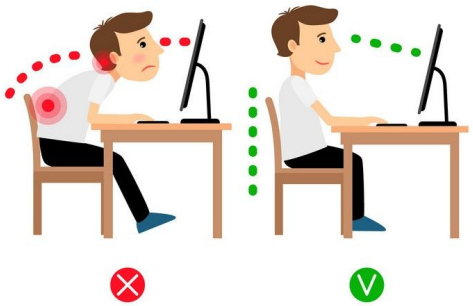


- : Wrong posture
- : Correct
- : Leaning towards screen
- : Leaning away from screen



Problem Statement

“The wrong Posture of Sitting with Minimal Breaks In this Digital Era with Average Screen-time More than 5 hours, are deteriorating Life quality Standards by leading to problems related to Spinal cord, gastrology, weakening of eyesight and many more consequences which eventually affects the work-life which we were onto”



- **"With the underlying Pandemic at place, Programmers/Students/working professionals are spending more Time with their laptop, working out day and night!”**

Our Hack

“A Robust AI-Driven System (Web App) That Monitors :

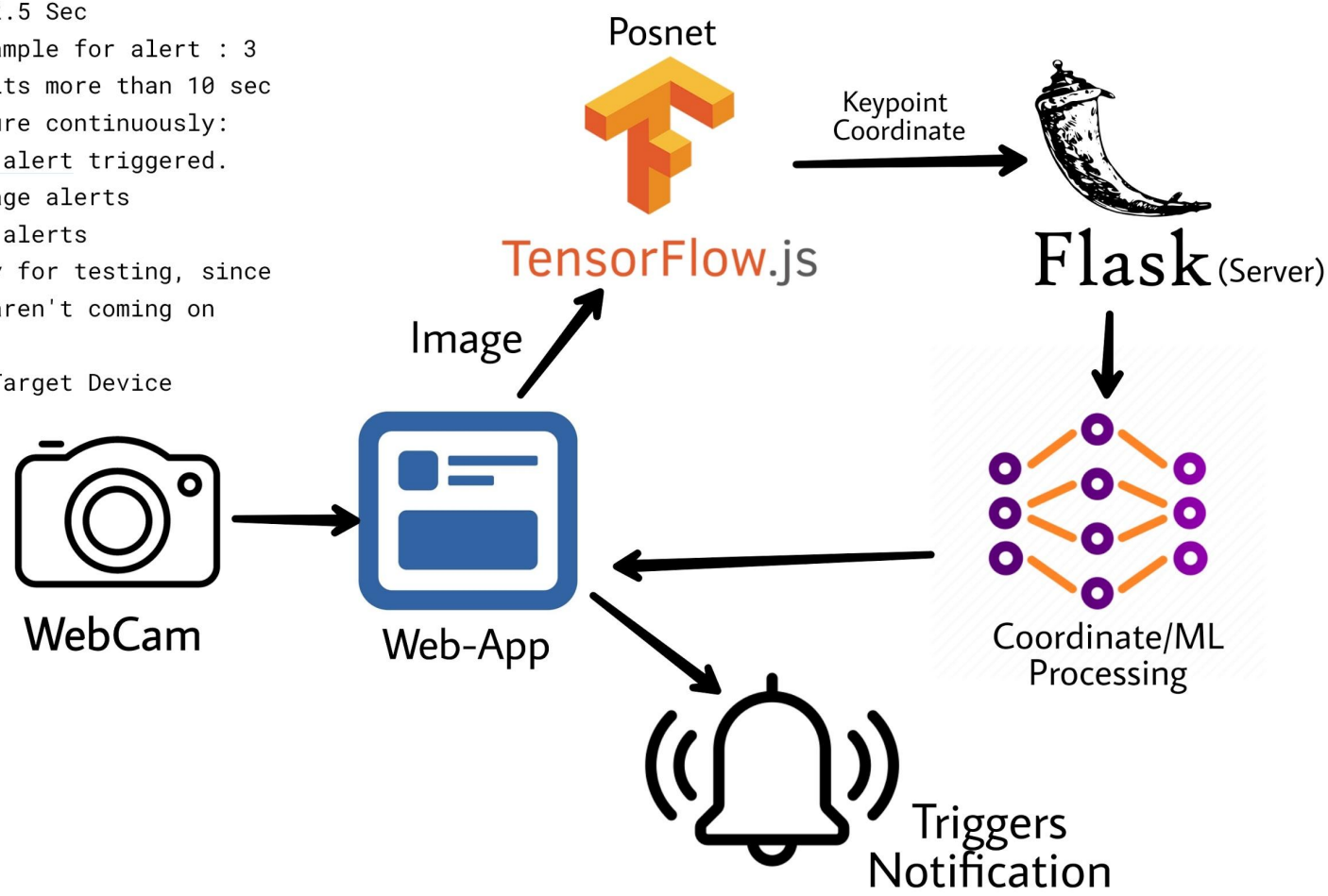
- Posture (7 Body KeyPoints)
- Relative Distance from Display

Which Notifies User when his/her Posture or Relative Distance is Wrong with a Suggestion on how to improve it! ”

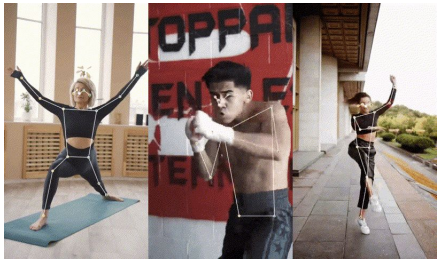
Using

- CNN And ANN Model
- Tensorflow.js/ Movenet3.0 with Client Side Rendering.

- Frame rate: 0.1 Sec
- Sample rate: 2.5 Sec
- Consecutive sample for alert : 3
- I.e if user sits more than 10 sec in wrong posture continuously: there will be alert triggered.
- LAPTOP : Message alerts
- PHONE : Sound alerts
- Phone: is only for testing, since notification aren't coming on minimising.
- Laptop: main Target Device

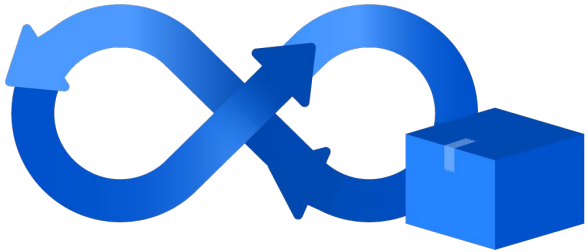


Key Features

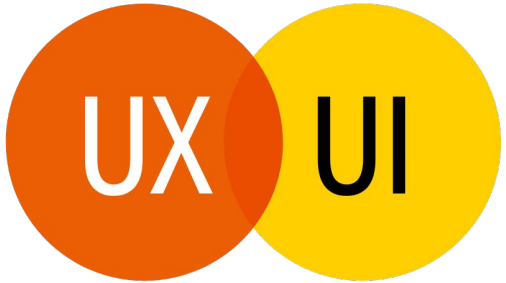


Pose-Detection with Movenet3.0 on Tensorflow.js

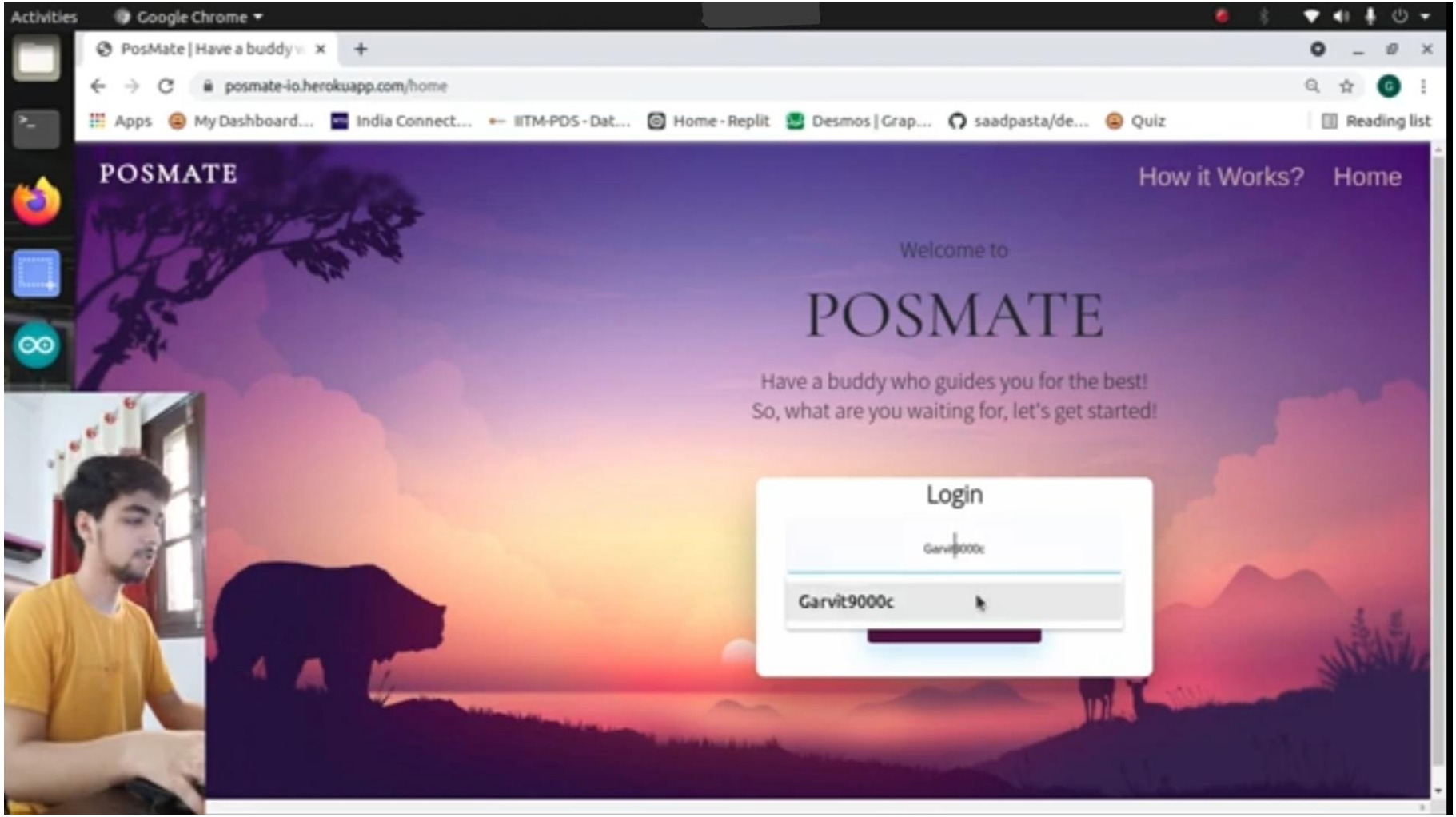
Client Side AI rendering,
Reducing Server Load Drastically

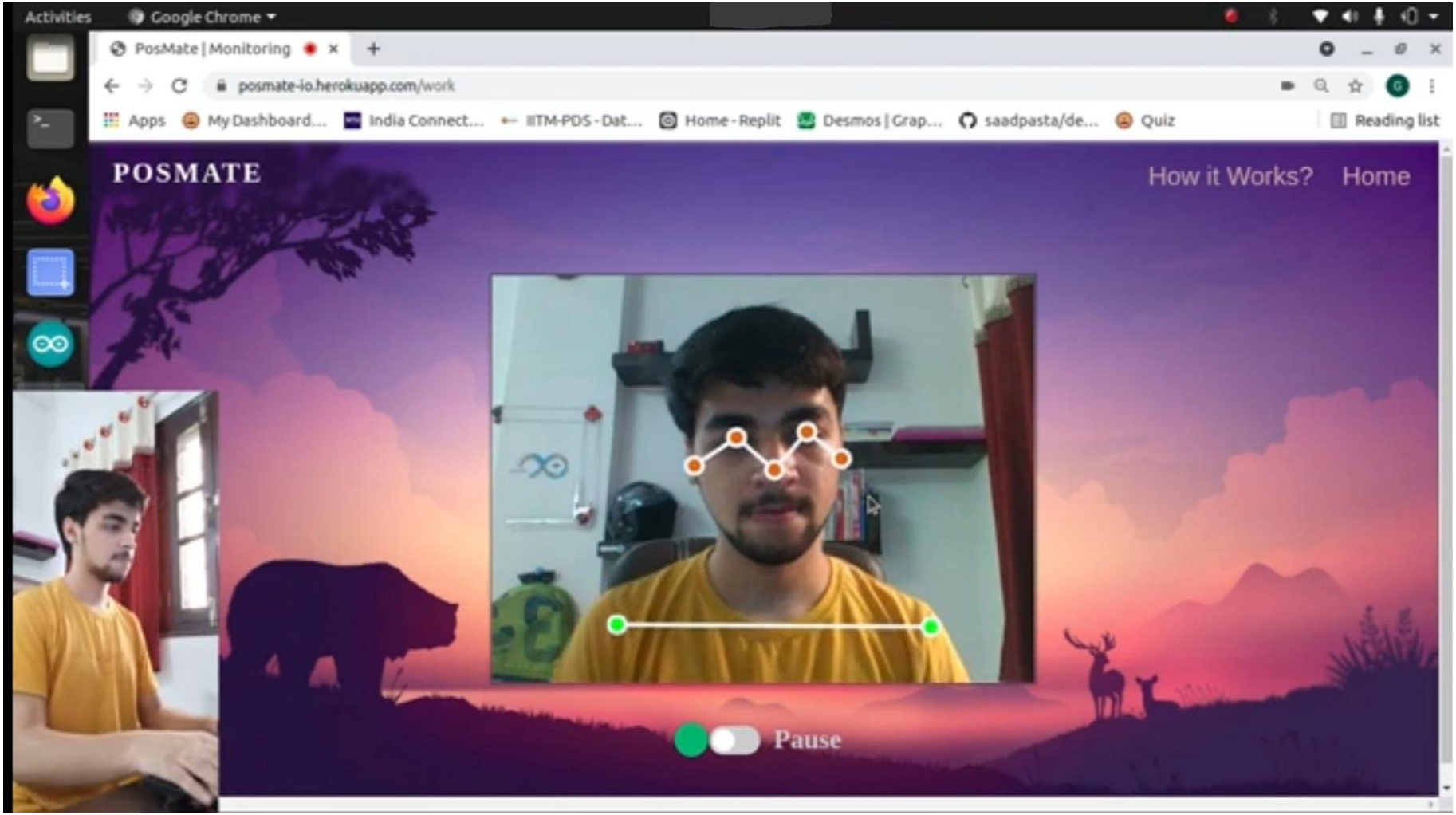


CI/CD Pipeline



Responsive UI with Minimalistic Design


Activities
Google Chrome
PosMate | Have a buddy
posmate-io.herokuapp.com/home
Apps
My Dashboard...
India Connect...
IITM-PDS - Dat...
Home - Replit
Desmos | Grap...
saadpasta/de...
Quiz
Reading list
POSMATE
How it Works?
Home
Welcome to
POSMATE
Have a buddy who guides you for the best!
So, what are you waiting for, let's get started!
Login
Garvit9000c
Garvit9000c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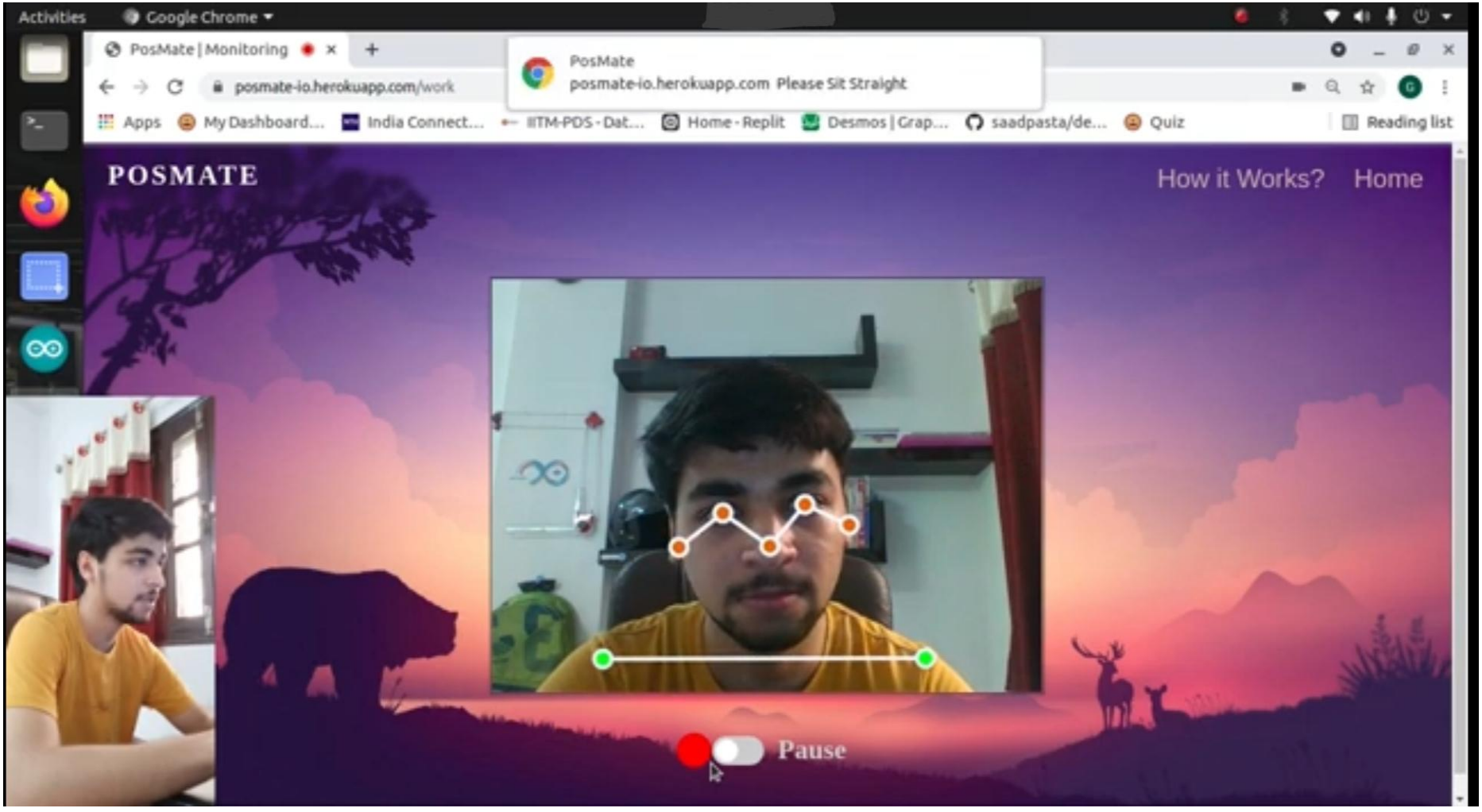
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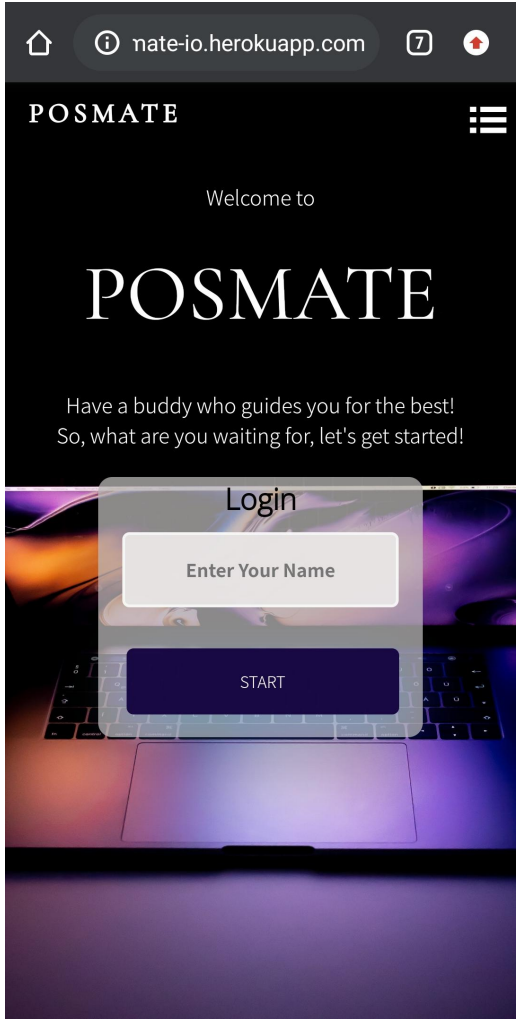
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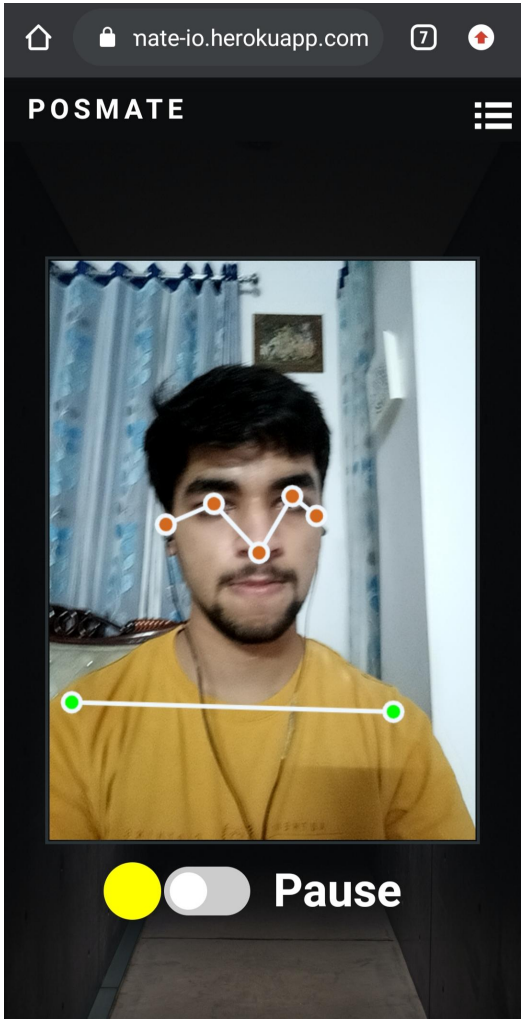
Enter Your Name
START


nate-io.herokuapp.com
POSMATE
Pause

Tech-Stack

- Front End: **HTML5 / CSS3 / Bootstrap / JavaScript / jQuery**
- Backend End: **Flask-python**
- Deployment: **Heroku**
- ML Models: **Tensorflow.js / SkLearn / Movenet**

ideas with impact