



CODE-A-THON

DRIVER FATIGUE ANALYSIS

BY : TEAM TECH LORDS

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OUR TEAM

PROBLEM STATEMENT

- Develop a system to detect driver fatigue from the camera feed of driver's face.
- Use computer vision based model to analyze driver's face and detect fatigue.
- Create an user-friendly UI to display the determined driver stats.



OUR WORK



Using dlib library, we created a algorithm that can recognize a driver's eye closing and yawing. Eye closing and yawing are indicators of driver fatigue.

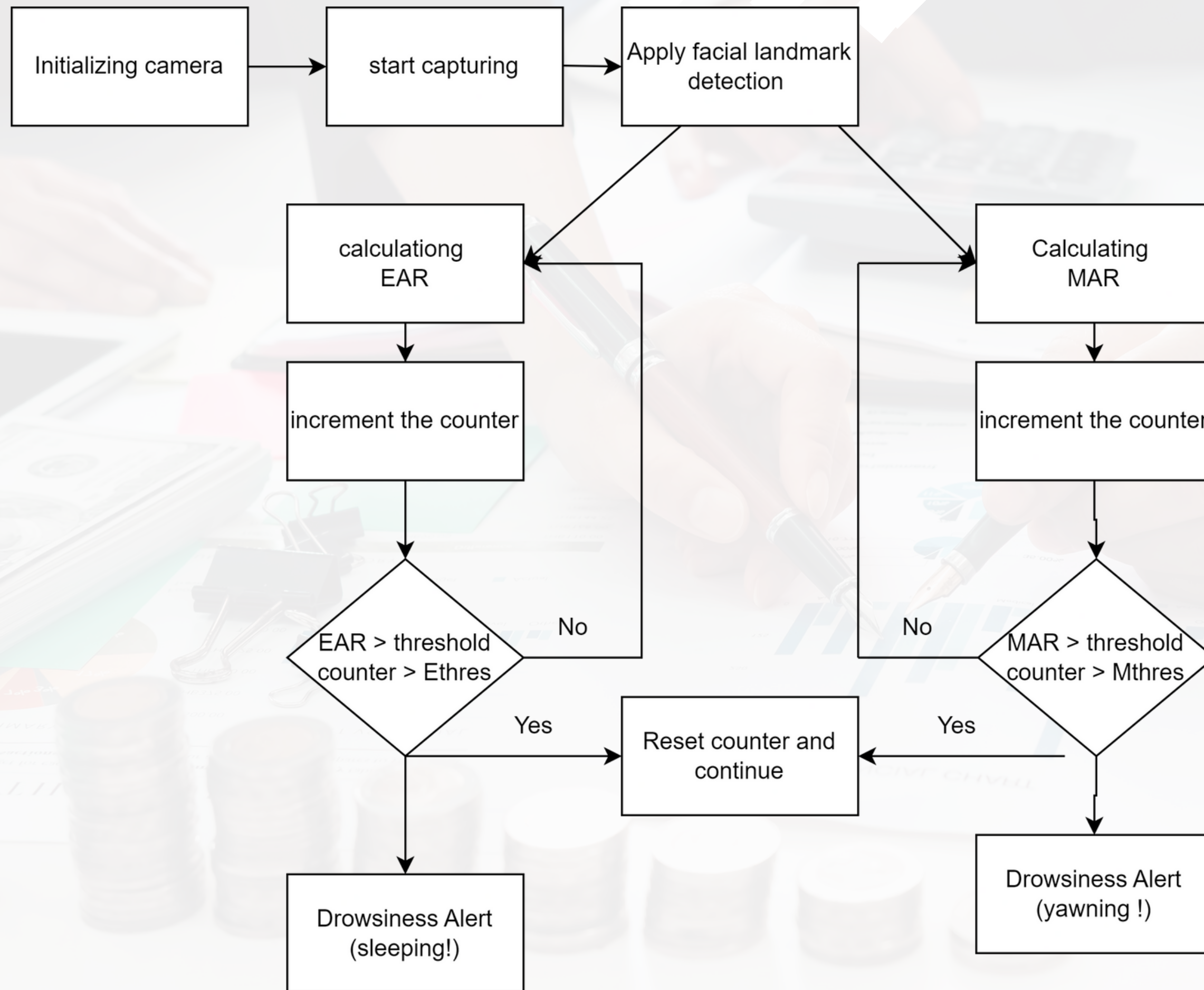


We created a user-friendly UI using HTML and CSS. The driver fatigue stats was obtained from an algorithm running in backend using flask and displayed.



The stats were uploaded to ThingSpeak IoT server for future analysis. Also, the history of fatigue was displayed in UI in the form of a graph.

ARCHITECTURE



TECH STACK

- ALGORITHM

- Python
- dlib
- openCV

- DATABASE

- ThingSpeak

- BACKEND

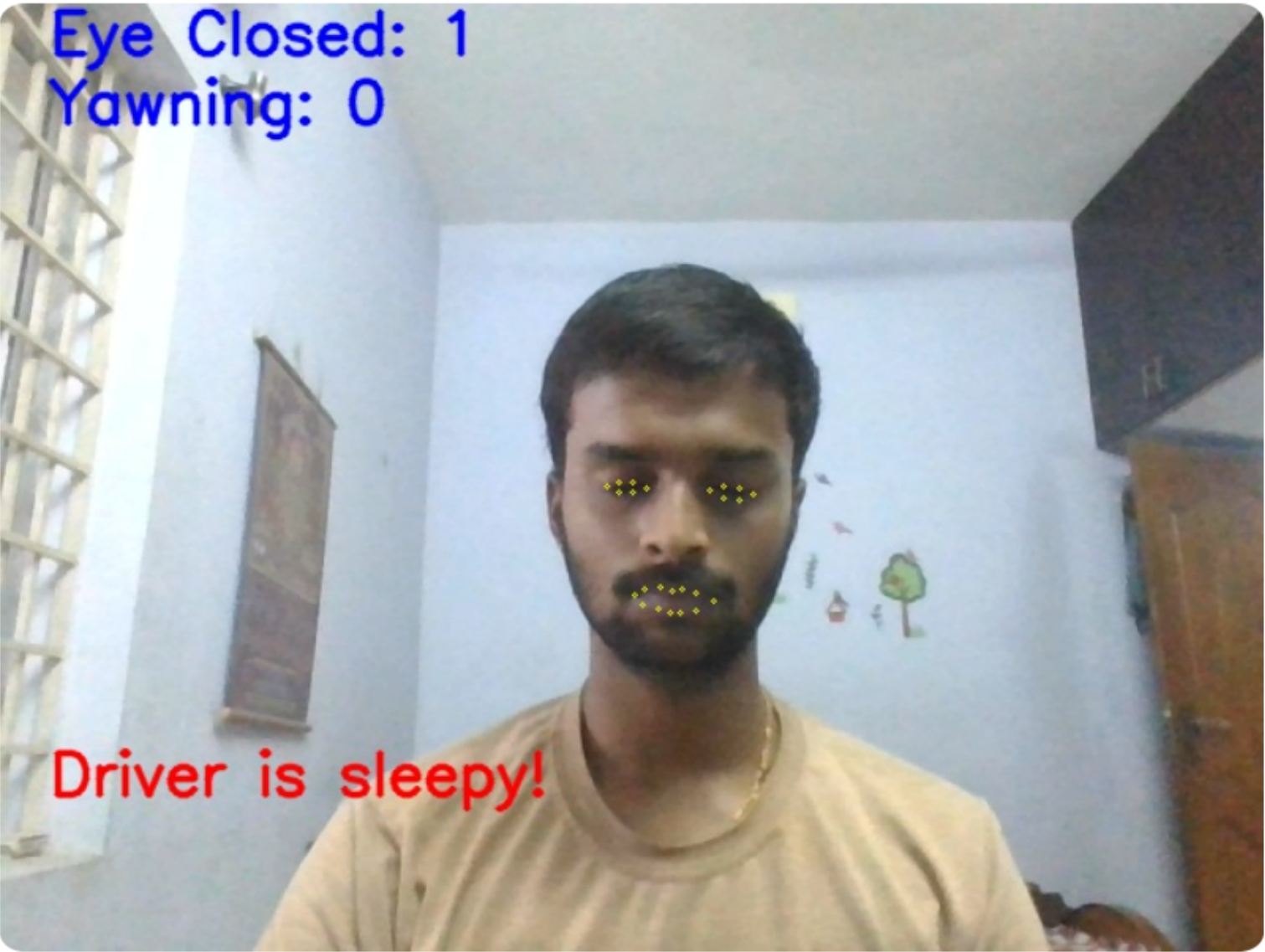
- Flask

- FRONTEND

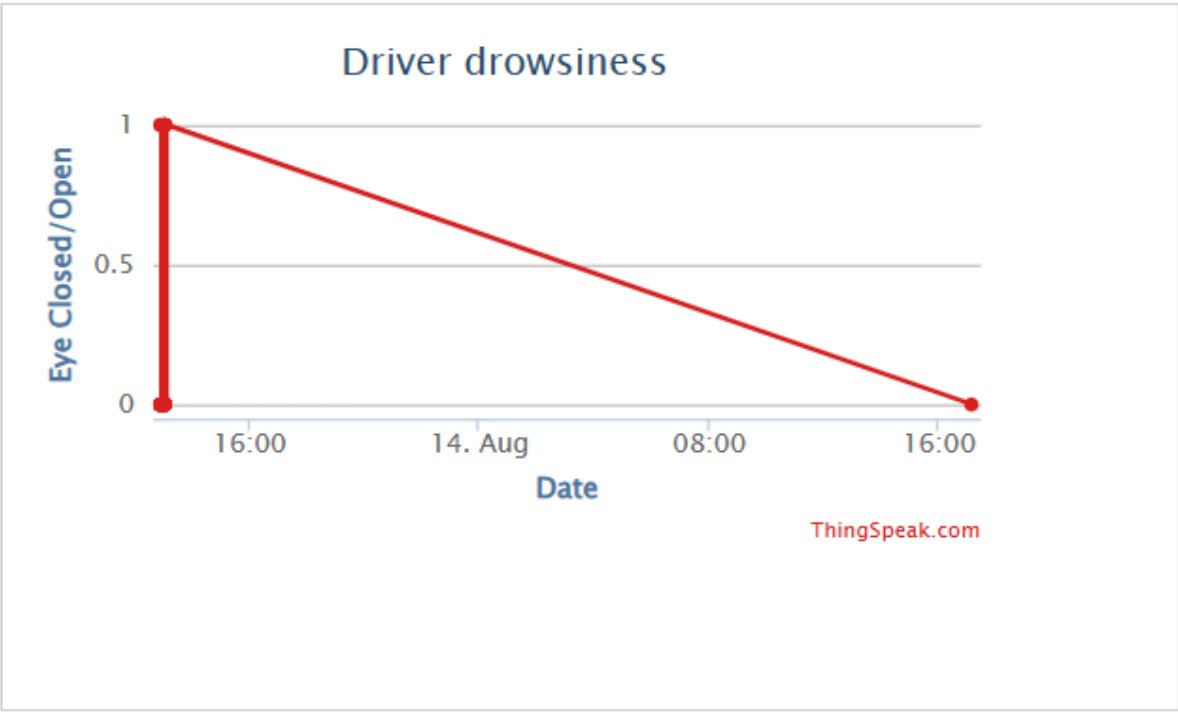
- HTML
- CSS

DEMO

Driver Fatigue Analysis



Analytics



SOURCE CODE

Github repo:

https://github.com/JashwinMari/Driver_FatigueDetection

THANK YOU

