DRIVER DROWSINESS DETECTION USING PYTHON

Project Diary

02/12/2021

→ Topic Selection
→ Feasibility Study

10/12/2021

→Abstract submission and Approval
→Reference papers:

22/12/2021

→First scrum meeting
Activities:
→Existing System
→Proposed System
→Use case diagram
→Data flow diagram

03/1/2021

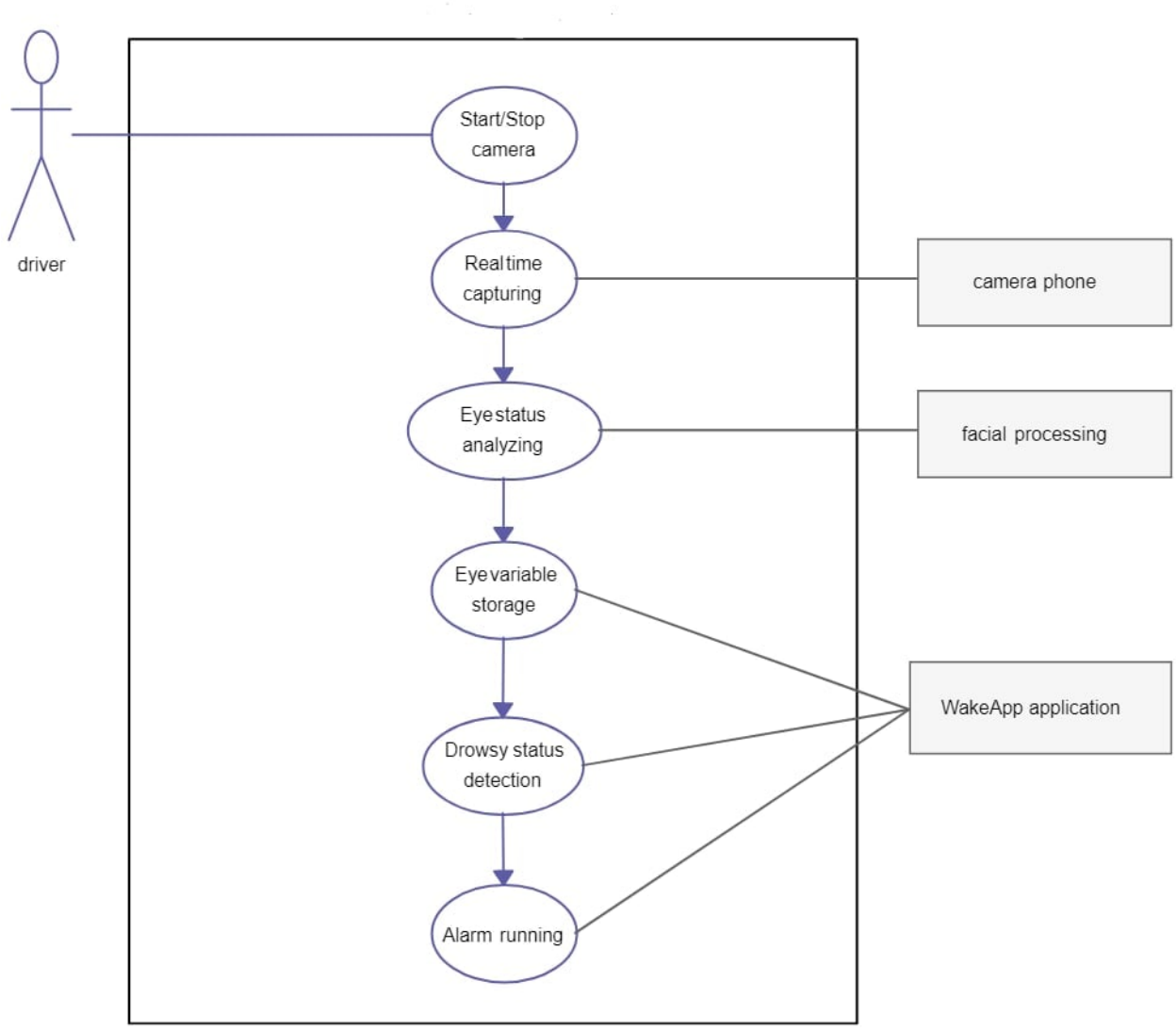
→ **Existing System:**

The existing system of driver drowsiness detection has the following disadvantages. Mainly, using two cameras in the system one for monitoring the head movement and the other one for facial expressions. The other disadvantage is aging of sensors and all these sensors are attached to the driver's body which may affect the driver. So to overcome all these disadvantages we designed a system in which a live camera is used for monitoring the driver's drowsiness and alerting the driver which reduces the road accidents.

→ **Proposed System:**

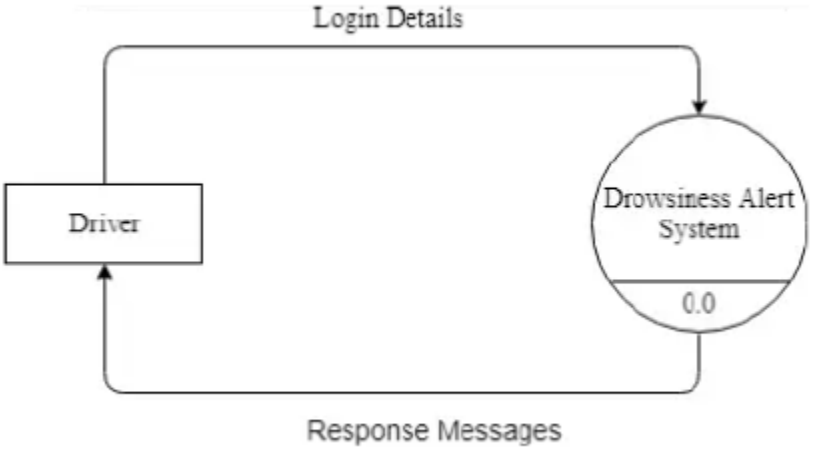
Road accidents have become a common phenomenon in this modern era. Reasons for road accidents are many.Driver drowsiness can be considered one of the major reasons. It creates a distraction which may lead to a road accident. In India about 37% vehicle accidents are caused due to the drowsiness of the driver. As a solution for this our project can detect the real time drowsiness of a driver and take immediate action to wake him up and get back to consciousness. The system works by always observing the eyes of the driver and checks for longer duration of closed eyes, if found the system will alert the driver thereby reducing the risk of accidents.

→ **Use case Diagram:**

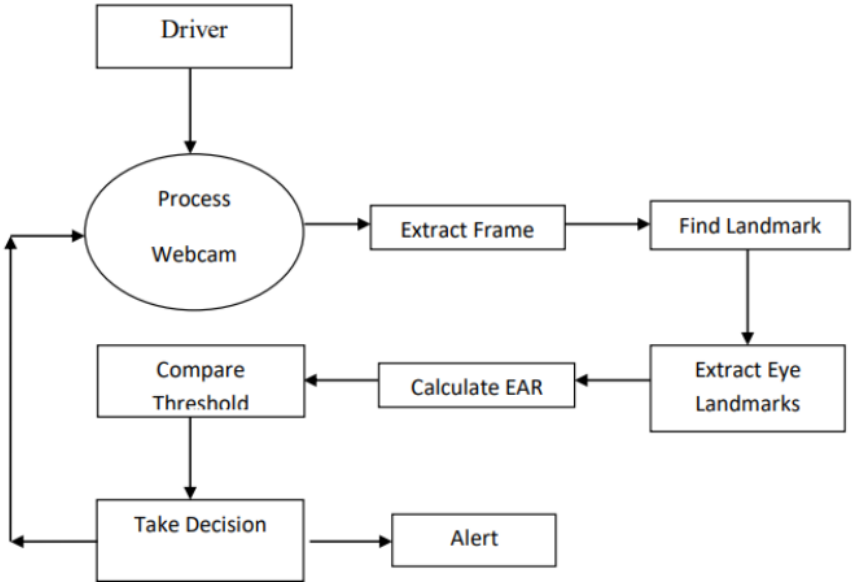


→ **Data Flow Diagram:**

Level 0 :



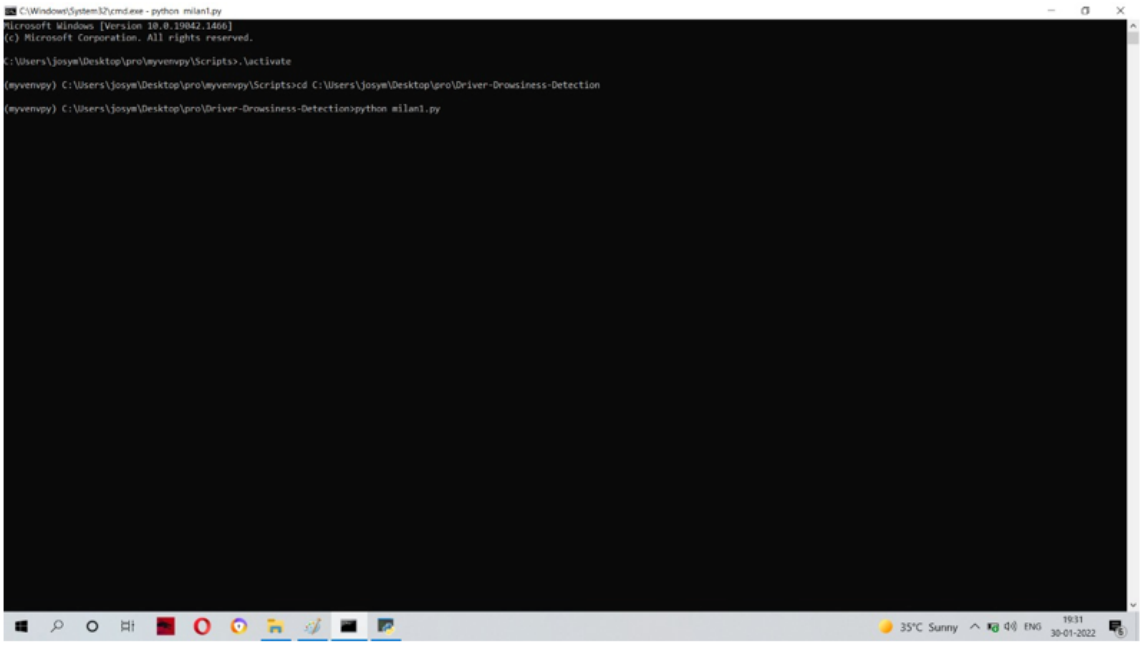
Level 1:

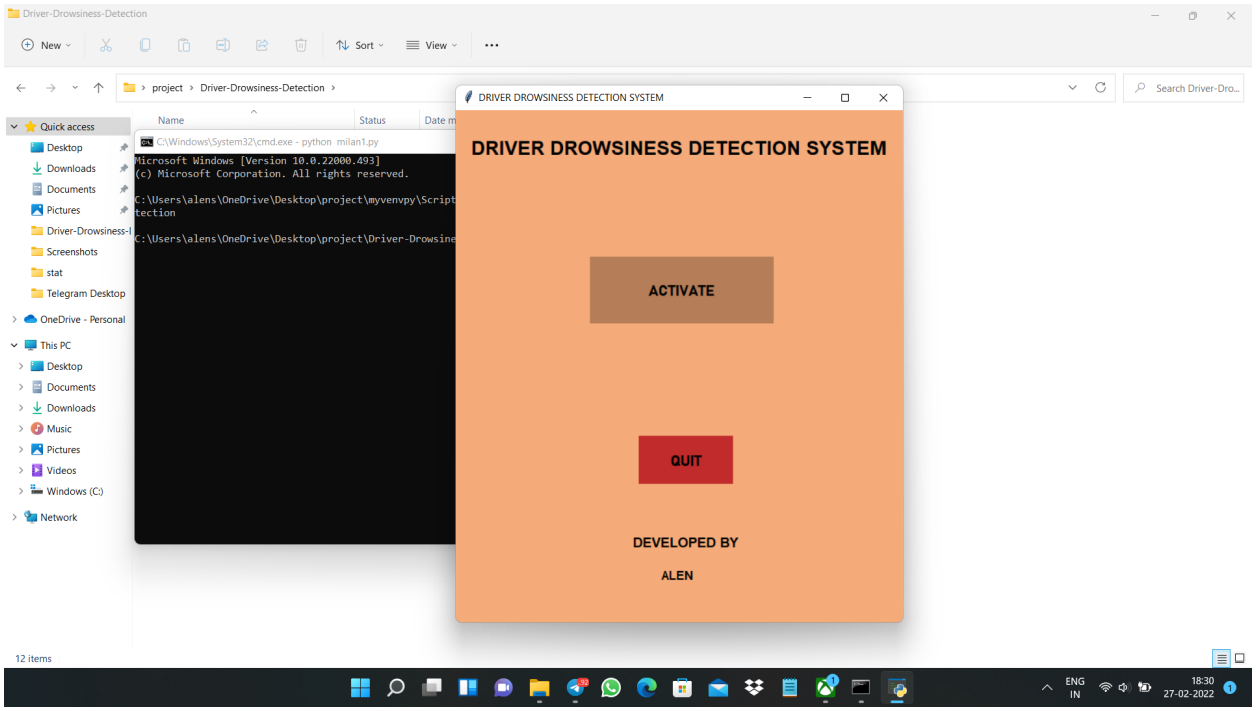


05/01/2022

→ 2nd Scrum Meeting
→ Interface Design Completed

INTERFACE





22/01/2022

→Implementation started

19/02/2022

→Testing Completed
→Final execution of the project

22/02/2022

→Last Scrum Meeting
→Explanation of final product to Guide

27/02/2022

→Completion of commits in Github

28/02/2022
→Final ppt presentation presented in front of the Guide