

# **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**

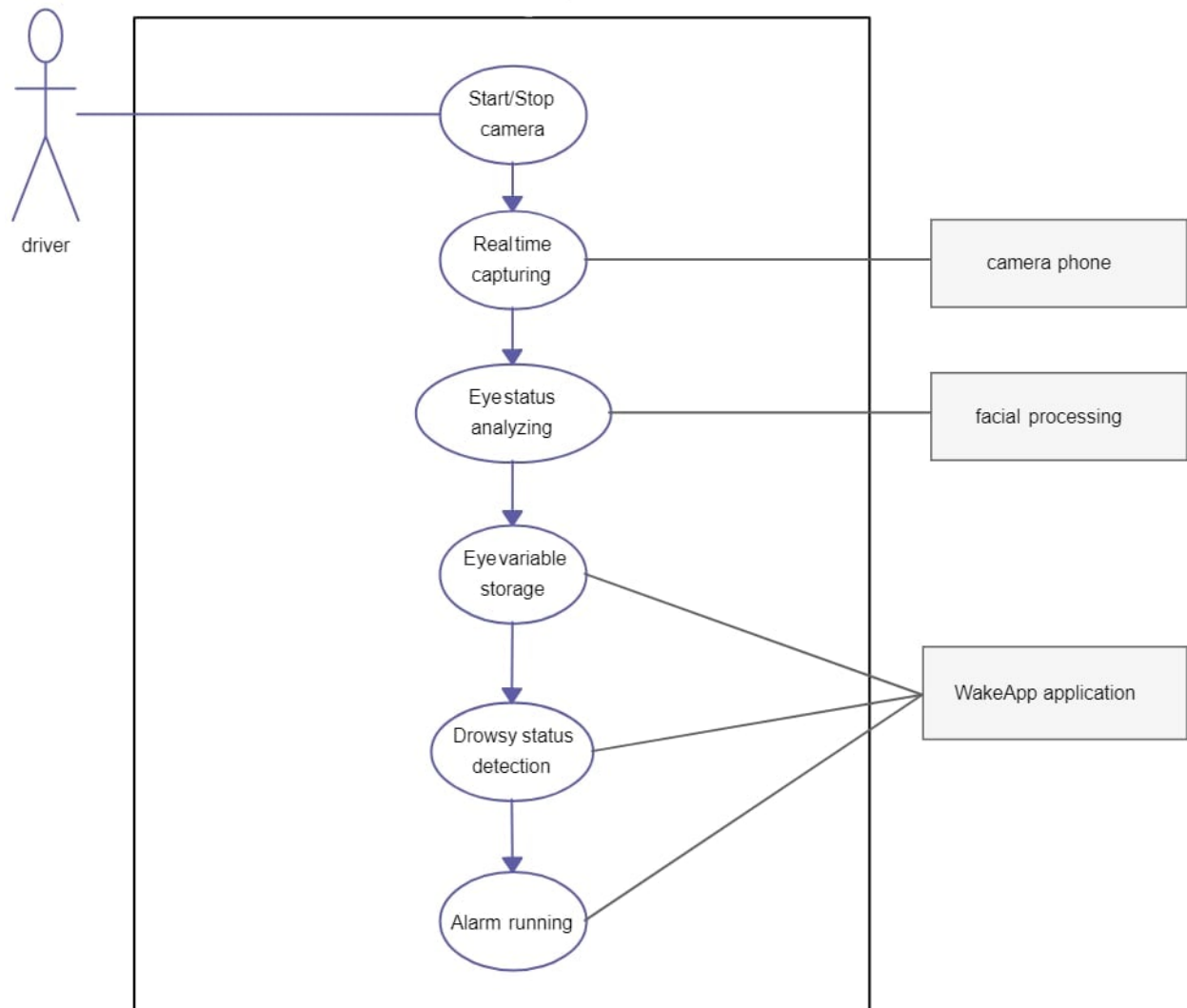
- **Existing System:**

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:**

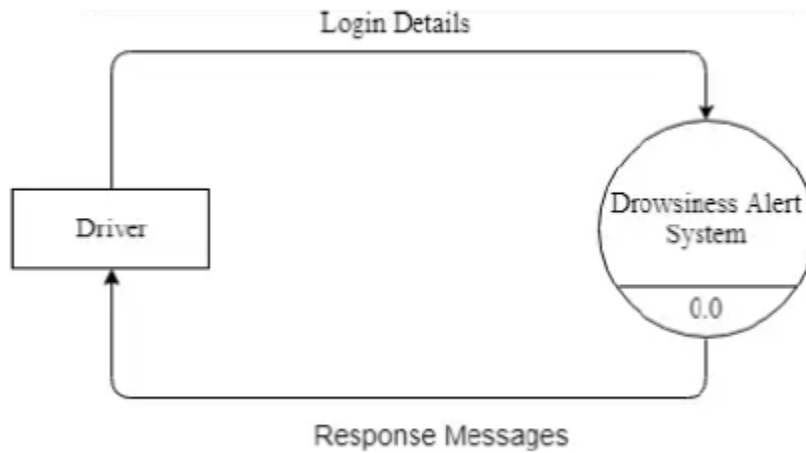
Road accidents have become a common phenomenon in this modern era. Reasons for road accidents are many. Driver drowsiness can be considered one of the major reasons. It creates a distraction which may lead to a road accident. In India about 37% vehicle accidents are caused due to the drowsiness of the 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:**

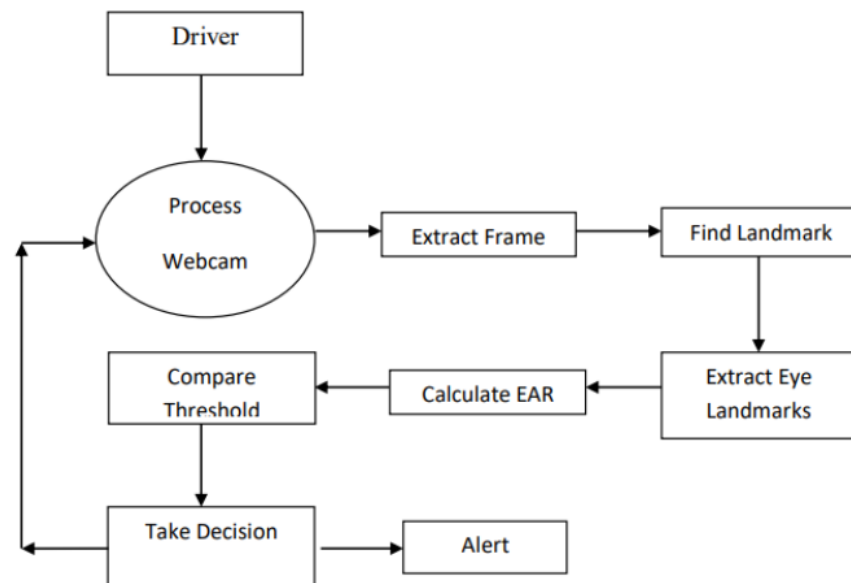


→ **Data Flow Diagram:**

**Level 0 :**



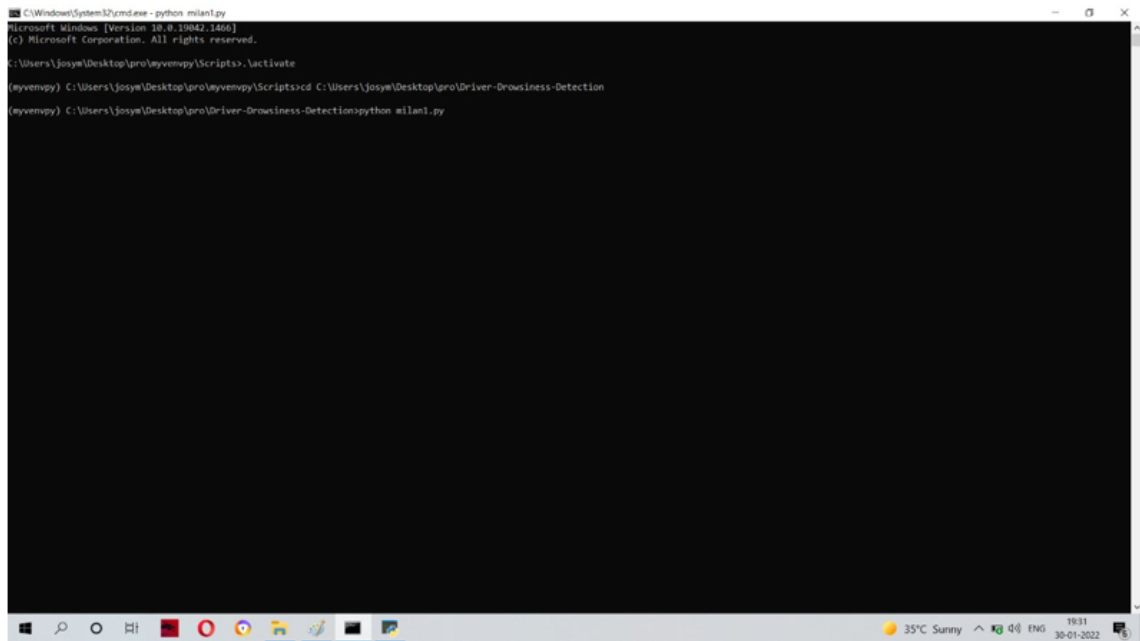
**Level 1:**



**05/01/2022**

- 2nd Scrum Meeting
- Interface Design Completed

## INTERFACE

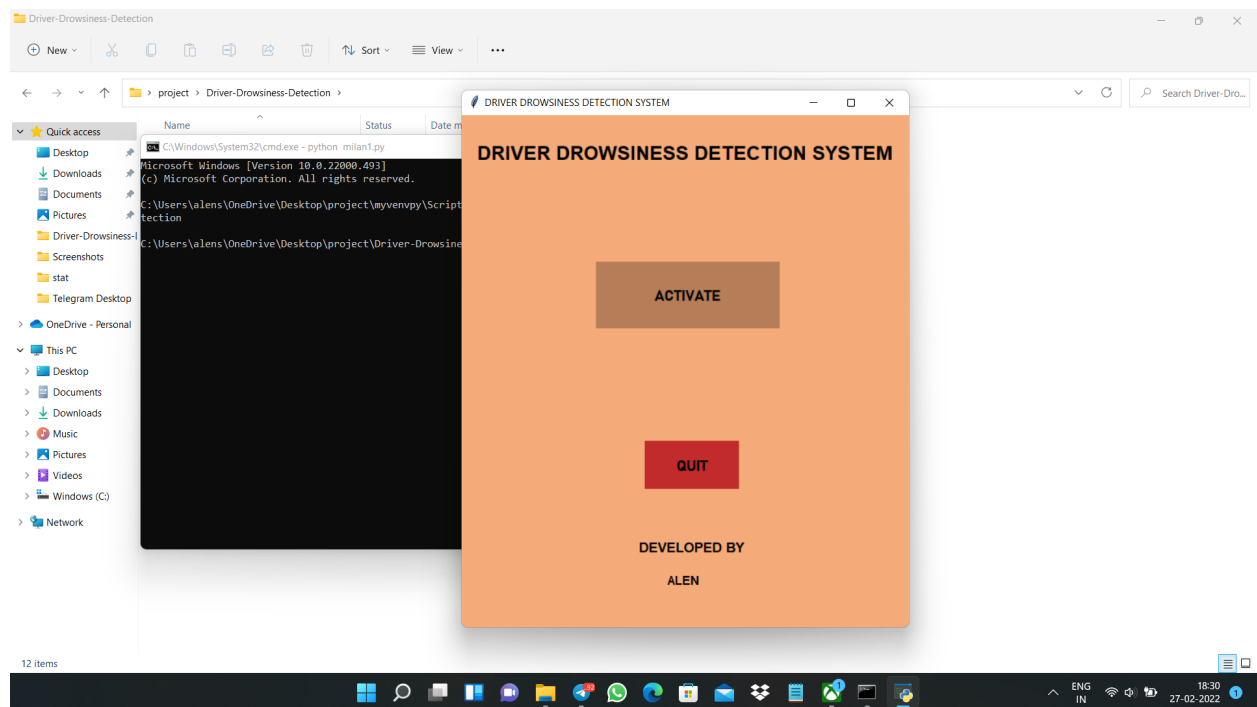


```
C:\Windows\System32\cmd.exe - python milan.py
Microsoft Windows [Version 10.0.19042.1466]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jose\Desktop\pro\myvenpy\Scripts> .\activate

(myvenpy) C:\Users\jose\Desktop\pro\myvenpy\Scripts> cd C:\Users\jose\Desktop\pro\Driver-Drowsiness-Detection
(myvenpy) C:\Users\jose\Desktop\pro\Driver-Drowsiness-Detection> python milan.py
```

The screenshot shows a Windows command prompt window with a black background and white text. The title bar indicates the command is 'C:\Windows\System32\cmd.exe - python milan.py'. The prompt shows the user has activated a virtual environment named 'myvenpy' and navigated to the directory 'C:\Users\jose\Desktop\pro\Driver-Drowsiness-Detection'. The final command entered is 'python milan.py'. The Windows taskbar at the bottom shows the system clock as 19:31 on 30-01-2022, with a weather widget indicating 35°C Sunny.



**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

