Project Development Phase
Performance Testing

Date	18 May 2023
Team ID	NM2023TMID01052
Project Name	Project - "AI Enabled Car Parking Using OpenCV"

Model Performance Testing:

Project team shall fill the following information in the model performance testing template.
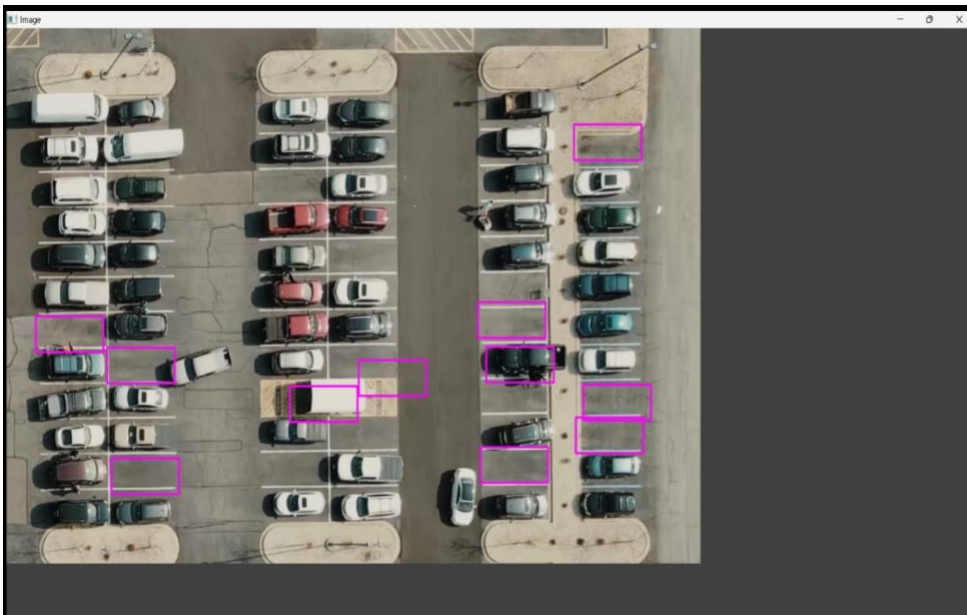
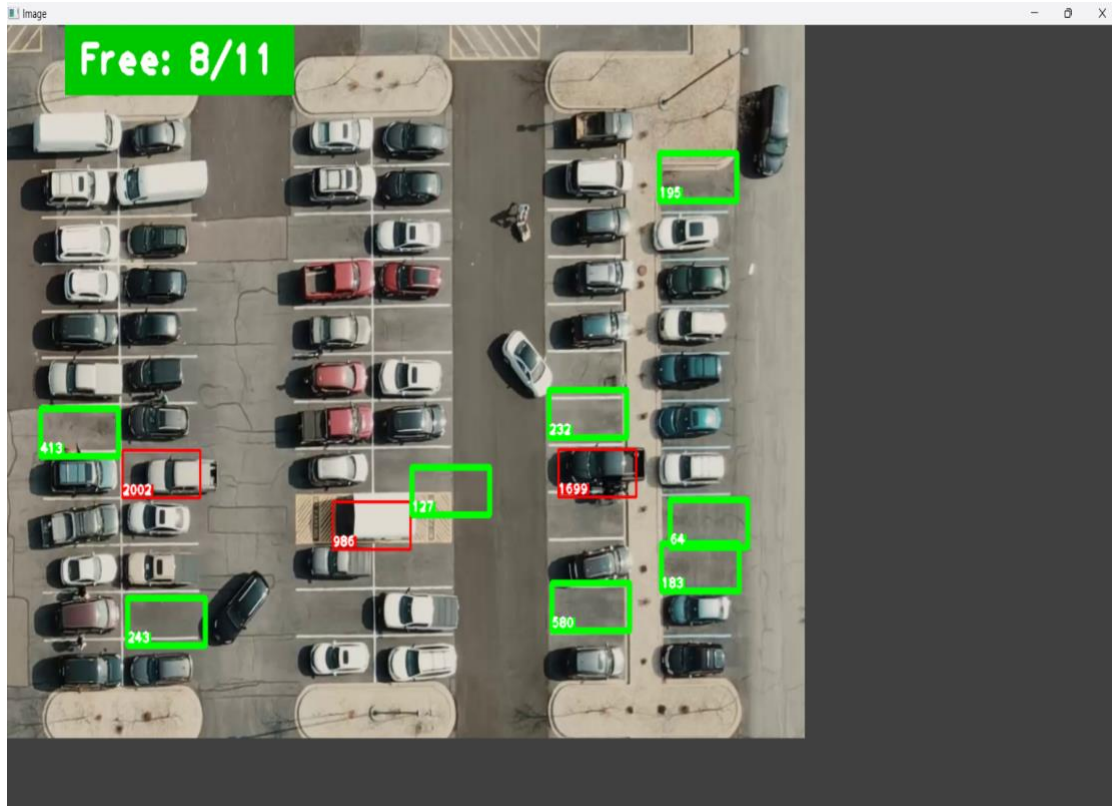| S.No	Parameter	Values	Screenshot
1.	Model Summary	In this model, it has **Data Acquisition**, **Object Detection, Vehicle Tracking**, **Parking Space Detection** and **Occupancy detection** through sensors.	Mentioned below
2.	Accuracy	Training Accuracy – **92%** Validation Accuracy -**94%**	Mentioned below
3.	Confidence Score (Only Yolo Projects)	Class Detected Confidence Score – **"if count < 900"**	Mentioned below

1. Model Summary

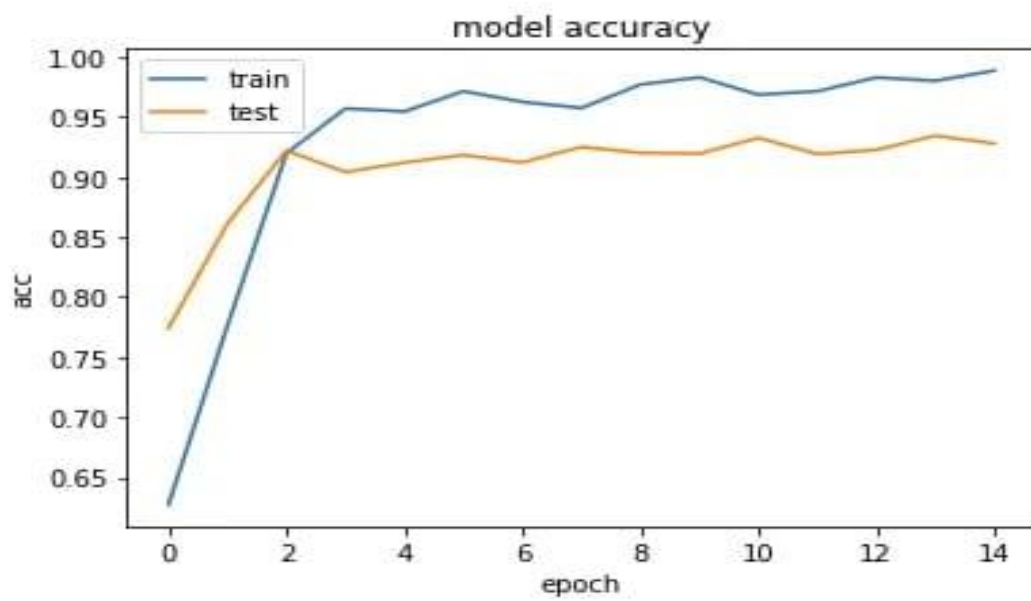- **Data Acquisition**

- **Object Detection and Vehicle Detection**

- **Parking Space Detection and occupancy detection**

2. Accuracy

3. Confidence Score

- **Class Detected**

```python
cap = cv2.VideoCapture('carPark.mp4')

with open('CarParkPos', 'rb') as f:
    posList = pickle.load(f)
width, height = 107, 48
```

```python
cap = cv2.VideoCapture('carPark.mp4')
width, height = 103, 43
with open('polygons', 'rb') as f:
    posList = pickle.load(f)
```

- **Confidence Score**

```python
if count < 900:
        color = (0, 200, 0)
        thic = 5
        spaces += 1

    else:
        color = (0, 0, 200)
        thic = 2
```

```python
if count < 900:
        color = (0, 255, 0)
        thickness = 5
        spaceCounter += 1
    else:
        color = (0, 0, 255)
        thickness = 2
```