**Project Development Phase**
**Model Performance Test**

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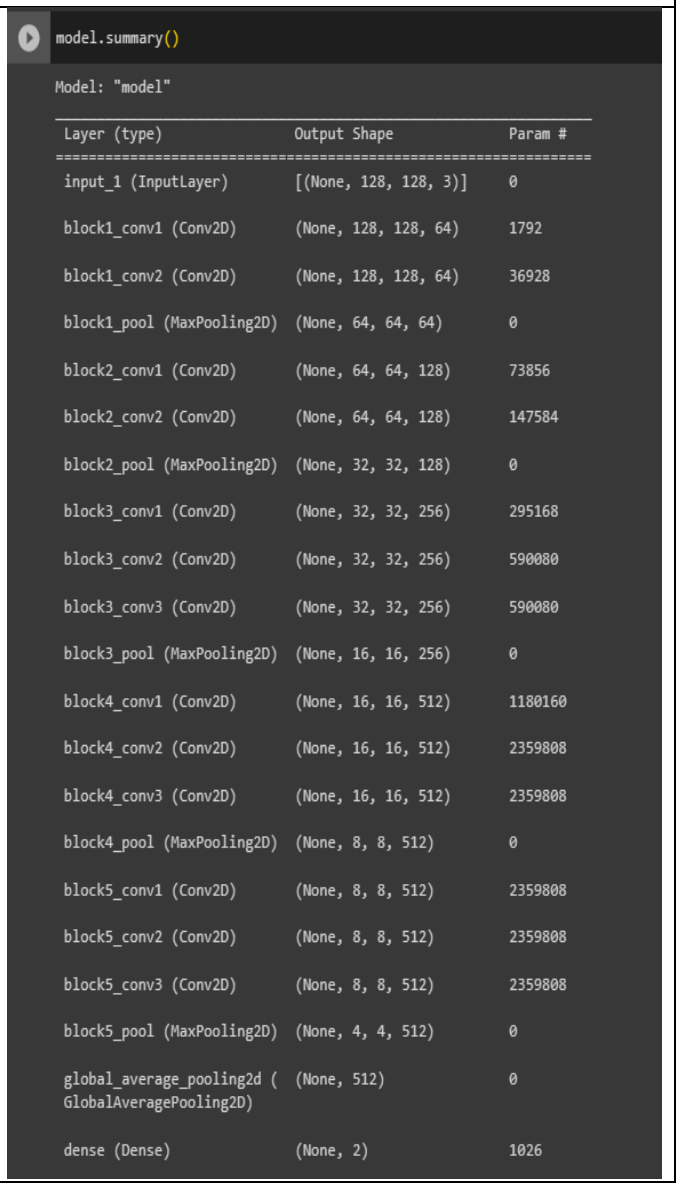
| Date | 20 November 2023 |
| Team ID | Team-593005 |
| Project Name | AI Enable car parking using OpenCV |
| Maximum Marks | 10 Marks |

**Model Performance Testing:**

Project team shall fill the following information in model performance testing template.

| S.No. | Parameter | Values | Screenshot |
|---|---|---|---|
| 1. | Model Summary | Model: "model"<br>_____<br>Layer (type) Output Shape Param #<br>=====<br>input_1 (InputLayer) [(None, 128, 128, 3)] 0<br>block1_conv1 (Conv2D) (None, 128, 128, 64) 1792<br>block1_conv2 (Conv2D) (None, 128, 128, 64) 36928<br>block1_pool (MaxPooling2D) (None, 64, 64, 64) 0<br>block2_conv1 (Conv2D) (None, 64, 64, 128) 73856 |  |

```
model.summary()

Model: "model"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 input_1 (InputLayer)        [(None, 128, 128, 3)]     0

 block1_conv1 (Conv2D)       (None, 128, 128, 64)      1792

 block1_conv2 (Conv2D)       (None, 128, 128, 64)      36928

 block1_pool (MaxPooling2D)  (None, 64, 64, 64)        0

 block2_conv1 (Conv2D)       (None, 64, 64, 128)       73856

 block2_conv2 (Conv2D)       (None, 64, 64, 128)       147584

 block2_pool (MaxPooling2D)  (None, 32, 32, 128)       0

 block3_conv1 (Conv2D)       (None, 32, 32, 256)       295168

 block3_conv2 (Conv2D)       (None, 32, 32, 256)       590080

 block3_conv3 (Conv2D)       (None, 32, 32, 256)       590080

 block3_pool (MaxPooling2D)  (None, 16, 16, 256)       0

 block4_conv1 (Conv2D)       (None, 16, 16, 512)       1180160

 block4_conv2 (Conv2D)       (None, 16, 16, 512)       2359808

 block4_conv3 (Conv2D)       (None, 16, 16, 512)       2359808

 block4_pool (MaxPooling2D)  (None, 8, 8, 512)         0

 block5_conv1 (Conv2D)       (None, 8, 8, 512)         2359808

 block5_conv2 (Conv2D)       (None, 8, 8, 512)         2359808

 block5_conv3 (Conv2D)       (None, 8, 8, 512)         2359808

 block5_pool (MaxPooling2D)  (None, 4, 4, 512)         0

 global_average_pooling2d (  (None, 512)               0
 GlobalAveragePooling2D)

 dense (Dense)               (None, 2)                 1026
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|---|---|---|---|
| | | block2_conv2 (Conv2D) (None, 64, 64, 128) 147584<br><br>block2_pool (MaxPooling2D) (None, 32, 32, 128) 0<br><br>block3_conv1 (Conv2D) (None, 32, 32, 256) 295168<br><br>block3_conv2 (Conv2D) (None, 32, 32, 256) 590080<br><br>block3_conv3 (Conv2D) (None, 32, 32, 256) 590080<br><br>block3_pool (MaxPooling2D) (None, 16, 16, 256) 0<br><br>block4_conv1 (Conv2D) (None, 16, 16, 512) 1180160<br><br>block4_conv2 (Conv2D) (None, 16, 16, 512) 2359808<br><br>block4_conv3 (Conv2D) (None, 16, 16, 512) 2359808<br><br>block4_pool (MaxPooling2D) (None, 8, 8, 512) 0<br><br>block5_conv1 (Conv2D) (None, 8, 8, 512) 2359808 | |

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|---|---|---|---|
| | | block5_conv2 (Conv2D) (None, 8, 8, 512) 2359808<br><br>block5_conv3 (Conv2D) (None, 8, 8, 512) 2359808<br><br>block5_pool (MaxPooling2D) (None, 4, 4, 512) 0<br><br>global_average_pooling2d ( (None, 512) 0<br><br>GlobalAveragePooling2D)<br><br>dense (Dense) (None, 2) 1026<br><br>==========<br>Total params: 14715714 (56.14 MB)<br>Trainable params: 12980226 (49.52 MB)<br>Non-trainable params: 1735488 (6.62 MB) | |
| 2. | Accuracy | Training Accuracy – 0.94<br><br>Validation Accuracy – 0.89 | loss: 0.1423 - accuracy: 0.9423 -<br><br>val_loss: 0.3345 - val_accuracy: 0.8963 |
| 3. | Confidence Score (Only Yolo Projects) | Class Detected -<br><br>Confidence Score - | This is not YOLO project |