# Project Development Phase
## Model Performance Test

| Date | 14 September 2022 |
|------|-------------------|
| Team ID | EXT2023TMID592333 |
| Project Name | Microbe Mapper: Visual Recognition Of Micro-Organisms |
| 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 | **Total params: 23851784 (90.99 MB)**<br><br>**Trainable params: 23817352 (90.86 MB)**<br><br>**Non-trainable params: 34432 (134.50 KB)** |  |

| 2. | Accuracy | Training Accuracy - 88.94 | Epoch 4/50<br>6/6 [==============================] - 144s 23s/step - loss: 1.0861 - accuracy: 0.6275 - val_loss: 1.1117 - val_accuracy: 0.6267<br>Epoch 5/50<br>6/6 [==============================] - 150s 24s/step - loss: 0.9556 - accuracy: 0.6793 - val_loss: 1.0727 - val_accuracy: 0.6667<br>Epoch 6/50<br>6/6 [==============================] - 151s 26s/step - loss: 0.8529 - accuracy: 0.7353 - val_loss: 1.0097 - val_accuracy: 0.6800<br>Epoch 7/50<br>6/6 [==============================] - 144s 23s/step - loss: 0.7460 - accuracy: 0.7689 - val_loss: 0.9195 - val_accuracy: 0.7067<br>Epoch 8/50<br>6/6 [==============================] - 151s 24s/step - loss: 0.6453 - accuracy: 0.7955 - val_loss: 0.9761 - val_accuracy: 0.6667<br>Epoch 9/50<br>6/6 [==============================] - 151s 24s/step - loss: 0.6187 - accuracy: 0.7969 - val_loss: 0.9032 - val_accuracy: 0.7867<br>Epoch 10/50<br>6/6 [==============================] - 150s 24s/step - loss: 0.5671 - accuracy: 0.8347 - val_loss: 0.9420 - val_accuracy: 0.7600<br>Epoch 11/50<br>6/6 [==============================] - 145s 23s/step - loss: 0.5512 - accuracy: 0.8347 - val_loss: 0.8842 - val_accuracy: 0.7333<br>Epoch 12/50<br>6/6 [==============================] - 158s 26s/step - loss: 0.4840 - accuracy: 0.8571 - val_loss: 0.9960 - val_accuracy: 0.7067<br>Epoch 13/50<br>6/6 [==============================] - 149s 24s/step - loss: 0.4451 - accuracy: 0.8613 - val_loss: 0.9542 - val_accuracy: 0.6933<br>Epoch 14/50<br>6/6 [==============================] - 144s 23s/step - loss: 0.3890 - accuracy: 0.8894 - val_loss: 0.9249 - val_accuracy: 0.7333 |
| | | Validation Accuracy - 73.00 | |
| 3. | Confidence Score (Only Yolo Projects) | Class Detected - NA<br><br>Confidence Score - NA | Not Applicable |

## Screenshot:

## Model Summary

0.6400
Epoch 4/50
6/6 [==============================] - 144s 23s/step - loss: 1.0861 - accuracy: 0.6275 - val_loss: 1.1117 - val_accuracy: 0.6267
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In [ ]:  pd.DataFrame(history.history).plot(figsize=(8.5))

# Accuracy

```
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```
In [ ]:  pd.DataFrame(history.history).plot(figsize=(8,5))
```