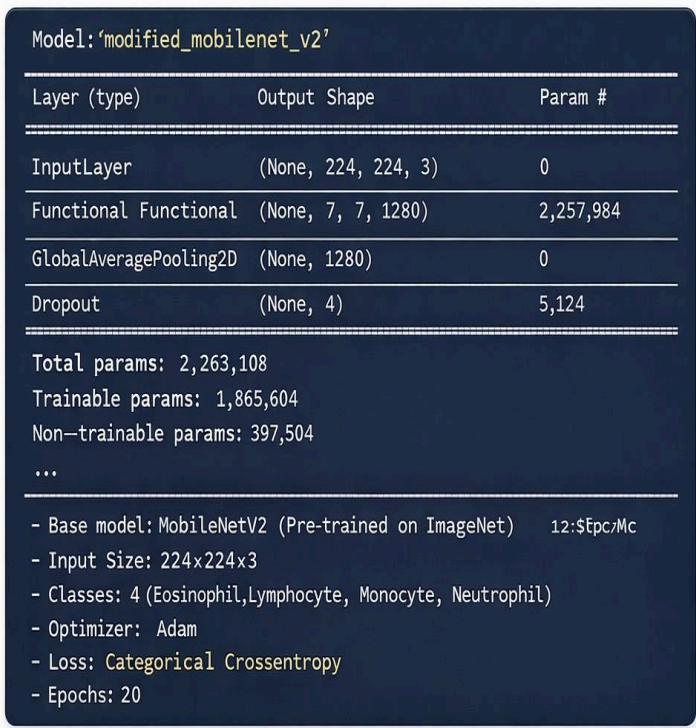


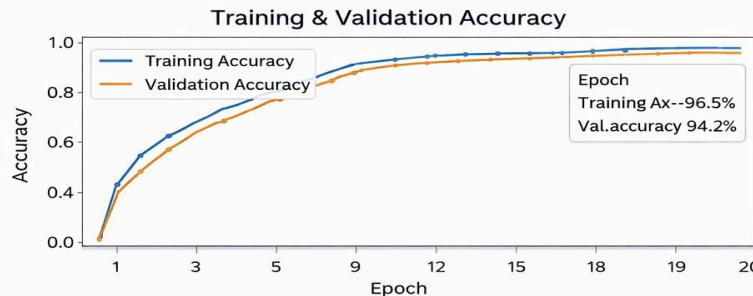
Project Development Phase Model Performance Test

| | |
|---------------|--|
| Date | 15 February 2026 |
| Team ID | LTVIP2026TMIDS49741 |
| Project Name | Project - HematoVision: Advanced Blood Cell Classification Using Transfer Learning |
| Maximum Marks | |

Model Performance Testing:

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

| S.No. | Parameter | Values | Screenshot |
|-------|---------------|---|---|
| 1. | Model Summary | Base Model: MobileNetV2 (Pre-trained on ImageNet) Input Size: 224x224x3 Classes: 4 (Eosinophil, Lymphocyte, Monocyte, Neutrophil) Optimizer: Adam Loss: Categorical Crossentropy Epochs: 20 |  <pre> Model: 'modified_mobilenet_v2' Layer (type) Output Shape Param # ----- InputLayer (None, 224, 224, 3) 0 Functional Functional (None, 7, 7, 1280) 2,257,984 GlobalAveragePooling2D (None, 1280) 0 Dropout (None, 4) 5,124 Total params: 2,263,108 Trainable params: 1,865,604 Non-trainable params: 397,504 ... - Base model: MobileNetV2 (Pre-trained on ImageNet) 12:\$Epc/Mc - Input Size: 224x224x3 - Classes: 4 (Eosinophil,Lymphocyte, Monocyte, Neutrophil) - Optimizer: Adam - Loss: Categorical Crossentropy - Epochs: 20 </pre> |

| 2. | Accuracy | <div>- Training Accuracy – 96.5%</div> <div>-Validation Accuracy – 94.2%</div> | <div><div>Training & Validation Accuracy</div><table><tr><th>Epoch</th><th>Training Accuracy</th><th>Validation Accuracy</th></tr><tr><td>1</td><td>0.42</td><td>0.38</td></tr><tr><td>2</td><td>0.55</td><td>0.48</td></tr><tr><td>3</td><td>0.65</td><td>0.58</td></tr><tr><td>4</td><td>0.72</td><td>0.65</td></tr><tr><td>5</td><td>0.78</td><td>0.72</td></tr><tr><td>6</td><td>0.82</td><td>0.78</td></tr><tr><td>7</td><td>0.85</td><td>0.82</td></tr><tr><td>8</td><td>0.88</td><td>0.85</td></tr><tr><td>9</td><td>0.90</td><td>0.88</td></tr><tr><td>10</td><td>0.91</td><td>0.90</td></tr><tr><td>11</td><td>0.92</td><td>0.91</td></tr><tr><td>12</td><td>0.93</td><td>0.92</td></tr><tr><td>13</td><td>0.94</td><td>0.93</td></tr><tr><td>14</td><td>0.945</td><td>0.935</td></tr><tr><td>15</td><td>0.95</td><td>0.94</td></tr><tr><td>16</td><td>0.955</td><td>0.945</td></tr><tr><td>17</td><td>0.958</td><td>0.948</td></tr><tr><td>18</td><td>0.96</td><td>0.95</td></tr><tr><td>19</td><td>0.962</td><td>0.952</td></tr><tr><td>20</td><td>0.965</td><td>0.942</td></tr></table></div> | Epoch | Training Accuracy | Validation Accuracy | 1 | 0.42 | 0.38 | 2 | 0.55 | 0.48 | 3 | 0.65 | 0.58 | 4 | 0.72 | 0.65 | 5 | 0.78 | 0.72 | 6 | 0.82 | 0.78 | 7 | 0.85 | 0.82 | 8 | 0.88 | 0.85 | 9 | 0.90 | 0.88 | 10 | 0.91 | 0.90 | 11 | 0.92 | 0.91 | 12 | 0.93 | 0.92 | 13 | 0.94 | 0.93 | 14 | 0.945 | 0.935 | 15 | 0.95 | 0.94 | 16 | 0.955 | 0.945 | 17 | 0.958 | 0.948 | 18 | 0.96 | 0.95 | 19 | 0.962 | 0.952 | 20 | 0.965 | 0.942 |
|-----------|-------------------------------|--|---|-------|-------------------|---------------------|----------------------|-----------|--------|--------------|-----------------|-----------|--------|--------------|-----------------|-----------|--------|--------------|-----------------|------|------|---|------|------|---|------|------|---|------|------|---|------|------|----|------|------|----|------|------|----|------|------|----|------|------|----|-------|-------|----|------|------|----|-------|-------|----|-------|-------|----|------|------|----|-------|-------|----|-------|-------|
| Epoch | Training Accuracy | Validation Accuracy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0.42 | 0.38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 0.55 | 0.48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 0.65 | 0.58 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 0.72 | 0.65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 0.78 | 0.72 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 0.82 | 0.78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 0.85 | 0.82 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 0.88 | 0.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 0.90 | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 0.91 | 0.90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 0.92 | 0.91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 0.93 | 0.92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 0.94 | 0.93 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 0.945 | 0.935 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 0.95 | 0.94 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | 0.955 | 0.945 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | 0.958 | 0.948 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | 0.96 | 0.95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | 0.962 | 0.952 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 0.965 | 0.942 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | Fine Tunning Result(if Done) | Validation Accuracy – 97.1% | <div><div>Fine-Tuning Result</div><div><div>[↑ 300 rows hidden]</div><table><tr><th></th><th></th><th>val_accuracy</th><th>val_accuracy: 0.9711</th></tr><tr><td>Epoch 18:</td><td>1.0000</td><td>val_accuracy</td><td>0.9669 - 0.9669</td></tr><tr><td>Epoch 19:</td><td>1.0000</td><td>val_accuracy</td><td>0.9692 - 0.9704</td></tr><tr><td>Epoch 20:</td><td>1.0000</td><td>val_accuracy</td><td>0.9711 - 0.9711</td></tr></table><div>Epoch 20/20 ~ 30s ins/. Step 1 &</div></div></div> | | | val_accuracy | val_accuracy: 0.9711 | Epoch 18: | 1.0000 | val_accuracy | 0.9669 - 0.9669 | Epoch 19: | 1.0000 | val_accuracy | 0.9692 - 0.9704 | Epoch 20: | 1.0000 | val_accuracy | 0.9711 - 0.9711 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | val_accuracy | val_accuracy: 0.9711 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epoch 18: | 1.0000 | val_accuracy | 0.9669 - 0.9669 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epoch 19: | 1.0000 | val_accuracy | 0.9692 - 0.9704 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epoch 20: | 1.0000 | val_accuracy | 0.9711 - 0.9711 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |