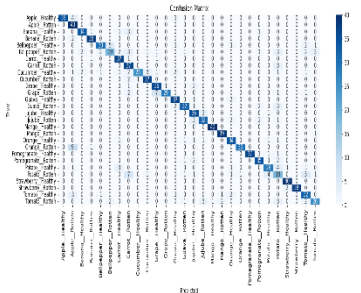


Project Development Phase Model Performance Test

Date	26 June 2025
Team ID	LTVIP2025TMID59414
Project Name	Smart Sorting: Transfer learning for rotten fruits and vegetables
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.	Metrics	<div>Classification Model: Confusion Matrix, Accuracy Score & Classification Report</div>	<div><table><caption>Classification Report:</caption><thead><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr></thead><tbody><tr><td>Apple_Healthy</td><td>1.00</td><td>0.88</td><td>0.93</td><td>40</td></tr><tr><td>Apple_Rotten</td><td>0.67</td><td>1.00</td><td>0.80</td><td>40</td></tr><tr><td>Banana_Healthy</td><td>0.89</td><td>0.85</td><td>0.87</td><td>40</td></tr><tr><td>Banana_Rotten</td><td>0.93</td><td>0.95</td><td>0.94</td><td>40</td></tr><tr><td>Bellpepper_Healthy</td><td>0.88</td><td>0.75</td><td>0.81</td><td>40</td></tr><tr><td>Bellpepper_Rotten</td><td>0.73</td><td>0.47</td><td>0.58</td><td>40</td></tr><tr><td>Carrot_Healthy</td><td>0.82</td><td>0.93</td><td>0.87</td><td>40</td></tr><tr><td>Carrot_Rotten</td><td>0.64</td><td>0.93</td><td>0.76</td><td>40</td></tr><tr><td>Cucumber_Healthy</td><td>0.96</td><td>0.62</td><td>0.76</td><td>40</td></tr><tr><td>Cucumber_Rotten</td><td>0.88</td><td>0.93</td><td>0.90</td><td>40</td></tr><tr><td>Grape_Healthy</td><td>0.78</td><td>0.90</td><td>0.84</td><td>40</td></tr><tr><td>Grape_Rotten</td><td>0.97</td><td>0.72</td><td>0.83</td><td>40</td></tr><tr><td>Guava_Healthy</td><td>0.84</td><td>0.93</td><td>0.88</td><td>40</td></tr><tr><td>Guava_Rotten</td><td>0.86</td><td>0.80</td><td>0.83</td><td>40</td></tr><tr><td>Jujube_Healthy</td><td>0.77</td><td>0.90</td><td>0.83</td><td>40</td></tr><tr><td>Jujube_Rotten</td><td>0.82</td><td>0.80</td><td>0.81</td><td>40</td></tr><tr><td>Mango_Healthy</td><td>0.98</td><td>1.00</td><td>0.99</td><td>40</td></tr><tr><td>Mango_Rotten</td><td>0.93</td><td>0.97</td><td>0.95</td><td>40</td></tr><tr><td>Orange_Healthy</td><td>0.79</td><td>0.85</td><td>0.82</td><td>40</td></tr><tr><td>Orange_Rotten</td><td>0.97</td><td>0.75</td><td>0.85</td><td>40</td></tr><tr><td>Pomegranate_Healthy</td><td>1.00</td><td>0.93</td><td>0.96</td><td>40</td></tr><tr><td>Pomegranate_Rotten</td><td>0.83</td><td>0.88</td><td>0.85</td><td>40</td></tr><tr><td>Potato_Healthy</td><td>0.81</td><td>0.72</td><td>0.76</td><td>40</td></tr><tr><td>Potato_Rotten</td><td>0.44</td><td>0.45</td><td>0.44</td><td>40</td></tr><tr><td>Strawberry_Healthy</td><td>0.93</td><td>1.00</td><td>0.96</td><td>40</td></tr><tr><td>Strawberry_Rotten</td><td>1.00</td><td>0.95</td><td>0.97</td><td>40</td></tr><tr><td>Tomato_Healthy</td><td>0.70</td><td>0.80</td><td>0.74</td><td>40</td></tr><tr><td>Tomato_Rotten</td><td>0.81</td><td>0.65</td><td>0.72</td><td>40</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.83</td><td>1120</td></tr><tr><td>macro avg</td><td>0.84</td><td>0.83</td><td>0.83</td><td>1120</td></tr><tr><td>weighted avg</td><td>0.84</td><td>0.83</td><td>0.83</td><td>1120</td></tr></tbody></table><p>Accuracy: 0.8321</p></div>		precision	recall	f1-score	support	Apple_Healthy	1.00	0.88	0.93	40	Apple_Rotten	0.67	1.00	0.80	40	Banana_Healthy	0.89	0.85	0.87	40	Banana_Rotten	0.93	0.95	0.94	40	Bellpepper_Healthy	0.88	0.75	0.81	40	Bellpepper_Rotten	0.73	0.47	0.58	40	Carrot_Healthy	0.82	0.93	0.87	40	Carrot_Rotten	0.64	0.93	0.76	40	Cucumber_Healthy	0.96	0.62	0.76	40	Cucumber_Rotten	0.88	0.93	0.90	40	Grape_Healthy	0.78	0.90	0.84	40	Grape_Rotten	0.97	0.72	0.83	40	Guava_Healthy	0.84	0.93	0.88	40	Guava_Rotten	0.86	0.80	0.83	40	Jujube_Healthy	0.77	0.90	0.83	40	Jujube_Rotten	0.82	0.80	0.81	40	Mango_Healthy	0.98	1.00	0.99	40	Mango_Rotten	0.93	0.97	0.95	40	Orange_Healthy	0.79	0.85	0.82	40	Orange_Rotten	0.97	0.75	0.85	40	Pomegranate_Healthy	1.00	0.93	0.96	40	Pomegranate_Rotten	0.83	0.88	0.85	40	Potato_Healthy	0.81	0.72	0.76	40	Potato_Rotten	0.44	0.45	0.44	40	Strawberry_Healthy	0.93	1.00	0.96	40	Strawberry_Rotten	1.00	0.95	0.97	40	Tomato_Healthy	0.70	0.80	0.74	40	Tomato_Rotten	0.81	0.65	0.72	40	accuracy			0.83	1120	macro avg	0.84	0.83	0.83	1120	weighted avg	0.84	0.83	0.83	1120
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2.	Tune the Model	Hyperparameter Tuning Validation Method	
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