

Project Development Phase

Model Performance Test

Date	28 june 2025
Team ID	LTVIP2025TMID59918
Project Name	Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables
Maximum Marks	10 Marks

Model Performance Testing:

S.N	Parameter	Values	Screenshot																																																																																																																																																																
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1.	Metrics	Classification Model: Confusion Matrix - , Accuray Score- & Classification Report -	<div><p>Confusion Matrix</p><p>Classification Report</p><table><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr><tr><td>Apple_Healthy</td><td>0.82</td><td>1.00</td><td>0.90</td><td>40</td></tr><tr><td>Apple_Rotten</td><td>0.83</td><td>1.00</td><td>0.91</td><td>40</td></tr><tr><td>Banana_Healthy</td><td>0.97</td><td>0.90</td><td>0.94</td><td>40</td></tr><tr><td>Banana_Rotten</td><td>0.95</td><td>0.97</td><td>0.96</td><td>40</td></tr><tr><td>Bellpepper_Healthy</td><td>0.83</td><td>0.95</td><td>0.88</td><td>40</td></tr><tr><td>Bellpepper_Rotten</td><td>0.91</td><td>0.72</td><td>0.81</td><td>40</td></tr><tr><td>Carrot_Healthy</td><td>0.91</td><td>1.00</td><td>0.95</td><td>40</td></tr><tr><td>Carrot_Rotten</td><td>0.97</td><td>0.88</td><td>0.92</td><td>40</td></tr><tr><td>Cucumber_Healthy</td><td>0.90</td><td>0.95</td><td>0.93</td><td>40</td></tr><tr><td>Cucumber_Rotten</td><td>0.97</td><td>0.88</td><td>0.92</td><td>40</td></tr><tr><td>Grape_Healthy</td><td>0.94</td><td>0.85</td><td>0.89</td><td>40</td></tr><tr><td>Grape_Rotten</td><td>0.93</td><td>0.95</td><td>0.94</td><td>40</td></tr><tr><td>Guava_Healthy</td><td>0.95</td><td>1.00</td><td>0.98</td><td>40</td></tr><tr><td>Guava_Rotten</td><td>0.88</td><td>0.88</td><td>0.88</td><td>40</td></tr><tr><td>Jujube_Healthy</td><td>0.88</td><td>0.93</td><td>0.90</td><td>40</td></tr><tr><td>Jujube_Rotten</td><td>0.78</td><td>0.78</td><td>0.78</td><td>40</td></tr><tr><td>Mango_Healthy</td><td>0.95</td><td>1.00</td><td>0.98</td><td>40</td></tr><tr><td>Mango_Rotten</td><td>0.98</td><td>1.00</td><td>0.99</td><td>40</td></tr><tr><td>Orange_Healthy</td><td>0.79</td><td>0.82</td><td>0.80</td><td>40</td></tr><tr><td>Orange_Rotten</td><td>1.00</td><td>0.80</td><td>0.89</td><td>40</td></tr><tr><td>Pomegranate_Healthy</td><td>0.97</td><td>0.88</td><td>0.92</td><td>40</td></tr><tr><td>Pomegranate_Rotten</td><td>0.78</td><td>0.90</td><td>0.84</td><td>40</td></tr><tr><td>Potato_Healthy</td><td>0.79</td><td>0.93</td><td>0.85</td><td>40</td></tr><tr><td>Potato_Rotten</td><td>0.76</td><td>0.70</td><td>0.73</td><td>40</td></tr><tr><td>Strawberry_Healthy</td><td>1.00</td><td>1.00</td><td>1.00</td><td>40</td></tr><tr><td>Strawberry_Rotten</td><td>1.00</td><td>1.00</td><td>1.00</td><td>40</td></tr><tr><td>Tomato_Healthy</td><td>0.94</td><td>0.80</td><td>0.86</td><td>40</td></tr><tr><td>Tomato_Rotten</td><td>0.87</td><td>0.68</td><td>0.76</td><td>40</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.90</td><td>1120</td></tr><tr><td>macro avg</td><td>0.90</td><td>0.90</td><td>0.90</td><td>1120</td></tr><tr><td>weighted avg</td><td>0.90</td><td>0.90</td><td>0.90</td><td>1120</td></tr></table><p>PS D:\526\smart_sorting> █</p></div>		precision	recall	f1-score	support	Apple_Healthy	0.82	1.00	0.90	40	Apple_Rotten	0.83	1.00	0.91	40	Banana_Healthy	0.97	0.90	0.94	40	Banana_Rotten	0.95	0.97	0.96	40	Bellpepper_Healthy	0.83	0.95	0.88	40	Bellpepper_Rotten	0.91	0.72	0.81	40	Carrot_Healthy	0.91	1.00	0.95	40	Carrot_Rotten	0.97	0.88	0.92	40	Cucumber_Healthy	0.90	0.95	0.93	40	Cucumber_Rotten	0.97	0.88	0.92	40	Grape_Healthy	0.94	0.85	0.89	40	Grape_Rotten	0.93	0.95	0.94	40	Guava_Healthy	0.95	1.00	0.98	40	Guava_Rotten	0.88	0.88	0.88	40	Jujube_Healthy	0.88	0.93	0.90	40	Jujube_Rotten	0.78	0.78	0.78	40	Mango_Healthy	0.95	1.00	0.98	40	Mango_Rotten	0.98	1.00	0.99	40	Orange_Healthy	0.79	0.82	0.80	40	Orange_Rotten	1.00	0.80	0.89	40	Pomegranate_Healthy	0.97	0.88	0.92	40	Pomegranate_Rotten	0.78	0.90	0.84	40	Potato_Healthy	0.79	0.93	0.85	40	Potato_Rotten	0.76	0.70	0.73	40	Strawberry_Healthy	1.00	1.00	1.00	40	Strawberry_Rotten	1.00	1.00	1.00	40	Tomato_Healthy	0.94	0.80	0.86	40	Tomato_Rotten	0.87	0.68	0.76	40	accuracy			0.90	1120	macro avg	0.90	0.90	0.90	1120	weighted avg	0.90	0.90	0.90	1120
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