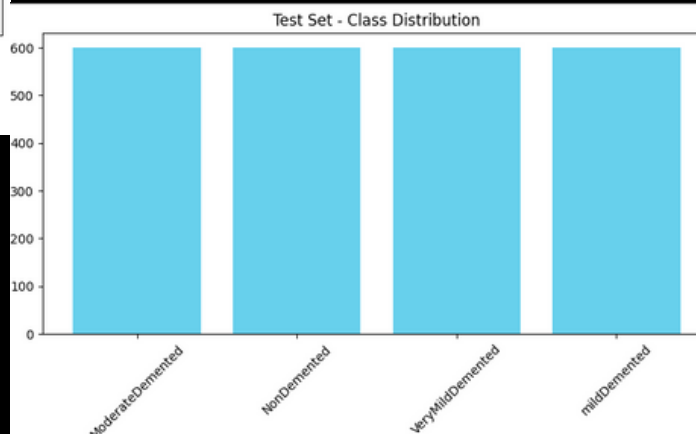
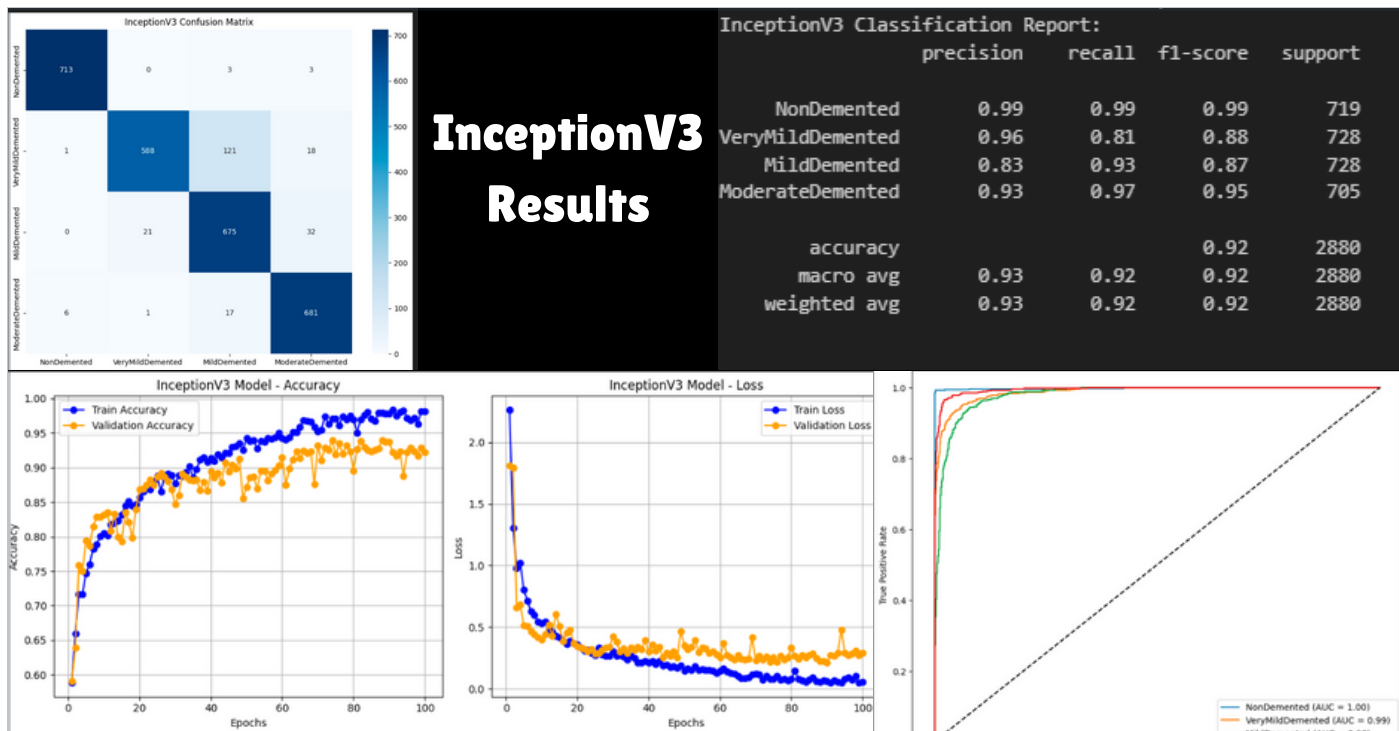


1. The training set includes 600 images per class, totaling 2400 images.
2. The test set also contains 600 images per class, totaling 2400 images.
3. In total, the dataset comprises 4800 MRI images, with 1200 images per class across all categories.

1. NonDemented – Healthy individuals with no signs of dementia.
2. VeryMildDemented – Early onset, subtle cognitive impairment.
3. MildDemented – Noticeable but manageable cognitive decline.
4. ModerateDemented – Clear and consistent symptoms of Alzheimer's disease.







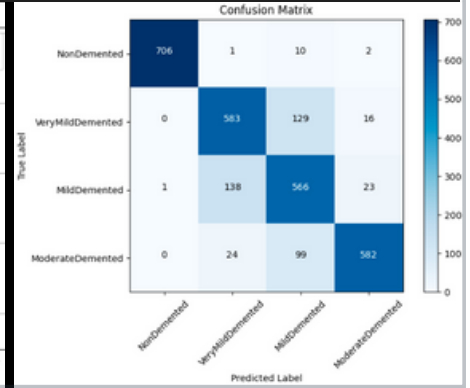
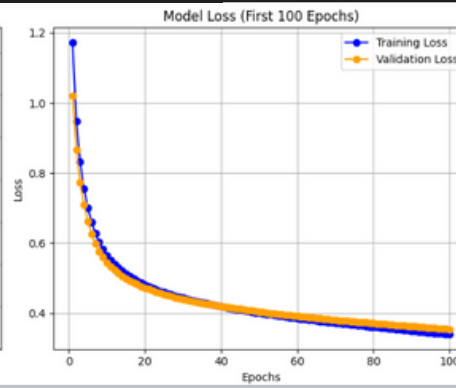
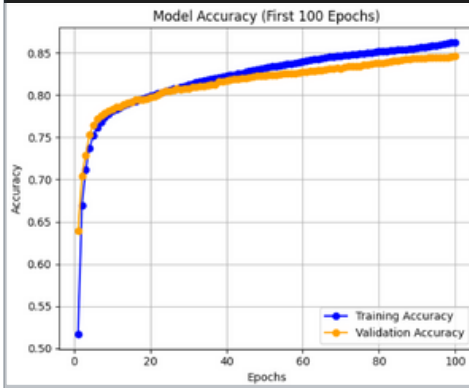
Classification Report:

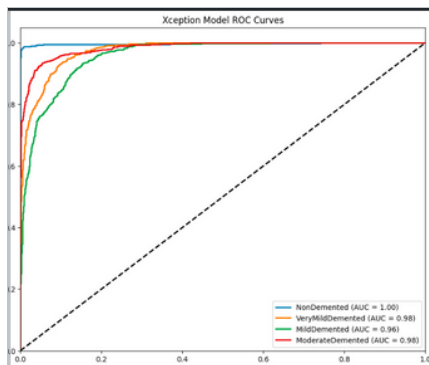
	precision	recall	f1-score	support
NonDemented	1.00	0.98	0.99	719
VeryMildDemented	0.78	0.80	0.79	728
MildDemented	0.70	0.78	0.74	728
ModerateDemented	0.93	0.83	0.88	705
accuracy			0.85	2880
macro avg	0.85	0.85	0.85	2880
weighted avg	0.85	0.85	0.85	2880

ResNet50 Results

ResNet50 Validation Loss: 0.3547

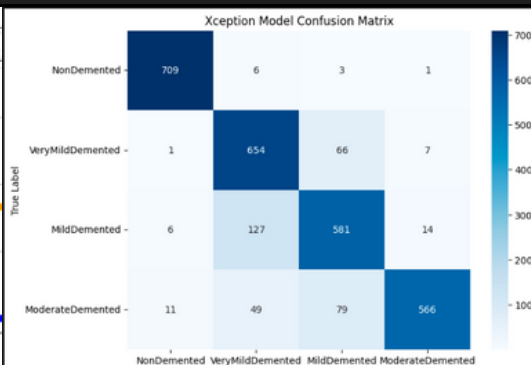
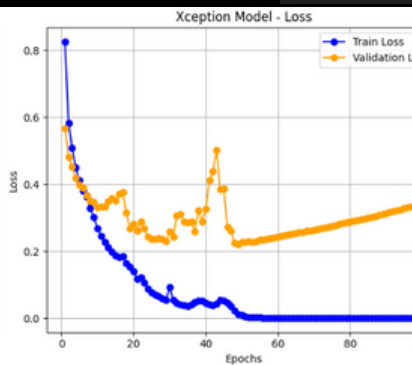
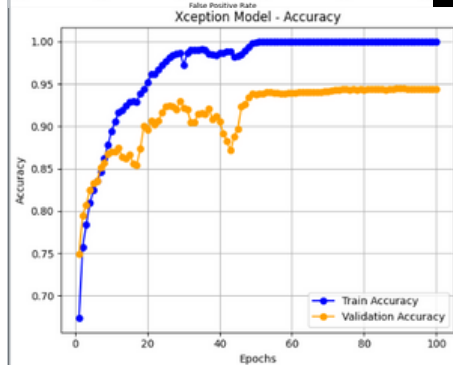
ResNet50 Validation Accuracy: 84.62%

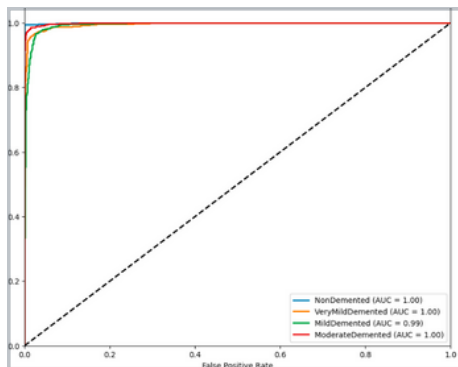




Xception Results

Xception Model Classification Report:				
	precision	recall	f1-score	support
NonDemented	0.98	0.99	0.98	719
VeryMildDemented	0.78	0.90	0.84	728
MildDemented	0.80	0.80	0.80	728
ModerateDemented	0.96	0.80	0.88	705
accuracy			0.87	2880
macro avg	0.88	0.87	0.87	2880
weighted avg	0.88	0.87	0.87	2880





Hybrid Model Results

Classification Report:

	precision	recall	f1-score	support
NonDemented	1.00	0.99	1.00	719
VeryMildDemented	0.98	0.94	0.96	728
MildDemented	0.93	0.97	0.94	728
ModerateDemented	0.98	0.98	0.98	705
accuracy			0.97	2880
macro avg	0.97	0.97	0.97	2880
weighted avg	0.97	0.97	0.97	2880

