**Submission Of Data-set For ML**

**Group # 3**

1. Syed Ali Raza
2. Hamza Abbasi

# Data-set Name: Brain Tumor Classification (MRI)

* **Repositry Link:**

<https://www.kaggle.com/datasets/sartajbhuvaji/brain-tumor-classification-mri>

* **Total Images:** 3265

**Total-Affected:**2765

**Total-Not-Affected:**500

**Total-Train:**2,870 (88%)

**Total-Test:**395 (12%)

* **Classification Type:** Multi-Classification
* **Labled Data:**

|  |  |  |
| --- | --- | --- |
| **Class Name** | **Train** | **Test** |
| No Tumor | 395 | 105 |
| Pituitary Tumor | 827 | 74 |
| Meningioma Tumor | 822 | 115 |
| Glioma Tumor | 826 | 100 |

**Comparative Analysis Of Data-set:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr # | Algorithm | Accuracy | Precision | Recall | F1 Score |
| 1 | Decision Tree | 69.03% | 74.40% | 69.03% | 64.01% |
| 2 | KNN | 77.918% | 80.29% | 77.91% | 73.97% |
| 3 | Logistic Regression | 73.35% | 77.59% | 73.35% | 69.22% |
| 4 | SVM | 66.24% | 71.66% | 66.24% | 62.39% |
| 5 | ANN | 76.14% | 82.16% | 76.14% | 72.14% |

**Git-hub Code Link:**  
<https://github.com/syedzada077/Comparative-Analysis-Of-Dataset-Of-Brain-Tumor>