**Role and Key Responsibilities**

**Member 1- Premathilaka H.P.S.M (IT24102483)**

**Data Loading & Missing Value Handling**

* Initial data inspection
* Missing value analysis
* Foundation for subsequent steps

**Member 2- Jayathilaka D.L.T.S. (IT24102482)**

**Outlier Detection & Removal**

* Identifying outliers using IQR method
* Analyzing outlier impact
* Visualizing distributions before/after treatment

**Member 3- Adhikari A.Y.S (IT24102544)**

**Categorical Encoding**

* Encoding categorical variables
* Ordinal encoding for ordinal features
* One-hot encoding for binary features

**Member 4- Mohomed N.M.N. (IT24102476)**

**Feature Scaling**

* Standardizing numerical features
* Comparing distributions pre/post scaling

**Member 5- Hariluxshun.R (IT24102466)**

**Dataset Balancing**

* Addressing class imbalance with SMOTE
* Creating balanced data set
* Visualizing pre/post distribution

**Member 6- Hannadige L.H.D (IT24102552)**

**Feature Engineering**

* Creating new feature (LFI)
* Assigning weights to each feature for LFI creation
* Analyzing new feature correlations