Data Collection and Preprocessing Phase

|  |  |
| --- | --- |
| Date | 18-06-2025 |
| Team ID | SWTID1749841176 |
| Project Title | Online Payments Fraud Detection using Machine Learning |
| Maximum Marks | 6 Marks |

Data Exploration and Preprocessing Report

This project focuses on detecting online payment fraud using machine learning. We explored the dataset to understand feature distributions, detect outliers, and observe class imbalance. Key visualizations and statistical summaries highlighted patterns useful for model training. In preprocessing, we normalized features, encoded categorical variables, and ensured the dataset was clean and suitable for accurate fraud detection.

|  |  |  |
| --- | --- | --- |
| Section | Description | |
| Data Overview | Dimension  6362620 rows × 11 columns  Descriptive statistics: | |
| Univariate Analysis |  | |
| Bivariate Analysis |  | |
| Outliers And Anomalies |  | |
| Data Preprocessing Code Screenshots | | |
| Loading Data | |  |
| Handling Missing Values | | - |
| Data Transformation | |  |
| Feature Engineering | | Attached the codes in final submission. |
| Save Processed Data | | - |