

## Model Development Phase Template

|               |   |
|---------------|---|
| Date          | July 2024   |
| Team ID       | Team-739856   |
| Project Title | Auto Insurance Fraud Detection Using Machine Learning |
| Maximum Marks | 5 Marks   |

## Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

| Feature              | Description                                | Selected (Yes/No) | Reasoning  |
|----------------------|--|-------------------|--|
| ID                   | Unique identifier for each insurance claim | No                | For predicting fraud, ID is not required.                      |
| Incident_Description | Detailed description of the incident       | Yes               | Inconsistent or vague descriptions can be indicative of fraud. |
| Claim_Amount         | Amount claimed for the insurance           | Yes               | Unusually high claim amounts may indicate potential fraud.     |
| Policy_Holder_Age    | Age of the policyholder                    | Yes               | Certain age groups might be more prone to fraudulent claims.   |

|                     |   |     |   |
|---------------------|---|-----|---|
| Claim_History       | Previous claim history of the policyholder                          | Yes | A history of frequent claims may suggest a pattern of fraudulent activity.                              |
| Incident_Location   | Location where the incident occurred                                | Yes | Some locations might have higher rates of fraudulent claims.  |
| Report_Delay        | Time taken to report the incident after it occurred                 | Yes | Delays in reporting can sometimes be a red flag for fraud.  |
| Witnesses           | Number of witnesses to the incident                                 | Yes | Lack of witnesses can be suspicious in certain types of claims..  |
| Customer_Rating     | Rating provided by the customer for the insurance experience        | Yes | Low customer ratings may indicate dissatisfaction and potential fraud..                                 |
| Policy_Type         | Type of insurance policy (e.g., comprehensive, third-party)         | No  | Policy type alone may not directly indicate fraud and is not required for fraud detection.              |
| Claim_Cause         | Cause reported for the insurance claim                              | No  | The reported cause alone may not directly indicate fraud without other context..                        |
| Police_Report_Filed | Binary indicator whether a police report was filed for the incident | No  | The presence or absence of a police report alone may not directly indicate fraud without other context. |