**Model Development Phase Template**

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| Date | 10 July 2024 |
| Team ID | 739835 |
| Project Title | Credit card approval prediction using ML |
| 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.

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| **Feature** | **Description** | **Selected (Yes/No)** | **Reasoning** |
| Application\_ID | Unique identifier for each applicant | No | Not relevant for prediction. |
| Gender | Applicant's gender | Yes | Relevant for assessing diversity and potential bias in loan approval. |
| Married | Marital status of the applicant | Yes | Marital status can affect financial stability and responsibilities. |
| Savings | amount of money the applicant has savings accounts | Yes | Indicates financial reserves and ability to handle unexpected expenses. |



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| --- | --- | --- | --- |
| Self\_Employed | Self-employment status | Yes | Self-employed individuals may have different financial profiles. |
| Applicant  Income | Income of the applicant | Yes | It is crucial in determining the applicant's financial capacity. |
| Current Debts | total amount of current debts held by the applicant. | Yes | Indicates the financial burden the applicant is already under. |
| Debt\_to\_Income\_Ratio | Ratio of total monthly debt payments to gross monthly income | Yes | Indicates the burden of debt relative to income, affecting credit risk. |
| Credit Score | Credit card approval outcome | Yes | A higher credit score typically suggests a lower risk of default. |
| Credit\_History | Credit history of the applicant | Yes | A major factor in credit card approval is reflecting the applicant's creditworthiness. |
| |  | | --- | | Approval\_Status | | Credit card approval outcome | Yes | The target variable for predictive modeling – essential for the project's goal. |