

Model Development Phase Template

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| Date | 19 June 2025 |
| Team ID | SWTID1750050475 |
| Project Title | SmartLender - Applicant Credibility Prediction for Loan Approval |
| 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 |
|------------|---|-------------------|---|
| Loan_ID | Unique identifier for each loan applicant | No | For predicting the loan, a Loan ID is not required. |
| 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 impact financial stability and loan eligibility. |
| Dependents | Number of dependents | Yes | Indicates financial responsibilities and influences loan capacity. |

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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. |
| Co-applicant Income | Income of the co-applicant | Yes | Combined income provides a more accurate picture of financial stability. |
| Loan Amount | Amount of loan applied | Yes | Fundamental for assessing the financial magnitude of the loan. |
| Loan Amount Term | Term of the loan (in months) | Yes | The loan term influences monthly repayments and impacts eligibility. |
| Credit_History | Credit history of the applicant | Yes | A major factor in loan approval is reflecting the applicant's creditworthiness. |
| Loan_Status | Loan approval outcome | Yes | The target variable for predictive modeling – is essential for the project's goal. |