

Project Initialization and Planning Phase

| | |
|---------------|--|
| Date | 15 th July 2024 |
| Team ID | 739743 |
| Project Name | AutoForesight: A Predictive Model for Streamlining Car Loan Repayment Planning |
| Maximum Marks | 3 Marks |

Define Problem Statements (Customer Problem Statement Template):

AutoForesight leverages advanced artificial intelligence and machine learning algorithms to accurately predict the likelihood of borrowers defaulting on their vehicle loans. By analyzing a comprehensive set of borrower and loan-related factors, the system aims to assist financial institutions in making informed lending decisions, optimizing loan management strategies, and minimizing default rates.

Scenario 1: Risk Assessment for Lenders Financial institutions can utilize Auto Foresight to conduct detailed risk assessments of potential borrowers. By predicting the likelihood of loan defaults, lenders can make more informed decisions about loan approvals, interest rates, and required collateral. This helps in reducing the financial risk associated with lending and ensures a more stable loan portfolio.

Scenario 2: Personalized Repayment Plans Auto Foresight can assist lenders in designing personalized repayment plans for borrowers based on their predicted ability to repay. By tailoring repayment schedules and amounts to individual borrowers' financial situations, lenders can enhance repayment success rates and improve customer satisfaction. Borrowers benefit from more manageable and realistic repayment plans, reducing the chances of default.

Scenario 3: Early Warning System for Defaults The predictive model can be integrated into loan management systems to provide an early warning system for potential defaults. By identifying borrowers at risk of defaulting on their loans, lenders can proactively engage with these customers to offer support, restructuring options, or financial counseling. This proactive approach helps in mitigating losses and maintaining healthy lender-borrower relationships.

Scenario 4: Portfolio Optimization AutoForesight can be used by financial institutions to optimize their loan portfolios. By understanding the default risk associated with different segments of borrowers, lenders can diversify their portfolios to balance risk and return. This strategic approach to portfolio management enhances the overall stability and profitability of the lending business.

| I am | I'm trying to | But | Because | Which makes me feel |
|-------------------|--|---|------------------------------------|--|
| Financial Analyst | Streamline car loan repayment planning | It is difficult to predict repayment behaviors accurately | Of unpredictable financial factors | Determined to create a reliable predictive model |

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------|--------------------|--|--|-------------------------------------|---|
| PS-1 | Financial Analyst. | Streamline car loan repayment planning . | It is difficult to predict repayment Behaviors Accurately. | Of unpredictable financial factors. | Determined to create a reliable predictive model. |