

Customer Churn Prediction Project – Plan B Proposal

1. Objective of Plan B

The objective of Plan B is to redesign the current Customer Churn Prediction system to improve usability, interpretability, and practical relevance. Instead of using all available dataset features, the model will be retrained using only high-impact attributes to create a more focused and business-friendly prediction interface.

2. Selected High-Impact Features

- Tenure
- Monthly Charges
- Contract Type
- Internet Service
- Payment Method
- Senior Citizen
- Partner
- Dependents

3. Model Modifications

The model will be retrained using only the selected features. Standard preprocessing steps such as encoding, scaling, and SMOTE (for class imbalance handling) will be applied as before. The final trained model and scaler will be saved for deployment in the Streamlit web application.

4. Application Improvements

The prediction interface will be redesigned to display only the selected attributes, resulting in a cleaner, more professional layout. This will reduce complexity while maintaining prediction accuracy and consistency with the trained model.

5. Expected Benefits

- Improved user interface and usability
- Better interpretability of model decisions
- More realistic business-oriented prediction system
- Reduced input complexity

- Stronger project presentation during viva

6. Conclusion

Plan B aims to enhance the overall quality of the Customer Churn Prediction project by focusing on high-impact features and improving system design. This approach balances technical accuracy with practical usability, resulting in a more refined and professional final-year project.