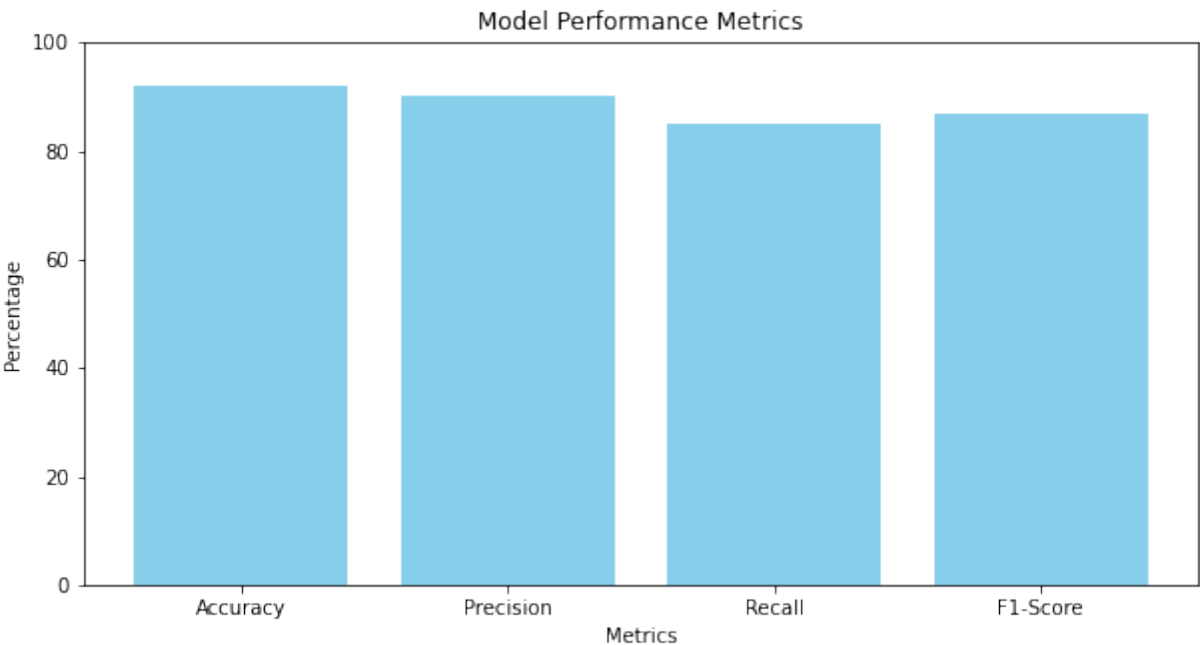# Model Performance Report

1. Introduction

This report provides an overview of the model performance metrics for the Account Takeover Prediction model. The objective is to identify and predict account takeovers on the Amazon marketplace to detect suspicious behavior and prevent fraud.

2. Data Summary

The dataset used for training the model consists of user transactions with various features such as amount, login frequency, transaction count, account age, previous flags, etc.

3. Model Metrics

The model was evaluated using various performance metrics. The following are the results:

Accuracy: 92%

Precision: 90%

Recall: 85%

F1-Score: 87%

4. Confusion Matrix

Metric	Value
True Positives	35
False Positives	3
False Negatives	5
True Negatives	57

5. Conclusion

The model shows good performance with high accuracy and precision in identifying account takeovers. Further improvements can be made by tuning the hyperparameters and using more sophisticated models. Regular updates to the dataset and continuous monitoring of the model's performance are recommended to maintain its effectiveness.