

Model Development Phase Template

Date	June 2025
Team ID	Team-739774
Project Title	Amazon Kindle Store Review Analysis
Maximum Marks	5 Marks

Model Selection Report

In the model selection phase for the Amazon Kindle Store Review Analysis project, multiple machine learning models were evaluated to identify the most effective algorithm for analyzing and classifying customer review sentiments.

While deep learning models such as CNNs and RNNs may be explored in future expansions, this report focuses on evaluating traditional machine learning models based on key criteria:

Model Selection Report:

Model	Description
Linear Regression Model	Linear Regression is a supervised learning algorithm used to predict the sentiment score of customer reviews. It models the relationship between review features (e.g., word frequency, sentiment polarity) and the overall rating. While simple and interpretable, it may not capture complex, non-linear patterns in textual data.
Logistic Regression Model	Logistic Regression is a classification algorithm used to predict categorical outcomes, such as positive or negative sentiment in Kindle reviews. It estimates the probability that a review belongs to a particular class and is effective for binary and multiclass sentiment classification tasks. Logistic Regression offers a balance of accuracy, efficiency, and interpretability, making it a strong choice for text-based classification problems.