

## Model Development Phase Template

Date	10 <sup>th</sup> July 2024
Team ID	739958
Project Title	Food Demand Forecasting for Food Delivery Company
Maximum Marks	5 Marks

## Feature Selection Report Template

This report presents the results of feature selection analysis conducted for food demand forecasting in the context of a food delivery company. The goal was to identify the most influential features that contribute to accurate demand predictions, ultimately optimizing resource allocation and operational efficiency.

Feature	Description	Selected (Yes/No)	Reasoning
Time-related Features	Hour of day, Day of week, Month, Seasonality indicators	Yes	Time-related features capture daily, weekly, and seasonal demand patterns, influencing ordering behaviour.
Customer Demographics	Age, Gender, Location	Yes	Customer demographics provide insights into preferences and ordering habits based on location and demographic factors.
Customer Loyalty Status	Membership status, Loyalty points	Yes	Loyalty status influences frequency of orders and customer retention, impacting long-term demand trends
Order-related Features	Number of items, Total order value, Special promotions	Yes	Order-related features directly correlate with transaction size and promotional effectiveness.
Weather Conditions	Temperature, Precipitation, Weather type (e.g., sunny,	No	Weather impacts consumer behavior, affecting demand for certain types of food during different weather conditions.

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Holiday Indicators	Public holidays, Festive seasons	Yes	Holidays and festive periods drive unique demand patterns, requiring special forecasting considerations.