

## Model Development Phase –

Date	21 JUNE 2025
Team ID	SWTID1749896042
Project Title	Unemployed Insurance Beneficiary Forecasting
Maximum Marks	5 Marks

## Feature Selection Report –

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Record_ID	Unique identifier for each record	No	Not predictive; serves only as identifier
Week_Number	Sequential week index	Yes	Captures temporal order & seasonality
Prev_Week_Claims	Claims in previous week (lag-1)	Yes	Strong autocorrelation with current week claims

Unemployment_Rate	Official unemployment %	Yes	Key macro-indicator influencing new claims.
Job_Openings_Rate	Vacancies per 100 workers	Yes	Inverse relationship with claims volume
GDP_Growth	Quarter-on-quarter GDP growth %	Yes	Captures broader economic expansion/contraction
CPI_Inflation	Consumer Price Index YoY %	Yes	Economic stress signal affecting layoffs
Population	Regional population size	Yes	Normalises claims per capita, controls scale
Region	State/region categorical code	Yes	Accounts for structural geographic differences