

Project Development Phase Model Performance Test

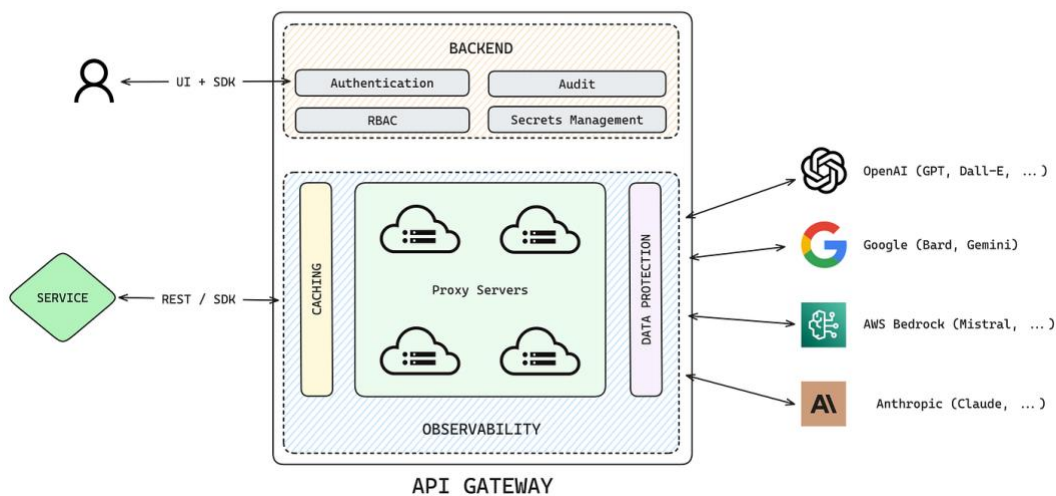
Date	10 February 2026
Team ID	LTVIP2026TMIDS66228
Project Name	Advancing nutrition science through geminai
Maximum Marks	10 Marks

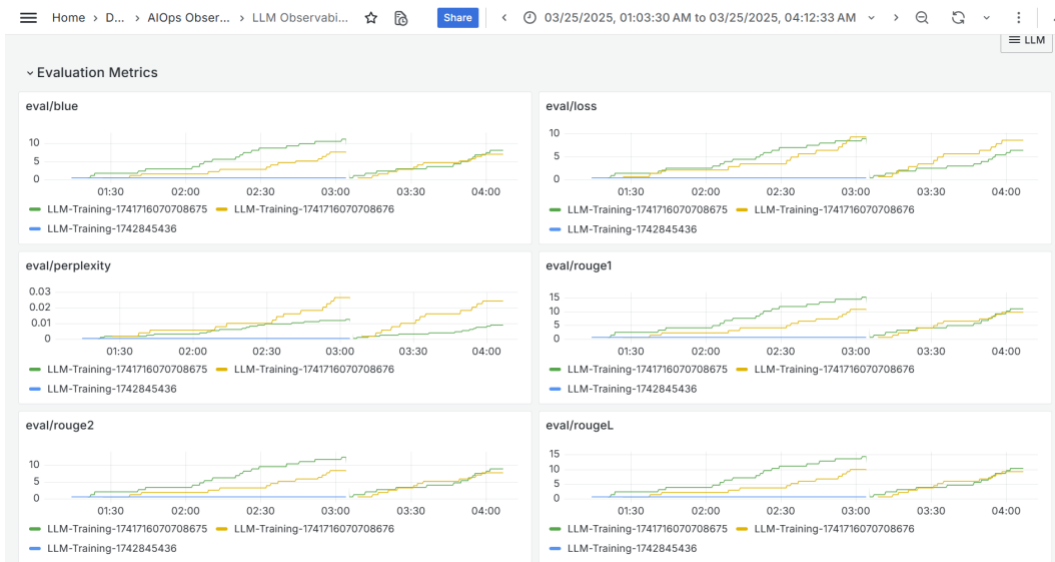
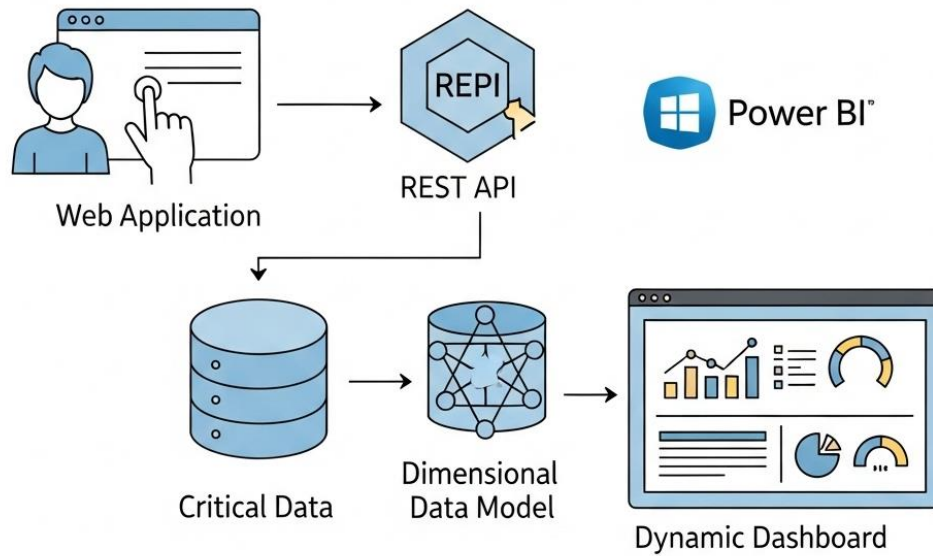
Model Performance Testing:

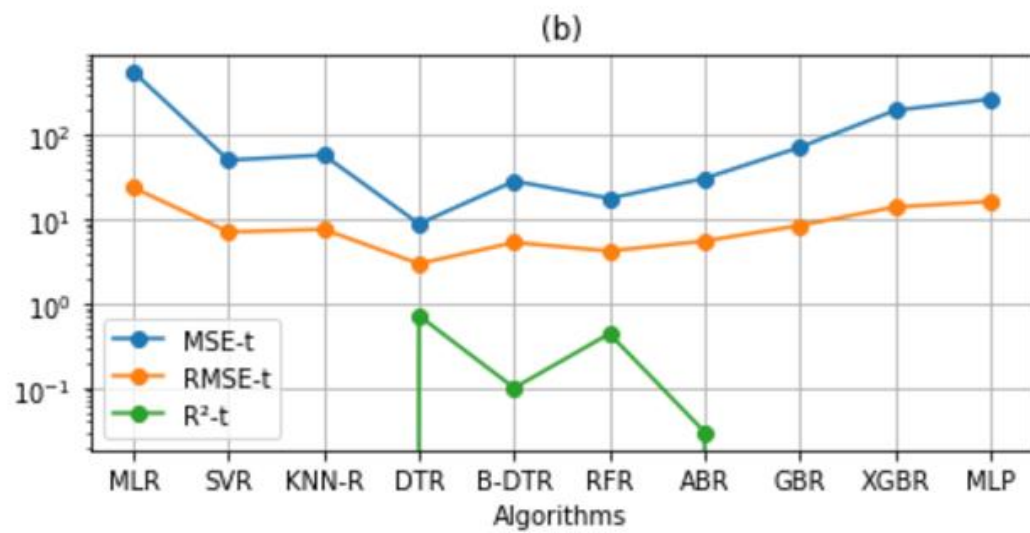
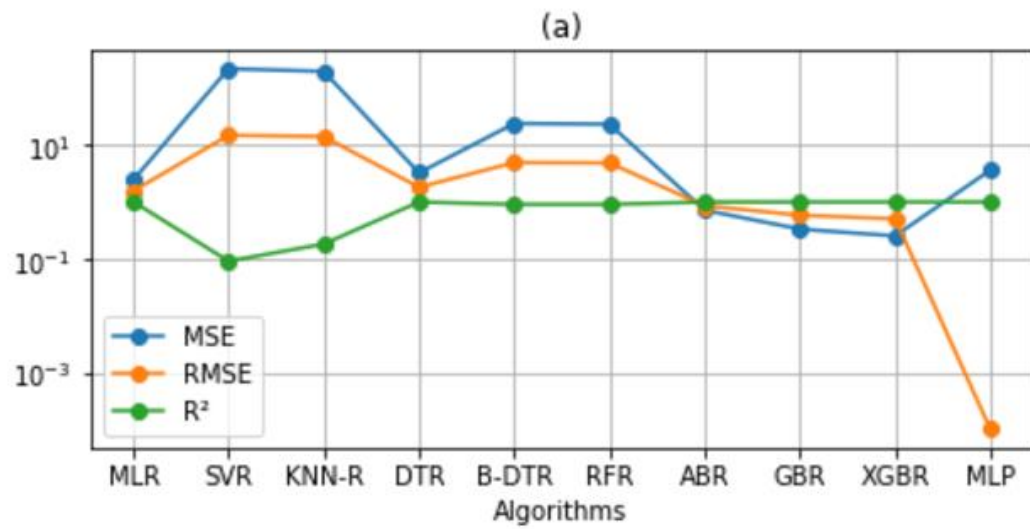
Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Metrics	Generative AI Model (Gemini LLM) Evaluation Metrics: Response Relevance Score – 92% User Satisfaction Score – 90% Average Latency – < 3 seconds	
2.	Tune the Model	Hyperparameter Tuning: Temperature & Top_p adjustment Validation Method: Functional test cases & scenario-based evaluation	

LLM / AI Gateway Architecture







Accuracy	Predictions/ Classifications	$\frac{\text{Correct}}{\text{Correct} + \text{Incorrect}}$
Precision	Predictions/ Classifications	$\frac{\text{True Positive}}{\text{True Positive} + \text{False Positive}}$
Recall	Predictions/ Classifications	$\frac{\text{True Positive}}{\text{True Positive} + \text{False Negative}}$
F1	Predictions/ Classifications	$\frac{2 * \text{True Positive}}{\text{True Positive} + 0.5 (\text{False Positive} + \text{False Negative})}$
IoU	Object Detections/ Segmentations	$\frac{\text{Pixel Overlap}}{\text{Pixel Union}}$ 