

## **Fynd AI Intern – Take Home Assignment Report**

**Candidate:** Hari Om

**Role:** AI Engineering Intern

### **1. Overview**

This assignment consists of two parts: rating prediction via prompt engineering and a web-based AI feedback system. The focus is on prompt design, evaluation, system behavior, and deployment.

### **2. Task 1 – Rating Prediction via Prompting**

Dataset used: Yelp Reviews dataset (sampled 200 reviews). Three prompt versions were designed and evaluated.

**Prompt V1 – Simple Zero-Shot:** Baseline prompt with minimal constraints. Moderate accuracy and lower JSON validity.

**Prompt V2 – Structured Prompt:** Added strict JSON schema and rules. Improved consistency and JSON validity.

**Prompt V3 – Reasoning-Guided Prompt:** Internal reasoning enforced with strict output control. Best accuracy and reliability.

#### **Results Summary:**

V1 Accuracy ~68%, JSON Validity ~82%

V2 Accuracy ~72%, JSON Validity ~96%

V3 Accuracy ~75%, JSON Validity ~98%

### **3. Task 2 – Two-Dashboard AI Feedback System**

A web-based system built using Streamlit with User and Admin dashboards sharing a common data source.

#### **User Dashboard:**

Users submit ratings and reviews. AI generates responses, summaries, and recommended actions which are stored in shared storage.

#### **Admin Dashboard:**

Displays all submissions with analytics such as average rating and feedback count.

### **4. Design Decisions**

Streamlit was chosen for fast development and deployment. CSV storage was used for simplicity. LLMs were used for responses, summarization, and action recommendations.

### **5. Conclusion**

This project demonstrates effective prompt engineering, evaluation of LLM outputs, and deployment of AI-powered systems with clear design reasoning.