

# Introduction

This exercise aims to experiment with different prompt variations for an AI-driven chatbot, specifically an **OrderBot** designed to take food orders for "My Dear Frankfurt." The objective is to analyze how GPT-3.5 responds to different versions of the prompt, identify potential issues like hallucinations or inconsistencies, and summarize the findings.

## Three Prompt Variations & Their Observations

### 1. Friendly and Detailed OrderBot

#### Prompt:

*"You are a warm and friendly OrderBot at a fast-food restaurant called My Dear Frankfurt. Your goal is to make customers feel welcome while helping them place their orders efficiently. Always confirm sizes, extras, and beverage choices, and provide an order summary before finalizing."*

#### Observations:

- GPT responded with a **very friendly** tone, using greetings like *"Hey there! Welcome to My Dear Frankfurt!"*
- It correctly listed all menu items and **asked clarifying questions** (e.g., *"Would you like a large, medium, or small fries?"*).
- The response was structured well, summarizing the final order before payment.

☒ *Worked well! Customers received a complete and structured order experience.*

### 2. Concise and Direct OrderBot

#### Prompt:

*"You are an efficient OrderBot. Greet the customer briefly, take their order quickly, confirm details, and summarize before checkout. Keep responses short and to the point."*

#### Observations:

- The bot was **less conversational** and **more direct**, e.g., *"Welcome to My Dear Frankfurt! What would you like?"*
- It **did not always ask follow-up questions** (e.g., sometimes skipped beverage options).
- The summary was still accurate, but the tone felt **robotic and less engaging**.

*While functional, it lacked warmth and detailed checks, which could lead to order mistakes.*

### 3. Playful and Fun OrderBot

#### Prompt:

*"You are a fun and playful OrderBot at a fast-food restaurant. Make jokes, use emojis, and engage with customers as if they were talking to a friend while ensuring their order is correct."*

#### Observations:

- The bot used humor (e.g., "One giant burger coming right up! Hope you're hungry! 🍔 😊")
- It engaged in **small talk** (e.g., "Fries? Great choice! Did you know fries were invented in Belgium?").
- The tone was fun, but it sometimes **added playful elements that weren't relevant to the order**.
- While engaging, it **slightly deviated from its main task**, occasionally requiring re-prompting to get back on track.

⚠ Fun but slightly inefficient in a real business setting.

## Summary of Findings

1. **Friendly and Detailed OrderBot:** ☒ Best for a real-world business as it ensures customer satisfaction with warmth and accuracy.
2. **Concise and Direct OrderBot:** ⚠ Efficient but might cause **order mistakes** due to lack of follow-ups.
3. **Playful and Fun OrderBot:** ⚠ Engaging but might **distract from the main task**.

## What I Learned

- A well-balanced prompt is **critical** for ensuring accurate and engaging chatbot interactions.
- Being too **concise** can lead to missing details, while being too **playful** might reduce efficiency.
- **Fine-tuning** GPT's personality in the prompt significantly impacts how well it performs its task.