

# Senior ML Scientist Challenge

Thanks for meeting with us, we are delighted to invite you to the Challenge round!

You are tasked with designing a **fully generative chatbot** that utilizes an **LLM (Large Language Model) to formulate responses** while also adhering to company policies. The chatbot will be integrated with specific API endpoints such as:

- **OrderCancellation** – Processes order cancellation requests
- **OrderTracking** – Provides order tracking information

The chatbot must be capable of understanding company policies when handling customer requests. For example:

- **Order Cancellation Policy:** If an order was placed less than **10 days ago**, it is **eligible for cancellation**. Otherwise, cancellation is not permitted.
- 

## Your Challenge

Build a generative chatbot that:

- ✓ **Connects to APIs** to fetch relevant information or execute actions
- ✓ **Handles the following cases:**

- **Order Cancellation:** When a user requests to cancel their order
- **Order Tracking:** When a user asks for their order status

You are free to define **arbitrary policies** (e.g., how orders should be canceled) and design the API integrations accordingly.

---

## Experiment & Evaluation

To assess how effectively the chatbot follows steps, processes actions, and generates accurate responses, you should **design an experiment**. Your experiment should:

- ♦ **Evaluate the chatbot's decision-making process** (step-by-step action handling)
  - ♦ **Measure solution performance** (quantitative and/or qualitative metrics)
  - ♦ **Report key insights** on chatbot effectiveness and accuracy
-

## What should submission include?

1. Github repository with code and experiment
2. Documentation regarding the solution and how the scientist came to that conclusion (can be included in the github repo as well)

Note: If you have any questions please feel free to send it our way 😊

We look forward to seeing your innovative approach to this challenge. Good luck! 🚀