



## Coding Case

Your task is to assist a technology ecommerce company named '*Makers Tech*' in creating a ChatBot that responds to and informs users through a graphical interface about the inventory, features, and prices of the products currently available. This is based on the question asked, for example:

- **Client:** How many computers are currently available?
- **ChatBot:** At the moment, we have 4 computers; we have 2 HP, 1 Dell, and the other one is Apple. Which one would you like to purchase?
- **Client:** Tell me more about the computer Dell?

**Note:** This conversation is just an example; the main feature is for the ChatBot to provide real-time inventory through a personalized conversation using an **AI** system (Free choice).

The ChatBot will be presented to the CEO of '*Makers Tech*', so it should not be limited to the main feature. Let your creativity, technical, and business skills shine.

(Optional) In addition to the main feature, a new feature is proposed: a recommendation system. When a user logs in, they will be able to see the available products categorized into three groups based on their personal preferences: "Highly Recommended," "Recommended," and "Not Recommended." This classification will be powered by an AI-based recommendation system.

(Optional) Additionally, since it is a store, we want the administrators to have the ability to visualize stock metrics through a dashboard. This dashboard will allow them to see, for example, the quantity of items with specific characteristics, represented through various charts and graphs.

**Note:** The last two features are optional. We suggest focusing on developing the one you feel most confident with and striving to present it with the highest possible quality.

To further convince the '*Makers Tech*' team to acquire the product, the developers will record a video pitch and demo of their proposed solution, with a maximum length of 5 minutes. The video must be uploaded to YouTube, and it should be a group effort where all team members participate.

To conclude, each team member's written ability will be evaluated. **Individually**, they must present a written piece explaining how the acquisition of the product adds value to *'Makers Tech'* (The text should not exceed 200 words and must be written in English).

**Note:** The technologies are of free choice. The quality of the code and good programming practices are important factors for test approval, therefore the GitHub or GitLab repository will be requested.