

## Company Challenge: Corporate Game Chick

Corporate Game Chick (<https://www.corporategamechick.com/>) is dedicated to empowering organizations and employees to foster integrity and compliance in the workplace. Through the use of AI technology, the company creates interactive content and games that help employees make the right decisions in line with corporate policies, while also enabling organizations to manage their compliance risks effectively.

As part of their mission, Corporate Game Chick is developing a serious game aimed at helping employees understand critical compliance policies, such as gift policies. Central to this game will be a Virtual Compliance Assistant (chatbot), which will serve as a tool for employees to ask questions and receive accurate guidance on company policies.

**Your challenge is to design and test a chatbot capable of responding to employees' questions regarding a company's gift policy, based on the documentation provided by Corporate Game Chick. The chatbot must be developed using an existing framework — BUas AI Assistants Platform — and should demonstrate the ability to handle compliance-related queries in an engaging and informative manner.**

The next sections of this document present some notes and resources related to the challenge. **Please read this entire document before starting the challenge.**

### 1. Communication Related to this Challenge

A dedicated Teams channel ("Company Challenge - Corporate Game Chick") has been set up for this challenge. If you have any questions, encounter issues, or wish to discuss any aspect of the challenge, please use this channel.

The challenge organizer, Edirlei Soares de Lima, will monitor all discussions in the Teams channel and provide assistance when possible.

While this challenge is developed in duos/trios, you are encouraged to use the channel to share your results and exchange ideas with the other groups. Discussing concepts and sharing materials that may benefit others is highly encouraged.

### 2. Understanding the Gift Policy

To develop an effective chatbot for this challenge, it is essential to understand the company's gift policy and related compliance guidelines. Corporate Game Chick has provided a detailed

document that includes important information regarding anti-bribery rules, procedures, and specific policies about gifts.

The document describes:

- General ABAC (Anti-Bribery and Corruption) Policy: Definitions, rules, and procedures for maintaining honest business conduct.
- Gifts Policy: Rules and procedures for giving and receiving gifts within the organization, including a pre-approval and registration process.
- Guidance on Ethical Dilemmas: Applying the "3Ps" (Purpose, Perception, Process) test when making decisions regarding gifts.
- Practical Guidance and Examples: FAQs, red flags to watch for, and a checklist for evaluating gifts.

You can access the full document through the following link: <https://bit.ly/3UmP1T9>

This document is essential for training the chatbot to respond accurately to employees' questions about gift policies. Make sure to thoroughly review this document to ensure that your chatbot is aligned with the company's compliance standards.

### **3. The BUas AI Assistants Platform for Creating Chatbots**

In this challenge, you will use the BUas AI Assistants Platform to design and test your Virtual Compliance Assistant. This platform enables users to create customized chatbots using Retrieval Augmented Generation (RAG) methods to query knowledge bases composed of various files, such as PDF, DOCX, TXT, MD, and CSV formats. The platform is integrated with the university's authentication system, so you can use your BUas Microsoft account to access the system.

The BUas AI Assistants Platform is accessible at the following link:

<https://edirlei.com/aioda-project/buas-ai-assistants/>

To create a new AI assistant in the platform, you will need to define several key aspects, such as the assistant's name, purpose, personality traits, expertise, capabilities, and restrictions. These parameters will constitute the chatbot's system prompt. You will also need to specify the assistant's knowledge base by uploading documents that contain the necessary information — such as the gift policy documentation provided by Corporate Game Chick. Additionally, you will select the large language model that best fits your chatbot's needs and adjust other settings, such as its creativity level. These settings will determine how the assistant interacts with users and retrieves information to provide relevant and accurate answers.

While the BUas AI Assistants Platform provides a powerful framework for creating chatbots, much of this challenge will focus on prompt engineering — crafting effective prompts and instructions to guide the chatbot's responses. Experimenting with different prompt structures

will be essential to ensuring the chatbot answers questions accurately and in line with the gift policy and the company requirements for the chatbot.

Furthermore, structuring the knowledge base will require careful attention. Simply uploading the provided documentation may not be enough for the chatbot to find and retrieve all relevant information. You will need to organize the documents in a way that enhances information retrieval, ensuring the chatbot can provide reliable and detailed answers when asked about specific compliance topics.

This challenge will test your ability to design effective prompts and structure the knowledge base for optimal information retrieval, ensuring that your chatbot serves as a reliable Virtual Compliance Assistant.

#### **4. User study into the BUas AI Assistants Platform**

We are conducting a user study on the recently developed BUas AI Assistants Platform to evaluate its usability and user-friendliness. Since the platform is new and has not been extensively tested, we invite you to participate by sharing your feedback.

If you join the study, we will ask you to complete three surveys: one after your first day using the tool, another at the end of week 9, and a final one at the end of week 10. Each survey will include a few open-ended questions, and we ask that you provide detailed responses to help us refine the platform. Additionally, you may be invited for a follow-up interview to further elaborate on your feedback. Your insights will be used to improve the BUas AI Assistants Platform. Participation is entirely voluntary, and you may opt out at any time.

Students participating in this user study will receive an additional point for this challenge. Therefore, you can get a maximum of 4 points in this challenge (3 points for the company challenge and 1 extra point for participating in the user study).

You will receive more information about the procedure of the user study on the challenge's Teams channel.

#### **5. Evidencing the Results of the Challenge**

Upon completing the challenge, you are required to submit a report that documents your approach, the design decisions you made, and the testing process to validate the chatbot. This report will serve as the primary evidence of your work and should be structured as follows:

1. **Introduction:** Provide an overview of the challenge and summarize the objectives of your chatbot. Briefly describe how the assistant is expected to help employees understand the gift policy and ensure compliance.

2. **Chatbot Design and Prompt Engineering:** Explain the design process for your chatbot. Discuss the decisions you made regarding the assistant's identity, personality, and purpose. Detail how you crafted and refined the prompts used by the chatbot to deliver consistent and relevant responses. Discuss any challenges or adjustments you encountered when guiding the chatbot's behavior through prompt engineering.
3. **Knowledge Base Structuring:** Describe how you prepared and organized the knowledge base for the chatbot. Explain how you structured the provided gift policy documentation and any additional materials used to improve information retrieval. Highlight any strategies you used to ensure that the chatbot can access and provide accurate responses based on this information.
4. **Testing and Results:** Provide the link to the chatbot you created on the BUas AI Assistants Platform, so it can be reviewed and tested by others. Explain how you tested the chatbot to ensure it responds correctly to queries about the gift policy. Include specific examples of test cases, the results of those tests, and any improvements made based on the testing phase. You should also discuss any limitations or issues identified during testing.
5. **Conclusion and Future Improvements:** Conclude by summarizing your key findings and the overall performance of the chatbot. Suggest any potential improvements or future steps that could enhance the chatbot's functionality, accuracy, or user interaction.

When you complete the challenge, you must submit the report on the Brightspace assignment of the challenge:

Brightspace → ADSAI General Information 2024-2025 → Course Elements → Assignments → Corporate Game Chick

The report must be submitted individually by all students in the duos/trios (the same report).

In addition to the report, you must present your chatbot in the final presentation that will take place in week 10. The exact date of the final presentation will be announced in the Teams channel of the challenge.

Good Luck!