

# REPLY CASE STUDY



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# SUMMARY

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5. Resources
6. Penalties and Disqualifications
7. Reply Student Tech Clash

# THE REPLY CASE STUDY

## LEVEL 1 - THE MAIN CHALLENGE THIS LEVEL IS MANDATORY

### CHALLENGE OVERVIEW

Think of a problem in one of the following categories and **imagine how agents can help you.**

### CATEGORIES

- **Student life:** for example summaries, maps, events, transcriptions, bureaucracy, university problems, CV helper, job/internship orientation, course guidance, guidelines on university policies, Erasmus, scholarship announcements
- **Hobbies:** for example finding hobbies, finding activities/groups of people/associations, audiobooks/podcasts/streaming)
- **Choose your own!** There are no limits! You can think about an agent that supports a company in the public/private sector or whatever other use case you might think of.

The goal of this first level is to define how software agents can be used to automate processes

### SUGGESTIONS FOR SUCCESS

Keep in mind that an Agent is not necessarily a chatbot; they can produce all kinds of outputs, visual, code, and therefore anything can be done.

## DELIVERABLE OF THE MAIN CHALLENGE

A PRESENTATION that includes:

- **Description of the idea** explaining how it improves, automates, and addresses a problem/use case
- **Example of real applications** in the chosen sector as if the idea were immediately marketable/usable
- **A description of any agent/multi-agent approach.** (Advanced/Optional)

**WHAT YOU NEED TO DO:**

1. **Identify a Problem:** Choose a specific problem or process you want to improve using AI Agents.
2. **Develop Your Idea:** Work on a project that utilizes AI agents effectively.
3. **Prepare Your Deliverables:** Ensure your submission includes all the deliverables required.

This first level serves to evaluate your ability to understand key concepts and connect them to concrete use cases.

### SUGGESTIONS FOR SUCCESS

- **Think Creatively:** Consider how AI agents can be applied in unexpected ways within the time travel theme.
- **Ask Questions:** Don't hesitate to reach out to Reply experts for support and advice throughout the whole day.

## LEVEL 2 - PRACTICE

### THIS LEVEL IS MANDATORY

#### Implementation of a Simple Agent (Technical)

No need of coding skills needed but if you want you can show yours!

Create a **software agent** that simulates the use case chosen in the Level 1 (or at least a part of it).

#### Example:

An Agent that responds to FAQs on the customer service side (like all the automated responders commonly used today)

## DELIVERABLE OF LEVEL 2

You have 2 possible ways to implement this step of the challenge.

Depending on the one you use the deliverables will be different.

#### No-Code/Low-Code approach: no need of any coding skill!

Using the “normal” interface of an LLM of choice (ChatGPT, LLama, Gemini, etc.) write a prompt that makes it act as an Agent that meets Level 1 requirements.

The deliverable in this case will be the **prompt, some examples** of use in the presentation, and, if possible (preferably) a **small demo video** of an interaction with the Agent.

## 2. Coding Approach: if you feel like coding

In this case the deliverable is the **functioning code written in Python** with a brief description of the architecture and functioning of the agent. (API keys and templates will be provided in the form of a Notebook to support those who choose this approach)

If you can, try to work on a **potential interface** using Streamlit, Gradio and similar tools to unleash your graphic creativity

This second level allows you to demonstrate your technical skills by implementing a simple agent with specific objectives with or without the use of code.

## LEVEL 3 - BONUS

### THIS LEVEL IS NOT MANDATORY

Create a **multi-agent system that collaborates to solve a complex problem**.

Here are a couple of examples:

- A system where different agents analyze different data sources, coordinating among themselves to provide a global view and optimize investment strategies.
- A system where each agent specializes in a specific task and communicates with each other

### DELIVERABLE OF LEVEL 3

- **Technical report** explaining the multi-agent system, how the agents communicate with each other
- **Explanation** of why the multi-agent approach is the best for the chosen use case
- **Optional:** Functional code (Python)
- **Optional:** How agents optimize the decision-making process

This step requires you to manage complexity, testing both your technical skills and problem-solving abilities in a cooperative context.

# EVALUATION CRITERIA

## 40% CREATIVITY AND INNOVATION

This criterion evaluates your ability to **think originally and express unique ideas**. It is important to consider the originality of the proposed solutions, the use of unconventional approaches, and the ability to combine existing elements in new ways.

- Creativity should manifest through the variety of ideas presented and their ability to surprise and engage the audience.
- Solutions that are not only original but also provide added value compared to what already exists will be evaluated.
- **Innovation** implies the ability to solve problems in new and improved ways, and the evaluation will also consider the **feasibility** and **applicability** of the ideas in the current context.

## 20% IMPACT

This criterion focuses on the **potential impact of the proposed ideas**. It evaluates how positively the solutions can influence society, the environment, or a specific sector.

The scope and sustainability of the impact, as well as the ways in which the idea could be implemented to maximize benefits, are important to consider.

# EVALUATION CRITERIA

## 20% TECHNICAL

Technical competence concerns the **solidity and effectiveness** of the proposed solutions at a practical level.

This criterion evaluates the accuracy, quality, and relevance of the technologies and methodologies used.

It is essential that you demonstrate a **clear understanding of the technologies** at play and that their solutions are **technically feasible and well-designed**.

## 20% EFFECTIVE PRESENTATION

This criterion evaluates your **ability to communicate** your ideas clearly, engagingly, and persuasively.

- An effective presentation must include a logical organization of information, appropriate use of visual aids, and accessible language.
- The **appeal of the presentation** itself will also be assessed.

# RESOURCES

- **OpenAI**
- **Colab**
- **OpenAI Playground** (To create Agents)
- **Figma** (The Collaborative Interface Design Tool)

# HELP YOUR UNIVERSITY WIN THE STUDENT TECH CLASH

**40**  
points

## BEST PROJECT

Among the winners in each University

**25**  
points

## WINNER OF THE QUIZ

Play during the Workshop!

**20**  
points

## WINNER OF THE INSTAGRAM BATTLE

Vote for your University on the @ReplyU  
Instagram Profile

**15**  
points

## BEST PICS TAKEN DURING THE EVENTS

Showing both the Reply and your University  
logo. Share it from a public profile on Instagram.  
Use #StudentClash and tag @ReplyU