



Technical Challenge Brief

Congratulations on making it to the technical assessment phase of our intern selection process! We are excited to see your skills in action and to evaluate your approach to solving real-world problems.

Challenge Overview

You are tasked with creating a chatbot that can be embedded on any web page. This chatbot should be able to answer questions about people working at DemoCo, a fictitious company.

Requirements

Technology Stack

Front End: HTML, JavaScript, CSS

Back End: Python

Frameworks: You may choose any frameworks that you are comfortable with, such as React or Django.

The front end must interact with the back end through a REST API.

You may implement the chatbot Q&A functionality by using an open-source LLM or your own NLP pipeline. You are not allowed to hard-code answers.

Functional Requirements

The chatbot should be able to answer questions about staff. You have been provided with a knowledge base that lists staff names, their roles, and their years of experience. Additionally, you have been given a list of expected answers the chatbot should return when asked specific questions.

Knowledge Base

The chatbot's knowledge base is as follows:

[START]

Kayla is a Project Manager with 10 years of experience. She contracts to DemoCo.

Beneil is a Project Manager who has been working for 20 years. He is not a contractor.

Miesha is a Diversity and Inclusiveness Researcher with 10 years of work experience. She is a permanent employee at DemoCo.



Israel has 20 years of experience as a Diversity and Inclusiveness Researcher. He works at SubCo, a subcontractor to DemoCo.

[END]

Expected Results

The chatbot should return the following results to user queries:

Query	Expected Result *
Find people who fulfil the following requirements: any person	Kayla, Beneil, Miesha, Israel
Find people who fulfil the following requirements: they are a project manager	Kayla, Beneil
Find people who fulfil the following requirements: they are a project manager, they have more than 15 years of experience	Beneil
Find people who fulfil the following requirements: they are a project manager, they are a contractor	Kayla
Find people who fulfil the following requirements: they are a project manager, they have more than 15 years of experience, they are a contractor	No result / Unknown
Find people who fulfil the following requirements: they are a diversity and inclusiveness researcher	Miesha, Israel
Find people who fulfil the following requirements: they are a diversity and inclusiveness researcher, they have more than 15 years of experience	Israel
Find people who fulfil the following requirements: they are a diversity and inclusiveness researcher, they are a contractor	Israel
Find people who fulfil the following requirements: they are a diversity and inclusiveness researcher, they have less than 15 years of experience, they are a contractor	No result / Unknown

* Results are not required to be verbatim



Process

1. Read the Brief

Carefully read and understand this brief.

2. Email Questions

If you have any questions, please email them to support@advaise.app. Include the unique ID provided in the email you received in the subject line. You are allowed one round of Q&A, so please consolidate all your questions into a single email.

3. Develop and Test the Solution

Develop your solution based on the requirements and test it thoroughly to ensure it works as expected.

4. Upload Your Code

Clone the GitHub repository we created for you. Complete the task and push your code to the repository. Ensure your code is well-documented and includes instructions on how to run it.

Email support@advaise.app if you encounter any problems using the GitHub repo.

5. Completion Email

Once you have completed the challenge, send an email to support@advaise.app answering the following questions:

- How does your solution work?
- What frameworks did you choose, and why (if any)?
- How would you improve the solution?
- Any other comments.

Include the unique ID provided in the email you received in the subject line.

Evaluation Criteria

Your submission will be evaluated based on the following criteria:

- **Functionality:** Does the chatbot accurately answer the questions based on the knowledge base?
- **Code Quality:** Is the code clean, well-documented, and easy to understand?
- **Technical Skill:** How effectively did you use the chosen frameworks and technologies?
- **Creativity:** Did you add any extra features or improvements that enhance the solution?

We look forward to seeing your solution. Good luck!