

Interview Trainer Agent - Knowledge Base

This document serves as a knowledge base for an AI-powered Interview Trainer Agent. It contains role-specific technical questions, HR queries, behavioral scenarios, and industry guidelines. It is structured for easy integration into a Retrieval-Augmented Generation (RAG) pipeline.

Role: Software Developer (Backend) - 2 Years Experience

Technical Interview Questions:

- Explain how database indexing works. Why is it important?
- How do you optimize Django ORM queries for performance?
- Describe REST API best practices for scalable backend systems.
- How do you handle concurrency in a Python web application?
- What is the difference between SQL and NoSQL databases? When would you use each?

HR Interview Questions:

- Tell me about a time you resolved a conflict within a team.
- Why do you want to work at our company?
- What motivates you to perform well in your role?
- How do you handle feedback from your manager?

Behavioral Scenarios:

- Describe a situation where you had to meet a tight deadline. How did you manage it?
- Talk about a time you had to learn a new technology quickly for a project.
- Describe a challenge you faced in a project and how you overcame it.

Industry Guidelines:

- Research the company thoroughly before the interview.
- Prepare examples using the STAR (Situation, Task, Action, Result) method.
- Dress appropriately and be on time.
- Ask meaningful questions about the role and company.

Role: Data Analyst (Fresher)

Technical Interview Questions:

- What are the different types of joins in SQL?
- Explain data normalization and its benefits.
- How do you handle missing data in a dataset?
- What is the difference between descriptive and inferential statistics?
- Explain a project where you used data visualization to derive insights.

HR Interview Questions:

- Why did you choose data analytics as your career?

- How do you handle criticism of your work?
- Tell me about a time you worked on a team project.

Behavioral Scenarios:

- Describe how you solved a problem with incomplete data.
- Talk about a time you had to present findings to a non-technical audience.

Industry Guidelines:

- Showcase analytical thinking during interviews.
- Communicate complex data insights in simple terms.
- Be prepared with case studies or project examples.

This knowledge base can be indexed in a vector database (Chroma, Milvus, or IBM Watson Discovery) and used with IBM Granite LLM to create a Retrieval-Augmented Interview Trainer Agent.