

Task: Build a GraphQL API for a track search service.

In this test assignment, you will be building a GraphQL API for a track search service. The goal is to create a GraphQL schema and implement the necessary resolvers to handle various operations related to tracks. The API should allow users to fetch tracks by name, create new tracks if they are not present in the system, fetch all tracks, update tracks, and delete tracks.

You are required to create an Apollo server to run the Studio for the application, allowing you to interact and test the GraphQL API. While the focus of this assignment is on the backend functionality, you are not required to build a frontend for the application as Apollo Studio will serve this purpose nicely.

For the external API please use: <https://docs.acrcloud.com/reference/metadata-api>.

To get the credentials for the external API requests, please sign up on <https://console.acrcloud.com/signup#/register>.

Requirements:

1. Implement a GraphQL schema with the following types. Please create a base schema that has internal id, created at & updated at fields that will be extended to the following schema:
 - Track:
 - name
 - artist_name
 - duration
 - ISRC
 - release_date
2. Implement the necessary resolvers to handle the following operations:
 - Get a Track by its name and artist name & create a new entity to the database when not present in the system (should fetch data from the external API).
 - Get all tracks in the database.
 - Get/Update/Delete a specific Track by internal ID.
4. Implement token authentication for the GraphQL endpoint.

5. Include proper error handling and response status codes for GraphQL endpoints.
6. Use TypeScript for type safety and provide clear and comprehensive type definitions for the application.
7. Create an Apollo server for running the Studio for the application.
8. Front-end not required for this application.
9. Write 2 tests for the application
10. Dockerized setup is a plus but not a requirement. Please add guidelines to the readme how to run the application in any case
11. Serve the GraphQL API through a single endpoint /graphql.

System logic implementation:

- When there is a search for a Track and there is no entry in the database, fetch it from the external API and create a new entry to the database.

Evaluation Criteria:

- Correct implementation of the GraphQL schema and resolvers.
- Proper error handling and response status codes.
- Use of TypeScript for type safety and clear type definitions.
- Overall code organization, readability, and best practices.
- Tests properly written.

Please write a few sentences on how the evaluation criteria was met.