Backend Developer Intern Assignment

About Arré

Arré is a leading multi-format, multi-genre digital media brand creating original stories across video, audio, and the written word. More than 200 Mn people enjoy Arré's content through its network of linear and digital platform collaborations (Jio, MX Player, Hotstar, Tata Sky, etc).

Arré Studio, launched in 2019, produces large-format original shows for international and domestic OTT platforms, broadcast television, and movie screens, across languages and genres.

Arré forayed into the media tech space with Arré Voice, a women-first, audio social app that lets creators share their thoughts via 30-second audio clips, called Voicepods, and a conversation tool called Voicepools. The core mission of Arré Voice is to empower users with the easiest tool to share their primal and fleeting thoughts with their fans/followers without the fear of judgment, effortlessly.

The product team at Arré Voice takes a first-principles approach towards building a seamless & delightful consumer experience, with an extreme bias for action. We adopt a data-first approach to arrive at objective solutions to user problems, also relying on intuition and creativity wherever applicable. We're looking for talented, passionate, and fearless execution-oriented individuals to join our young, vibrant team. If you're passionate about solving the right problems, can communicate solutions effectively, and can hustle to get it executed, we want to talk to you!

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1. Assignment Details

Objective:

As part of this assignment, you will build an API service based on the below mentioned requirements.

A simple **library system** where users can:

- Manage **books** (add, update, delete, and list books).
- Manage **authors** (add, update, delete, and list authors).
- Track **borrowed books** by users.
- Fetch **books by author** and **authors by book**.

2. Functional Requirements

API Operations:

1. **Books**
    - Add a new book.
    - Update book details.
    - Delete a book.
    - List all books with optional filters (e.g., by author, borrowed status).
2. **Authors**
    - Add a new author.
    - Update author details.
    - Delete an author.
    - List all authors.
3. **Users**
    - Add a new user.
    - List all users.
4. **Borrowed Books**
    - Mark a book as borrowed by a user.
    - Return a borrowed book.
    - Fetch all borrowed books for a user.

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3. Technical Requirements

Technology Stack

1. **Node.js (Typescript)** or **Go**.
2. **GraphQL** for API implementation
3. **SQLite or MongoDB:** Primary database for the project
4. **Docker** for containerisation.

Note: no authentication is required

4. Deliverables

- A GitHub repository with a README file containing:
    - Steps to run the project
    - Any additional notes