

Node.js Service Development Test

Objective:

Develop a Node.js service that provides a RESTful API for managing users.

Requirements:

1. Technology Stack:

- Use **Node.js** with **Express.js**.
- Use **Typescript**.
- Use **MySQL** as the database.
- Do not use **Sequelize** or another ORM/query builder.
- You can use Express not framework like NestJS

2. User Model:

Each user should have the following attributes:

- **id** (Auto-incremented, Primary Key)
- **name** (String, Required)
- **surname** (String, Required)
- **birth_date** (Date, Required)
- **sex** (Enum: **male**, **female**, **other**, Required)

3. Endpoints:

Implement endpoints to create, retrieve, list, modify and delete users.

4. Database Setup:

- Provide a script or instructions to set up the MySQL database and necessary tables.

5. Bonus (Optional):

- Implement input validation using **Joi** or another validation library.
- Implement pagination for the **GET /users** endpoint.
- Write basic unit tests for the API.
- Set up a development environment

6. Advanced (Optional):

- Group Model: each group has the following attributes:
 - i. **id** (Auto-incremented, Primary Key)
 - ii. **name** (String, Required)
- Each user can belong to any number of groups
- Implement endpoints to create, list, modify and delete groups
- Implement endpoints to handle the association between users and groups (join and leave).

Delivery:

- Submit the source code as a **Git** repository.
- Include a **README.md** file with setup instructions and API documentation.