# **QriarLabs Intern Program – 2nd class 2023 Practical Exam: Node.js, APIs, and Database**

#### Overview

Your task is to create a simple Node.js application with an API that allows users to store, retrieve, update, and delete notes. You will use a database of your choice to persistently store the notes.

### Requirements:

## • Node.js Application:

- Use Express.js as your server framework.
- Use any database of your choice (e.g., MongoDB, MySQL, PostgreSQL, SQL Lite).
- Use an ORM or database driver to interface with your chosen database (e.g., Mongoose for MongoDB, Sequelize for SQL databases).

## • API Endpoints:

- o **POST /notes**: Add a new note.
- o Request body: { "content": "This is a sample note." }
- o **GET /notes**: Retrieve a list of all notes.
- o **GET /notes/:noteId**: Retrieve a specific note by its ID.
- o **PUT /notes/:noteId**: Update a specific note by its ID.
- o Request body: { "content": "This is an updated note." }
- o **DELETE** /notes/:noteId: Delete a specific note by its ID.

#### • Database:

- o Design a table or schema for the notes.
- Each note should have an ID, content, and a timestamp indicating when it was created.
- o Error Handling:
- Your API should handle possible errors gracefully, such as trying to retrieve, update, or delete a note that doesn't exist.
- Return appropriate status codes and error messages for different types of errors.

#### **Submission:**

- Push your code to a Git repository (e.g., GitHub, GitLab).
- Provide the repository URL, and make sure the repository is public or you've granted access to the reviewing team.
- If you deployed the application, provide the live URL as well.

- Write a **README** . **md** in your repository that includes:
  - o Instructions on how to set up and run your application.
  - o Any assumptions or decisions you made while working on the exam.
  - o Known issues or parts of the task you didn't manage to complete.

Remember, the aim of this exam is to test your understanding and skills in Node.js, APIs, and database integration. It's more important to have a working solution than a complex one. Please, be ready to present and asnwer questions about your implementation, last not least: Don't use AI tools for creating this app/exam for you.