# Internship Assignment: Full-Stack Development

Company: GIVA - Silver Jewellery Company

Location: Bangalore

Deadline: 24 hours from receiving the assignment.

# **Objective:**

To assess your ability to work with modern web technologies, particularly focusing on Postgres, React, and Node.js. You will be tasked with developing a basic e-commerce feature that demonstrates your skills in frontend and backend development.

# **Assignment:**

You are required to build a simple Product Management System using React(preferred Next.js), Node.js, and PostgreSQL.

# **Key Requirements:**

#### 1. 1. Frontend:

- Create a product listing page where users can:
- View a list of products (name, description, price, and available quantity).
- Add a new product using a form (name, description, price, and quantity).
- Edit an existing product.
- Delete a product.
- Use React for the frontend.
- Style the frontend using basic CSS or any framework like Bootstrap.

## 2. 2. Backend:

- Build a simple API using Node.js and Express.js to handle the following operations:
- GET: Fetch all products.
- POST: Add a new product.
- PUT: Edit an existing product.
- DELETE: Delete a product.
- Use PostgreSQL as the database to store product information.

#### 3. 3. Database:

- Set up a PostgreSQL database with a products table containing the following fields:
- id (Primary Key)
- name (Text)

- description (Text)
- price (Float)
- quantity (Integer)
- 4. 4. Bonus (Optional):
- Add unit tests for your API routes.
- Implement simple authentication for adding, editing, and deleting products.
- Deploy the application to vercel or any other hosting service.

### **Submission Guidelines:**

- Share a GitHub repository with your project code.
  - Ensure that the project can be set up and run locally with minimal effort (include a README with setup instructions).
  - If deployed, provide the live URL.
- Feel Free to use any open source dataset to create initial dataset

## **Evaluation Criteria:**

- Code quality: Clean, modular, and reusable code.
- Functionality: How well the app meets the requirements.
- Database integration: Efficient use of PostgreSQL.
- Creativity: Optional features or enhancements beyond the scope.
- Timely submission.