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Technical Skill Assessment

Develop a web app based on the below listed requirements.

GearUp is the online store that allows customers to purchase the any tech products with simple steps.

Requirements

User Management	• The user is required to enter the necessary customer details at the start before entering the products page.
Cart Management	• All products that are planned for sale should be visible to users. • Users should be able to add items to the cart, update quantity and remove items from the cart.
Order Management	• User should be able to confirm their order by providing the delivery details. • After transaction completion, User should receive an order confirming email alert.

Instructions

- Design a database schema to store data related to the GearUp web application.
  - When designing the database schema, you have created a table to store the product details and seed at least 15 entries to product details table. Creating the user interface for adding products to the web application is not required.
  - You have to create the tables to store customers details, cart details and order details. When designing a table, you have applied the primary/foreign key constraint and choose the suitable relationship between tables.
- The initial loading of the application requires the user to enter the customer details. The user is directed to the products page after the customer data is saved to the database.
- All the transactions happen in the cart (Add, Update, Remove) should be stored in the database against the user.
- Validate user inputs, handle database errors, and provide meaningful error messages to the users.

- Need to create two separate frontend and backend projects that communicate via a rest API.
- Use appropriate HTTP status codes for different scenarios (e.g. 200, 201, 400, 404, 500).
- Ensure that you follow best practices for code organization, security, and data integrity.
- Use appropriate design patterns and adhere to the principles of clean code and separation of concerns.

Bonus (Optional)

- Write unit test cases.
- Deploy implemented web application.

Deliverables

- Upload the database scripts and source code.
- Upload a README file explaining the setup instructions and any additional information related to the project.

Gear Up Process