

ASSESSMENT OVERVIEW:

A Simple Product Management Dashboard

In this assignment, we aim to evaluate your software development skills. Please focus on practicality and avoid over-engineering your solution.

Objective:

Develop simple RESTful APIs using C# (ASP.NET Core) to manage products and create a React frontend to display and interact with the data.

Backend (C# ASP.NET Core):

1. REST API Design:

- Create APIs to manage products with the following functionalities:
 - Register a new product with details such as:
 - Category (Food, Electronics, Clothes...)
 - Name
 - Product Code
 - Price
 - SKU
 - Stock Quantity
 - Date Added
 - Retrieve a list of products.

2. Database:

- For us to test your solution easily; please use an embedded database like SQL Server Express, SQLite for local file storage. (Alternatively, you may use other database solutions)

Frontend (React):

- **DataTable:** Implement a table to display the list of products with their details.
- **Graph:** Create two graphs to visually represent product data. The graphs should include:
 - Total stock quantity per category.

- Total number of products added in different time periods (e.g. This week, This Month, This Year)
- In addition to the data created with your new API, you can insert extra mock data in advance to better demonstrate the graph's functionality.

Deliverables:

1. Documentation:

- Provide a README file with clear and simple setup instructions, API endpoints documentation.
- If required, please provide SQL scripts or detailed initialization steps for setting up the database schema and inserting initial mock data.

2. (Optional) Dockerization:

- It's a nice-to-have to containerize your application using Docker. Provide a Docker file and instructions for building and running the container.

We look forward to your solution and appreciate your time applying with us!