Mini Project – Item Purchase System

Technologies: React 18 + Context API + Axios + json-server

Question 1 (3 marks) – View & Filter Items

Create a component that retrieves and displays all items from the API:
GET http://localhost:9999/items

Requirements:
- Route: http://localhost:3000
- Display the following fields in a table: Name, Type, Cost, Avg Stars (average of stars from feedbacks)
- Use a dropdown to filter items by type
- Match the given layout figure

Question 2 (3 marks) – Add to Cart and Place Purchase

- Clicking "Add to Cart" will add an item to cart.
- If item already exists in cart, increase its quantity.
- Allow removing items from the cart.
- Add a textarea to input Delivery Address.
- Clicking "Place Purchase" sends cart info to:
  POST http://localhost:9999/purchases
- Show success message upon purchase.

Question 3 (2 marks) – View Purchase History

- Route: http://localhost:3000/purchases
- Display table with: ID, Date (dd/MM/yyyy), Address, Item List, Total Cost
- Each item row must be displayed as:
  <index>. <Item Name>   <Cost>   <Quantity>

Question 4 (2 mark) – Display Rating Chart

- Create a simple chart component (e.g. bar chart or pie chart)

- Show the distribution of average stars (1 to 5 stars) from all items
- You may use a chart library (e.g., chart.js, recharts, or Ant Design Charts)
- Display on the homepage below the product table