5.1 .a. Design and style a ProductCard React component that adjusts its layout and appearance based on the device screen size. Style the card with a fixed width and padding for desktop view. Use media queries to: • Make the card full-width on screens smaller than 600px. • Adjust font sizes and button sizes for mobile devices. Ensure the image, title, and price remain visually balanced and readable on all screen sizes. Use external CSS or CSS modules for styling.

App.js

import React from 'react';

import ProductCard from './ProductCard';

function App() {

  return (

    <div>

      <h1 style={{ textAlign: 'center' }}>Our Products</h1>

      <ProductCard

        image="https://via.placeholder.com/300"

        title="Wireless Headphones"

        price="2499"

      />

    </div>

  );

}

export default App;

\src\ProductCard.css

.product-card {

    width: 300px;

    padding: 16px;

    border: 1px solid #ddd;

    border-radius: 8px;

    box-shadow: 2px 2px 10px rgba(0, 0, 0, 0.1);

    text-align: center;

    margin: 10px auto;

    transition: all 0.3s ease;

    background-color: #fff;

  }

  .product-image {

    width: 100%;

    height: auto;

    border-radius: 6px;

  }

  .product-title {

    font-size: 1.5rem;

    margin: 12px 0 6px;

  }

  .product-price {

    font-size: 1.2rem;

    color: #28a745;

    margin: 4px 0 12px;

  }

  .product-button {

    padding: 10px 20px;

    font-size: 1rem;

    background-color: #007bff;

    color: #fff;

    border: none;

    border-radius: 6px;

    cursor: pointer;

  }

  /\* Mobile Responsive \*/

  @media screen and (max-width: 600px) {

    .product-card {

      width: 100%;

      padding: 12px;

    }

    .product-title {

      font-size: 1.2rem;

    }

    .product-price {

      font-size: 1rem;

    }

    .product-button {

      padding: 8px 16px;

      font-size: 0.9rem;

    }

  }

C:\Users\nikit\Desktop\WEB LAB SEM 6\5.1\src\ProductCard.js

import React from 'react';

import './ProductCard.css'; // Import external CSS

const ProductCard = ({ image, title, price }) => {

  return (

    <div className="product-card">

      <img src={image} alt={title} className="product-image" />

      <h2 className="product-title">{title}</h2>

      <p className="product-price">₹{price}</p>

      <button className="product-button">Add to Cart</button>

    </div>

  );

};

export default ProductCard;

5.2 Create a Responsive Navigation Bar with CSS and Media Queries Build a Navbar component that: • Displays horizontal menu items on large screens (desktop/tablet). • Collapses into a hamburger menu on small screens (mobile). • Uses CSS media queries to handle layout changes. • Includes hover effects and active state styling. Requirements: • On desktop: Show menu items side-by-side. • On mobile (screen width < 768px): Hide menu items and show a hamburger icon. • Clicking the hamburger icon toggles the menu visibility vertically. • Style with smooth transitions for showing/hiding the menu.

App.js

import React from 'react';

import Navbar from './Navbar';

function App() {

  return (

    <div>

      <Navbar />

      <main style={{ padding: '20px', color: 'white', background: '#161b22', height: '100vh' }}>

        <h1>Welcome to MySite</h1>

        <p>This is a responsive navbar demo.</p>

      </main>

    </div>

  );

}

export default App;

npm install redux react-redux install this

index.js

import React from 'react';

import ReactDOM from 'react-dom/client';

import App from './App';

import { Provider } from 'react-redux';

import store from './store';

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(

  <Provider store={store}>

    <App />

  </Provider>

);

Navbar.css

/\* Base styles \*/

.navbar {

    display: flex;

    justify-content: space-between;

    align-items: center;

    background-color: #0d1117;

    padding: 10px 20px;

    color: white;

    position: relative;

  }

  .logo {

    font-size: 24px;

    font-weight: bold;

  }

  .menu {

    display: flex;

    gap: 20px;

    transition: max-height 0.3s ease;

  }

  .nav-link {

    text-decoration: none;

    color: white;

    font-size: 16px;

    position: relative;

  }

  .nav-link:hover {

    color: #00bfff;

  }

  .nav-link.active::after {

    content: '';

    position: absolute;

    bottom: -5px;

    left: 0;

    height: 2px;

    width: 100%;

    background-color: #00bfff;

  }

  /\* Hamburger hidden by default \*/

  .hamburger {

    display: none;

    font-size: 24px;

    cursor: pointer;

  }

  /\* Mobile styles \*/

  @media (max-width: 768px) {

    .menu {

      flex-direction: column;

      position: absolute;

      top: 60px;

      right: 0;

      background-color: #0d1117;

      width: 100%;

      max-height: 0;

      overflow: hidden;

      z-index: 1;

    }

    .menu.open {

      max-height: 300px;

      padding: 10px 0;

    }

    .hamburger {

      display: block;

    }

  }

  Navbar.js

import React, { useState } from 'react';

import './Navbar.css';

export default function Navbar() {

  const [isOpen, setIsOpen] = useState(false);

  const toggleMenu = () => setIsOpen(!isOpen);

  return (

    <nav className="navbar">

      <div className="logo">MySite</div>

      <div className={`menu ${isOpen ? 'open' : ''}`}>

        <a href="#home" className="nav-link active">Home</a>

        <a href="#about" className="nav-link">About</a>

        <a href="#services" className="nav-link">Services</a>

        <a href="#contact" className="nav-link">Contact</a>

      </div>

      <div className="hamburger" onClick={toggleMenu}>

        ☰

      </div>

    </nav>

  );

}

store.js

import React, { useState } from 'react';

import './Navbar.css';

export default function Navbar() {

  const [isOpen, setIsOpen] = useState(false);

  const toggleMenu = () => setIsOpen(!isOpen);

  return (

    <nav className="navbar">

      <div className="logo">MySite</div>

      <div className={`menu ${isOpen ? 'open' : ''}`}>

        <a href="#home" className="nav-link active">Home</a>

        <a href="#about" className="nav-link">About</a>

        <a href="#services" className="nav-link">Services</a>

        <a href="#contact" className="nav-link">Contact</a>

      </div>

      <div className="hamburger" onClick={toggleMenu}>

        ☰

      </div>

    </nav>

  );

}

All are in src folder