

Advance Web Programming

Assignment 2

(Fall 2025)

Submission Deadline: 11th November 2025 – 11:59

Marks:100

Submission Mode: Upload the zipped folder on the ODOO Portal

Assignment Overview

Create a **React-based Single Page Product Gallery Website** that fetches data from an API and displays product images dynamically.

1. Project Setup

- Create a new React app using **Vite**.
- Install **Axios** and **Tailwind CSS**.
- Remove unnecessary default Vite files.
- Maintain a clean folder structure (e.g., `components/`, `sections/`, `assets/`).

2. Components

Component	Description
Header	Contains the website title and a Dark/Light Mode Toggle button using <code>useState</code> .
Hero	Intro section with heading and subheading (React + API).
GalleryCard	Reusable component that receives title, price, and image via props and displays a product card.
Gallery	Fetches product data using <code>Axios</code> + <code>useEffect</code> , maps over the data, and renders multiple <code>GalleryCard</code> components.
Contact	A form using controlled inputs (useState) with fields: Name, Email, Message (validate empty fields).
Footer	Displays copyright text.

3. JSX, Props & Styling

- Use **JSX expressions** to display dynamic values (e.g., product name, price).
- Use **props** to pass data from Gallery → GalleryCard.
- Use **Tailwind CSS** for styling (you may combine inline/CSS Modules).
- Add at least **one hover animation** on the gallery cards using Tailwind.

4. API Integration (Mandatory)

You must fetch data from this API:

<https://fakestoreapi.com/products>

Technical Requirements

- Must use **Functional Components ONLY** (no class components).
- Must use: `useState`, `useEffect`, Props, Controlled form inputs
- Must use: **Vite + React + Axios + Tailwind CSS**
- Website must be **responsive on mobile, tablet, and desktop**.
- Code must be clean, commented, and readable.

Hint:

Folder Structure:

src/

| App.jsx

| index.css

|— components/

| Header.jsx

Footer.jsx

GalleryCard.jsx

sections/

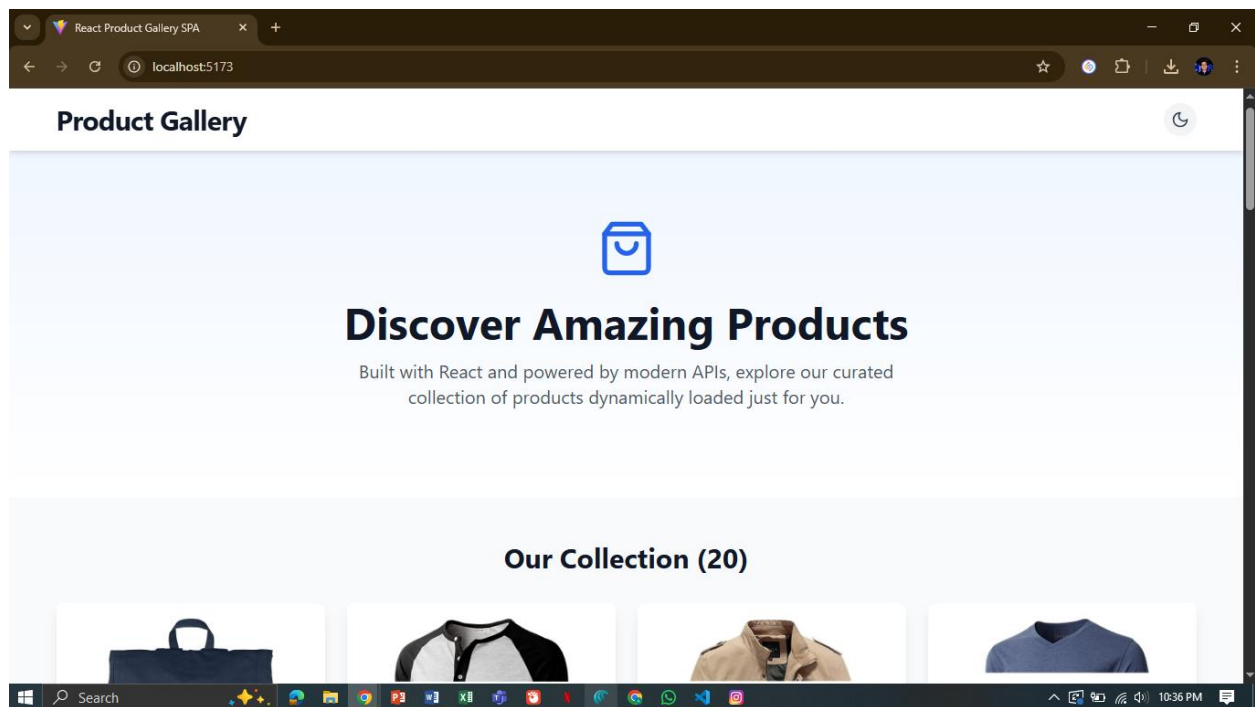
Hero.jsx

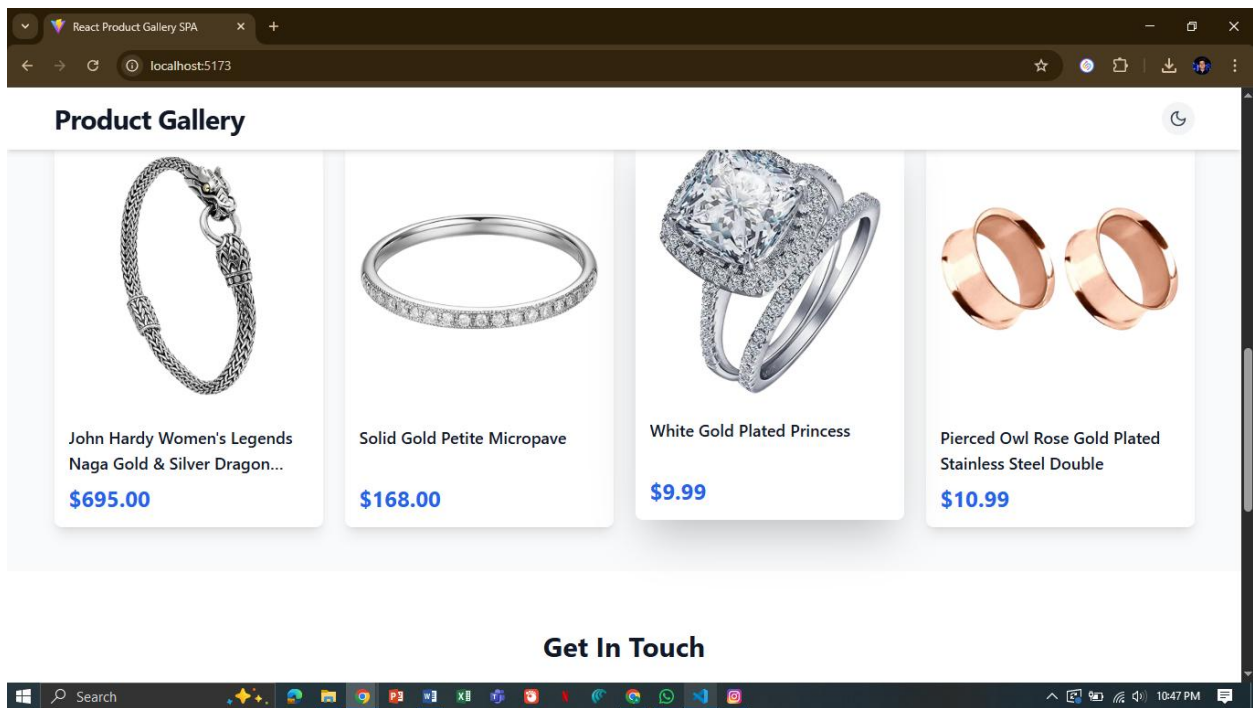
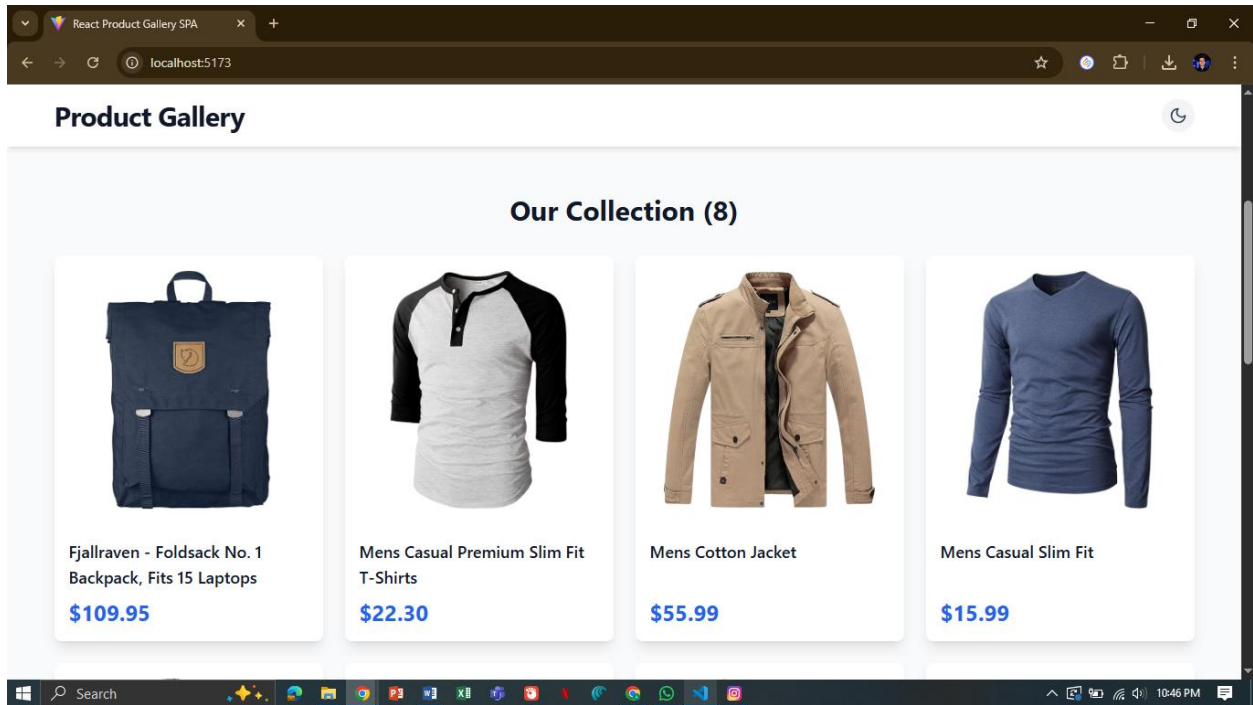
Gallery.jsx

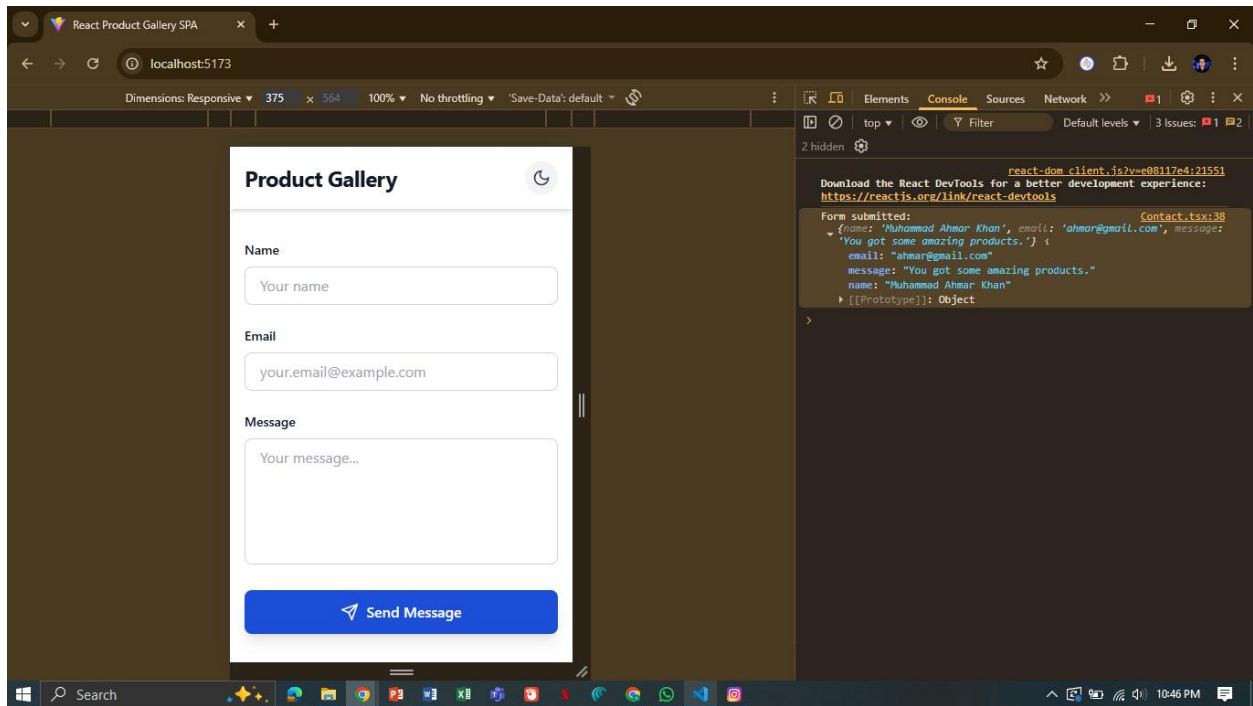
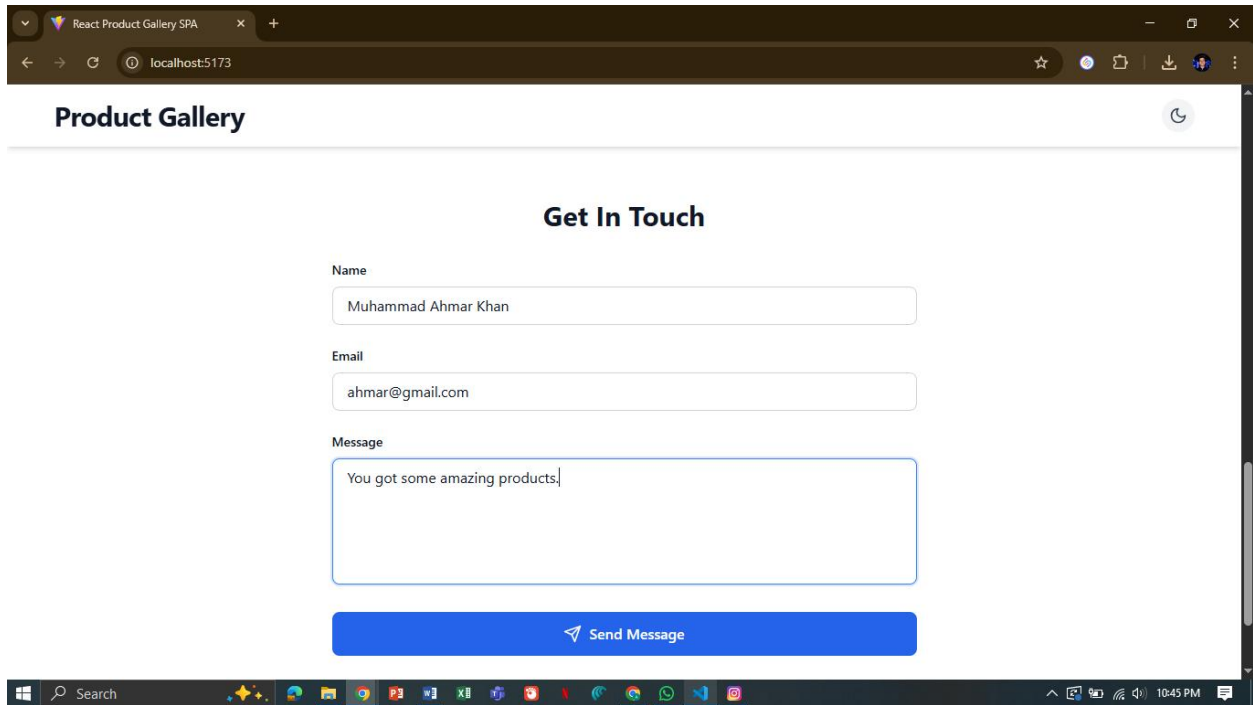
Contact.jsx

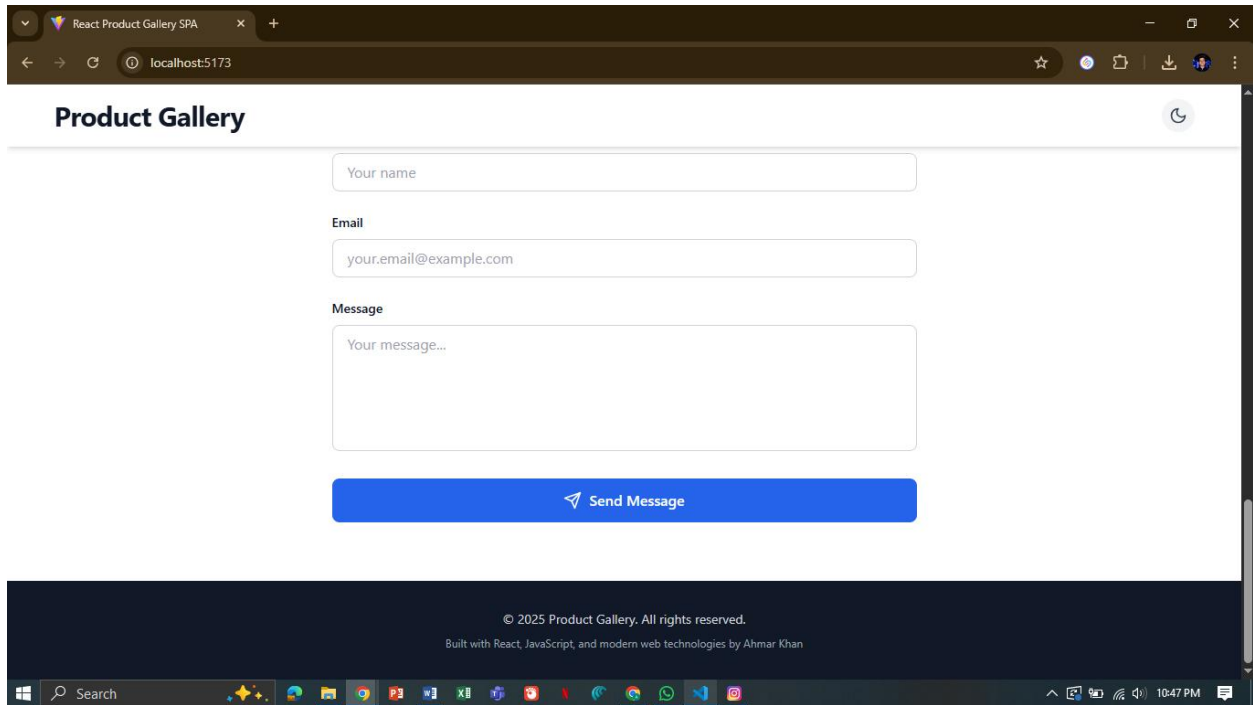
Sample UI:

Light theme

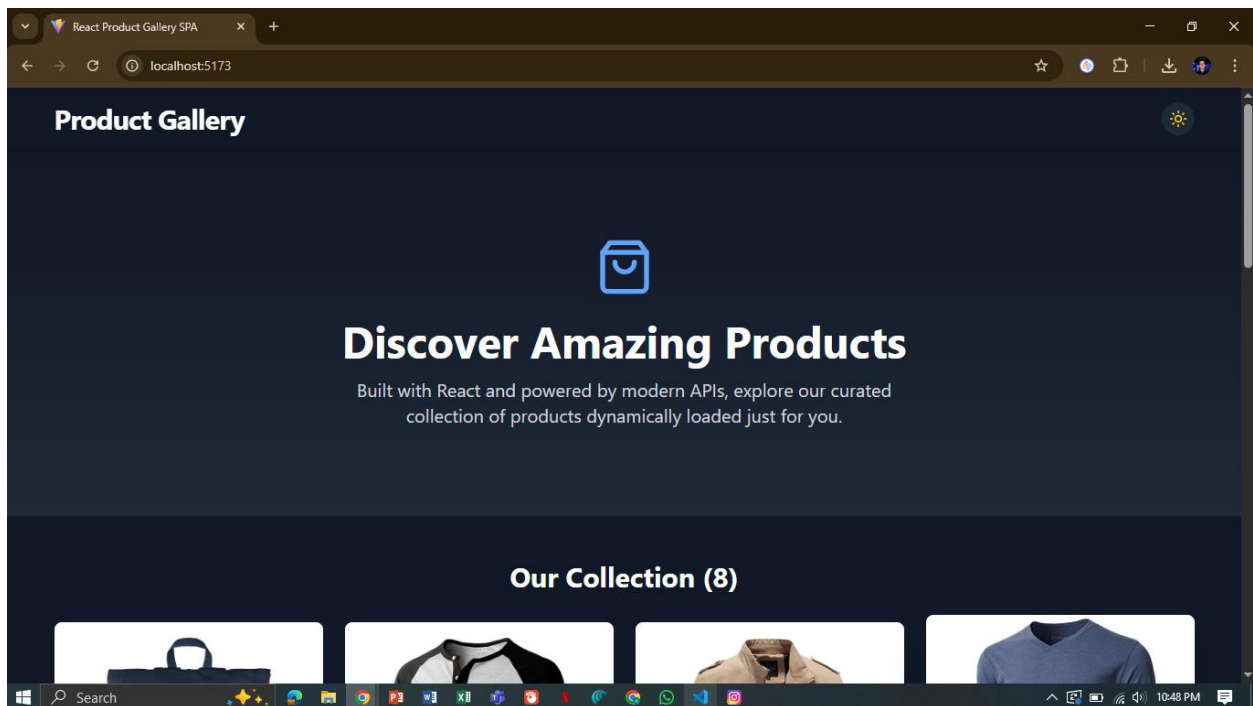


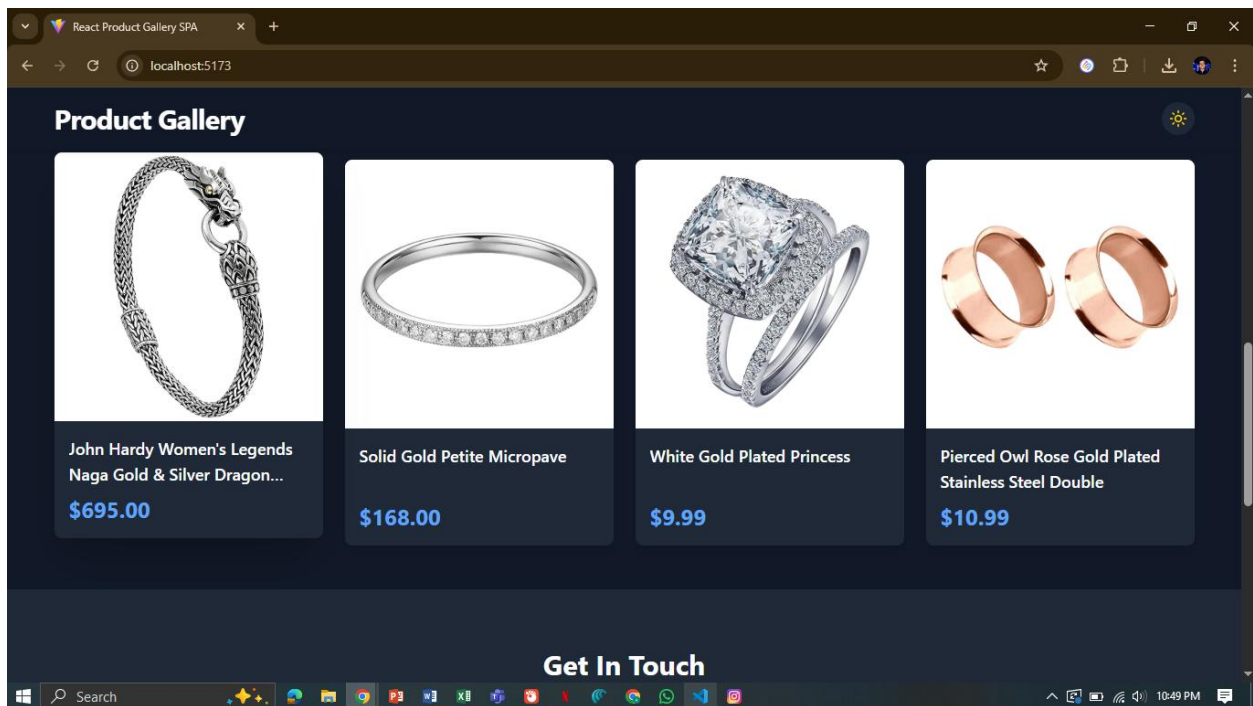
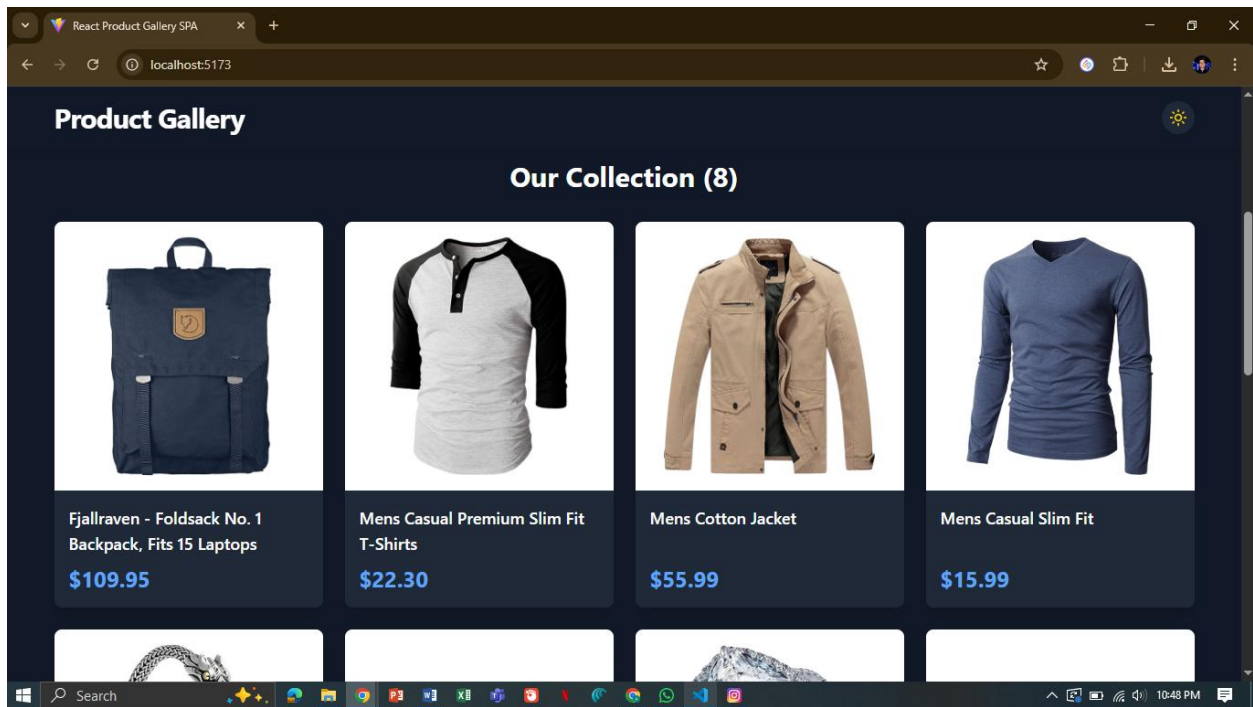


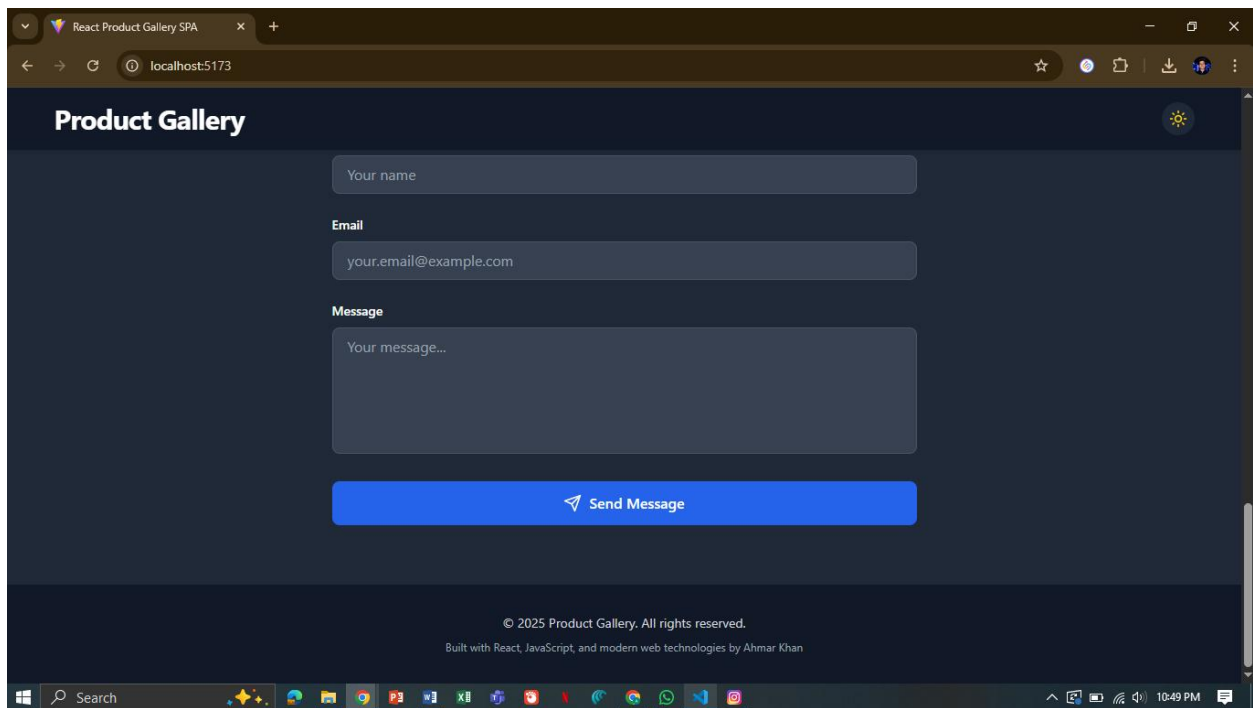
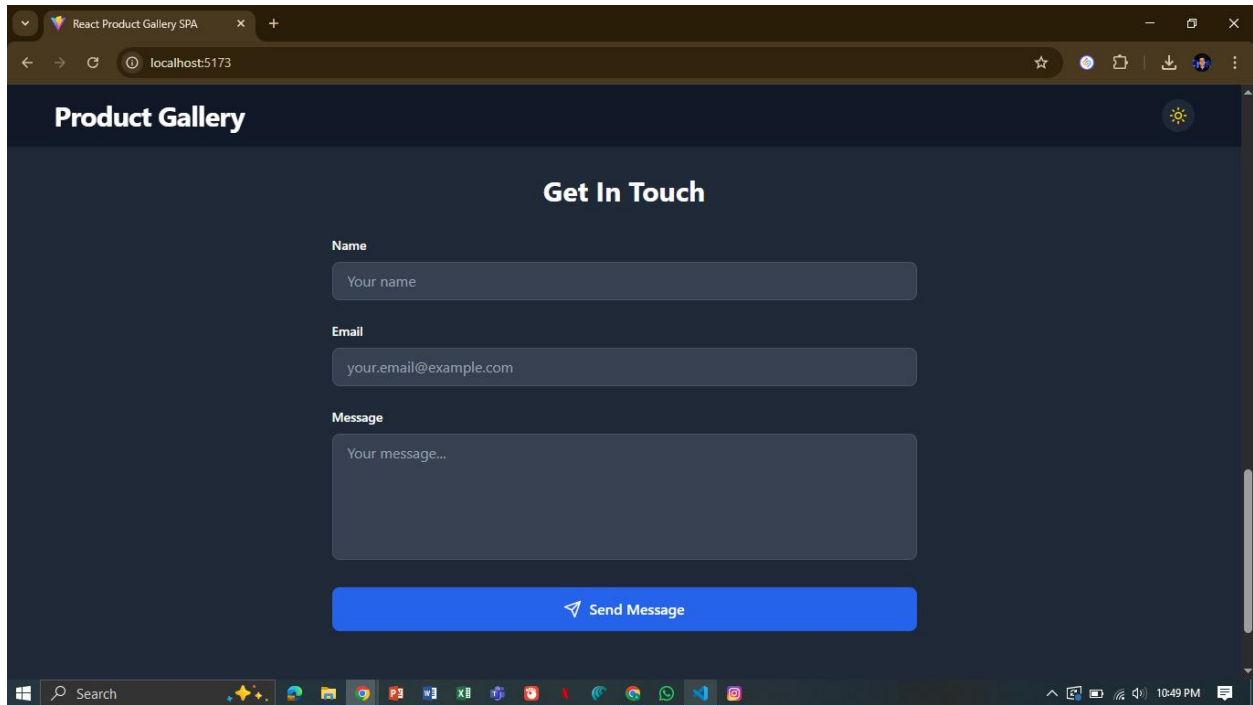




Dark:







Submission Instructions

- Submit a **zipped folder** of your project (including package.json).
- Do **not** include the node_modules folder.
- Submit a **zipped folder** named as:
RegistrationNumber_Name
Example: **L1F23BSSE0001_ZainAsghar.zip**

Rubric (Total 10 Marks)

Criteria	Description	Marks
React Setup & Folder Structure	Proper Vite setup and clean organization of files	10
Components Implementation	At least 5 reusable components created	20
useState + Event Handling	Dark/Light mode toggle + controlled input handling	15
Props Usage	Proper passing of values to GalleryCard component	10
API Fetch (Axios + useEffect)	Render dynamic product cards using map()	25
Styling (Responsive + Tailwind hover effects)	Clean and responsive UI	15
Code Quality & Readability	Proper indentation, comments, meaningful names	5
Total		100

GOOD LUCK!