

Advance Web Programming

Assignment 2

(Fall 2025)

Submission Deadline: 11th November 2025 – 11:59

Marks: 100

Submission Mode: Upload the zipped folder on the OODOO 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 useState.
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 Axios + useEffect, maps over the data, and renders multiple GalleryCard 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:

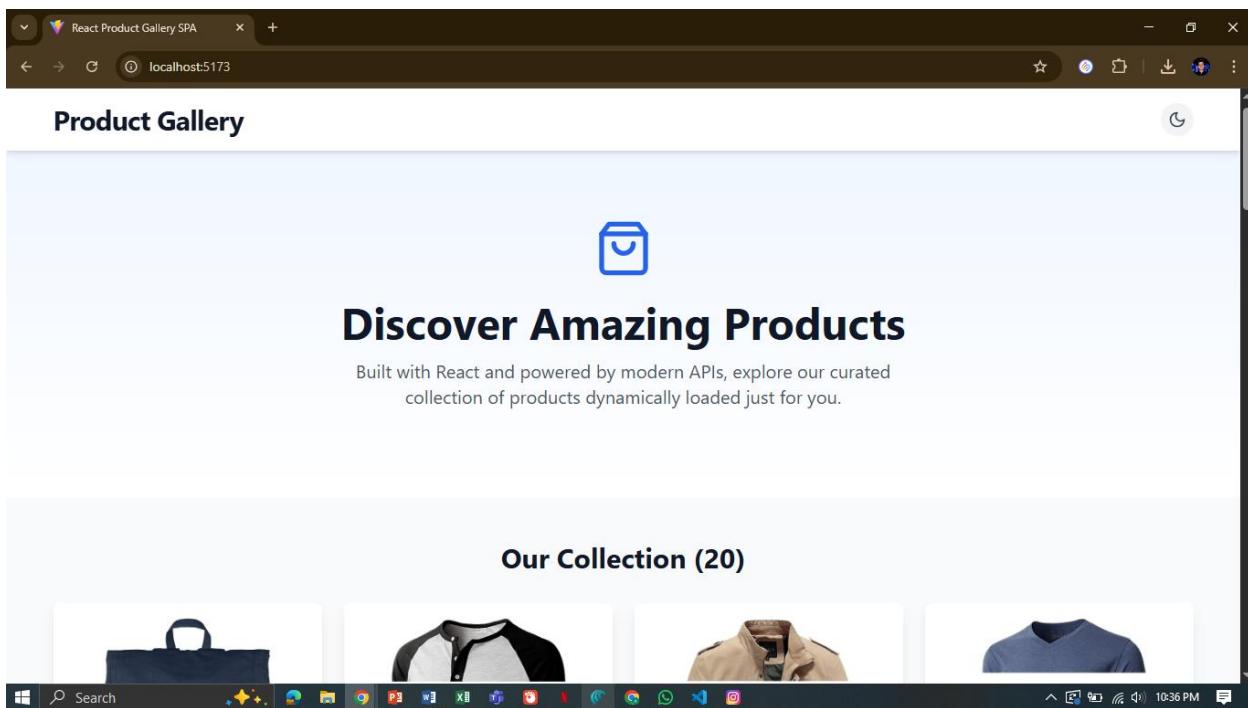
Folder Structure:

```
src/
  | App.jsx
  | index.css
  |— components/
    | Header.jsx
```

```
|  Footer.jsx  
|  GalleryCard.jsx  
|  sections/  
|    Hero.jsx  
|    Gallery.jsx  
|    Contact.jsx
```

Sample UI:

Light theme



React Product Gallery SPA

localhost:5173

Product Gallery

Our Collection (8)

Fjallraven - Foldsack No. 1
Backpack, Fits 15 Laptops

\$109.95

Mens Casual Premium Slim Fit
T-Shirts

\$22.30

Mens Cotton Jacket

\$55.99

Mens Casual Slim Fit

\$15.99

React Product Gallery SPA

localhost:5173

Product Gallery

John Hardy Women's Legends
Naga Gold & Silver Dragon...

\$695.00

Solid Gold Petite Micropave

\$168.00

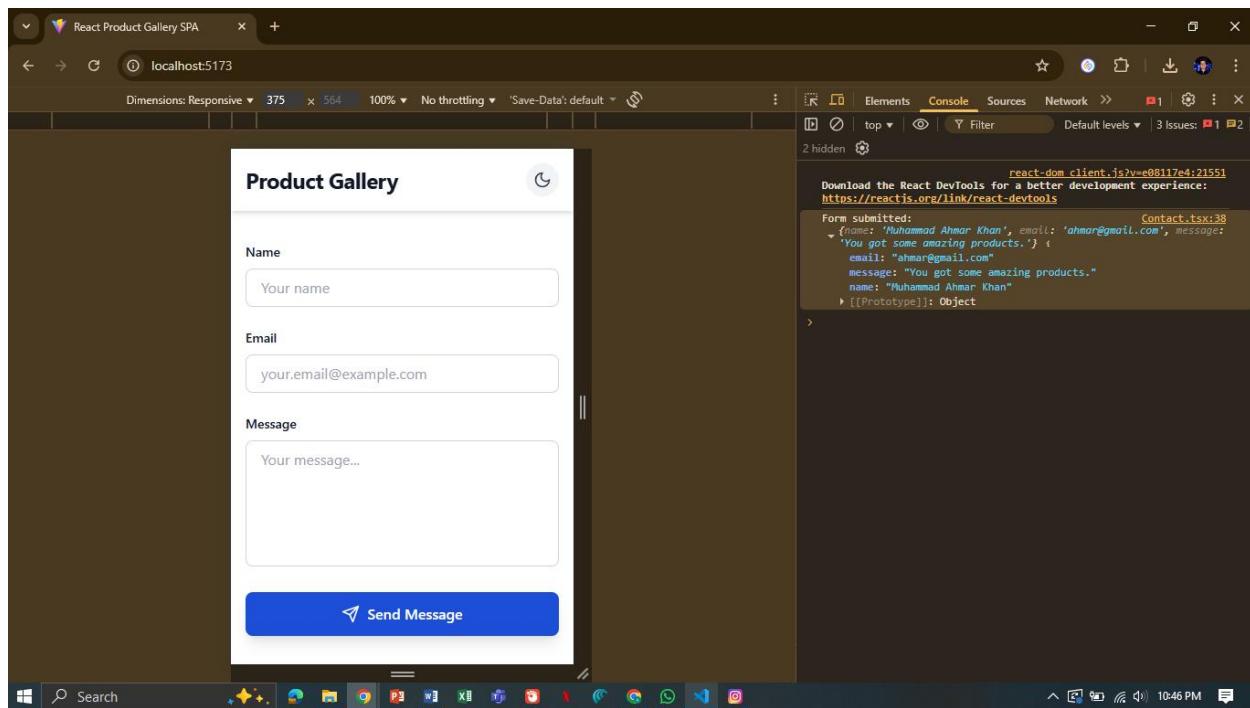
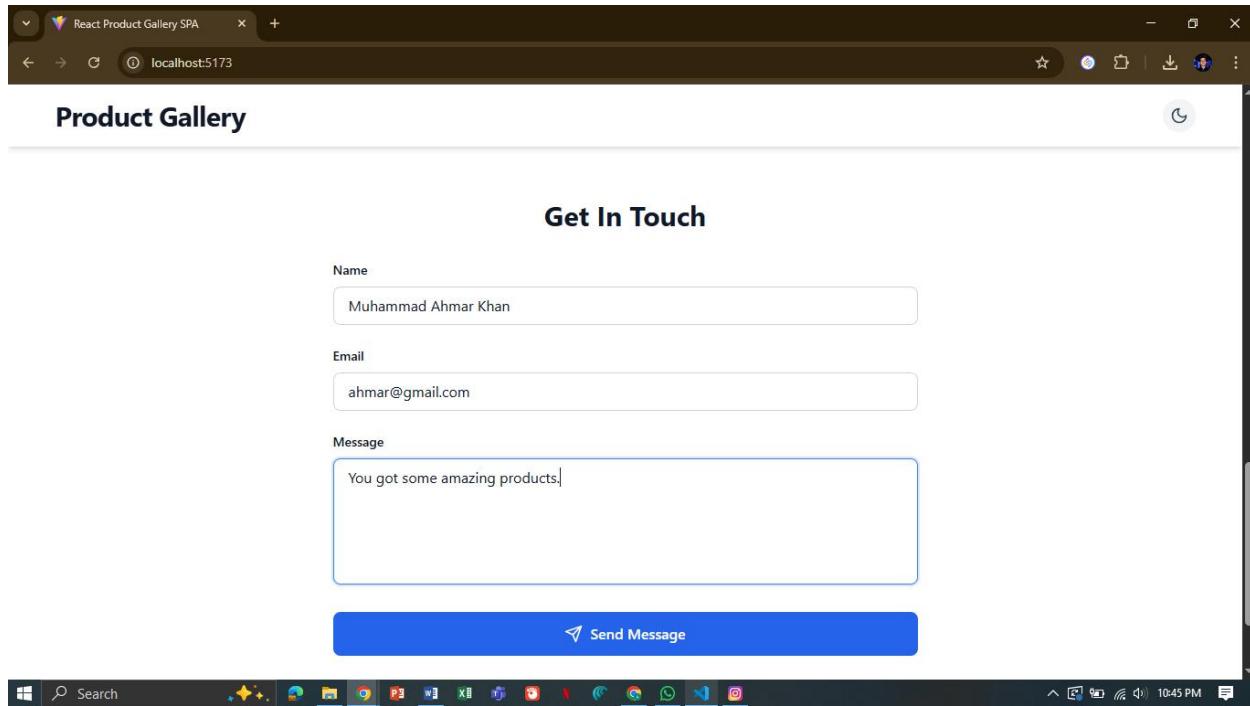
White Gold Plated Princess

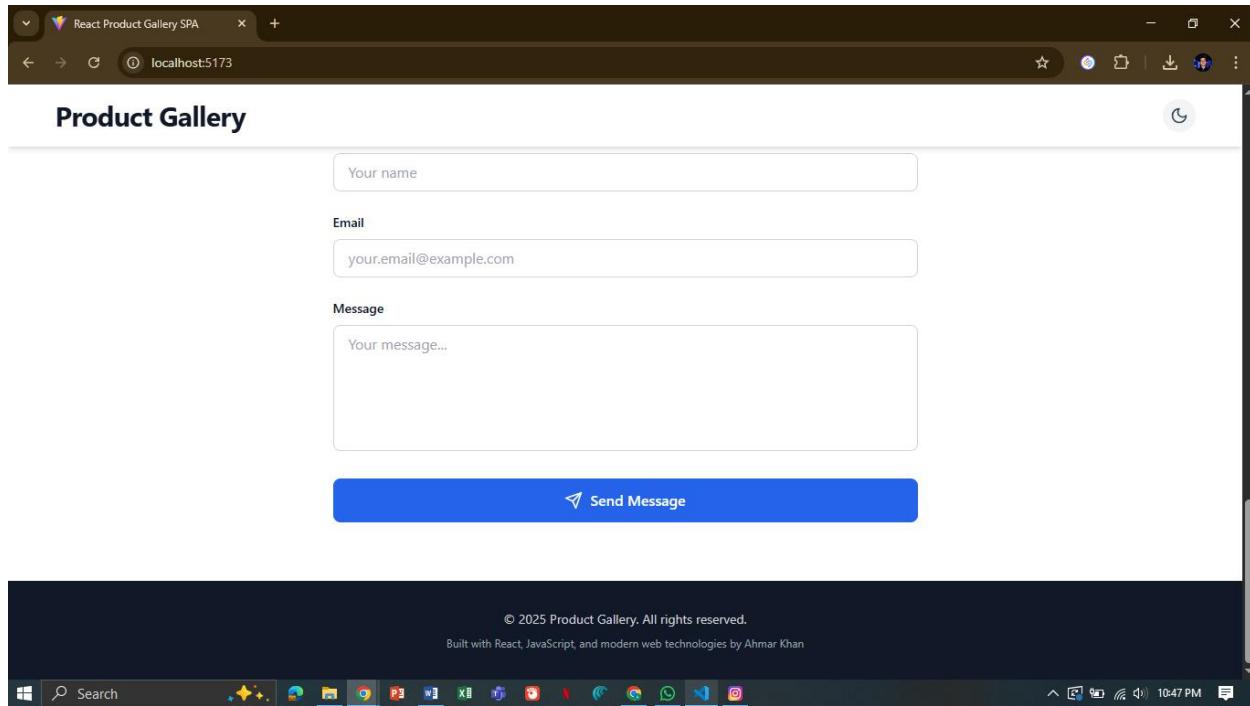
\$9.99

Pierced Owl Rose Gold Plated
Stainless Steel Double

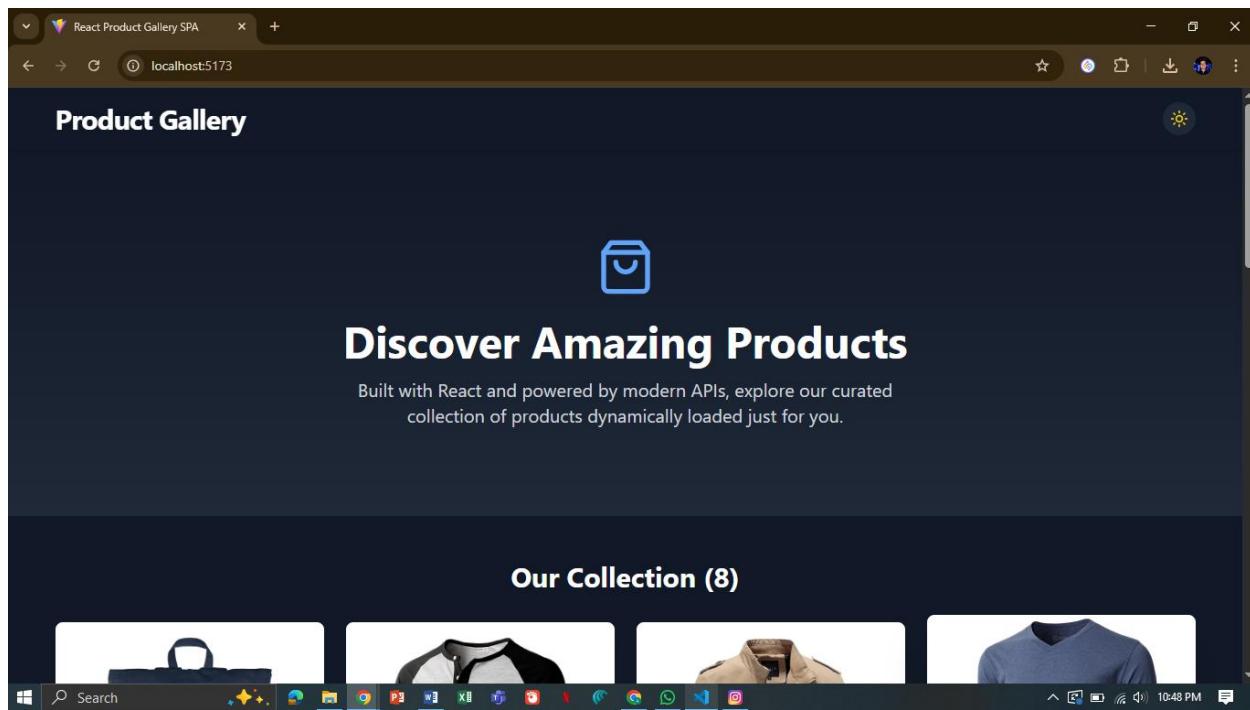
\$10.99

Get In Touch





Dark:



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React Product Gallery SPA

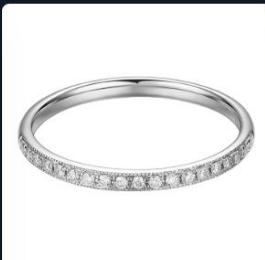
localhost:5173

Product Gallery



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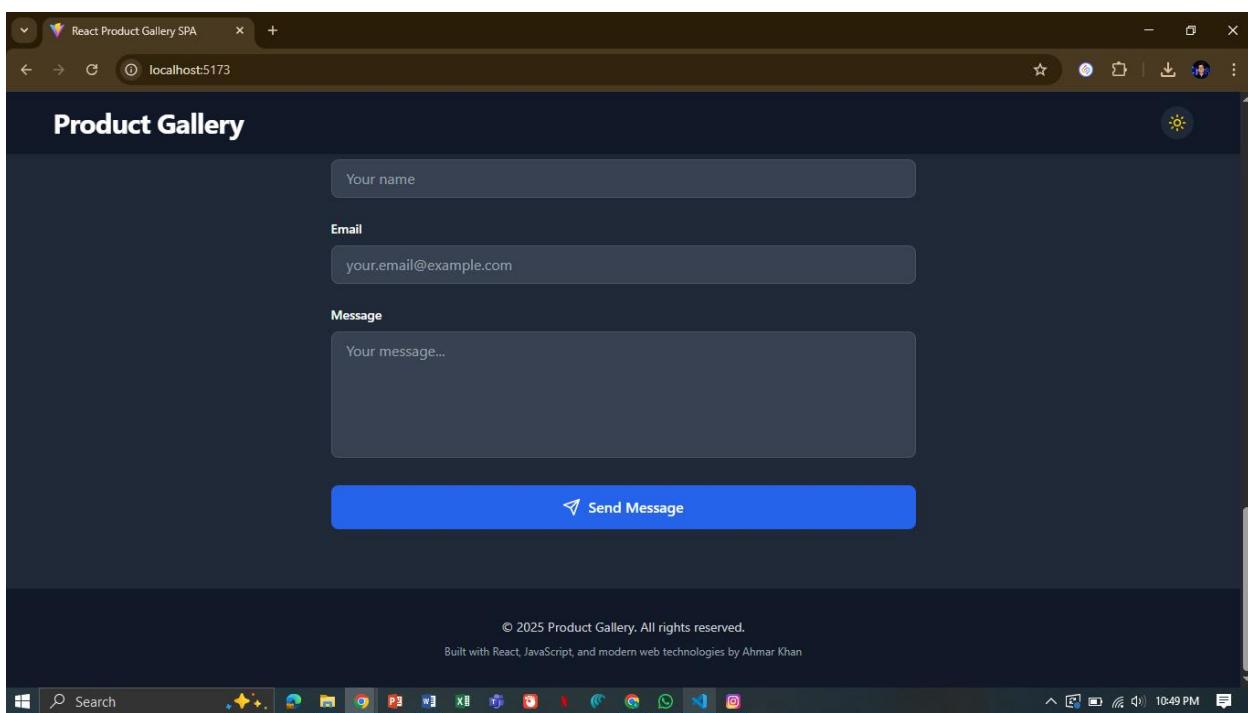
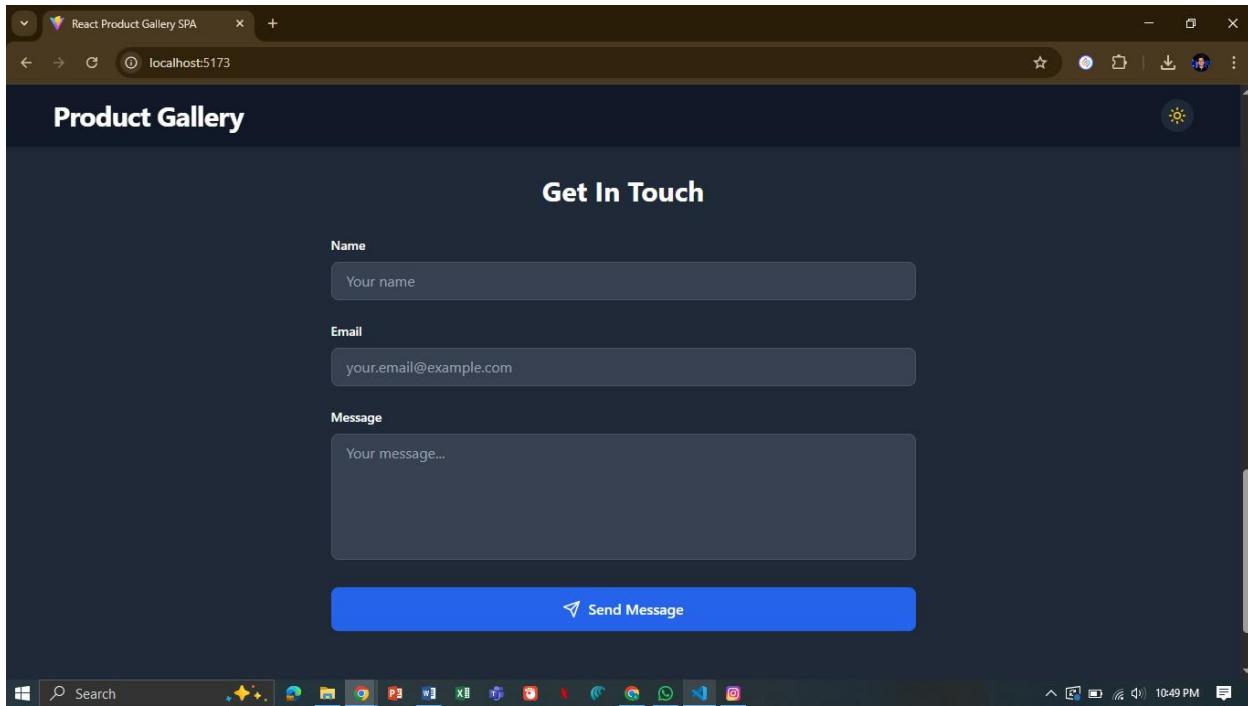


Pierced Owl Rose Gold Plated
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\$10.99



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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!