Portfolio Web Application using React and Tailwind CSS

Name: Srikanth Krishnan

Course: B.Tech Information Technology

College: SMV Engineering College, Puducherry

1. Project Overview

This project is a **personal portfolio web application** that showcases my profile, experiences, recommended resources, and a gallery of images. The application is built as a **single page React application** and styled using **Tailwind CSS**.

Key Features:

- Responsive tab navigation: About Me, Experiences, Recommended
- Dynamic gallery with add, scroll, and local storage support
- Modern UI with dark theme and neumorphic design
- Fully front-end application requiring no server-side setup

Purpose:

The purpose of this project is to demonstrate my technical skills in **React.js**, **Tailwind CSS**, **and front-end web development**, as well as to provide a professional online portfolio.

2. Technologies Used

Technology Purpose

React.js Building interactive UI components

Tailwind CSS Styling and responsive design

JavaScript Application logic and state management

HTML5 & JSX Markup structure for components

LocalStorage Save gallery images locally on the browser

3. System Requirements

Hardware:

Processor: Intel i3 or higher

RAM: 4GB or more

Storage: 2GB free

Software:

OS: Windows/macOS/Linux

Browser: Chrome/Firefox/Edge

• Node.js and npm (optional for local development)

• Code Editor: VS Code or any text editor

4. System Design

The application is built using functional React components.

Main Components:

- 1. App Root component that renders the layout.
- 2. WidgetTabs Handles navigation between About Me, Experiences, and Recommended sections.
- 3. **GalleryWidget** Displays images in a horizontal scrollable gallery, allows adding images, and stores them in LocalStorage.

Component Interaction Diagram:

App)
-----	---

└ GalleryWidget

5. Implementation Details

5.1 App Component

- Main container using Tailwind classes for responsive layout and centering.
- Renders WidgetTabs and GalleryWidget components.

5.2 WidgetTabs Component

- Displays three tabs: About Me, Experiences, Recommended.
- Uses **useState** to manage the active tab.
- Conditional rendering shows content based on selected tab.
- Example:

const [active, setActive] = useState(0);

Tab Contents:

- About Me: Introduction, skills, and career objective.
- **Experiences:** Internship experience, project work, and skills applied.
- Recommended: Books and learning resources.

5.3 GalleryWidget Component

- Displays a scrollable horizontal gallery of images.
- Users can add new images via file input.

- Stores and retrieves images using LocalStorage, so the gallery persists across page reloads.
- Includes navigation buttons to scroll left and right.
- Example of storing images:

localStorage.setItem('gallery_imgs_v3', JSON.stringify(images));

5.4 Styling

- Dark theme with neumorphic shadows.
- Responsive layout using Tailwind utility classes.
- Scrollbar hidden for a clean look.

6. Features Summary

Feature	Description	
Tab Navigation	Switch between About Me, Experiences, Recommended	
Dynamic Gallery	Add images dynamically and scroll horizontally	
Persistent Storage	Saves gallery images in LocalStorage	
Dark Theme	Neumorphic UI for modern look	
Responsive Design Works on mobile and desktop screens		

7. Learning Outcomes

- Gained practical experience with React functional components and state management.
- Learned Tailwind CSS utility classes for rapid UI development.
- Implemented LocalStorage to persist data on the client-side.
- Developed skills in **UI/UX design** with modern styling concepts like neumorphism and dark theme.
- Practiced component-based architecture and modular coding for maintainability.

8. Conclusion

This portfolio project demonstrates a **complete front-end web application** using React and Tailwind CSS. It effectively showcases my skills, experiences, and resources while providing a modern, interactive UI.

Future Improvements:

- Add animations using Framer Motion.
- Fetch experiences and recommendations from a backend API.
- Add dark/light mode toggle.
- Integrate contact form and social media links.

```
<!doctype html>
<html lang="en">
<head>
<meta charset="utf-8" />
<meta name="viewport" content="width=device-width,initial-scale=1" />
 <title>Figma Assignment - Srikanth Portfolio</title>
 <script src="https://cdn.tailwindcss.com"></script>
 <style>
 :root{
  --bg-dark: #0f1720;
  --card-dark: #1f2329;
  --muted: #9aa0a6;
 }
 body {
  background: var(--bg-dark);
  color: #e6eef8;
  font-family: Inter, ui-sans-serif, system-ui, -apple-system, "Segoe UI", Roboto, "Helvetica Neue";
  min-height: 100vh;
  padding: 20px;
 }
  .neumo { box-shadow: 8px 8px 20px rgba(2,6,23,0.8), -8px -8px 20px rgba(255,255,255,0.02); }
  .inner-shadow { box-shadow: inset 6px 6px 12px rgba(0,0,0,0.45), inset -4px -4px 8px rgba(255,255,255,0.02); }
  .scrollbar-hide::-webkit-scrollbar { display:none; }
 </style>
</head>
<body>
 <div id="root"></div>
<script crossorigin src="https://unpkg.com/react@18/umd/react.development.js"></script>
 <script crossorigin src="https://unpkg.com/react-dom@18/umd/react-dom.development.js"></script>
 <script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>
```

```
<script type="text/babel">
const { useState, useEffect, useRef } = React;
function App(){
 return (
  <main className="flex justify-center items-start w-full min-h-screen">
  {/* Left empty space on large screens */}
   <div className="hidden lg:block w-1/2"></div>
  {/* Right side widgets */}
   <div className="w-full lg:w-1/2 flex flex-col space-y-10">
   <WidgetTabs />
   <GalleryWidget />
   </div>
  </main>
);
}
function WidgetTabs(){
const tabs = ['About Me', Experiences', Recommended'];
 const [active, setActive] = useState(0);
 return (
  <div className="rounded-3xl bg-[var(--card-dark)] neumo p-8 w-full">
   <div className="flex gap-6 items-center mb-6 justify-center">
   {tabs.map((t,i)=>(
    <button key={t}
     onClick={()=>setActive(i)}
     className={
      "px-6 py-3 rounded-full text-base font-semibold transition-all duration-150 "+
      (active===i?'bg-black text-white shadow-lg':'bg-transparent text-[var(--muted)]')
     }
     aria-pressed={active===i}
    >
```

```
{t}
    </button>
   ))}
   </div>
   <div className="rounded-xl bg-[#22262b] p-8 max-h-72 overflow-auto text-base leading-7 text-gray-300">
   {active===0 && (
    <div>
     <h3 className="text-xl font-semibold mb-3">About Me</h3>
     >
      I'm <b>Srikanth Krishnan</b>, a motivated and curious B.Tech Information Technology student from SMV
Engineering College, Puducherry (GPA: 8.56/10).
      I seek opportunities to apply my technical knowledge while expanding my professional capabilities through
challenging roles.
     My technical skills include <b>Java, Python, PHP, JavaScript, SQL,</b> and frameworks like <b>React.js,
Node.js, TensorFlow,</b> and <b>Spring Boot</b>.
      I'm passionate about full-stack web development, debugging, and Al-driven applications.
     <q\>
     I'm driven to grow continuously, contribute meaningfully to organizational goals, and stay updated with
modern technologies.
     </div>
   )}
   {active===1 && (
    <div>
     <h4 className="font-semibold mb-2">Experience & Projects</h4>
     <b>Software Developer Intern</b> - Atharvo India Pvt. Ltd. (Aug-Sep 2024)
      Developed predictive ML applications and optimized pipelines using Python.
      Built the <b>PSCNN-BiLSTM-ARIMA</b> hybrid model for stock market forecasting with improved
accuracy.
      Worked on full-stack mini projects using Node.js, MySQL, and React.js.
```

```
</div>
   )}
   {active===2 && (
    <div>
    <h4 className="font-semibold mb-2">Recommended</h4>
    Books & Resources:
    Deep Learning with Python – François Chollet
     Clean Code - Robert C. Martin
     Al & ML Roadmap (TensorFlow, Scikit-learn, Pandas)
     Full-Stack Web Dev with React & Node.js
    </div>
   )}
  </div>
 </div>
);
}
function GalleryWidget(){
 const [images, setImages] = useState([
 "https://images.unsplash.com/photo-1504384308090-c894fdcc538d?w=800",
 "https://images.unsplash.com/photo-1508921912186-1d1a45ebb3c1?w=800",
 "https://images.unsplash.com/photo-1522202176988-66273c2fd55f?w=800",
 "https://images.unsplash.com/photo-1521790361206-5d47a2e7d9bf?w=800",
 "https://images.unsplash.com/photo-1503023345310-bd7c1de61c7d?w=800",
 "https://images.unsplash.com/photo-1532074205216-d0e1f4b87368?w=800"
]);
const scroller = useRef(null);
const fileRef = useRef(null);
 useEffect(()=>{
 const saved = localStorage.getItem('gallery_imgs_v3');
 if(saved) {
```

```
try{ setImages(JSON.parse(saved)); } catch(e){}
  }
 },[]);
 useEffect(()=> localStorage.setItem('gallery_imgs_v3', JSON.stringify(images)), [images]);
 function addImage(e){
  const f = e.target.files && e.target.files[0];
  if(!f) return;
  const reader = new FileReader();
  reader.onload = ()=> setImages(prev => [reader.result, ...prev]);
  reader.readAsDataURL(f);
  e.target.value = null;
 }
 function scrollBy(dir = 1){
  if(scroller.current){
   scroller.current.scrollBy({ left: dir * 320, behavior: 'smooth' });
  }
 }
  return (
  <div className="rounded-3xl bg-[var(--card-dark)] neumo p-8 w-full">
   <div className="flex items-center justify-between mb-6">
    <div className="rounded-full bg-black px-6 py-3 text-white font-semibold text-lg">Gallery</div>
    <div className="flex items-center gap-4">
     <button onClick={()=>fileRef.current.click()} className="px-5 py-3 bg-[#2b3035] rounded-full inner-shadow
text-sm font-medium">+ ADD IMAGE</button>
     <input ref={fileRef} type="file" accept="image/*" className="hidden" onChange={addImage} />
     <button onClick={()=>scrollBy(-1)} aria-label="left" className="w-12 h-12 rounded-full bg-[#2c3340] text-
lg">◀</button>
     <button onClick={()=>scrollBy(1)} aria-label="right" className="w-12 h-12 rounded-full bg-[#1b2130] text-
lg">▶</button>
    </div>
   </div>
```

