Communication Labs

Spring 2023

Assignment 5



Personal Portfolio Website

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1. INTRODUCTION

The purpose of my project was to create a well-designed, personalized web page that could serve as a showcase of my skills, work experience, and previous projects. The primary goal was to create a central location where I could display all of my work in one place and allow others to easily contact and reach out to me. The resulting personal portfolio website is intended to provide a visually appealing, informative, and user-friendly platform that effectively conveys my skills and experience to potential clients or employers.

To achieve these objectives, the personal portfolio website was designed to be simple yet impactful, with a focus on clear navigation and an engaging user experience. The website's layout and content were carefully crafted to highlight my strengths and showcase my previous work, while also providing a clear overview of my skills and qualifications. The resulting website serves as a comprehensive representation of my professional profile and provides a platform for me to share my work with the world.

Github Link | Deployed Website Link | Portfolio Page Walkthrough Link

2. PROJECT DESCRIPTION

2.1 Concept

The concept for the personal portfolio website project was to create a visually stunning platform that would showcase my skills and work experience using the latest web development technologies. The website was built using three.js, a popular JavaScript library used for rendering 3D graphics and animations in web browsers. By incorporating three.js into the website, the project aimed to create dynamic, interactive 3D models of my skills that could be explored and manipulated by site visitors.

In addition to using three.js, the website was built using React, a popular JavaScript library for building user interfaces. React allowed the project to create modular components that could be easily reused across the website, resulting in a more efficient and organized development process. By using React, the website was also made responsive, able to adapt to different screen sizes and devices.

To enhance the visual appeal and interactivity of the website, the project incorporated animation effects using Framer Motion, a popular animation library for React. These animation effects were used to create smooth transitions between different sections of the website, add visual interest to static elements, and bring attention to important information. Overall, the

concept for the personal portfolio website project was to create a cuttingedge, visually stunning platform that would effectively showcase my skills and work experience to potential clients and employers.

2.2 Inspiration and Target Audience

The inspiration for the personal portfolio website project came from a desire to create a comprehensive representation of my skills and work experience. The project aimed to create a website that would not only showcase my past projects and accomplishments, but also serve as an immersive experience that would reflect my skills and style. To achieve this, inspiration was taken from various websites and videos online, including a tutorial video [1] that was followed to create some parts of the website. However, several changes were made to the tutorial to make it personalized and unique.

The target audience for the personal portfolio website project is potential employers and clients who may be interested in my skills and work experience. The website serves as a platform to showcase my portfolio and achievements, while also providing information about my skills, qualifications, and experience. By presenting this information in a clear, concise, and visually appealing manner, the website aims to attract the attention of potential clients or employers and encourage them to reach out to me for further collaboration or job opportunities. Overall, the personal portfolio website project was designed with the target audience in mind, with the goal of creating a platform that effectively showcases my skills and experience to potential clients or employers.

3. WEBSITE DESIGN AND IMPLMENTATION

The implementation section of the project documentation outlines the technical aspects of creating the personal portfolio website. This section will cover various topics, including the software and tools used, and the overall process of creating and deploying the website. It will provide a better understanding of how the website was built and the techniques and technologies that were utilized in its development.

3.1 Wireframing

The wireframing process involved creating a basic layout and structure for the personal portfolio website. The wireframe of the entire website was created on Figma, a cloud-based design tool that allowed for collaboration and easy sharing of design assets. This the a <u>link</u> to the wireframes. Initially, the wireframe was designed for desktop-only screens to ensure that the website had a cohesive and streamlined appearance. However, as part of the responsive design approach, the website was later made to be responsive for

phones and smaller devices as well. This helped to ensure that the website was accessible and usable across a range of devices and screen sizes.

3.2 Creative Design – UI and UX

The creative design of the personal portfolio website focused on creating an immersive and engaging user experience for visitors. One of the key design decisions was to use a dark theme color scheme, with shades of white and black and an accent color of cyan and purple gradient used for highlights. This helped to create a modern and sleek look and feel that was both visually appealing and functional. The fonts used were also carefully chosen to ensure that they were easily readable and legible, while also complementing the overall design aesthetic.

The website was divided into 7 main sections, each with a unique design and purpose. The navbar provided easy navigation to all sections of the website, making it simple for users to find the information they needed. The hero section, which was the first thing users saw when they landed on the website, featured a 3D model of a computer with an open VS Code editor. This creative element helped to set the tone for the website and highlight the focus on technology and development.

The about section showcased the positions that I had held over the years. These were displayed using card elements with a cool tilt on hover effect, adding a dynamic and interactive aspect to the design. The experiences section followed the LinkedIn-style timeline format, where all past experiences were listed chronologically, allowing the user to get a quick overview of my professional journey. The skills section was designed with three.js shapes on which the software logos were meshed, which could be interacted with by the user

The projects section featured card elements, each displaying a picture, a brief description, and a category with relevant hashtags for the skills used and the project category. These cards also had a cool tilt effect, adding to the overall aesthetic of the website. Clicking on each card linked to the project's GitHub repository or hosted location, allowing users to learn more aboutmy projects. Finally, the contact section was divided into two parts - a contact form and links to the my's social handles on platforms like GitHub, LinkedIn, and Instagram.

The creative design of the personal portfolio website was thoughtfully crafted with a focus on usability and visual appeal. The attention to detail in every aspect of the design ensured that users would have an engaging and

immersive experience, making the website an effective tool for showcasing my skills and experiences.

3.3 Technical Design

The technical documentation section of the personal portfolio website outlines the various technologies used in the development process. The website was designed using Figma for creating the wireframes, which were later transformed into a fully functional website using React and Vite, with Node.js being used for server-side processing. Three.js was utilized for rendering the 3D models on the website, while Framer Motion helped to provide smooth animations throughout. React Router DOM was used for routing the website, ensuring that users could easily navigate between different pages. To enable the contact form, Email.js was integrated, allowing users to contact me directly. Finally, Netlify [2] was used for deployment, ensuring that the website was hosted securely and efficiently.

The navbar of the personal portfolio website was implemented using React Router. It allowed easy navigation between the different sections of the website. On smaller devices, the navbar collapsed into a hamburger icon for better user experience. The hamburger icon revealed a dropdown menu when clicked, which contained all the links in the navbar.

The hero section of the website was designed with a 3D model of a computer and an open VS Code editor using Three.js. Pointlights were used to simulate realistic lighting conditions, and Orbit Controls were used to allow users to move the object. This section was designed to create an immersive experience and highlight the focus on technology and development.

The about section of the website featured card elements that displayed the positions I had held over the years. React-tilt was used to render the tilt on hover effect, adding a dynamic and interactive aspect to the design. This helped to make the website more engaging and immersive for visitors.

The experiences section followed a LinkedIn-style timeline format, displaying all past experiences chronologically. This was implemented using simple HTML and CSS with a responsive design to ensure that the timeline looked good on screens of all sizes. The timeline design made it easy for visitors to get a quick overview of the my professional journey.

The skills section was designed with Three.js to create a mesh of logos for the software I know, forming 3D objects. This created an interesting visual effect that helped to highlight the my skills and areas of expertise. The 3D objects could be interacted with by the user, creating a fun and engaging experience.

The projects section featured card elements with pictures, brief descriptions, and categories with relevant hashtags for the skills used and the project category. React-tilt was used to create the tilt effect on hover, making the cards look more dynamic and interactive. Each card linked to the project's GitHub repository or hosted location, allowing visitors to learn more about the my projects.

The contact section of the website was implemented using Email.js to create a contact form. This allowed visitors to send messages directly to the me, making it easy to get in touch. The contact section also contained links to the my social media handles on platforms like GitHub, LinkedIn, and Instagram.

Throughout the website, Framer Motion was used for smooth animations on scroll. This helped to create a more immersive and engaging user experience, making the website more visually appealing and fun to use.

4. KEY CHALLENGES AND SOLUTIONS

- Rendering the 3D models was a challenge as some browsers struggled to render them, particularly in the Skills section. After experimentation, I found the appropriate number of 3 canvases that browsers could render without breaking. However, some mobile browsers may still have difficulty rendering them due to the way they have been built.
- Finding an appropriate color scheme was challenging as I wanted the
 website to be visually appealing and modern. After trying out various
 color combinations, I settled on a dark theme color scheme with
 shades of white and black, and an accent color of cyan and purple
 gradient used for highlights.
- I faced some glitches while working with framer motion animations due to problems with intersection listeners. However, I was able to debug through them and implement the animations smoothly.
- Adding all my skills, experiences, and projects to the website was a long and tedious task that required a lot of time and patience. However, by staying organized and breaking the task into smaller parts, I was eventually able to complete it.
- Figuring out the contact form was quite difficult, but finally I was able to implement it using the Emailjs library [1].

 Figuring out a way to deploy the entire application was difficult as well because of the size of the application. I tried out several ways like Github Pages, Glitch, etc. before finally settling on Netlify. I also changed the website to be hosted on a custom domain bought from Google domains.

5. REFLECTIONS AND NEXT STEPS

While the personal portfolio website is functional and achieves its objectives, there is always room for improvement. One potential next step is to add a typewriter effect in the hero section to add an extra level of engagement and make the website more interactive. I also plan on optimizing the website's performance further on smaller devices to be able to render the 3d models and also try to provide a self-rated metric in the skills section to help the users understand more about my abilities.

Building this personal portfolio website has been an exciting journey for me, and I am proud of what I have achieved so far. It has allowed me to showcase my skills and experiences in a unique and creative way while also honing my web development skills. Throughout the development process, I encountered several challenges that tested my patience and skills. However, each challenge provided me with an opportunity to learn and grow as a developer.

6. GRAPHICS USED

Computer 3D model[1]:



• About Section Pictures [3]:



7. REFERENCES

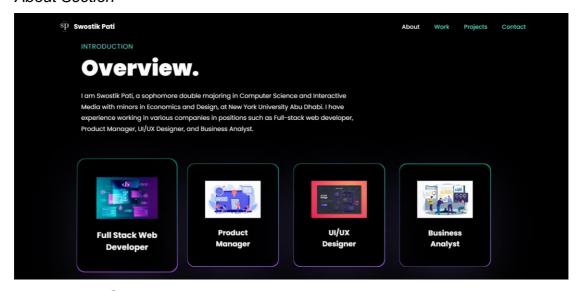
- [1] "Build and Deploy an Amazing 3D Web Developer Portfolio in React JS | Beginner Three.js Tutorial." *YouTube*, 3 Mar. 2023, www.youtube.com/watch?v=0fYi8SGA20k.
- [2] "Deploy Your React+Vite App in 3 EASY STEPS." *YouTube*, 10 Dec. 2022, www.youtube.com/watch?v=7T4w0QJtL-o.
- [3] "Freepik: Download Free Videos, Vectors, Photos, and PSD." *Freepik*, www.freepik.com.

8. GALLERY (APPENDIX)

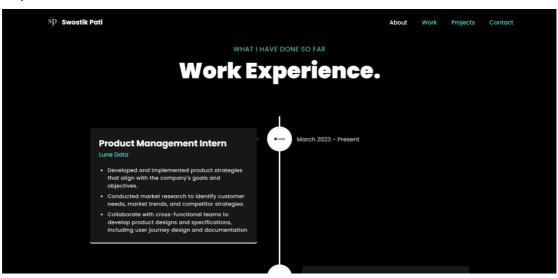
Home Page (Navbar + Hero section)



About Section



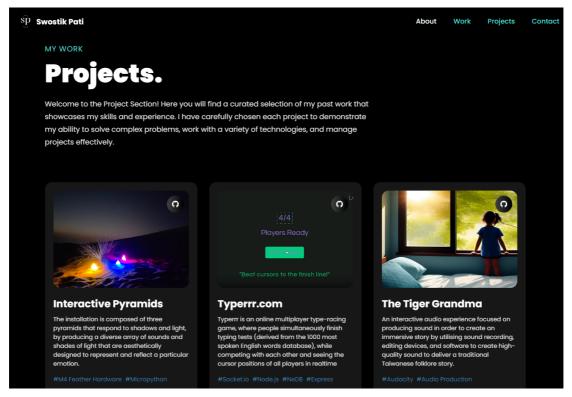
Experiences Section



Skills Section



Projects Section



Contact Section

