Project Plan

Portfolio

September 2023

OVERVIEW

I will create a professional personal IT portfolio website that effectively showcases my learning outcomes while focusing on using React. Additionally, I will explore the possibility of integrating three.js for added interactivity.

GOALS

1. Create an engaging and user-friendly portfolio website.
2. Showcase my learning outcomes and skills gained during the semester.
3. Achieve a fine balance in content presentation for both teachers and hiring agents.

DELIVERED PRODUCT

A fully functional and responsive front-end portfolio website with logical and visually appealing design choices, emphasizing user-friendliness.

Main Research Question

How can I create a visually appealing and highly functional personal IT portfolio website with React?

Sub Questions

1. What distinguishes the top websites of 2023, and what design element them exceptional?
2. How can I ensure website responsiveness while maintaining clean and efficient code?
3. Who is the target audience for my portfolio, and what are their expectations?
4. How to connect 3D component to the website? / How can I seamlessly integrate three.js components to enhance interactivity?
5. What programming languages and frameworks are most suitable for this project?
6. What testing methods should be implemented to ensure a smooth user experience?

ANSWERS

Main Research Question

To create a visually appealing and highly functional personal IT portfolio website with React, it's essential to follow a structured approach that combines design principles, technical expertise, and user-centric considerations.

Sub Questions

1. What distinguishes the top websites of 2023, and what design element them exceptional?

- The top websites of 2023 often prioritize minimalism in their design, using clean layouts and limited color palettes.
- Exceptional websites leverage microinteractions, providing subtle yet engaging user experiences.
- They incorporate augmented reality elements to create interactive and immersive features.
- Implementing dark mode options is a trend that enhances both aesthetics and functionality.

2. How can I ensure website responsiveness while maintaining clean and efficient code?

- Employing responsive design principles, such as flexible grids and media queries, ensures adaptability across devices.
- Utilizing React's component-based architecture streamlines code management and promotes efficiency.
- Minimizing unnecessary code files like multiple CSS files.

3. Who is the target audience for my portfolio, and what are their expectations?

- The target audience may include teachers and potential employers in the IT and media industry.
- Their expectations include easy navigation, clear presentation of projects, a professional aesthetic, and evidence of skills and expertise.

4. How to connect 3D component to the website? / How can I seamlessly integrate three.js components to enhance interactivity?

- To connect 3D components is to utilize the React Three Fiber library, which facilitates the integration of Three.js into React applications.
- Integration may involve creating React components that render 3D scenes and interactive elements.

5. What programming languages and frameworks are most suitable for this project?

- JavaScript and its libraries, particularly React, are essential for building the frontend of the portfolio.
- HTML and CSS are fundamental for structuring and styling.
- Three.js is a valuable library for the 3D elements.

6. What testing methods should be implemented to ensure a smooth user experience?

- Usability testing, involving real users navigating the portfolio and providing feedback, can help identify usability issues.
- Cross-browser testing ensures compatibility across various web browsers.
- Performance testing helps optimize load times and responsiveness.
- Accessibility testing, which ensures that the website is inclusive and usable for all users.

APPROACH & METHODOLOGY

I will be using the DOT framework approach. This approach supports switching perspectives to examine the problem from several aspects. The combination of various research strategies in this framework helps to balance the research. Following is some examples of the strategies that I may use in the process;

1. Library research

A. Analyze existing top websites from 2023 to identify design trends.
B. Study literature on effective CSS styling, responsive design, and user experience principles.
C. Explore design patterns and trends that align with my vision.

2. Field research

A. Conduct interviews with potential users to understand their preferences and needs.
B. Observe user behavior and gather insights on how they interact with portfolio websites.

C. Create domain models to better understand the context in which users will interact with my portfolio.

3. Lab research

A. Perform usability testing to evaluate the website's components and interactions.
B. Test different coding approaches and experiment with CSS styles for optimal results.

4. Showroom research

A. Seek feedback from design specialists and peers through peer reviews.
B. Compare the portfolio with students and generic design guidelines.

5. Workshop research

A. Ideate and prototype various design and interaction ideas.
B. Experiment with different design tools and co-create design elements.
C. Make multi-criteria decisions to prioritize design and development choices.

SMART

Development goal	How to work on this?
Enhance research skills on the design aspect	**Specific**: Research is an essential aspect of any study. I intend to enhance my research skills in the designing aspect. **Measurable:** By the end of the semester, I should be able to name different types of design choices. **Achievable:** Ask talented or professional individuals in the out world field or ask the teachers. **Relevant:** Enhancing my research skills is key to moving forward in my study; I'll need to spend 70% of the time doing research. **Time-bound:** In 19 weeks, I should have enhanced my research skills to the point where I am capable of naming different design choices.
Enhance design skills	**Specific:** During the semester, I want to enhance my designing skills and choices. **Measurable:** At the end, I want to prove to myself that I have decent designing skills and I am capable of using different design tools. **Achievable:** Watch state-of-the-art design trends on YouTube. Read tweets and articles about bad design choices. **Relevant:** Enhancing the design skills would help me understand where I stand in the real world and what I need to improve. **Time-bound:** Enhancing my skills may require additional training or experience. I can look up information and ask for feedback.
Strengthen coding skills	**Specific:** Level up coding skills. **Measurable:** I should illustrate better coding skills. I can complete various coding courses for the languages I want to improve in. **Achievable:** Look up coding courses and watch YouTube tutorials. **Relevant:** I can gain the right skills with having a good plan and schedule. **Time-bound:** Strengthening my coding skills may require additional training or experience during the semester.
Implement three.js (3D graphics) integration	**Specific:** Integrate three.js to add interactive 3D components to the portfolio website. **Measurable:** The website should feature at least one interactive 3D element, such as a rotating model or an interactive scene. **Achievable:** Learn the basics of three.js through online tutorials, experiment with different 3D models, and implement them into the website. **Relevant:** Adding 3D elements can make your portfolio stand out and demonstrate advanced web development skills. **Time-bound:** Complete the integration of three.js components within the first 5 weeks of the semester.

PROJECT TIMELINE

Week 1-3: Initial Website Development

- Research top websites from 2023 for design inspiration.
- Begin designing the portfolio website using Figma.
- Start coding the website, focusing on responsive design principles.
- Complete a React course.
- Explore three.js tutorials to prepare for integration.

Week 4-5: three.js Integration

- Dive deeper into three.js and practice creating 3D elements.
- Integrate the selected 3D component into the website.
- Ensure seamless interaction between 3D elements and the rest of the website.

Week 6: Website Testing and Optimization

- Perform initial testing of the website's functionality and responsiveness.
- Identify and address any issues or bugs.
- Optimize the website's code and assets for performance.

Week 7-18: Ongoing Content Updates

- Regularly update the website with new projects and learning outcomes.
- Reflect on my progress and add content that showcases my growth.
- Seek feedback from teachers and other students for improvements.

Throughout the Semester: Skill Enhancement

- Continuously improve research, design, and coding skills.
- Take online courses, watch tutorials, and practice regularly.
- Stay updated on design trends and coding best practices.

Monitoring and Feedback

- Track progress using milestones and key performance indicators.
- Collect feedback from teachers, peers, and potential employers.
- Make adjustments to the project plan as needed based on feedback.