Web design and Development
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I. Introduction:

This report delves into software development, which is a crucial aspect of innovation in the rapidly changing technology industry. It highlights the complexities, challenges, and innovations that have shaped this field, stressing its significance in improving user experiences and streamlining processes. The report also underscores the importance of comprehending the human aspect of software development, emphasizing the collaborative efforts, obstacles, and victories beyond code. The research provides a comprehensive understanding of the current state of software development, including technological advancements and human dynamics. In this process I have followed the below development structure.

II. techniques that have been used to improve the accessibility of the website

1. Semantic HTML:
   I used proper HTML tags to structure content semantically. For example, use headings (<h1>to <h6>, etc.) to outline the content hierarchy.
2. Descriptive Alt Text for Images:
   Provide descriptive alternative text for images to ensure that users with visual impairments understand the content of the images.

3. Navigation bar:
   In this product development process, I followed the W3C regulations and ensured all functionality was accessible using a navbar. Users should be able to navigate through my website using only the top menu.

4. Contrast and Readability:
   I used sufficient colour contrast between text and background to improve readability, especially for visually impaired users.

5. Captions and Transcripts for Multimedia:

Include captions for videos and provide transcripts for audio content to make the multimedia content accessible to users with hearing impairments.

6. Responsive Design:
   The website has been optimized to ensure it works seamlessly on all devices and screen sizes, enhancing the user experience for those using assistive technologies or different devices.

7. Form Accessibility:
   Used proper form label inputs and ensured that form fields were programmatically associated with their labels. This helps users with screen readers understand the purpose of each form field.

8. Accessible Navigation:
   Implement clear and consistent navigation menus. Provide skip navigation links for users to jump directly to the main content.

9. Accessible Fonts and Text Sizes:
   Choose readable fonts and provide options for users to adjust text sizes. Some users may require larger text for better readability.

10. Testing with Accessibility Tools:
    My website is regularly tested for accessibility using tools, and user testing is conducted with individuals with varying abilities and knowledge of the product.

11. Focus Indicators:
    Ensure that there are visible and clear indicators when an element is in focus, especially for users navigating with a keyboard.

III. Weekly log of the development process:

As I'm building a website for my future business. Here's a hypothetical logbook detailing weekly activities involved in building a food website and how various challenges were resolved:

Week 1: Project Kick-off and Planning
Activities:

- I deeply researched my business logic and the requirements and made a rough website prototype.
- We defined project scope, goals, and objectives.
- Identified target audience and competitors.

Challenges:

- I was clarifying the specific requirements and expectations.

Resolution:

- Address queries and refine project details.
- Documented precise project requirements.

Week 2: Research and Content Strategy

Activities:

- I researched popular food websites for design inspiration.
- Defined a content strategy, including types of content and frequency of updates.

Challenges:

- Balancing visual appeal with content relevance.

Resolution:

- I have created a visually appealing yet user-friendly design.
- I conducted user feedback sessions on content strategy.

Week 3: Frontend Development
Activities:

- Started front-end development using HTML.

Challenges:

- It is achieving consistent design across different browsers.

Resolution:

- Utilized CSS to enhance cross-browser compatibility.
- It is regularly tested, and the design is adjusted for different screen sizes.

Week 4: Frontend Development

Activities:

- I started designing the HTML structured skeleton with CSS.
- It ensured responsive design for various devices.

Week 5: Menu Integration and Testing**
Activities:

- Continuously designed with HTML, CSS, and JavaScript.

Week 6: Menu Integration and Testing
Activities:

- Integrated a dynamic menu section.
- Conducted thorough testing of website functionality.
- Ensuring accurate menu item representation.

Week 7: User Testing and Feedback**

Activities:

- Conducted user testing sessions for feedback.
- Gathered insights on user experience and functionality.
- Established a systematic approach for prioritizing and addressing reported issues.
- Conducted iterative testing and improvements based on user feedback.

Week 8: Final Adjustments and Launch Preparation

Activities:

- Made final adjustments based on user feedback.
- Prepared for the website release.

This logbook is a comprehensive record of the weekly activities carried out during the development of a food website, including the challenges faced and their corresponding solutions. Each week was dedicated to testing, collaboration, and continuous improvement to guarantee a successful website launch and post-launch performance.

IV. Reflection of the development process

Starting this website from scratch as a lone developer has been an incredibly educational experience. I was able to take on many roles, such as project management, testing, and design, in addition to coding. This one-off project has shed light on several software development-related topics and provided insights that will undoubtedly influence my next endeavours.

Before beginning to code, careful planning and requirement collection are essential. The development process may have been more effective if a comprehensive project plan with clear deliverables and milestones had been created. In addition, a thorough preliminary examination of user requirements would have minimized the need for additional modifications.

I learned the need for self-control and efficient time management because I worked alone. My realization of the necessity of a planned development schedule and taking pauses to stay productive and prevent burnout came from juggling many duties. Setting aside time for regular introspection helped me stay focused and evaluate my progress toward my goals.

I should have utilized more automation technologies for processes like deployment and testing. Efficiency can be substantially increased by automation, mainly when working alone. The development cycle may be expedited by implementing continuous integration and deployment (CI/CD) pipelines, reducing manual labour and the possibility of human error.

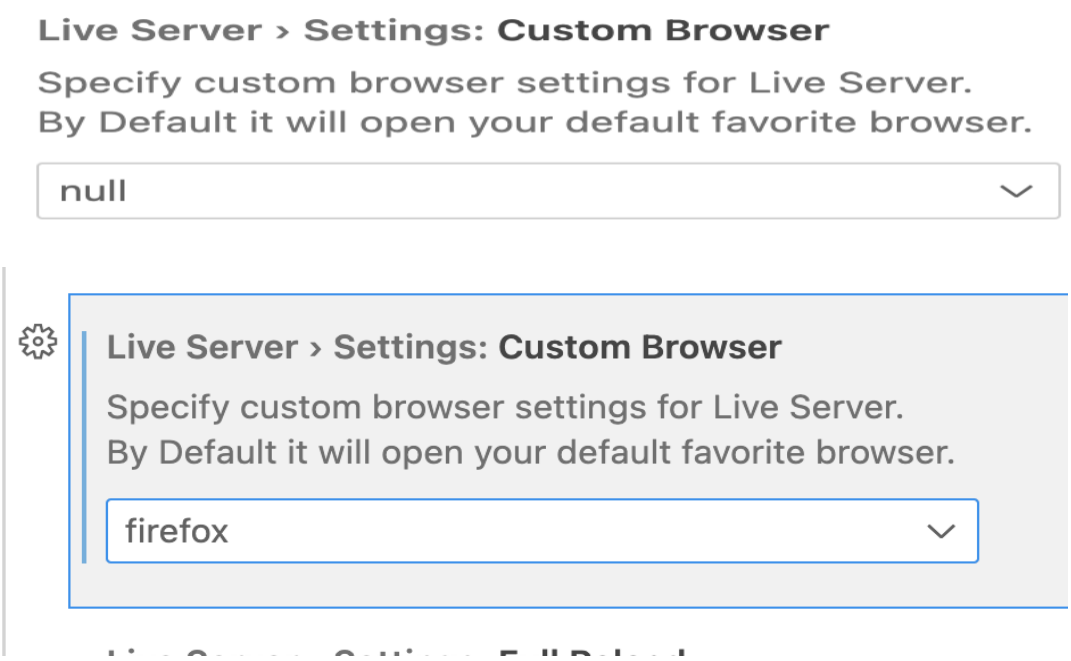
A lone developer might have gained insightful viewpoints by receiving comments early in the process. Finding blind spots and directing the project in the appropriate direction can both be aided by outside feedback.

To sum up, I have learned a lot from my single development experience. My approach to future projects will definitely be influenced by the lessons I've received, which emphasize the value of careful planning, self-discipline, and the thoughtful incorporation of automated tools for increased productivity.

V. Important note:

https://drive.google.com/file/d/1MXBF3w490KDnFAG1nRe1aHSc7i9nWH8Y/view?usp=drive_link THE VIDEO LINK IS FOR TH REFERENCE

Everything was working perfectly fine while developing my website in Visual Studio Code. However, it worked perfectly when I tried running the site with a live server. But when I tried to click run in the default browser or open in other browsers, the CSS file didn't connect with the HTML file. But when I changed the live server setting to Firefox as below, again, it's running from the live server.



I had to copy the port http://127.0.0.1:5500/html/index.html and paste it to another browser to make it work. I tried other text editors like Sublime and Atom, but the issue persisted. I searched for a solution on Google but haven't found one yet.