GISMA University Of Applied Sciences

Computer Lab SS0324: Project Report

Final Project

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Contents

1 Introduction

This project report serves to inform the reader about the intricate details and methodologies used when creating my professional GitHub webpage as well as my LaTeX-created CV for my final project.

The following are links to each respective project:

- WebPage: https://takudzwa22.github.io/
- GitHub Repository: https://github.com/Takudzwa22/Takudzwa22.github.io

2 Design: Folder and File Structure

The website consists of several files and directories arranged in a hierarchy:

- ▷ **Root Directory**: This is the main directory containing all the website's files.
  - **index.html**: The main HTML file. It acts like a single-page application with sections dedicated to different parts of your portfolio.
  - **index.css**: The main stylesheet that controls the website's appearance.
  - **script.js**: (Optional) A JavaScript file that adds interactive elements to your website (like a dynamic footer).
  - **imgs/**: A folder containing all the image assets used throughout the website.
    - Profile.jpeg: Your profile picture.
    - GISMA.png: Logo of GISMA University Of Applied Sciences.
    - IVA.jpeg: Logo of IVA Global Online School.
    - st_albans.png: Logo of St. Albans College.
    - Velorum.JPG: Logo of AI automation agency. (Consider using a consistent naming convention like velorum.jpg).

HTML Structure Breakdown

The website's structure is defined in the **index.html** file. It consists of two main sections:

- ▷ **Head Section**: This section contains information about the webpage that isn't directly visible on the screen.
  - **Meta Tags**: These tags define the character set, viewport settings, and search engine optimization (SEO) for your website.
  - **Title**: The title displayed on the browser tab.
  - **Link Tags**: These tags link external resources like the CSS stylesheet and favicon.
- ▷ **Body Section**: This section contains the content that users see on the webpage. It's further divided into sections for better organization.
  - **Header**: This section displays your profile picture, your name, links to your educational institution, and buttons to download your CV and project report.
  - **Navigation Bar**: This section provides quick links to the main content areas of your portfolio (About Me, Education, Experience, Skills, Portfolio, and Contact).
  - **Main Content Sections**: Each section contains detailed information about a specific aspect of your portfolio:
    - **About Me**: A brief personal statement introducing yourself.

— **Education**: Details about your educational background.

— **Experience**: Your work and internship experiences.

— **Skills**: Your technical and soft skills.

— **Portfolio**: Links to your downloadable CV and project report. (Consider separating the links from the "About Me" section for clarity).

— **Contact**: Your contact information (email and phone number).

3 Design Decision

3.1 Decision and Justification

Simplicity and Clarity

Decision: Use a minimalistic design with clear sections.
Justification: Ensures that the content is easy to read and navigate, appealing to potential employers.

Mobile Responsiveness

Decision: Apply responsive design principles using CSS media queries.
Justification: Ensures accessibility across different devices, which is necessary given the varied ways people access websites today.

Accessibility

Decision: Use alt tags for images, semantic HTML5 elements, and ARIA roles.
Justification: Enhances the usability of the site for people using screen readers and improves overall accessibility.

Profile and Contact Information Accessibility

Decision: Place profile images and contact information prominently.
Justification: Immediate visibility helps in personal branding and allows potential employers to find contact details quickly.

Interactive Navigation

Decision: Implement a sticky navigation bar.
Justification: Ensures ease of navigation without requiring the user to scroll back to the top.

Dynamic Footer

Decision: Show/hide the footer based on scroll position using JavaScript.
Justification: Keeps the interface clean while still providing essential information when needed.

3.2 Tools and Technologies Used

- **HTML**: Structuring content.
- **CSS**: Styling the webpage.
- **JavaScript**: Adding interactivity, such as the dynamic footer.
- **Image Files**: Various formats (JPEG, PNG) for profile pictures and logos.
- **CSS Frameworks (Future Consideration)**: Could use Bootstrap for responsive and consistent styling.
- **Version Control (Future Consideration)**: Git for managing changes and collaboration.

4 Conclusion and Future work

4.1 Reflection on Strengths and Weaknesses

Strengths

- **Clean and Simple Design:** Ensures user ease and readability.
- **Responsive Design:** Adapts well to different devices.
- **Well-Structured Code:** Maintains clarity and is easy to navigate for updates.
- **Dynamic Elements:** Enhances user engagement with small interactive features like the dynamic footer.

Weaknesses

- **Limited Interactivity:** Lack of animations and other engaging elements.
- **Static Content:** Manual updates required for content changes.
- **Basic Aesthetics:** Could benefit from more advanced styling and design features.

4.2 Suggestions for Future Improvements

- **Enhance Interactivity:**
  - Implement CSS animations and transitions to make the site more visually appealing.
  - Use JavaScript or jQuery for more dynamic content features such as modals, sliders, and scroll-based animations.
- **Advanced Styling:**
  - Use CSS frameworks like Bootstrap or Tailwind CSS for more sophisticated and responsive designs.
- **SEO Optimization:**
  - Improve meta tags, use alt tags for images, and apply structured data for better SEO.
- **Performance Optimization:**
  - Optimize images via compression.
  - Implement lazy loading for better performance.
- **Version Control Implementation:**
  - Use Git for tracking changes and facilitating collaboration.

Conclusion

This comprehensive overview of my portfolio website includes its detailed structural design, justifications for design decisions, tools and technologies used, a thorough reflection on strengths and weaknesses, and

actionable suggestions for future improvements. By implementing these enhancements, your portfolio can evolve into a more sophisticated, user-friendly, and highly functional platform.

5 References

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