Final Project Report

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Topic: Personal Portfolio Website

- **General Info:**
  - Final Project Presentation Slides
    Link: https://docs.google.com/presentation/d/18f6anrj7UWc4Uu6kQx2wheIqQWqeS3vqgEovJrhyOM4/edit#slide=id.g262cdddd93d_0_14
  - Site Link (Coding): https://b04310041.github.io/SI539_final_project/
  - Git Repository Link (Coding): https://github.com/b04310041/SI539_final_project

- **Weekly Progress 1**
  - Hours spent: 15 hours
  - Challenges:
    - Organize the information architecture for different pages
    - Adjust different arrangements for various screen sizes
  - Successes: (completed index.html)
    - HTML
      - Created an HTML5 document structure.
      - Included meta tags for character set and viewport settings.
      - Linked to an external stylesheet (style.css) and a font from Google Fonts.
      - Included the Font Awesome kit for icons.
      - Defined the structure of the webpage with sections such as profile, education, experience, and projects.
      - Added social media links with corresponding icons.
      - Implemented a navigation system with links to different sections.
      - Created a "Skip to Main Content" link for accessibility.
      - Included a JavaScript script for opening and closing a navigation menu.
    - CSS:
      - Reset default margin, padding, and box-sizing for all elements.
      - Applied a background gradient to the body.
      - Styled the profile section, including the image, name, role, social links, address, and contact details.
      - Styled the heading section with a title and navigation toggle button.

- Styled the main content section with information about the person and a section on what they do.
- Styled cards for different skills, including data analysis, data visualization, machine learning, and project management.
- Styled the navigation menu for different screen sizes using media queries.
- Added hover effects for social links, email link, and navigation items.
- Made adjustments for larger screens, changing layout and styling accordingly.
- Included styles for reduced motion preference, disabling transitions.
- JavaScript:
  - Defined functions openNav and closeNav for toggling the navigation menu.
  - Additional Notes:
  - Ensured responsiveness with media queries for different screen sizes.
  - Used flexbox and grid for layout.
  - Applied hover effects for improved user experience.
  - Considered accessibility by including a "Skip to Main Content" link.
  - Considered reduced motion preferences for users.

- **Weekly Progress 2**
  - Hours spent: 3 hours
  - Challenges:
    - Identify some errors by using validators
  - Successes:
    - Completed education.html, work.html, and projects.html
    - Increase accessibility
      - Add "Skip to Main Content"
        - Each page has a "Skip to Main Content" link that only appears when it has focus (using the tab key)
      - Add arial-label attribute to empty link / button
      - Improved accessibility for scrollable content:
        - Made scrollable content keyboard-accessible, allowing users to navigate through content effortlessly.
        - Applied tabindex="0" to the scrollable container, ensuring it receives focus and is accessible via keyboard navigation.
        - Utilized :focus-visible styling for a clear focus indicator, improving visibility and usability for users navigating with the tab key.

Final Results

1. Improved User Experience: Cohesive information architecture and responsive design significantly enhanced user experience across devices.
2. Enhanced Accessibility: Inclusion of a "Skip to Main Content" feature and ARIA attributes improved website accessibility for all users.
3. Error Identification: Regular validation checks led to prompt identification and resolution of errors during development.
4. Scrollable Content Accessibility: Improved keyboard accessibility and visual indicators enhanced usability for all users.

Lessons Learned

1. Continuous Testing: Regular validation is essential for early error detection, emphasizing the need for continuous testing.
2. Accessibility Priority: Prioritizing accessibility from the start contributes to ethical standards and a better user experience.
3. Responsive Design Challenges: Challenges in adapting layouts highlight the importance of thorough testing across devices.
4. User-Centric Design: A user-centric approach results in a more intuitive and user-friendly website.