Report on Swavlamban Card Website Project

# 1. Introduction

This project involved developing a website based on the Swavlamban Card initiative, which provides various services for persons with disabilities. The goal was to create a website that is accessible, easy to navigate, and responsive across all devices using HTML and CSS. The website serves as a platform where users can apply for the Swavlamban Card, check their application status, and learn more about the scheme. Special attention was given to accessibility features and responsive design to ensure inclusivity for all users.

# 2. Case Study 1: Real-World Website Overview

For the first case study, I analyzed the official Swavlamban Card website. The site focuses on providing essential services for persons with disabilities, including registration for the Swavlamban Card. The design is straightforward, with clear navigation menus and user-friendly form submission processes. It offers essential features such as accessibility adjustments, including support for screen readers and accessible form elements. The official website prioritizes ease of access for users with varying levels of ability, which served as an inspiration for my project.

# 3. Key HTML Elements for Accessibility

In building the Swavlamban Card website, several key HTML elements were incorporated to ensure accessibility for all users:

• Alt attributes for images: All images on the site include descriptive alt text for screen readers.

• Semantic HTML: The use of semantic elements such as <header>, <nav>, <main>, and <footer> ensures meaningful structure.

• ARIA roles: ARIA (Accessible Rich Internet Applications) attributes were implemented to enhance accessibility.

• Form labels: Proper labels were associated with input fields using the <label> element to enhance accessibility.

# 4. CSS Enhancements for Visual Impairments

To ensure that the website is accessible for users with visual impairments, the following CSS techniques were applied:

• High contrast colors: The site uses high contrast colors to make text easier to read.

• Scalable fonts: Text sizes are defined using relative units so users can adjust them.

• Readable fonts: Sans-serif fonts were chosen to ensure readability.

• Media Queries for contrast adjustment: CSS media queries adjust color schemes for users requiring high contrast settings.

# 5. Case Study 2: Responsive Web Design

The second case study looks at the Government of India's digital service portal, which is optimized for responsive design. The site adapts seamlessly across devices, ensuring an equally accessible experience on mobile and desktop devices. I followed a similar approach by using flexible layouts, media queries, and scalable elements to ensure responsiveness.

# 6. Website Overview

The Swavlamban Card website consists of several core pages:  
• Home Page: Introduction to the Swavlamban Card and links to registration and status checking.  
• Registration Page: A form for users to apply for the Swavlamban Card, designed with accessibility in mind.  
• Application Status Page: Allows users to check the status of their application.  
• Information Page: Provides details about the Swavlamban Card and downloadable resources.

# 7. CSS Techniques for Responsive Design

To ensure that the website responds well across different devices, several CSS techniques were used:

• Media queries: CSS media queries adjust layout based on screen size for mobile, tablet, and desktop devices.

• Flexible grids and fluid layouts: The layout was designed using percentage-based grid systems for scalability.

• Responsive images: The 'max-width: 100%' rule ensures images resize correctly without breaking the layout.

# 8. Testing Across Devices

The Swavlamban Card website was tested across multiple devices, including smartphones, tablets, and desktop computers. Using developer tools, screen sizes and orientations were simulated to ensure functionality and accessibility. Screen reader compatibility was also tested.

# 9. Conclusion

This project was a valuable learning experience in creating an accessible and responsive government website using HTML and CSS. By focusing on accessibility and responsive design, the website ensures inclusivity for all users. The project reinforced best practices in web development, particularly for accessibility and responsiveness.

# 10. References

• "Web Accessibility Basics," W3C. Available at: https://www.w3.org/WAI/fundamentals/accessibility-intro/

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• "CSS Techniques for Accessibility," Mozilla Developer Network. Available at: https://developer.mozilla.org/en-US/docs/Learn/Accessibility/CSS