CIT 263 Final Report

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Final Report: Website Redesign for Jim's Steak & Spaghetti House

Introduction:

The redesign project for Jim's Steak & Spaghetti House [1] focused on updating the restaurant's outdated website to meet the demands of modern users and enhancing the business's online presence. As a historic and beloved local establishment, Jim's Steak & Spaghetti House relies heavily on its digital platform to attract new customers and retain regular customers. However, the existing website was found to be suffering in terms of responsiveness, usability, and visual appeal. The primary goal of this project was to rebuild the website using current web development practices, implementing a responsive design with improved navigation and accessibility features. This report outlines the project's scope, objectives, methodology, and significance, providing a detailed analysis of the problems addressed and the solutions implemented. The redesigned website aims to offer a seamless, user-friendly experience, preserving the restaurant's traditional branding while enhancing its functionality.

Problem Statement:

The original website for Jim's Steak & Spaghetti House faced several critical challenges that significantly impacted both user experience and the business's online effectiveness. One of the most pressing issues was the website's navigation, which featured a cluttered layout that made it difficult for users to locate essential information such as the menu and contact details, as illustrated in Figure 1.

Figure 1: Original Website Homepage

Survey data, as illustrated in Figure 2, revealed that a substantial portion of users found the website challenging to navigate. Complaints are often centered on difficulties accessing key information and dissatisfaction with the overall site layout. This issue created a barrier to effective engagement and hurt the user experience, undermining the website's role as a tool for customer interaction.

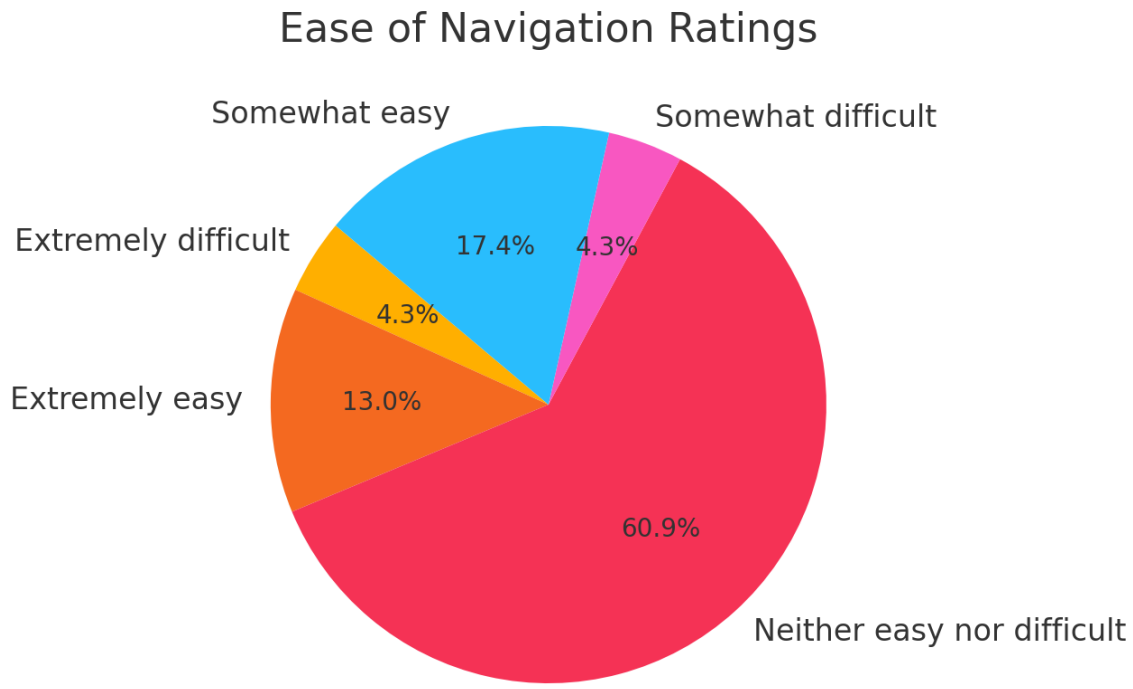

Figure 2: User Ratings on the Ease of Navigation of the Original Website

Another major challenge was the lack of mobile usability. The original site was not responsive, leading to a poor experience for users accessing it on mobile devices or tablets. This was particularly concerning given the growing trend of mobile web usage, with a significant portion of traffic coming from mobile users. Research by Nielsen and Budiu [1] highlighted the importance of mobile optimization in meeting user expectations and maintaining engagement, making this limitation a critical weakness of the original website. The outdated visual design of the website further pressed user dissatisfaction. As illustrated in Figure 3, user ratings on the visual design of the original website were quite low, reflecting the negative impact of its dated appearance on customer perception. This aspect not only hurt user satisfaction but also failed to effectively represent the restaurant's brand identity.

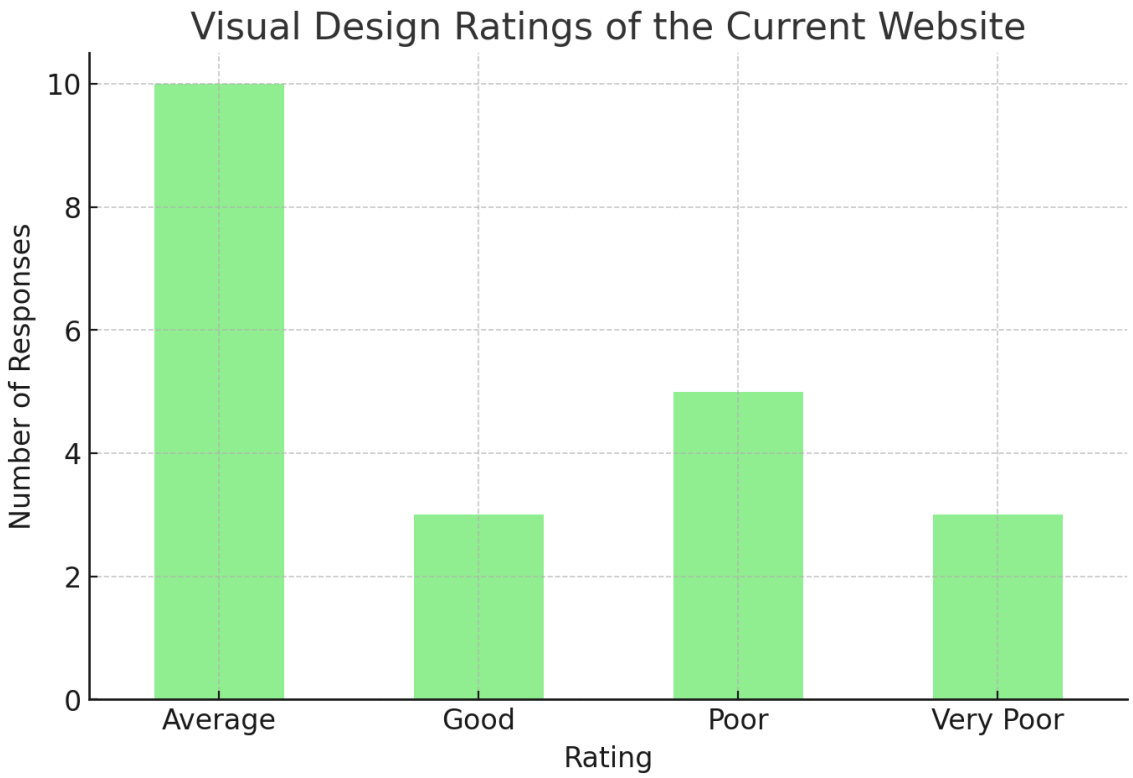

Figure 3: User Ratings on the Visual Design of the Original Website

Lastly, the website presented significant accessibility barriers, such the absence of descriptive text for images, which made it less usable for individuals with disabilities. These shortcomings highlighted a lack of inclusivity, further limiting the website's effectiveness in reaching a broader audience. Addressing these challenges was a must for improving user satisfaction, enhancing the business's online presence, and creating greater customer retention. By resolving these issues, the restaurant could better engage with its customers and create a more compelling digital experience that aligned with modern expectations.

Scope and Limitations:

The scope of this project was primarily focused on front-end development, utilizing HTML5, CSS3, and JavaScript to redesign the website's user interface and improve its overall

functionality and aesthetic appeal. A major focus was on implementing responsive design, ensuring that the website is fully optimized for various screen sizes and devices, including desktops, tablets, and mobile phones. This aspect was critical in providing a seamless user experience across different platforms, catering to the diverse ways users access the site. Another significant improvement was the redesign of the navigation structure. By simplifying the navigation bar, the site now features clear, concise links and a mobile-friendly hamburger menu, which greatly improves usability and accessibility, especially for mobile users. These changes aimed to make the website more intuitive and user-friendly, reducing navigation difficulties and improving the overall user experience.

The visual design of the website was also refreshed to align with modern web design trends while maintaining the restaurant's classic branding. These changes not only improved the aesthetic quality of the site but also contributed to reinforcing the brand's identity in a visually engaging manner.

Despite these improvements, the project had several limitations due to time and resource constraints. One of the most significant limitations was the lack of backend integration. Features such as a content management system (CMS) or online ordering capabilities were not implemented, which could have added further functionality and user convenience. While these limitations restricted certain aspects of the redesign, they also underscored the project's focus on delivering a streamlined, accessible, and visually appealing front-end experience within the given scope and timeline.

Objectives:

1. To collect user feedback through a comprehensive survey:

   Conducted a survey with 32 participants to gather feedback on the usability and design of issues of the original website. The feedback aided in the redesign process.

2. To design a responsive layout using HTML5, CSS3, and JavaScript:

   Created a new design, seen in Figure 4, and responsive layout using Flexbox, WebKit Flexbox, and media queries, as seen in Figure 5. Ensuring a seamless experience across phones, tablets, and desktops. Our project followed class learning and best practices from W3Schools [2]

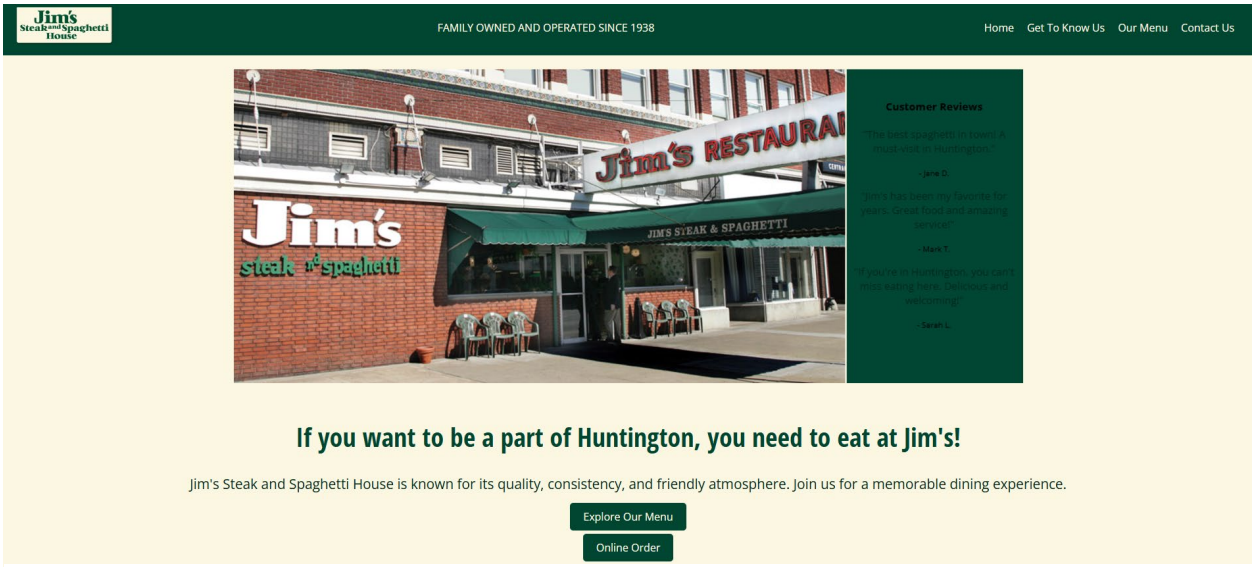

Figure 4: Redesigned Website Homepage

Figure 5: Redesigned Mobile View of Homepage

3. To simplify and improve the navigation experience:

   Implemented a mobile-friendly hamburger menu (Figure 6) and streamlined the desktop navigation bar for better user navigation (Figure 7).

Figure 6: Hamburger Menu on Mobile Devices

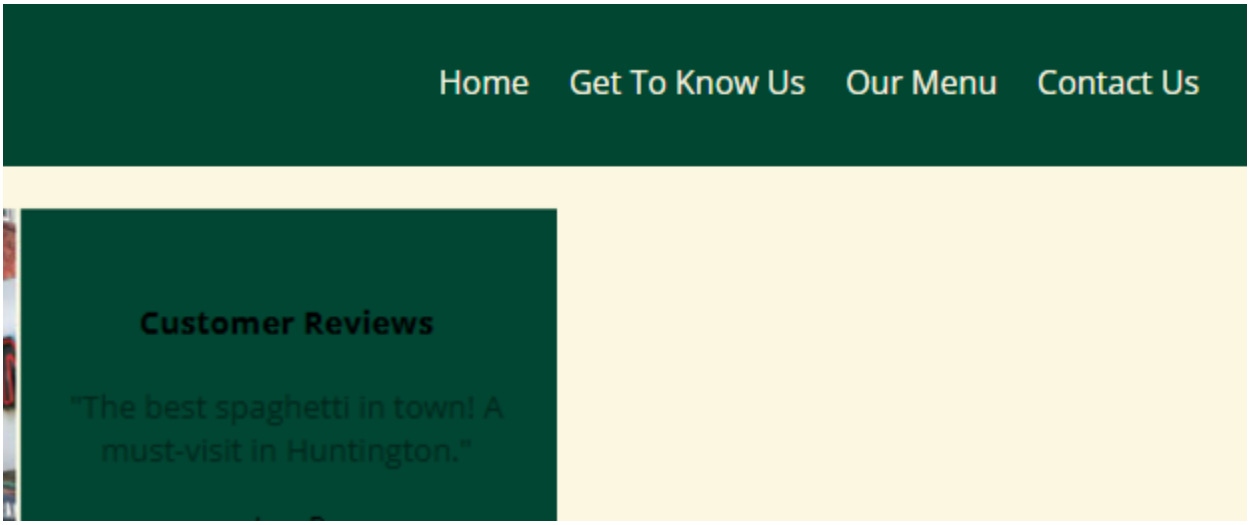

Figure 7: Streamlined Navigation Bar on Desktop

4. To enhance the visual appeal of the website:

   One of the primary objectives was to improve the visual design of the website, addressing the low user ratings in Figure 3. This project updated the look and style of the website to

improve the modernization but kept the color scheme and typography to keep with the restaurant's traditions.

5. To conduct usability testing and refine the website based on feedback:

   Performed using testing with a few participants from the original survey to evaluate the new design, making final adjustments based on their input.

Significance of the Project:

The redesigned website is expected to have a significant positive impact on Jim's Steak & Spaghetti House's online presence. By implementing a responsive, user-friendly design, the project addressed critical usability issues that previously hindered customer engagement. Moreover, the focus on accessibility ensures that the website is inclusive, catering to a broader audience. The enhanced visual design not only improves user satisfaction but also helps to attract new customers by presenting a polished, professional online image. Thus, the project contributes to the restaurant's business growth and provides a strong foundation for future digital enhancements. Given the high importance of mobile access expressed by users (Figure 8), the redesign focused heavily on ensuring a responsive layout that adapts seamlessly to various devices

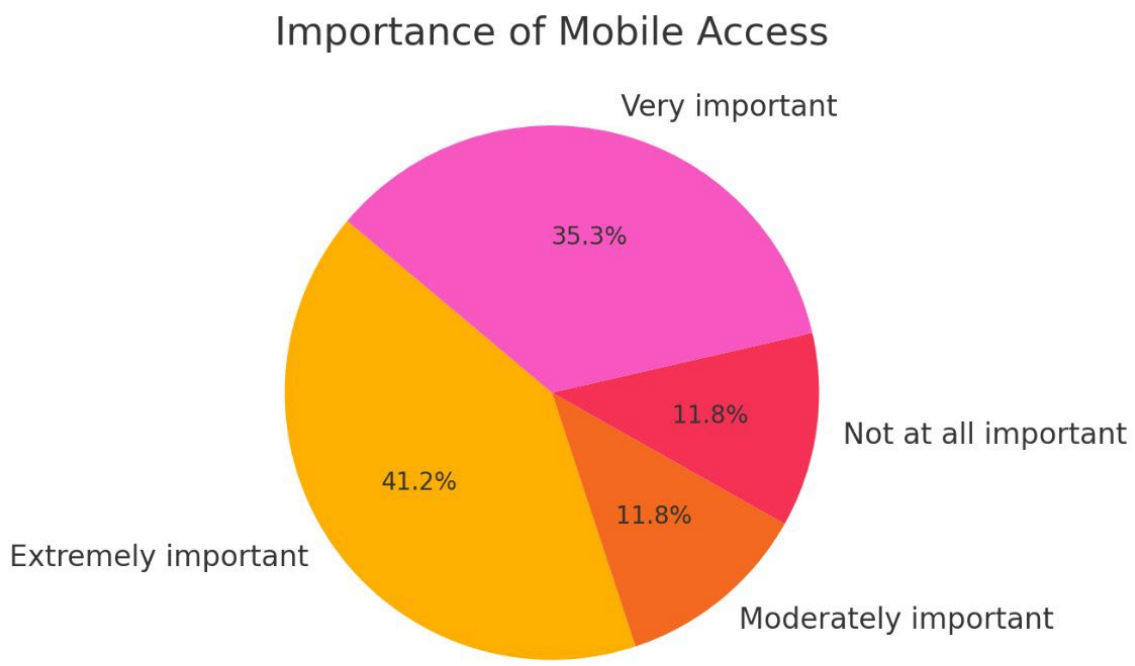

Figure 8: User Ratings on the Importance of Mobile Access for the Website

Methodology:

The project followed the Software Development Life Cycle (SDLC), which was divided into five phases. The redesigned website was built using HTML, CSS, and JavaScript, with a focus on simplicity, responsiveness, and user experience.

The initial phase, Planning and Research, where data was gathered on user preferences and design trends by reviewing the original website. This research helped identify key elements such as layout, navigation structures, and interactive features that are important for small business websites. Feedback was collected from 32 users, including family members and classmates, through surveys to understand their needs and preferences in terms of usability and design.

In the Design Phase the layout of the website was structured using basic design practices. Design layouts were created to organize content such as images, menus, and key information in a user-friendly and visually appealing manner.

Development Phase, the project was developed in three parts: HTML, CSS, and JavaScript. The development process incorporated in class learning and best practices from W3Schools [3] to ensure a robust foundation. Clean and semantic HTML was used to structure the content, followed by CSS to create a responsive and visually appealing design. Flexbox was employed for layout management, and media queries ensured the site adjusted seamlessly across devices. JavaScript was added to provide basic interactivity, such as a dropdown navigation menu.

Testing and Optimization Phase where the website underwent comprehensive testing across different browsers and devices to ensure compatibility and responsiveness. Feedback from users was gathered at this stage, and necessary adjustments were made to improve the overall user experience.

Final Review and Deployment In the final phase, the project was reviewed to confirm that all objectives were met. A thorough test ensured that all features were functional and optimized for performance. Documentation of the development process was prepared and presented, highlighting the key features and steps taken to complete the project.

Conclusion:

The redesign of Jim’s Steak & Spaghetti House’s website successfully addressed the issues identified in the original version. The new site features a modern, responsive layout, improved navigation, and enhanced visual appeal, all while maintaining the restaurant’s

traditional branding. The usability testing confirmed that the redesign improved user satisfaction, with positive feedback from participants. The project met its objectives and is expected to increase customer engagement, offering better online experience for users. Future updates may include integrating an online ordering system and additional interactive features to further enhance the user experience.

References

[1] Jims Spaghetti, “Jim’s Steak and Spaghetti House,” http://www.jimsspaghetti.com/

[2] J. Nielsen and R. Budiu, *Mobile Usability*. New Riders, 2013.

[3] W3Schools, "HTML, CSS, and JavaScript Tutorials," https://www.w3schools.com.