Capstone Final Project Report

Banta Sylla: 341037

Ottawa University

Senior Research Capstone 49100

Rick Hutchison

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Abstract

This capstone project involved the designing and development of a comprehensive IT department website aimed at improving access to support services and essential resources. The site was constructed using Adobe Dreamweaver and features a Main Page, a Frequently Asked Questions section, an Open Ticket form, a Get Help page, and a collection of tools and resources. A key component of the website is the file upload function that enables users to attach screenshots, documents, and screen recordings when submitting support tickets, thereby facilitating clearer communication and faster issue resolution for IT staff. The project demonstrates proficiency in web development using HTML, Java, and CSS, alongside the application of user-centered design principles. A hierarchical site map was developed to enhance site organization and navigation. Comprehensive testing was conducted through Dreamweaver's preview functionality to verify operational integrity across all site components. Upon completion, the website was published publicly at fakeitdept.com.

Table of Contents

Introduction

Have you ever used a website that felt completely unappealing? Whether it was because of the way the website looked, how poorly it ran, or how frustrating it was to navigate, every interaction quickly becomes a hassle. Unfortunately, when websites are poorly designed, users lose trust and patience. This is especially critical for IT departments, where efficiency and easy communication are essential. Without a centralized, well-designed platform, communication between users and IT staff can easily become fragmented. This often leads to delays in solving issues, unnecessary frustration, and lower productivity across an organization. Recognizing these challenges, the goal of this capstone project was to design, build, and launch a fully functional IT department website that makes support services and resources more accessible, while streamlining the problem-reporting process.

This project focuses on creating a practical, user-friendly website tailored to the real-world needs of an IT department. Adobe Dreamweaver was utilized as the primary development environment, with integrated tools such as Split View, the Insert Panel, and the CSS Designer supporting the efficient creation, organization, and styling of web content. These features directly enabled the development of the website's core technologies, including HTML for structural layout, Java for interactivity, and CSS for consistent visual design. The final site prioritized usability, clarity, and technical precision to deliver an accessible user experience.

A hierarchical site map was also created late in the process to organize the content and ensure users could easily find the help they needed. The finished website includes a Main Page, a Frequently Asked Questions (FAQ) section, a Get Help page, an Open Ticket form with file upload capabilities, and a Tools page offering additional resources. Special attention was given to

user-centered design principles to make the site intuitive for users with varying technical backgrounds.

Throughout the project, extensive testing was conducted using Dreamweaver's preview mode to ensure that every page and feature functioned as intended. Based on the results, continuous adjustments were made to optimize the site's usability, performance, and navigation experience. These refinements ensured that the final product not only met technical standards but also prioritized user experience at every step. After final revisions, the website was successfully deployed through Netlify and is now publicly accessible at fakeitdept.com. The live site represents the culmination of careful planning, technical development, iterative testing, and user-centered design strategies.

This report provides a comprehensive overview of the project's development. It begins by outlining the initial goals, including the skills targeted for growth and the intended deliverables. It then moves into the planning phase, covering how the site's structure, layout, and functionality were designed to meet user needs. Research findings are discussed next, showing how external sources informed the creation of key site components such as the Main Page, FAQ section, Open Ticket form, and Get Help page. The report then examines the final architecture, functionality, and design of the website, highlights challenges and solutions encountered during the process, and reflects on the skills developed. It concludes with a summary of project outcomes and a review of referenced sources. Together, these sections provide a complete picture of the project's development, from initial planning and research to the finished website and personal growth achieved through the capstone experience.

Goals

The primary goal of this capstone project was to apply both technical and creative skills to develop a fully functional website for a fictitious IT department. This involved not only designing and building a multi-page site, but also ensuring it was intuitive, professional, and reflective of real-world IT support systems. The website was expected to serve as a centralized support platform by providing helpful tools, streamlining communication between users and IT staff, and improving the accessibility of essential resources.

To meet these goals, several key learning objectives were identified:

- Strengthen proficiency in web development using core technologies such as HTML, CSS, and Java.
- Learn how to effectively use Adobe Dreamweaver, including tools like Split View, the Insert Panel, CSS Designer, and Preview Mode.
- Practice building and organizing content visually and through code to improve workflow efficiency.
- Apply user-centered design principles to create a site that is accessible, clear, and easy to navigate.
- Gain experience designing for both functionality and visual presentation.
- Develop confidence in independently managing a complete digital project from planning to deployment.

In terms of personal and professional growth, the project aimed to build confidence in independently managing a multi-phase digital project, from planning and research to

development and deployment. It also provided an opportunity to demonstrate skills such as problem-solving, interface design, iterative testing, and technical documentation.

The final deliverables produced through this capstone project include:

- A live, publicly accessible website hosted on Netlify at fakeitdept.com
- A multi-page design that incorporates core support features and user resources
- A hierarchical site map outlining the site's overall structure
- This formal written report documents the full development process
- A video presentation summarizing the project's goals, design decisions, and outcomes

These deliverables reflect the technical and creative goals set at the beginning of the project. Together, they represent the completion of a fully realized development cycle, from initial planning and research to execution, documentation, and presentation. Achieving these outcomes required a structured approach, beginning with a careful planning phase that established the project's direction, layout, and intended functionality.

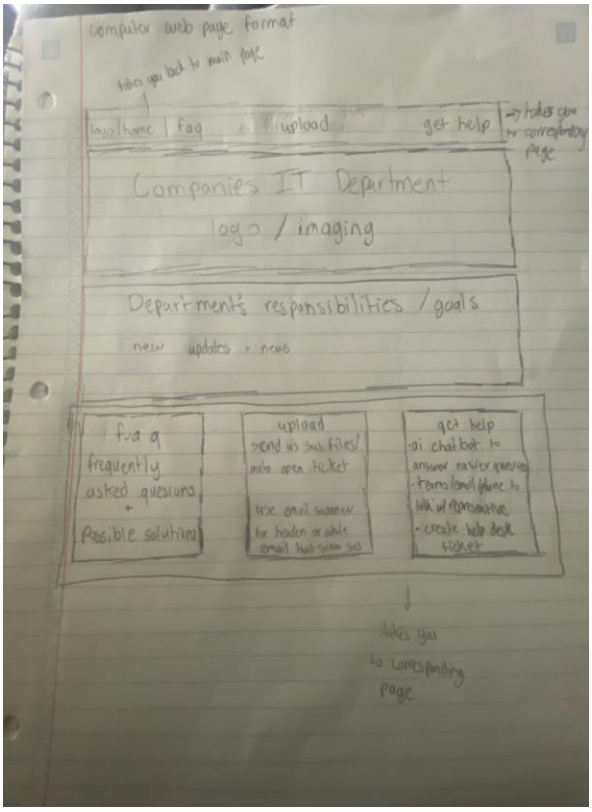
Planning

The planning phase was critical in establishing a clear direction for the development of the IT department website. Before any coding or design work began, time was spent outlining the overall purpose of the site, identifying the types of content and functionality it would need, and determining the best way to structure and organize information. The primary goal during planning was to ensure that the website would be intuitive, accessible, and functional for users with varying levels of technical expertise. Once these foundational goals were established, attention shifted towards planning the structure and functionality of each individual page, supported by rough outlines that helped guide layout and design decisions throughout the development process.

Main:

One of the first pages planned during the project was the Main Page, intended to serve as the central hub for the website. The primary function of this page was to direct users to the information and help they needed by providing clear navigation to the other sections, including the Frequently Asked Questions, Open Ticket, and Get Help pages. Additionally, the main page was designed to inform users about the IT department's mission statement, general responsibilities, and any important updates, ensuring users would have a basic understanding of where to go and what kind of support was available. Each link was planned to include a short description, helping users quickly recognize where they would be directed, without confusion.

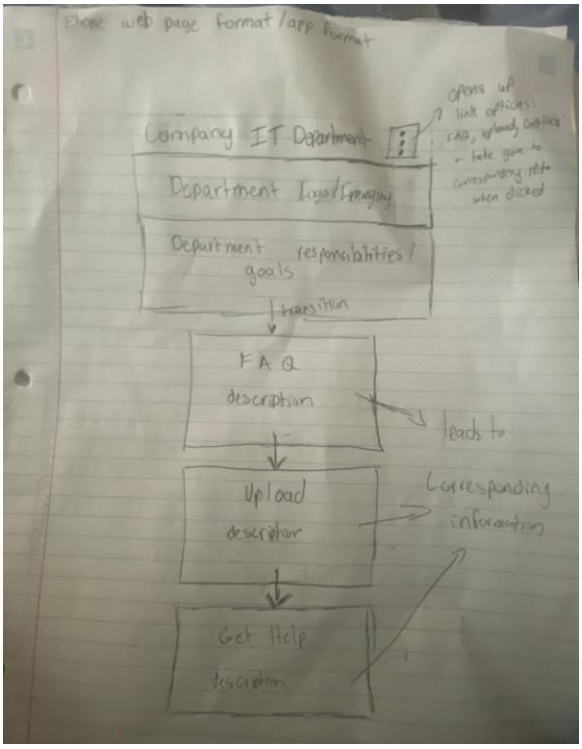
To help visualize this structure, an initial outline sketch was created for the website's desktop version. The layout emphasized clarity and simplicity, with prominently placed navigation links, a welcoming message, and an announcements area for urgent IT updates.



Early outline sketch of the Main Page (Desktop Layout).

Recognizing that users would also access the site from mobile devices, a second outline was developed specifically for phone and tablet formats. This version condensed the navigation into a more vertical, scroll-friendly structure, ensuring the site remained easy to use on smaller screens without sacrificing core functionality. Button sizes, text spacing, and layout were all adjusted to improve accessibility and readability for mobile users. This mobile version of the

homepage established a standard that would be carried across all other pages on the site, eliminating the need to create separate mobile outlines for each one.

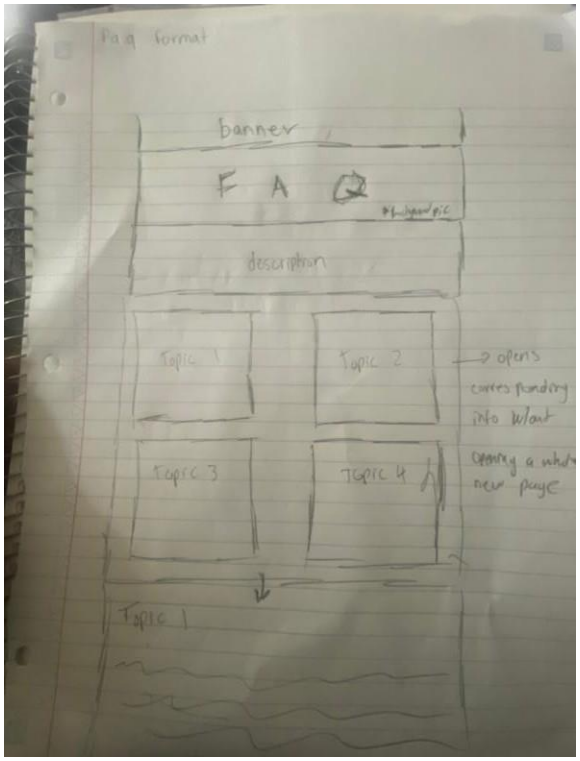


Early outline sketch of the Main Page (Phone/Tablet Layout).

Frequently Asked Questions:

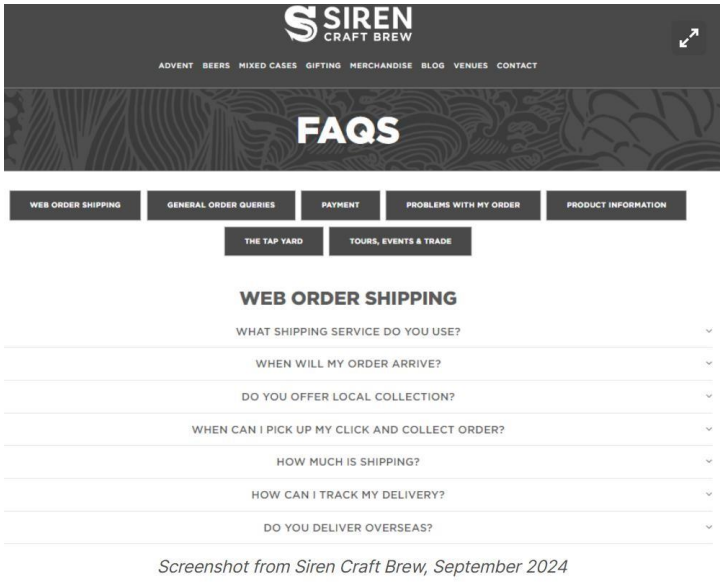
The Frequently Asked Questions (FAQ) Page was designed to give users quick access to answers for common IT issues without needing to open a support ticket. The goal was to reduce the number of simple, recurring support requests and help users solve problems independently. In the original outline, the layout featured a banner, a brief title, and large general topic blocks. While the idea was to make topics visually distinct, the early version lacked structure and didn't

provide a clear flow for exploring specific questions. It also lacked interactive features and felt visually unbalanced.



Initial layout sketch for the FAQ Page.

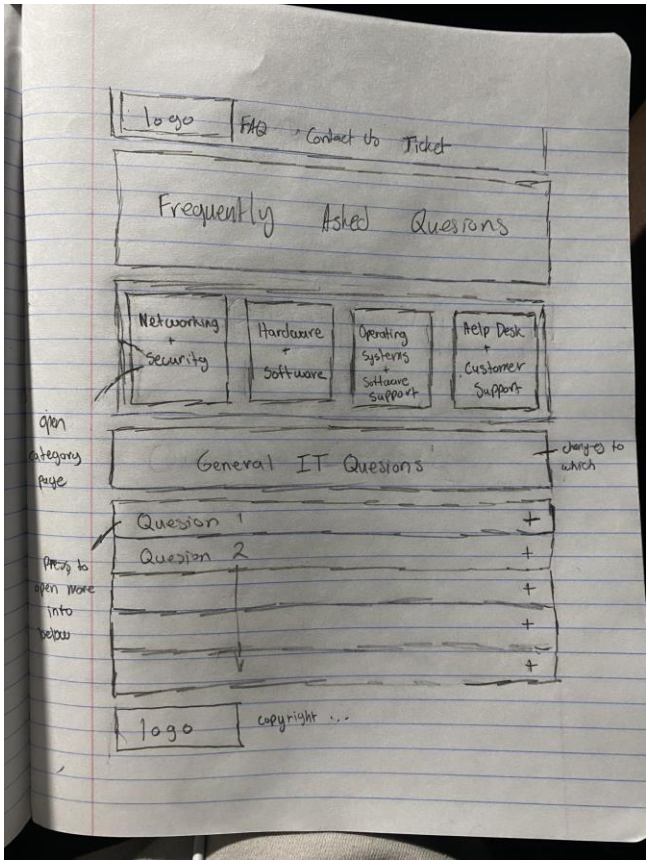
While the original layout aimed to make topics visually distinct, it lacked a clear structure and didn't support an intuitive flow for users to explore specific questions. To improve this, I looked at other websites for inspiration and found the layout of the Siren Craft Brew FAQ page particularly effective. Its use of clearly separated topics and nested question formatting helped guide users through relevant information without overwhelming them. This approach influenced my revised design strategy and led to a more structured, user-centered update of the FAQ section.



Screenshot from Siren Craft Brew, September 2024

. Siren Craft Brew FAQ layout used as design inspiration for improved topic navigation and structure.

As the website was being built, the FAQ page was redesigned to improve usability and structure. The new layout introduced a cleaner, more organized format, with clearly labeled categories: such as networking, software, hardware, operating systems, and customer support; spanning the top of the section. Under each category, questions were listed in collapsible panels that allowed users to expand only the information they needed without leaving the page. This interaction style reduced cognitive load, improved navigation, and supported a mobile-friendly browsing experience. The final layout reflected a balance between aesthetic clarity and practical functionality, aligning with user-centered design goals.

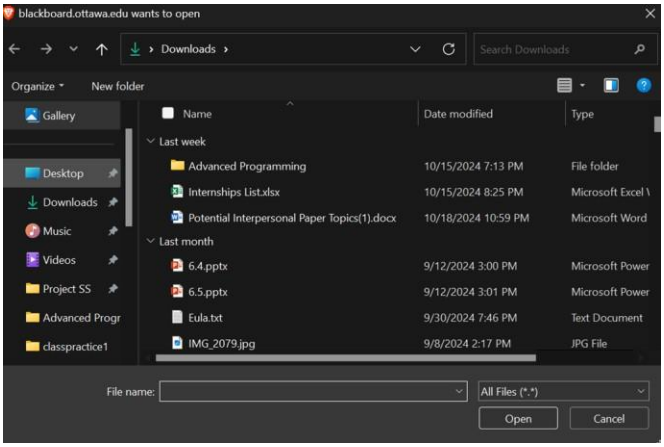


Updated layout sketch for the FAQ Page.

Open Ticket:

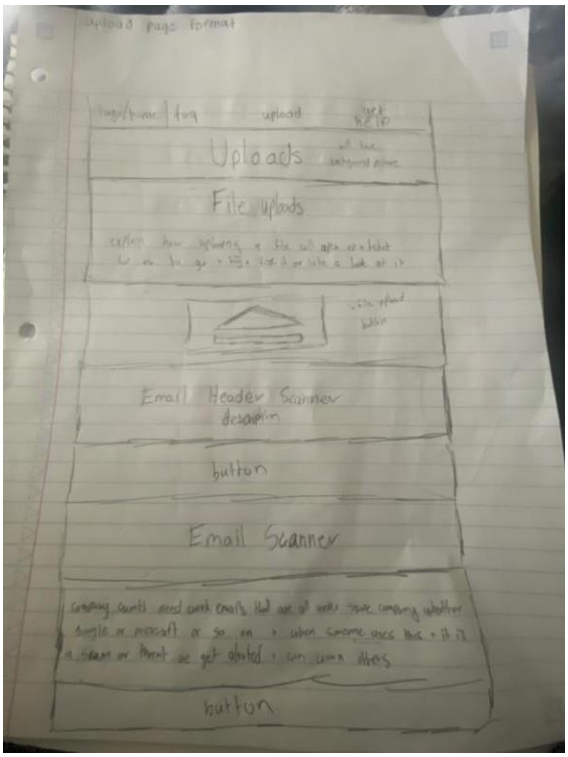
What began as a simple Upload Page evolved into a fully planned Open Ticket system, intended to give users a direct way to report issues while attaching relevant documentation. The original idea was to allow users to upload screenshots, documents, or screen recordings related to the technical problems they were experiencing. The inspiration for this functionality came from platforms like my school's Blackboard, where users can browse local files or cloud services and attach them to assignments or messages. This upload adaptability was central to the original planning of the feature.

Reference of a multi-option upload interface from Blackboard



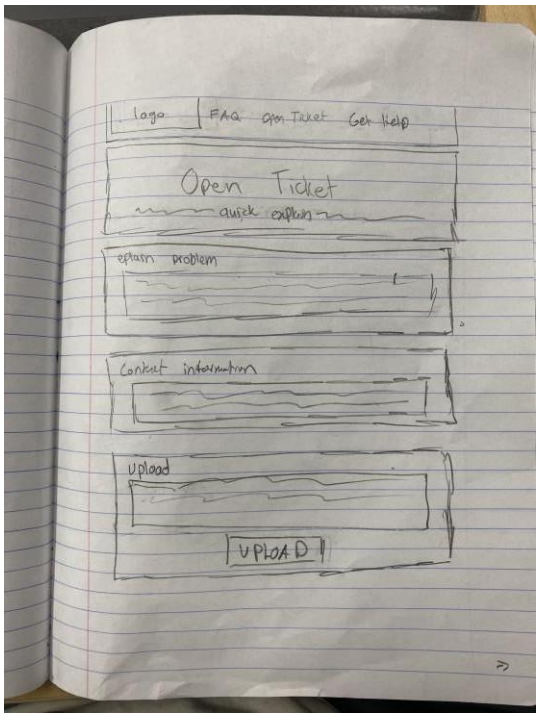
File selection window showing local files being chosen for upload

Once submitted, these files would automatically generate a new support ticket for the IT team to review. This provided a more flexible and user-friendly alternative to email-based troubleshooting. The goal was to give users a straightforward, centralized way to report problems with context, saving time for both users and IT staff.



Initial sketch of the Upload Page layout.

As planning continued, the original Upload Page was expanded into a fully developed Open Ticket Page to better reflect the structure of real-world IT support systems. In addition to the upload feature, new fields were added to capture the user's contact information and a brief description of the issue to help capture its urgency level. These additions helped transform the page from a basic submission form into a more complete and professional reporting tool. The revised layout, shown in the updated sketch below, illustrates these enhancements—highlighting a more organized design that clearly separates each input section for ease of use, ensuring that IT staff receive all necessary information at the time of submission.



Updated sketch of the Open Ticket Page layout.

In terms of storing the uploaded content, a conceptual system was also developed. It proposed using a database or network-attached storage (NAS) device, depending on available resources, to save all ticket-related data until the issue was resolved. The idea was that files submitted with a ticket would remain in high-priority status in the system until the support request was closed. Organizing this data would also allow technicians to reference previous uploads if similar problems occurred in the future. A diagram was created to represent how such a system could be structured to store and prioritize these submissions effectively.

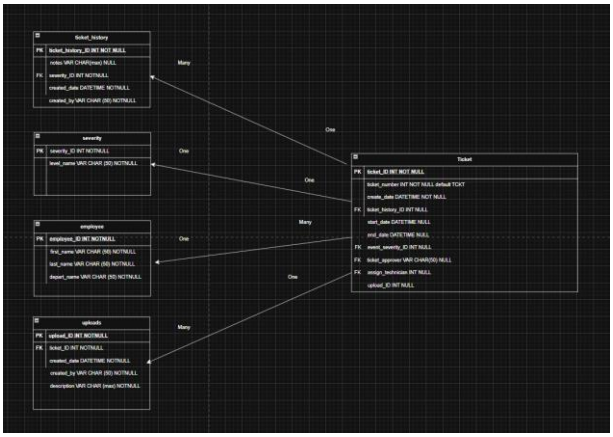
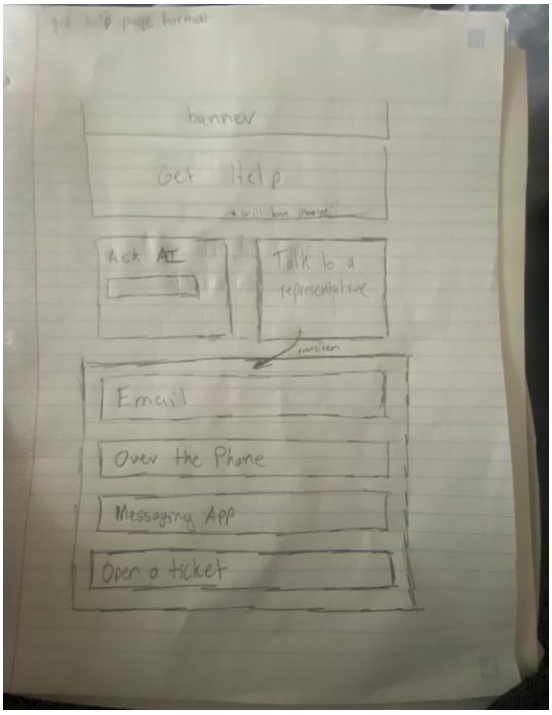


Diagram of planned database structure for managing uploaded support files.

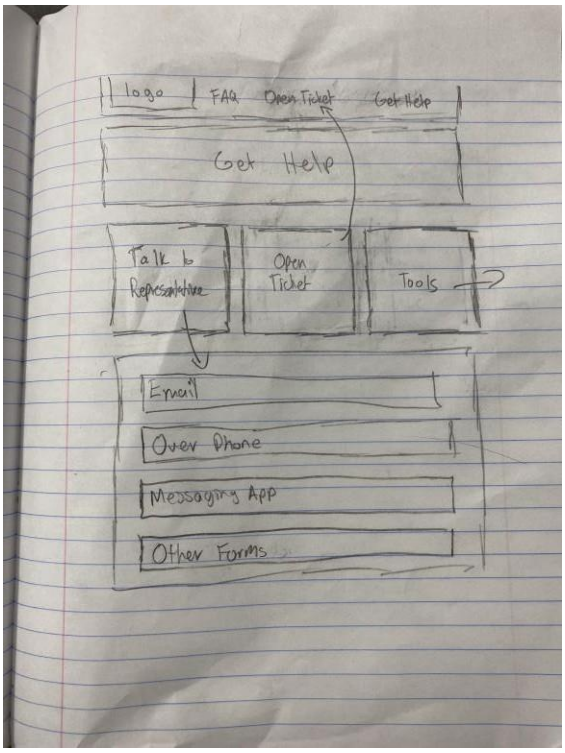
Get Help:

The Get Help page was designed as a central point for users to choose how they preferred to receive support. The goal was to provide multiple assistance options to accommodate different user preferences and urgency levels. During initial planning, the page was structured to offer access to AI chat assistance for quick problem-solving, as well as options to contact a representative through email, phone, messaging apps, or by opening a support ticket.



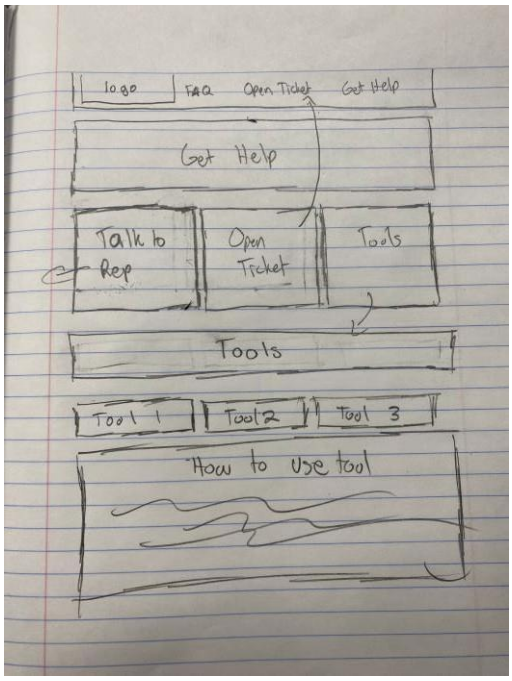
Early sketch of the Get Help page with communication method buttons.

As the design evolved, the Get Help page layout was reorganized to group assistance options into three clear categories: Talk to a Representative, Open Ticket, and Tools. This structure was created to simplify navigation by clearly directing users to either real-time help, form-based reporting, or self-service tools. Selecting “Open a Ticket” would simply redirect users to the existing ticket submission page, while choosing “Talk to a Representative” would expand into more detailed contact options. The sketch below illustrates the layout for these choices, focusing on how users would be guided through their communication preferences with clear buttons for email, phone, messaging apps, or other forms.



Updated sketch shows a redesigned layout with labeled sections and tool integration.

The Tools section in particular became more important as planning progressed. Originally, features like email scanners were considered part of the Open Ticket page, but they were eventually relocated here to keep the ticketing process focused and clean. Tools such as email breach scanners, file analysis links, and identity protection resources were organized under labeled categories to help users access them without needing to file a ticket. The sketch below presents an early concept of the Tools layout, showing how individual tools would be grouped with short descriptions beneath each one to guide users through their options quickly and effectively.



Final sketch showing the Tools layout under the Get Help page.

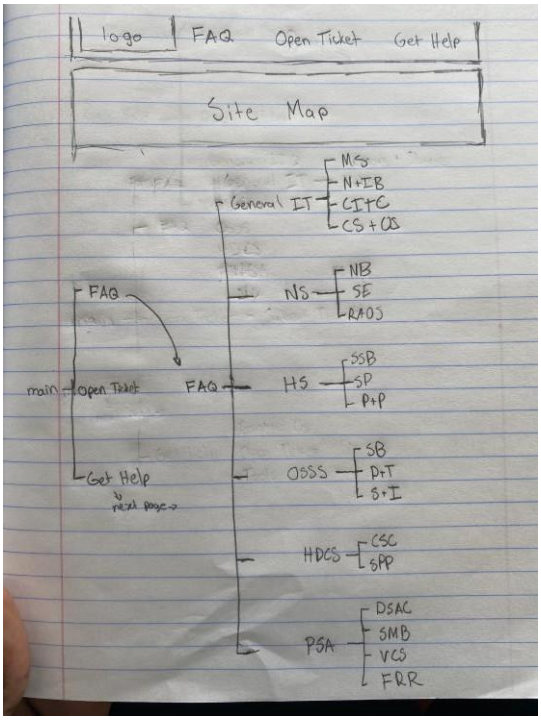
By the end of the planning phase, the Get Help page served as a highly adaptable interface that offered users multiple routes to resolve their issues based on their preferences, time sensitivity, and technical confidence.

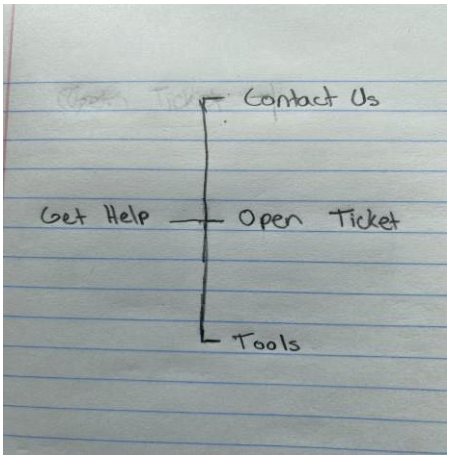
Sitemap:

The site map was one of the final additions to the planning phase, introduced after a discussion with my advisor emphasized the importance of visualizing the site's structure. To build it, I consulted external sources on best practices for hierarchical mapping and applied these concepts to my design. The goal was to clarify how pages connected and to help users and developers alike understand the overall flow of the website. This layout grouped content into

logical categories and made it easier to visualize user pathways from the homepage through various support options.

final site map sketch, showing the navigation structure across all major sections, including Get Help, Open Ticket, Tools, and the various FAQ categories





final site map sketches, showing the navigation structure across all major sections

Research

At the start of the project, I turned to online tutorials and video guides to learn how to effectively use Adobe Dreamweaver as my primary development tool. Although I had basic web development experience, Dreamweaver's unique interface and features: such as Split View, the Insert Panel, and the CSS Designer; required focused research to understand how to best leverage them. I followed step-by-step walkthroughs that demonstrated how to structure multi-page websites, link internal content, and preview live updates. This initial research laid the foundation for my confidence in using Dreamweaver and helped guide the way I approached building the site's structure from the ground up.

With a foundational grasp of the Dreamweaver interface in place, I shifted my focus toward how core web technologies: HTML, CSS, and Java; functioned within that environment. While I had used these languages before, applying them through Dreamweaver's development tools introduced new workflows. I researched how HTML handled site structure, forms, and linking in Dreamweaver's Design and Code views. Simultaneously, I explored how CSS could be managed through both direct code and Dreamweaver's visual tools, helping me maintain visual consistency and responsiveness across pages. For Java, I reviewed how to include lightweight scripts to enhance interactivity, like basic validation or toggle effects. These insights helped me blend technical coding with Dreamweaver's design-first features, creating a more streamlined and visually coherent site.

While researching other IT department websites, several common limitations became clear. Many lacked user-friendly layouts, offered limited communication options, and did not prioritize streamlined issue reporting. Often, users were required to dig through dense pages of information or wait long periods for a response without clear guidance. My site aimed to

improve upon these weaknesses by focusing on intuitive navigation, immediate access to support, and multiple help options such as AI assistance, direct messaging, and open ticket forms. Additionally, where other sites had cluttered interfaces or inconsistent styling, my project emphasized visual clarity and accessibility across all devices, ensuring users of varying technical backgrounds could find the resources they needed without frustration. These planned improvements were guided by both user experience principles and specific gaps noticed in the functionality of existing IT platforms.

To ensure the accuracy and relevance of each section of the website, a wide range of targeted research was conducted specific to each page's function. For the Get Help section, resources like LinkedIn Learning, GitHub, Gemini AI, and Khan Academy were reviewed to understand how platforms structure self-service and guided support options. For the Tools page, research focused on platforms such as Virus Total, Name Scan, and IdentityTheft.gov, helping to provide trustworthy third-party resources for email scanning, security breaches, and identity protection. The FAQ page drew from numerous sources including Cisco, Cloudflare, HeroThemes, MicroPro IT Support, and W3Schools to help generate accurate, helpful content tailored to common IT issues. Additionally, the sitemap structure was influenced by tutorials and examples from W3Schools and SEMrush, ensuring best practices were followed for hierarchical navigation. Finally, to understand how to build the Open Ticket page and integrate file upload capabilities, guidance from sources like Adobe's Dreamweaver tutorials and George Mason University's file upload documentation was used. Each of these resources contributed to refining page functionality and enhancing the user experience, making the site both practical and informative.

After finalizing the layout and content for each part of the site, the final step was researching how to successfully publish the website online. I began by learning how to upload files through Adobe Dreamweaver's FTP function, using resources from Adobe and George Mason University that explained how to structure files correctly and connect to a server. Although I initially planned to use this method, I ran into technical issues with FTP access and hosting limitations. As a result, I researched alternative hosting platforms and ultimately chose to use Netlify. Netlify stood out for its ease of use, especially for static websites, and allowed me to drag and drop my local files directly to a live domain. This simplifies the deployment process significantly and gave me greater flexibility in updating the site throughout the final stages of development.

Architecture/Functionality/Design

With the planning, research, and publishing stages complete, the focus shifted towards refining the website's internal structure, user experience, and overall design. This phase emphasized the integration of functional components, aesthetic consistency, and responsive layout principles to ensure the site was both visually appealing and easy to navigate. Each page was reviewed and optimized for accessibility, clarity, and flow, with special attention given to how users would interact with tools, submit tickets, and access resources. This section breaks down the technical and visual decisions made to support a user-centered, reliable IT support platform. Below will be breakdowns that cover each major section that appears on each page and explain their functionality, design choices, and how they contribute to the user experience.

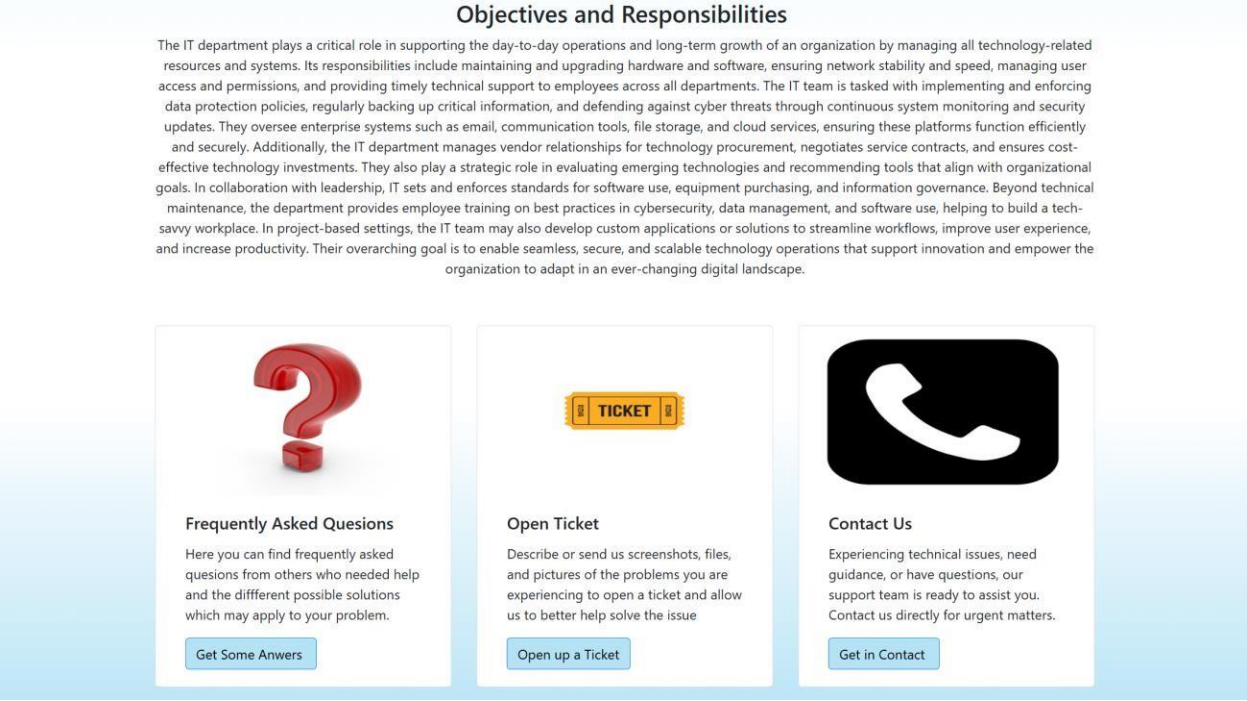
Main:

To start the development process, I created a base container using a fluid layout to ensure responsiveness across different screen sizes. I then began constructing the navigation bar, incorporating links to all the main pages of the site along with a clickable logo that directs users back to the homepage. From there, I added the department title and a mission statement, both of which were placed inside a Bootstrap jumbotron component for emphasis and visual appeal. This

framework formed the structure of the main page and many parts of my webpage.

The homepage banner featuring the department logo, navigation links to core pages, and a Bootstrap-styled jumbotron with the IT Department title and mission statement for clarity and visual emphasis.

From there I decided to continue to add more about the objectives and responsibilities to the website by creating a header using html. I also used divisions throughout to get a more correct spacing throughout my webpage. I felt this was necessary for the user to know what we would be able to help them with and know what we do. I then went ahead and created a single column grid with 3 rows. I then inserted a card into each of the rows. From there I gave an overview of each of the sections about where each of the navbar links that would take the user, and how they might help the user. Finally, I made a button that correlates to what each section is being described within the card.



The bottom section of the homepage showing the "Objectives and Responsibilities" paragraph, along with visual buttons for the FAQ, Open Ticket, and Contact Us sections; each with icons and brief descriptions.

The last thing I added to the home page was the copyright and the logo again at the end. Every website has a footer at the end. It's standard practice to remind you what site you're on, let the user know how old the content is, and finally keeps a clean design throughout the website. I also added my sitemap here later on in the process and will go into further detail into that later on.

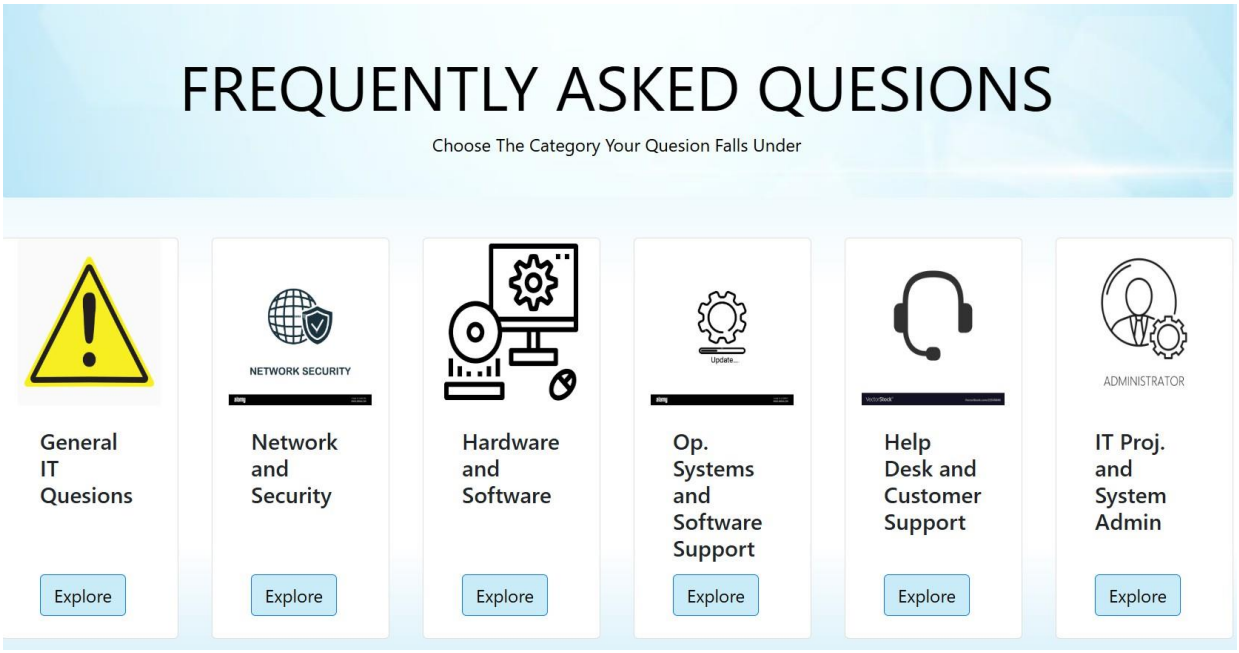
footer section of the homepage featuring the IT department's logo, the word "SITEMAP," and a copyright notice marked with the year 2025

Frequently Asked Questions:

With the homepage framework and navigation structure in place, the next step in the development process was building out the individual pages; Starting with the Frequently Asked Questions (FAQ) section, each link in the banner was directed to its corresponding page. I figured out how to transfer the CSS styles across pages by copying the homepage's code and modifying each page's content to align with its purpose.

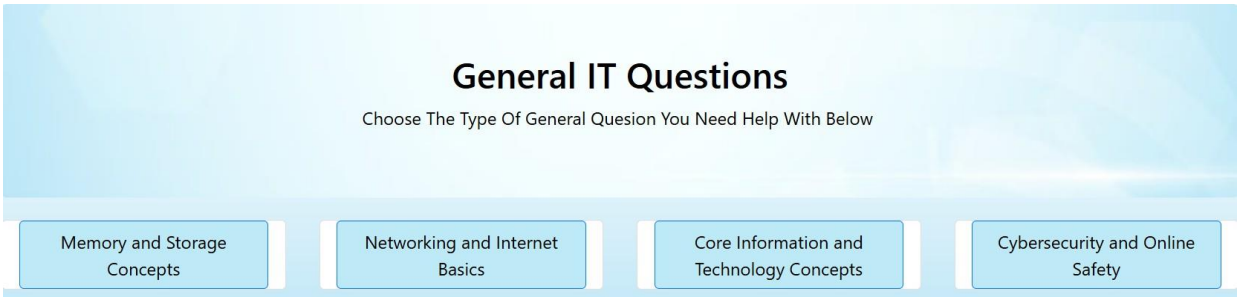
The FAQ section was one of the first areas I developed, as it serves as a central resource for users looking for quick answers. I compiled a broad set of questions covering general IT, networking, hardware and software issues, and IT department services. These questions were created using a variety of reliable sources and organized into categories to improve readability and ease of navigation. I organized the questions into distinct categories such as General IT, Network and Security, Hardware and Software, Operating Systems, Help Desk Support, and IT Professionals and System Admin. This organization helped users narrow their search based on

topic relevance and reduced information overload.



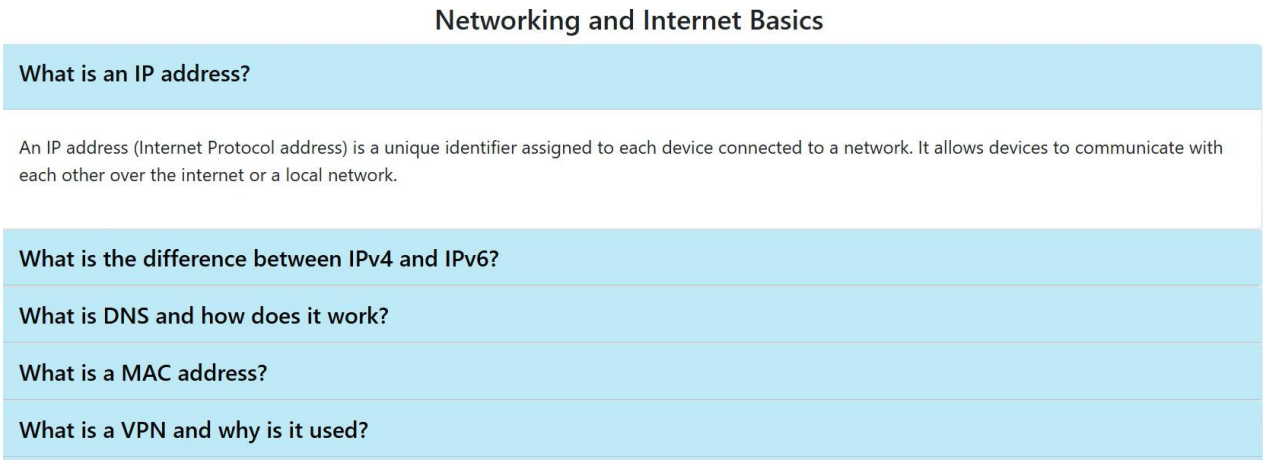
FAQ homepage featuring six clickable categories designed to help users find the right support area

From there, I continued to break down each category, using General IT Questions as an example, to create a more focused approach for users seeking answers. Within this section, I introduced subcategories like Memory and Storage Concepts, Networking and Internet Basics, Core Information and Technology Concepts, and Cybersecurity and Online Safety. Each subcategory leads to a new page featuring an accordion interface that displays a set of related questions.



Subcategories under General IT Questions, each leading to a more specific topic area.

For example, under Networking and Internet Basics, users can click on questions such as "What is an IP address?" or "What is a VPN and why is it used?" to expand and view the answers without being redirected. This accordion functionality improves readability and user experience by keeping the page organized and interactive.

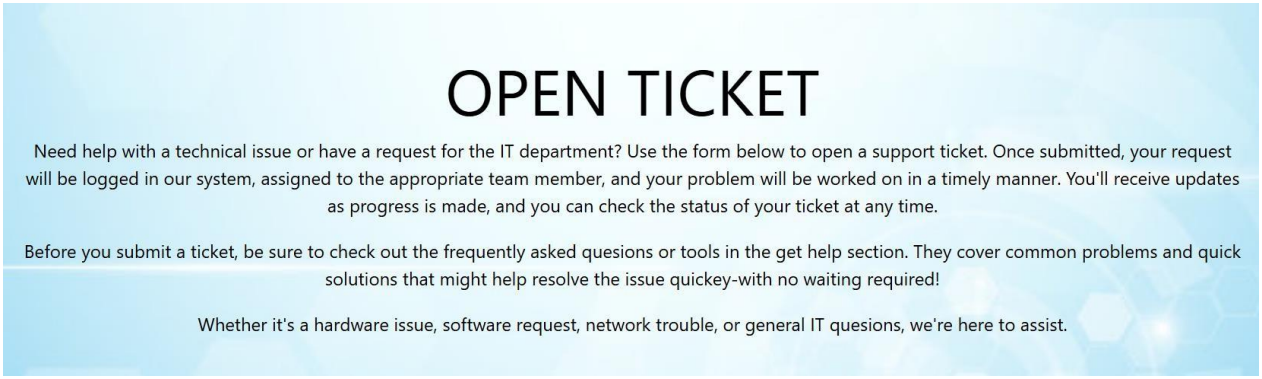


Accordion interface on the Networking and Internet Basics page, allowing users to expand individual questions for more details

Open Ticket:

After completing both the Frequently Asked Questions and Contact Us pages, I began developing the Open Ticket section. This page was designed to give users a structured way to report technical issues or service requests directly to the IT department.

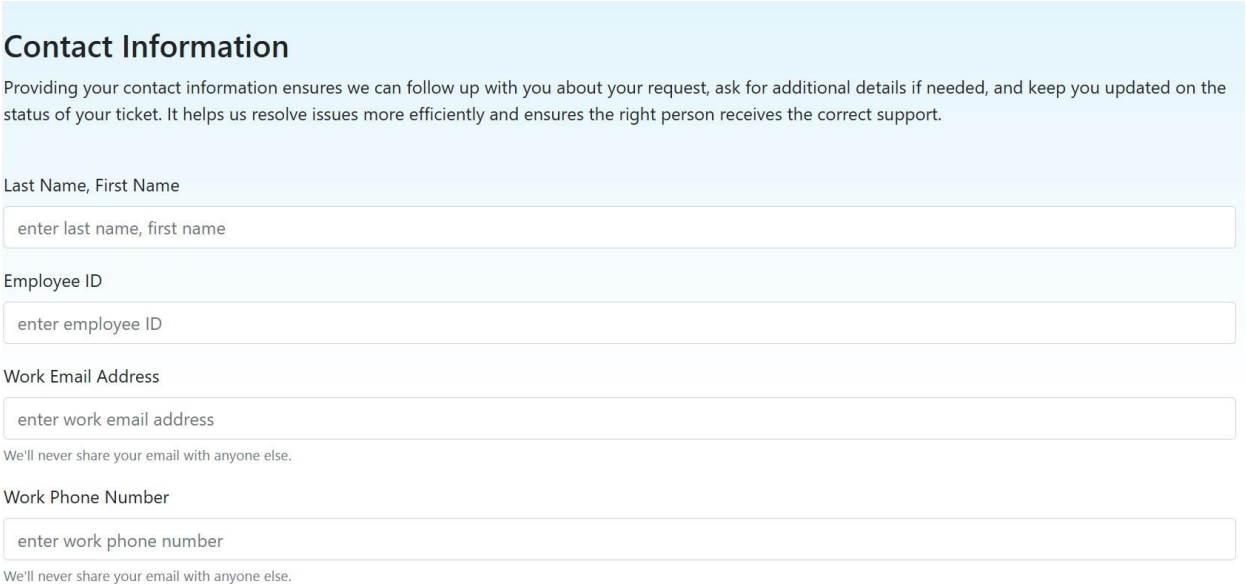
I started by adding a descriptive header that explains the purpose of the page and guides users to explore the FAQ or tools section before submitting a ticket, helping reduce unnecessary requests and speed up issue resolution.



Header of the Open Ticket page, introducing the purpose of the ticketing system and encouraging users to check the FAQ or tools section before submitting a request

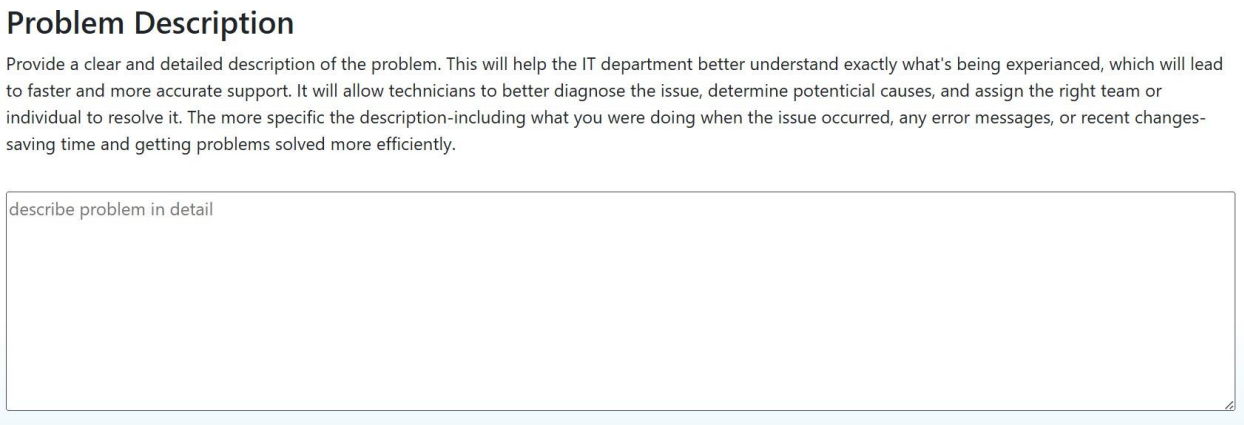
Below the header, I created a structured form that begins with a section for contact information, including fields for the user's full name, employee ID, work email address, and phone number. These fields are essential for effective follow-up, ensuring that IT staff can reach out with updates or requests for more details. The layout was designed with usability in mind,

keeping the form clean and intuitive to encourage full and accurate submissions.



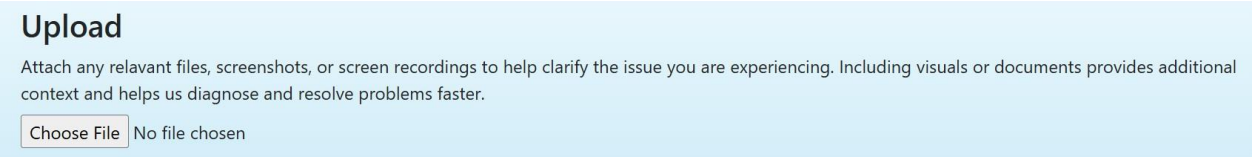
beginning of the Open Ticket form, prompting users to enter their contact information

To help the IT department understand and resolve issues more effectively, I created a Problem Description section directly below the contact fields. This area allows users to provide a clear, detailed explanation of the issue they are experiencing. Including specifics like what actions were taken when the problem occurred, any error messages received, or recent changes made, helps the IT staff accurately diagnose the problem. This minimizes guesswork and improves resolution time by giving technicians the context they need right away.



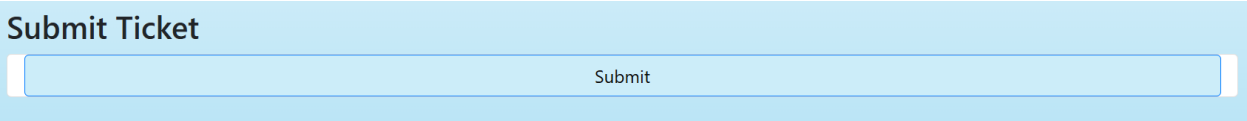
Problem Description section

Below the problem description, I added an Upload field to allow users to attach relevant files such as screenshots, screen recordings, or documents. I implemented this feature using an HTML <input type="file"> element, which made it easy for users to browse their device and select a file to submit with their ticket. I styled the upload button using CSS to match the rest of the site's color scheme and maintain visual consistency. This section plays a crucial role in helping the IT team visually understand the issue, especially when a user may not be able to describe the problem clearly in text. The added functionality improves the quality of ticket submissions and speeds up the resolution process by giving technicians immediate visual context.



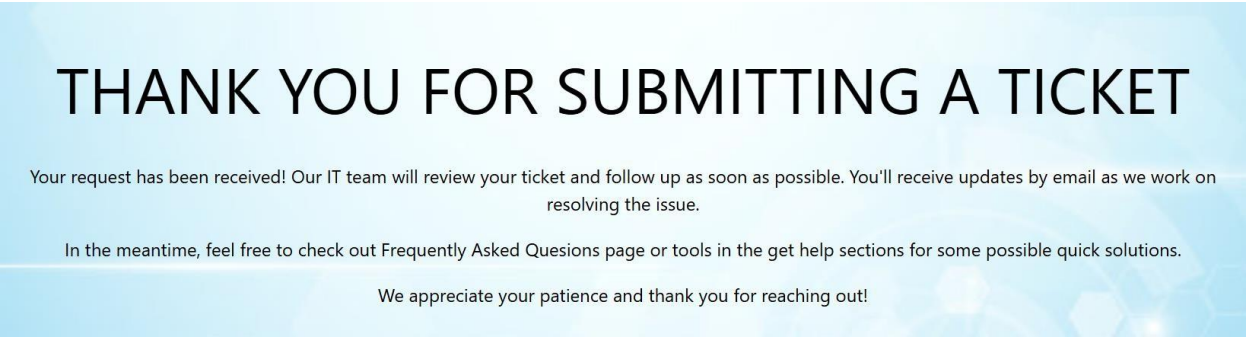
Upload section where users can attach supporting files

At the bottom of the page, I placed a Submit Ticket button to complete the form. When clicked, the information entered is submitted to the system, where it's logged and routed to the appropriate team member. This streamlined process makes it easy for users to request help while ensuring the IT department receives all the necessary information to begin working on the issue promptly.



Submit button at the bottom of the Open Ticket form

After the user submits a ticket, they are redirected to a confirmation page that acknowledges the successful submission. This page reassures the user that their request has been received, and that the IT team will follow up via email with updates as the issue is addressed. It also encourages users to explore the FAQ or Get Help sections in the meantime for potential solutions. This final step in the ticketing process helps manage expectations, reinforces user trust, and maintains a professional tone throughout the support experience.

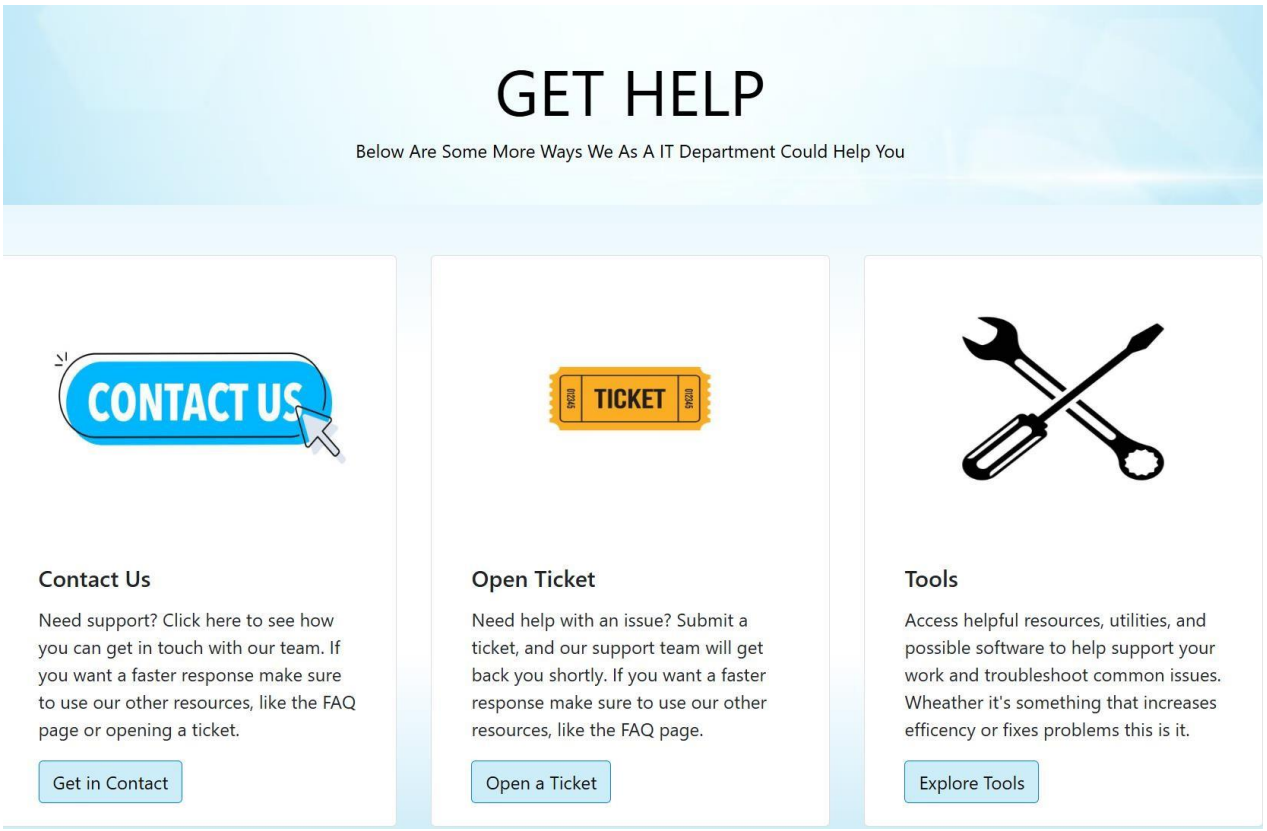


Confirmation page users see after submitting a ticket

Get Help:

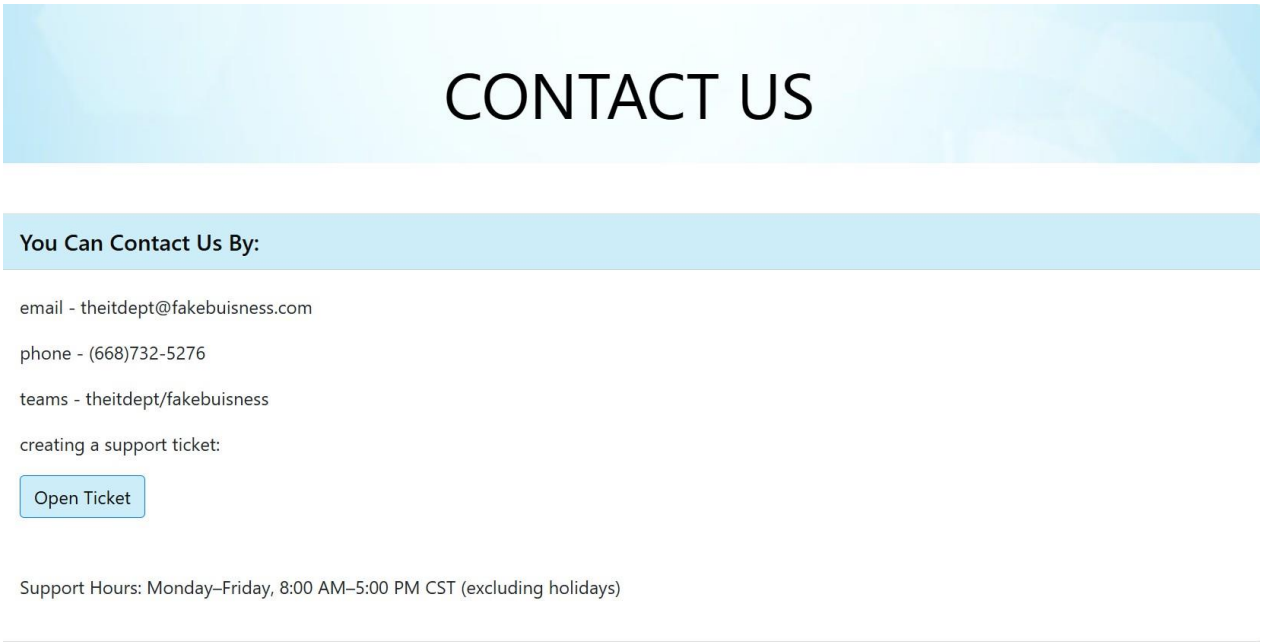
After completing the Open Ticket system, I moved on to developing the Get Help page. This page was designed to serve as a central hub where users could easily access various support options based on their needs. It brings together key resources, including contact information, ticket submission, and troubleshooting tools, into one user-friendly layout.

To build this page, I used a three-column structure to clearly separate each support option: Contact Us, Open Ticket, and Tools. Each column features a bold icon, a short description, and a button that links directly to its corresponding page. I used consistent styling and spacing to make the layout visually balanced and easy to navigate. This section helps guide users to the right path depending on the nature of their issue, whether they need to reach out directly, report a problem, or explore available resources before seeking additional help.



The Get Help page featuring three core options

The Contact Us section of the Get Help page was designed to give users direct access to communication channels for the IT department. I listed multiple methods of contact, including a dedicated email address, phone number, and Microsoft Teams link to ensure users had a variety of ways to reach support based on their preference. I also included our department's support hours to set clear expectations about availability. Additionally, I embedded a small "Open Ticket" button at the bottom of this section that redirects users straight to the Open Ticket page. This ensures a smooth experience for users who may start here but ultimately decide to submit a formal request.

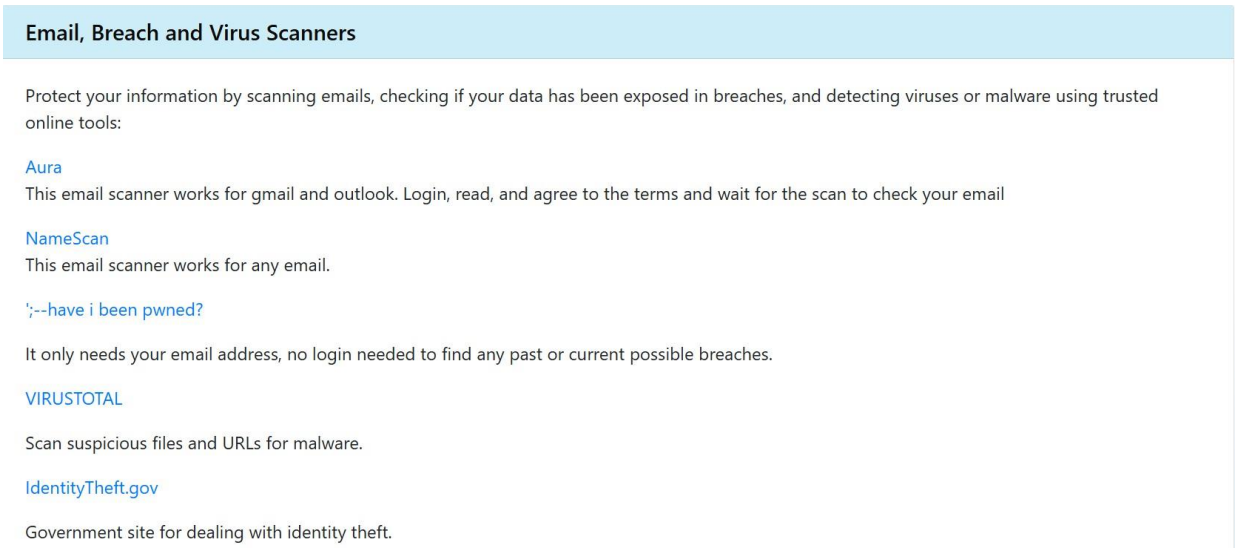


Contact Us section with listed communication methods

The last section that needs to be highlighted on the Get Help page is the Tools area; The Open Ticket section just goes to the Open ticket page. I created this section to provide users with quick access to useful resources and platforms that support productivity and troubleshooting. The tools are grouped into five categories: Email, Breach and Virus Scanners, AI Chatbots, Troubleshooting and System Monitoring, Learning and Training, and Collaboration and Productivity. I structured this using a simple unordered list styled with CSS to match the rest of the site's theme. Each tool category links to additional internal or external resources that can help users independently solve problems or learn more without needing to contact IT directly.

Tools section showcasing categorized resources that assist users with troubleshooting, training, and system monitoring.

When a user clicks on one of the categories in the Tools section, such as Email, Breach and Virus Scanners, the accordion expands to display a curated list of external resources. I built this using collapsible panels in HTML and JavaScript, allowing users to expand only the section they're interested in without cluttering the page with too much information at once. This particular panel provides links and short descriptions for trusted tools like Aura, NameScan, Have I Been Pwned, VirusTotal, and IdentityTheft.gov. These tools help users scan for breaches, detect malware, and verify their data security. By incorporating this interactive element, I was able to keep the page clean while still delivering detailed, actionable content.

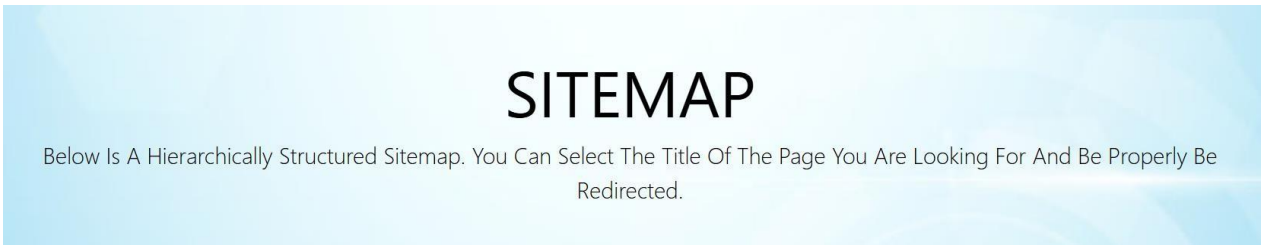


Expanded accordion view

Sitemap:

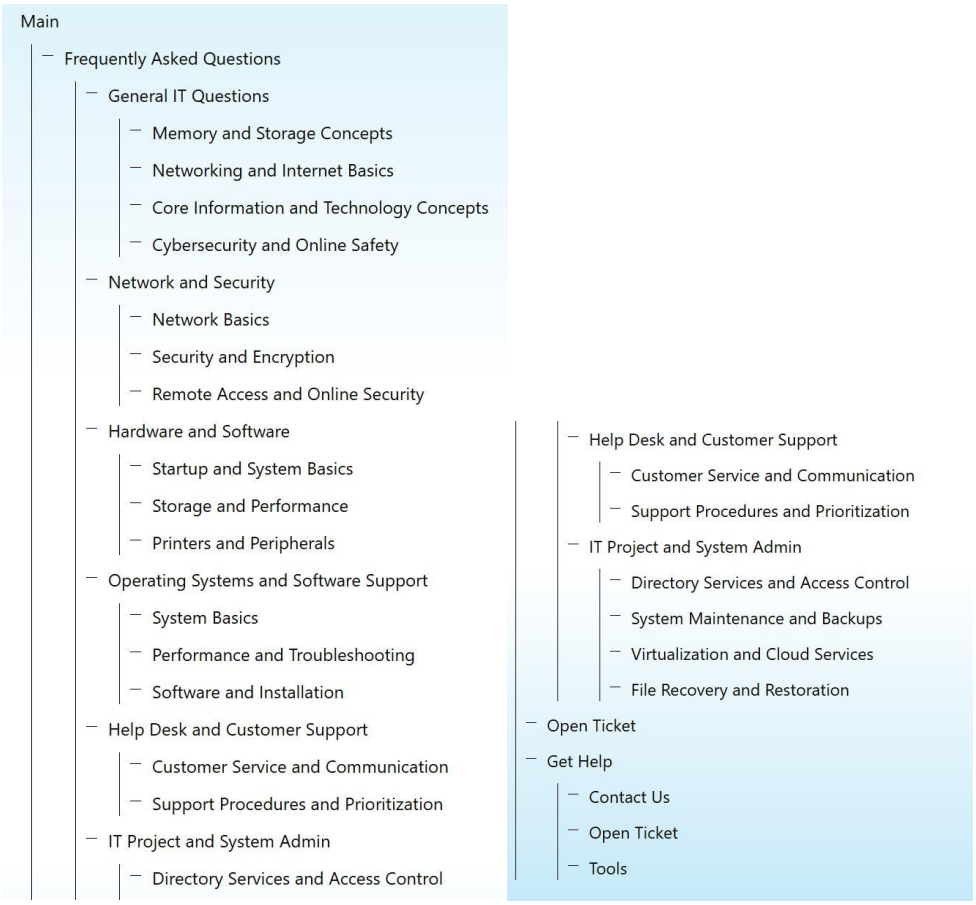
With the Get Help section complete and all major pages connected, I wanted to ensure users had one final way to easily understand and navigate the overall structure of the site. That led to the development of a Site Map; a visual and clickable outline that ties the entire website together.

To help users visualize the entire structure of the website, I created a dedicated Site Map page. I introduced the section with a short message explaining that users could click on the listed titles to navigate directly to the page they're looking for. This helped reinforce the usability of the site and acted as a reference point for both users and developers working on future updates.



Site Map title and introductory text

The site map is structured in a hierarchical format that mirrors the layout and navigation of the entire website. It begins on the Main page and branches into major sections like Frequently Asked Questions, Open Ticket, and Get Help. Within each section, I organized subcategories: General IT, Network and Security, and Hardware and Software, to reflect the structure users experience while navigating the site. Each of these is then broken down further into specific topics, like Cybersecurity and Online Safety under General IT. I created the map using nested HTML lists and used CSS to draw vertical lines, visually representing the parent-child relationships in a way that resembles a traditional flowchart.



Full visual of the hierarchical site map showing top-level pages on the left and all subpages and categories aligned to their sections on the right.

To make the site map even more functional, I made each title clickable, allowing users to instantly navigate to the corresponding page. This added layer of interactivity turns the map into both a visual reference and a convenient navigation tool.

Throughout development, I consistently used Dreamweaver's Preview in Browser feature to test the layout, responsiveness, and functionality of each page. This allowed me to identify and correct formatting issues, ensure all internal links worked correctly, and verify that form submissions and interactive elements like accordions displayed as intended. Testing in different

browsers helped me confirm a consistent user experience across platforms. I continuously adjusted spacing, font sizes, and button alignments based on this testing to improve both visual appeal and accessibility.

Once the site was fully built and tested locally, I began working on making it publicly accessible. Initially, I attempted to upload the website using Adobe Dreamweaver's built-in FTP capabilities. However, I ran into issues with port configurations and certificate errors that made the process unreliable. To ensure smoother deployment, I decided to use a third-party hosting platform, Netlify. Netlify allowed me to drag and drop my project folder directly, automatically deploy the site, and manage updates quickly. I also purchased a custom domain to give the website a professional appearance and make it easy for users to access. This combination of third-party hosting and domain registration provided a fast, stable, and user-friendly way to publish my IT support site online.

Overall, the architecture, functionality, and design of the website were developed with a strong focus on usability, clarity, and user support. Each section: from the homepage layout to the FAQ, Get Help, and Open Ticket pages, was intentionally built to guide users toward solutions efficiently and intuitively. Interactive elements like the accordion panels, structured form submissions, and a clickable site map not only enhanced the site's functionality but also reflected thoughtful design decisions aimed at improving the user experience. By combining clean visuals with logical structure and reliable support features, the final result is a well-rounded IT support site that is both practical and easy to navigate.

Conclusion

As the project ended, it was important to step back and evaluate the entire process, from initial planning to final deployment. The following section captures the key takeaways, challenges, skills gained, and areas where improvement is still possible. Reflecting on the journey not only shows the technical accomplishments of the project but also emphasizes personal and professional growth throughout its development.

Throughout the development of this project, I encountered several challenges that required adaptation and creative problem-solving. One of the first obstacles was building out certain advanced features, such as the AI chatbot and sections of the Tools page, directly within Dreamweaver. While Dreamweaver was excellent for visual layout and HTML/CSS editing, it wasn't equipped to fully support or embed complex third-party tools and dynamic functionalities. This led me to research external platforms and services that specialized in the types of features I wanted to integrate, such as AI-based chat support and productivity tools, and include them as external resources or hyperlinks on the site.

Another challenge occurred during my attempts to build an example database system using Postage's SQL interface. I was able to successfully create all of my tables and define the appropriate columns and data types, but I struggled to upload sample data. Despite converting example information into CSV files, I ran into formatting and uploading errors that prevented the data from populating the tables properly. This experience taught me the importance of data sanitation, formatting standards, and having backend tools with clear error handling and import options.

Lastly, one of the biggest technical hurdles was in the deployment process. While I originally planned to publish the site using Dreamweaver's built-in FTP capabilities, I encountered persistent issues with port configuration and certificate errors. To resolve this, I transitioned to using Netlify, a more reliable third-party hosting platform. Netlify made the deployment process smoother and faster, allowing me to drag and drop my site files, receive a live URL instantly, and link a custom domain for public access. This shift was essential in bringing the final version of the website online successfully.

This project taught me how to approach web development from both a technical and problem-solving perspective. I learned how important it is to plan the structure of a site in advance; especially when managing multiple interconnected pages like an FAQ section, contact forms, and tools directory. I also gained hands-on experience with interactive elements such as accordion menus, upload fields, and site navigation. Each feature pushed me to think critically about user experience and how to guide users toward helpful resources efficiently. Beyond just coding, I learned how to adapt when limitations arose: like turning to third-party platforms when Dreamweaver couldn't support certain functions. This reinforced the idea that flexibility and research are just as important as development itself.

Over the course of the project, I developed a strong set of both technical and practical web development skills. I improved my understanding of HTML and CSS structure, learned how to implement and style form components, and explored responsive design techniques. I also gained experience using JavaScript for interactive features like accordions and enhancing user navigation. Beyond coding, I learned how to use Adobe Dreamweaver as a design and testing environment, along with third-party tools like Netlify for site deployment. Troubleshooting challenges with file uploads and database imports sharpened my problem-solving abilities, while

researching and integrating tools like AI chatbots and external resources strengthened my adaptability and creative thinking.

The final deliverables for this project included a fully functional and navigable IT support website. The site featured a homepage, a categorized FAQ section with expandable accordions, a Get Help page linking to Contact Us, Open Ticket, and Tools sections, and a detailed hierarchical site map for visual navigation. I also built a working Open Ticket form with file upload functionality, styled consistently across all pages. The design emphasized usability, clarity, and accessibility. In addition to the website itself, I created a supporting final report with annotated screenshots, a detailed walkthrough video presentation using Zoom's screen recording feature that shows the design process and outcomes of this project, and a live published version of the site hosted on Netlify under a custom domain.

If I had more time or were to continue expanding this project, I would focus heavily on developing a more robust backend system. While the current version of the site provides strong front-end functionality, adding a backend would allow submitted tickets to be stored in a structured database and viewed by "FakeITDept" employees through a secure admin interface. This would improve how requests are managed and tracked internally. I would also work to complete the database system I began building in Postage's SQL platform, ensuring that data uploads function properly and are integrated into the website's support system. Additionally, I would enhance the site's visual design using more advanced CSS or a front-end framework like Bootstrap, and possibly integrate live chat functionality for faster, more interactive user support.

This project was a valuable learning experience that challenged me to combine design, development, and problem-solving skills into one cohesive product. From planning the layout and creating interactive features to troubleshooting deployment issues and exploring backend

possibilities, every step pushed me to grow both technically and creatively. Although there are still areas I would improve with more time, I'm proud of the final result; a polished, professional IT support website that reflects real-world functionality. This project not only strengthened my web development skills but also prepared me to approach future projects with greater confidence, adaptability, and a user-centered mindset.

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