



Cyber4Hire

Freelance Cybersecurity Services
Group Members: Niall, Jake, Ian

Introduction

Overview of Our Design:

Our project, *Cyber4Hire*, is a secure, user-friendly web platform that connects businesses with qualified freelance cybersecurity professionals. We built a site that prioritizes strong security practices, user authentication, service verification, and an efficient search and review system to ensure trusted and high-quality connections.

Problem/Services Addressed:

Today, businesses struggle to find trusted, skilled cybersecurity experts quickly and securely. At the same time, talented freelancers often face difficulty getting discovered. Cyber4Hire solves this by providing a secure, verified marketplace where companies can confidently hire cybersecurity help and freelancers can showcase their skills.

Project Structure Design

Client:

- Built using **PageLayer**, a WordPress page builder plugin that allowed us to design custom pages through a drag-and-drop interface.
- Our front-end is fully customized with HTML, CSS, and JavaScript components handled by PageLayer, providing users with an intuitive and responsive experience.
- Users can browse cybersecurity freelancers, post service requests, leave reviews, and search for verified professionals in a catalogue created using WooCommerce.
- User can make secure payments using Stripe as a payment gateway.

Project Structure Design

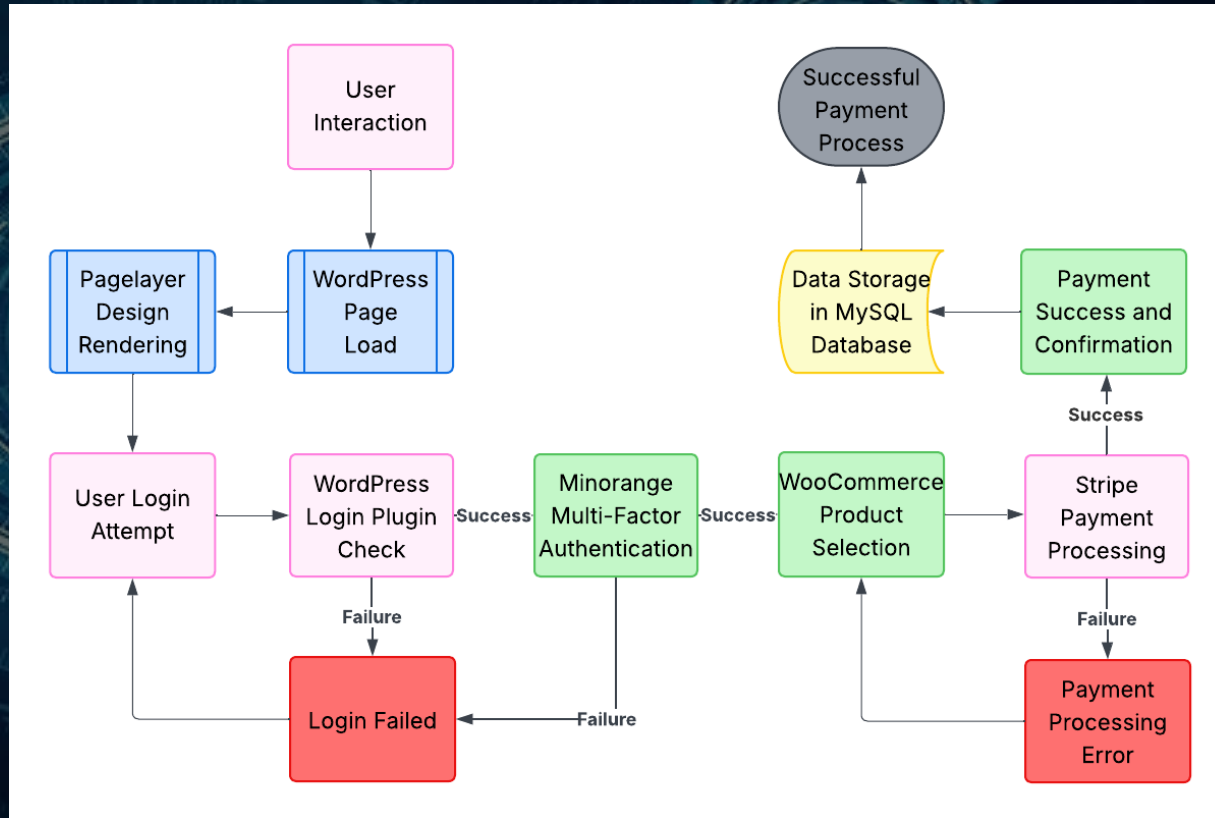
Server:

- Hosted on **InfinityFree**, running **WordPress** on an **Apache** web server with **PHP**.
- The server processes user interactions, manages sessions, and handles dynamic content generation securely.

Database:

- Powered by **MySQL** through InfinityFree's hosting service.
- Stores critical data such as user profiles, service listings, verification statuses, reviews, and other dynamic content.

Project Structure Design



Results and Analysis

Achievements and Outcomes

- We learned how to design an appealing and function website through the use of HTML and CSS (with the help of WordPress and plugins).
- Our team as a whole has a stronger understanding of the importance of cybersecurity, especially when payment & confidential user information is involved.
- In addition to this, we learned how to properly implement measures to strengthen the security of a website.
- We were able to conduct thorough vulnerability assessments on our site using tools such as Nessus and Zap.
- The reports could then be analyzed for critical vulnerabilities that may be present, giving us a better understanding of our website and what improvements can be made for the safety of its users.

Results and Analysis

Assessment Tools

- We scanned and assessed our website using Nessus, Nmap, and Zap.
- Provided is a video demonstrating and analyzing these scan results. Access the video here: <https://youtu.be/ehkEmHcrnEk>
- No critical vulnerabilities were found on the site thanks to the WAF, secure login plugin, and multiple other security features provided by MalCare and Jetpack.
- MalCare was also used on WordPress to detect potential vulnerabilities and implement solutions as needed.

Conclusion

Activities Completed

- Brainstorm website ideas for an untapped market (All)
- Setup website hosting on InfinityFree (Jacob)
- Configure SSL Certificate (Jacob)
- Design website; Logo, UI, Theme, Text, etc. (Jacob)
- Configure user registration and login (Ian)
- Configure MFA using MiniOrange (Niall)
- Configure website reCaptchas (Jacob)
- Setup payment gateway (Jacob)
- Design catalogue and populate with example products (Jacob)
- Configure MalCare security protection plugin (Niall)
- Conduct security scans to analyze website vulnerabilities (Ian)
- Create presentation of website (All)

Conclusion

Accomplishments & Takeaways

- A fully made plan that we used for our E-Commerce website
- A visually appealing eCommerce website that is fully completed and testably secure.
- We learned how to analyze and check our website for vulnerabilities using various testing tools.
- We learned about payment gateways, two-factor authentication, and CAPTCHAs and how to implement them into our future projects.
- We learned about hosting a website, and configuring the SSL Certificate for our website.
- We learned the importance of security and WAFS and how to implement them to increase the security of our website.

Resources

- InfinityFree - Domain & Hosting
- WordPress - Website Design & Plugins
- Pagelayer - Page Design
- PopularFX - Website Template
- User Registration & Membership - Login & Registration
- miniOrange - MFA
- WooCommerce - eCommerce Toolkit
- Stripe - Payment Gateway
- CleanTalk - Anti-Spam
- MalCare - Security Tools & Malware Protection
- Jetpack - Security Tools
- UpdraftPlus - Website Backup
- Google Slides - Presentation
- Lucidchart - Diagram Creation

References

- WordPress documentation used for learning purposes.
- Certain site images are royalty free images taken from Google Images.

The background is a dark blue gradient with several large, concentric circular patterns that resemble futuristic radar or data visualizations. These patterns are composed of various shades of blue and white lines, creating a sense of depth and complexity. The text "Thank You!" is centered in a bold, white, sans-serif font.

Thank You!