

Unit Name: Technology Capstone Research Project

Unit Code: 11522

Semester/Year: Semester 2 2025

Team: 11522-S2-06

Mentor Name: Fatema Afroz

Assignment Number and Title: Deliverable and Report

Date & Time Submitted: 24/10/2025 at 3.30 pm

Team Members

Adertha Elzabeth	U3274941
Aravind Rajeev	U3269911
Joseph Alan Benny	U3272695

Table of Contents

Introduction	3
Project Outcomes	3
1.Deliverables:	3
2. Achievements:	4
3. Key results	4
4.Alignment with KPI's	4
5.Quality Assurance Measures	5
6. Impact	5
Value to Sponsor	6
Scope or Design Changes	6
Checklist of Compliance with Proposal and Plan	7
Next Steps or Handover Notes	8
Recommendations to Sponsor	8
Conclusion	8
References	9
Github Repository Link	9
Appendices	10

Introduction

The Fitness frontline Resource Licensing System is a project developed for Miller Health Pty Ltd with an objective of enhancing the knowledge in workplace wellness, fitness, and health by providing access to informational digital resources. The project helps organization a simplified way to give employees access to specific purchased books wellness, fitness, and health, each of which comes with self-paced learning materials, while enabling administrators to handle licenses, fees, registrations, and access credentials. This web page helps the organization to ensure the engagement of employees with critical health information and to keep record of participation of employees. The project was developed because of the increasing demand and need of online platforms that helps organizations to manage and provide access to health and wellness related resource to their employees. The aim of the project was to implement a digital licensing system that have the functionalities like registration, licensing, payment processing and access management. Automating this system helps to increase data accuracy, less human administrative effort and easy monitoring of staff engagement with the purchased resources. The application WordPress is used in this project for development which helps in easy integration of frontend with backend logic, automated email notification. Use of this application ensure scalability, maintainability and user-friendly operations. Key objectives of the project include providing organization, a safe and structured access to purchased resource, improved operational efficiency and reduced manual administration, automating license code generation, registration, approved payment and access to resource, enabling managers to communicate with the team and fix a price before purchasing the resource, educating employees more easily by quick access to the digital resource.

Project Outcomes

1.Deliverables:

The main objective of the project was to create a platform for an organisation to access the resources by providing them with licenses in the form of access codes. For this we made use of resources like WordPress to deal with the front-end user interface that matched with the sponsor requirements and php code for backend operations with implementing MySQL databases. The key deliverables include:

- A registration form which included the basic details of the organisation which notifies the sponsor know about the organisation's interest to access the resources. WordPress MySQL database integration has been done where the important information about the organisation, their license code, invoice details, payment details etc are being stored based in the organisations id.
- An email notification system where the sponsor gets notified once an interest has been
 registered by an organisation, a personalised invoice sending system to each registered
 organisation with a link to login. An easy implementation of invoice sending where the user
 and admin receive the invoice in their registered email and provided with a link to continue
 payment.
- The successful implementation of the third-party payment integration using Stripe checkout. Ensured successful deployment in the live server after performing testing at various levels.

2. Achievements:

- Achieved the major milestone of creating a fully functional licensing system which aligned with the sponsor's requirements and provided a seamless process for organisations to register, make payments, and access licensed resources.
- During the course of action, major conflicts emerged in the working pages which crashed the entire workflow due to involvement of certain plugins like SMTP. But eventually those conflicts were resolved, and the workflow was back to normal as expected.
- The successful implementation of WordPress database using cPanel enabled to make the
 workflow smooth and dynamic and hence the operations like user registration, admin page data
 retrieval, invoice operations, login operations, the resource access etc were running smoothly.
- Various trial and error methods were involved in this. But the implementation of theme
 functions enabled it to provide a more secure and authentic way which involved improved
 readability, and easy maintainability.
- Integrated a secure and verified payment gateway (Stripe Checkout) to ensure data confidentiality and transactional safety for users.

3. Key results

- Form submission was found successful. Once the form is submitted, the admin is notified and the database was updated accordingly.
- The invoice delivery and admin email notification was found to be successful and the link to stripe checkout was working without causing any issue.
- The caching of the resources and books provided by the sponsor was found to be effective and took less loading time for the user to access. The conflict resolutions in the theme functions of the php code was found to be resolved after various debugging and testing process.
- The implementation of text changes referred by the sponsor was reflecting effectively and it was tested.

4. Alignment with KPI's

KPI	Target	Evidence of Achievement		
System Functionality	Develop a fully functional resources licensing system that allows registration, license generation, invoice management, secure payment, and resource access.	The system enables organization to register generate license codes, send invoices through the admin dashboard, process payments via Stripe, updates payment status in real time, and grant access to books. Fully tested and verified on the live WordPress portal.		
Performance and Reliability	Ensure the system has fast response time and stable performance across all the components.	The live system runs smoothly with quick form submissions, database updating, and email responses. The components were tested under different conditions with multiple user trials which confirmed consistent reliability and uptime.		
Security and Compliance	Implement secure authentication, data protection, and compliance with privacy standards.	The system uses CSRF protection, input sanitization, and session-based login validation to prevent unauthorized access. Payment integration via Stripe follows PCI DSS compliance, ensuring all transactions occur over secure https		

		connections. All data and resources are securely stored within the WordPress database, ensuring controlled access, integrity, and compliance with data handling policies.
Usability and Accessibility	Create a simple and user-friendly interface accessible to clients.	The website offers clear instructions, and responsive design. The registration form provides clear instructions and feedback, while invoices include direct login credentials and a login link. After logging in, users can view their exact payment amount with secure payment instructions. Once payment is completed, they are automatically directed to access the licensed resources for self-paced learning.
Scalability	Support multiple users and organizations without effecting system performance.	The system allows easy addition of new organizations and licenses. Each organization has a unique license code and independent payment flow, enabling future expansion without affecting existing users.
Quality Assurance Compliance	Follow ISO/IEC 27001 and 25010 standards and conduct verification, validation, and user acceptance testing.	The system follows secure practices using Stripe for compliant payments, WordPress for controlled data storage, and session-based login for authorized access. Quality checks and debugging were completed before deployment, and testing done by sponsor confirmed successful system operation and alignment with the quality standards.

5. Quality Assurance Measures

The Resource Licensing System has a structured quality assurance process to ensure reliability, security, and accuracy across all functionalities. The registration process was tested to validate correct form submissions, license code generation and proper database storage and updating within the WordPress. Proper debugging was performed to ensure that form protection through CSRF tokens, input sanitisation, and session-based validation worked seamlessly to prevent unauthorised access or data tampering. Each user interaction from registration and email notification to invoice generation was verified to perform accurately and trigger the intended database updates and email responses. Before deployment, the team conducted multiple test iterations, including workflow testing for payment through Stripe, which was verified for PCI DSS compliance and secure https connections. The system was evaluated for usability, ensuring that organisations could easily register, receive invoices, and complete payments through a simple, guided interface. User Acceptance Testing with the sponsor confirmed that all modules including registration, invoicing, payment confirmation, and resource access met both functional and security expectations. These quality assurance measures ensured that the final system delivered a secure, user-friendly, and dependable licensing experience.

6. Impact

The resource licensing system has made significant impact for the organisation and users as it provides for an entire organisation. A huge community of employees are getting benefitted from this as they are getting proper training and understanding of the physical health measures. The organisations are also getting deeply benefitted by this as they are giving them adequate training on workplace safety. The system which automatically generates license coded dynamically makes it simple and easier for admin and organisation to get access to the resources. Instead of manually approving the license, the admin gets an opportunity to automatically approve the license once the payment is done. This saves a lot of

time for both the users and sponsor. The easy-to-use user interface helps the customers to get access to the license and resources easily. It has been made in such a way that, it's very easy for the user to understand the flow and the working. The database integration helps the admin or the sponsor to have more precise record management system. The database from the cPanel helps the admin to connect it with other parts of the project as well. This helps the admin to generate invoices easily, add the desired amount details and send the invoice to the user or the customer immediately. The usage of the proper live website enabled the project to be deployed easily and get it available in the market. The design of the database and the code are made in such a way that, it is easily understandable and helps the future teams working on it make changes to it

Value to Sponsor

The Work Health and Fitness Resource Licensing System provides significant value to Miller Health Pty Ltd by developing and automating the distribution of resource to organizations. The platform is fully automated, which eliminates the manual process like license requests, payment, access management. The automation helps to reduce administrative efforts, saves time and reduce human error. For the sponsor, the system achieves operational efficiency by combining all licensing and user management works into a single digital environment. Administrators can easily track the interest registered organizations and negotiate a price with them and charge the decided price. Unique access codes are generated for all the organizations. Once the payment is successful, the organization can login to their account and access the digital resource. All these functionalities ensure transparency, accountability and improves customer satisfaction. Additionally, the system offers improved operational efficiency and scalability which enables Miller Health Pty Ltd to easily handle multiple clients and transactions. Organizations who are interested in the resource can easily buy or renew license online using the integrated secure payment system. From a stakeholder perspective, organizations can easily purchase and access digital resources, helping their employees to learn at their own speed and create a wellness culture in the workplace. This increases the sponsors brand recognition as a provider of digital health solutions and resources while also promoting the objective of promoting health and wellbeing. This project meets stakeholders need of creating an automated system that enables organization to show interest, negotiate price, purchase resource with a safe payment method and easy access to purchased resource. The system design guarantees data security and integrity by following professional standard and regulatory requirement.

Scope or Design Changes

When the project was in the development phase, there were made some changes in the initial scope and design changes were done in it. In the initial scope, we had a plan to integrate WP Mail SMTP plugin to handle the notifications of email and invoice sending, then it became non compatible and created conflicts in the implementation of the functionalities. So, we used the WordPress default wp_mail() function for the email notifications. This notification was introduced later in the project when the sponsor asked on how to get notified when an organisation showed interest. In the initial scope, the idea was to provide license code after the payment is completed. But later it was changed to provide access codes along with the invoice so that the users can login using the organisation name and licensing code. The main reason for this development is that it seemed more realistic and easily understandable by the use. Initially we had the plan to help users to select the books they wanted, but later it was decided to provide them access to all the resources as each book has its own significance, and the implementation was changed accordingly. The original scope also included inclusion of individual users in it. The upon

further discussion with the sponsor, it was decided to restrict the access to organisation as a whole since it mainly focusses on corporate organisations. The login credentials initially contained fields like email, password also along with it. The sponsor was convinced by the fact that since all the employees of a particular organisation will be using the same access code, the login can be made based on the organisation name and the licensing code.

Checklist of Compliance with Proposal and Plan

Key Item (From Proposal & Plan)	Planned Deliverable	Actual Outcome	Status	Notes
Project Objective	Develop an automate digital licensing system for Miller Health resources	Fully developed licensing system with registration, payment, and access to resource	Completed	Objective achieved by developing an automated license workflow live on WordPress
Scope of Work	Develop a licensing, registration, payment and access control for organizations and individual users	All functionalities implemented except for individual user access	Modified	Focused on organizational licensing as requested by sponsor, scalable for individuals later
System Functionality	Organizational registration, license generation, secure payment, resource access	All functionalities implemented using WordPress + PHP + Stripe API	Completed	Tested and verified end-to- end system flow
Payment Gateway Integration	Stripe or PayPal for secure checkout	Successfully integrated stripe with PCI DSS compliance	Completed	Verified Stripe test and live environment; recorded updates in database.
Security Features	Implement HTTPS, encrypted data, role-based access, CSRF, validation.	Sanitized inputs, session-based validation, and CSRF tokens implemented.	Completed	Confirmed safe form processing and login procedures

Next Steps or Handover Notes

The system is working perfectly now, providing a platform to payments, purchase books, and access resources. However technical precautions and guidelines are important to maintain system performance and integrity. It is highly recommended not to update WordPress plugins without verifying its compatibility. Unverified update may disrupt php integrations and database connection. Any new functionalities should only be integrated after confirming its alignment with the current working system. Even though WordPress is a great application for web development, it's not recommended for implementing customised backend development as there is a limitation for scalability. For future improvement, the system can be modified to implement the functionality of license renewal feature. By implementing this feature, organization can renew license once their excising license gets expired. One other major recommendation is the access to resource. Right now, the organizations are able to download resources even before completing the payment. Restricting downloads before purchasing will help to protect intellectual property. Furthermore, while currently only organizations can purchase resource, enabling individual users to buy the resource will be a good update to the system.

Recommendations to Sponsor

The project has great potential in further enhancing to higher levels. For this a few recommendations to the sponsor includes, Introducing these resources for individual access. There are people who are interested in taking care of their personal health and continuously monitoring it. So, we can provide them an option to select their interested and books and paying only for those. This can bring the whole scenario to a wider audience. Enabling a role-based access will make it easier for the admin to monitor the overall usage of the resources. This will help them implement and integrate a dashboard for the analytics. It will help them monitor real-time transactions, downloads etc. Integrating separate secure APIs for the E-learning module which in turn enhances the proper content delivery across all the connected modules. The implementation of chatbots makes it easier for the customers to help clear their queries without wasting their time. Another recommendation we would like to add is the integration to a cloud-based hosting environment like AWS or google cloud which provides with proper back up support which in turn helps in improving the performance and ensures smooth workflow. There are also additional customer relation management (CRM) platforms or tools like Zoho or HubSpot that helps in co-ordinating proper communication with the clients, follow-ups which are automated in nature, auto reply of client queries etc.

Conclusion

The Work Health and Fitness Resource Licensing System project successfully completed by meeting the goal of creating an automated web page with a user-friendly platform, secure payment method that helps organizations to purchase resource for their staff after negotiating with the administrator of Miller Health Pty Ltd. The system includes the functionalities like organization registration, pricing management, invoicing, unique license code generation, secure payment and resource download. The project was developed using WordPress, PHP, and MySQL. Elimination of manual administrative task, smooth communication between client and administration are some of the other functionalities of the system. The project is developed by keeping strong compliance with data measures like CSRF protection, encrypted payment method. By simplifying client management, payment management and developing an automated system, the project delivers significant value to sponsor. The system is scalable to incorporate future enhancement like AI recommendation, license renewing options, data

analysis options ensuring platform is always adaptable to the evolving technologies. Through this project, the team gained a practical experience of developing an automated web page with custom functionalities, backend integration using WordPress, modular project management. The successful implementation of project including all requirement from sponsor shows the effectiveness of teamwork, efficient communication, implementation of proper technologies which aligns the sponsors vision of promoting health and wellness in workplaces.

References

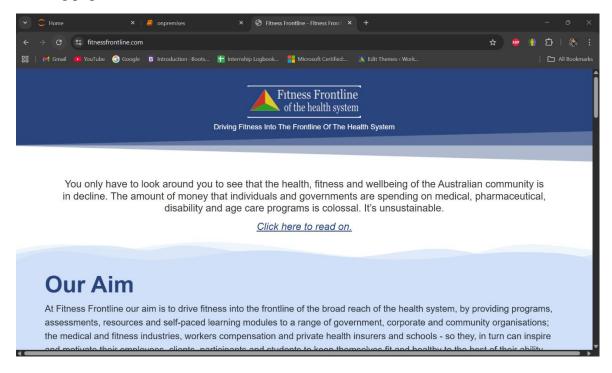
- 1. Stripe, 2025. Stripe PHP SDK Official GitHub Repository. [Online] Available at: https://github.com/stripe/stripe-php?utm source=chatgpt.com
- 2. Drozdovica, J., 2025. Is Stripe Safe? Stripe Security & Alternatives for Merchants. [Online]
 - Available at: https://noda.live/articles/is-stripe-safe.
- 3. Gartner, J., 2025. How to Use WordPress For A Blog in 2025 (Beginners Guide). [Online]
 - Available at: https://www.whitepeakdigital.com/blog/how-to-use-wordpress-for-a-blog/.
- 4. Haim, I., 2025. What Is WordPress? Explained for Beginners. [Online] Available at: <a href="https://elementor.com/blog/what-is-wordpress-2/?utm_source=google&utm_medium=cpc&utm_campaign=22685771421&utm_ter_m=&lang=&elem=CjwKCAjwpOfHBhAxEiwAm1SwEkRWGWRLwwi5XNHhnPF_hciQdgSqs1zd6iSwWVmlB6zmMc74-OBeJwBoCUPsQAvD_BwE&gad_source=1&gad_campaignid=22685771.

Github Repository Link

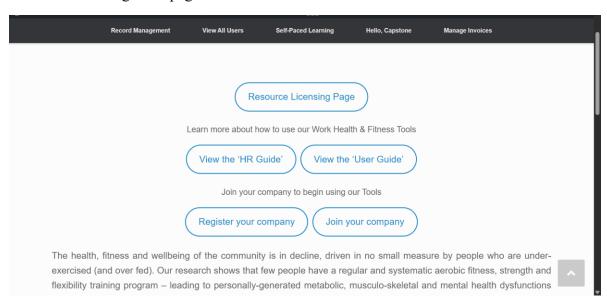
https://github.com/Adertha/Team-Collaboration.git

Appendices

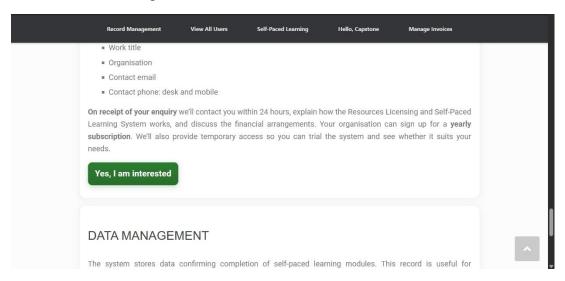
Landing page of the web site



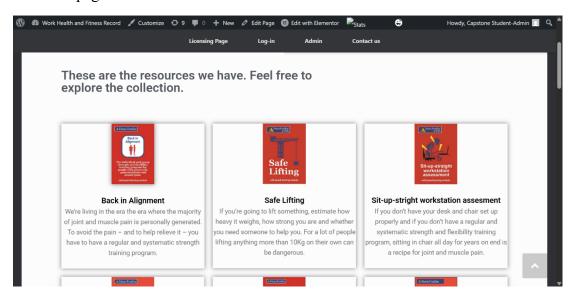
Resource licensing homepage



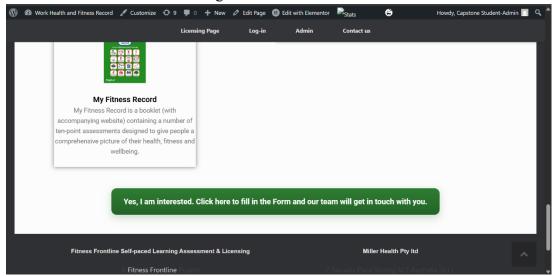
Button for interest response



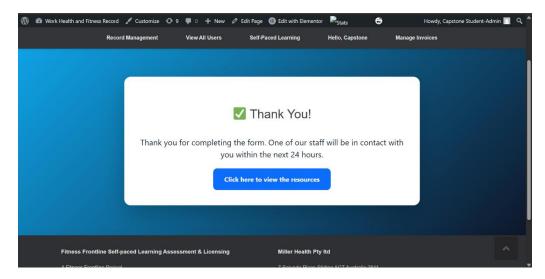
Resource page



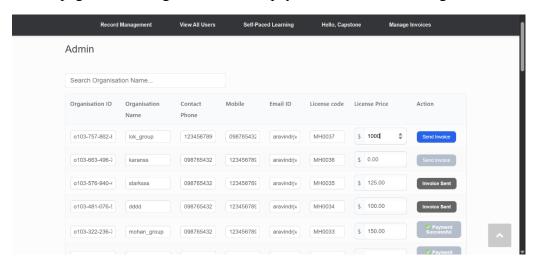
Button to fill the form for sending interest



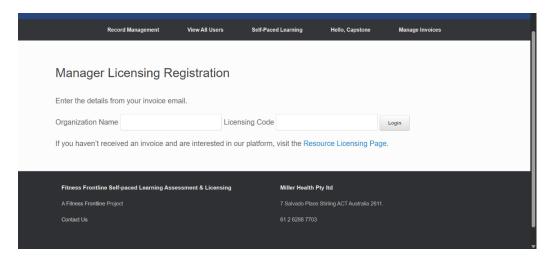
Page after filling the form.



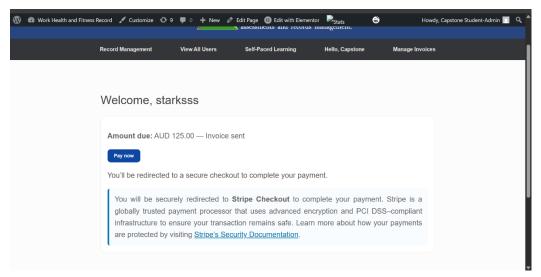
Admin page for, sending invoice, check payment status and sending invoice



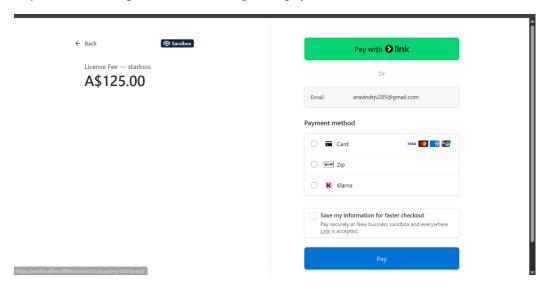
Login page for the organizations using the credentials



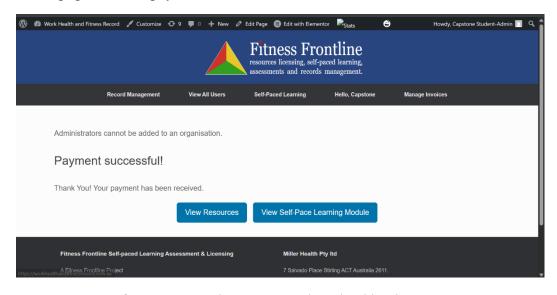
Home page after logging in, the amount to be paid will be displayed



Payment with stripe once continuing with payment



Home page once the payment is successful.



Resource page after payment where you can download books

