# CP3402 Weekly Practical Student Learning Journal Record

## Week 1

**Student's name:** Zhigang Qiao

**Date/Time:**
20 / 09 / 2025 12:00PM – 3:00PM (learning and doing the practical)
20 / 09 / 2025 4:00PM – 7:00PM (continued the practical and journaling)

## Week 1: Subject Intro & Web Design Basics

**Learning Activities & Resources:**

In the first week of CP3402 – Content Management Systems, I reviewed the fundamentals of web design, including **HTML, CSS, and GitHub** for publishing a simple static website. These activities refreshed my knowledge from CP1406 and helped me prepare for using CMS platforms later.

I recalled that **HTML structures the content** of a website while **CSS handles styling and layout**, and both are best separated for clean design. I revisited elements such as **forms, layouts, and tables**, focusing on best practices.

I also explored **GitHub Pages** for hosting. While it is limited to static sites, it was useful for understanding the process of hosting and publishing. Initially, I had difficulties setting up my repository to display the index.html file properly, so I consulted online tutorials and learned how to configure VS Code extensions to integrate with GitHub more efficiently.

**Practical:**

For my startup idea — a **Smart Home Energy Management System (EMS)** — I planned a prototype site that allows potential users to:

- Learn how the system works
- Explore its benefits for reducing energy consumption
- Contact the startup for inquiries
- Understand the company background

As an alternative idea, I briefly considered a student productivity tool, but I ultimately decided EMS is more relevant and has real-world application value.

**References:**

- GitHub Pages Documentation
- VS Code with GitHub Integration
- CP1406 Web Design Resources
- CP3402 Lecture Slides – Website Planning & Design Principles

**Estimated Hours:** 6 hours

**Content Insights:**

Revisiting web design fundamentals reminded me that good planning (wireframes, content goals, target users) is as important as coding. HTML and CSS are the foundation, but designing a site with usability, accessibility, and clear navigation is what makes it engaging.

**Career/Employability/Learning Insights:**

This practical reinforced my technical and problem-solving skills. Being able to troubleshoot GitHub publishing issues is similar to workplace challenges where self-learning and

adaptability are key. Web design and hosting skills will also be useful for future projects and personal development.

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**Week 2**
**Date/Time:**
27 / 09 / 2025 12:00PM – 3:00PM (learning about CMS, static & dynamic sites, practical start)
27 / 09 / 2025 4:30PM – 6:00PM (continued practical and journaling)

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**Week 2: Overview of CMSs**
**Learning Activities & Resources:**
This week I learned about **content management systems (CMSs)** and the difference between **static** and **dynamic** websites.
A CMS allows multiple users to create, edit, and publish content without advanced coding. Instead of manually coding in HTML/CSS, CMSs use templates, plugins, and a database to generate content dynamically.

- **Static websites**: built with fixed HTML, CSS, and JavaScript, the same for all visitors, and changes require manual edits.
- **Dynamic websites**: pages are generated on request, pulling information from a database, allowing personalization and interactive features.

Static sites are fast, simple, and cheap, but lack scalability. Dynamic sites are more complex but offer better user experience and functionality.

**Practical:**
I hosted my first CMS-based site using **Joomla** on InfinityFree. I experimented with the dashboard, explored components and modules, and created a simple site structure for the Smart Home EMS project.

**References:**
- My Joomla Site (InfinityFree Hosting)
- CP3402 Lecture – Static vs Dynamic Websites
- Joomla Documentation & Tutorials

**Estimated Hours:** ~5 hours

**Content Insights:**
Learning about CMSs clarified their role in managing content efficiently. Compared to static sites, a CMS enables scalable projects with interactive features like forms and dashboards. For my startup idea, a dynamic site powered by CMS is more suitable to showcase data such as energy reports or smart device integrations.

**Career/Employability/Learning Insights:**
Exploring Joomla gave me practical insight into managing a CMS, which will be useful in professional settings. Being able to evaluate CMS tools (Joomla vs WordPress) is valuable for web development roles, and this skill can also support entrepreneurial projects.

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**Week 3**
**Date/Time:**
05 / 10 / 2025 12:00PM – 3:00PM (install and explore WordPress)
05/ 10 / 2025 10:30AM – 12:30PM (continued learning and journaling)

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**Week 3: WordPress – Installation, Settings, Content, Navigation, Themes & Plugins**

**Learning Activities & Resources:**

In this week's practical, I installed and explored **WordPress**. I compared its features with Joomla, focusing on usability and extendibility.

The WordPress **dashboard** organizes everything into intuitive sections like **Pages, Posts, Media, Appearance, and Plugins**.

- **Pages** are for static content (About, Contact, Features).
- **Posts** are for blogs or dynamic updates.
- **Themes** control the site's appearance.
- **Plugins** extend functionality (e.g., contact forms, analytics).

I experimented with free themes and installed basic plugins to test features. Compared with Joomla, WordPress felt more **user-friendly** and customizable.

**Practical:**

I set up my Smart Home EMS website using WordPress, creating a **Home, Features, and About page**. However, I encountered issues when trying to publish edits while hosting on InfinityFree. Sometimes changes were not applied. I plan to test again or migrate to a different hosting provider if problems persist.

**References:**

- WordPress Essential Training (LinkedIn Learning)
- WordPress Tutorials for Beginners
- InfinityFree – Hosting Setup for WordPress
- My WordPress Test Site

**Estimated Hours:** 5 hours

**Content Insights:**

I gained a deeper understanding of WordPress as a CMS. It is highly extensible and has a large ecosystem of themes and plugins. I also learned how block-based editing (Gutenberg) simplifies page building compared to Joomla's more module-based structure.

**Career/Employability/Learning Insights:**

This practical showed me how important CMS tools are in professional environments. WordPress is widely used across industries, and gaining fluency in it adds value to my skillset. I also developed problem-solving strategies for hosting issues, an essential skill for web developers.