



WEB DEVELOPMENT TOOLS IN THE INDUSTRY



ABOUT ME

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- Chief tutor and a lecturer of COMP1710/6780
- 6+ Years experience developing website in the public and private sector.
- **Interests:** Human Computer Interaction (HCI), Web content delivery.
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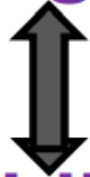
WEB DEVELOPMENT LIFECYCLE



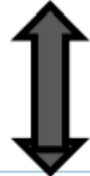
Planning



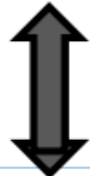
Designing



Building



Installing



Maintaining

RECAP WEEKS 2 - 4





CMS, CRM, INTRANET, SAAS, PAAS AND OTHER BUZZ WORDS



CONTENT MANAGEMENT SYSTEMS (CMS)

- Foundation of an industry standard website
- CMS is a software application that allows users to collaborate in the creation, editing, and production of digital content: web pages, blog posts, etc.
- Facilitate content editing
- Not just HTML and CSS, variety of different technologies



POPULAR CMS



POPULAR CMS

- Wordpress
- Drupal
- Wix
- Squiz
- Adobe Experience and more

SOFTWARE AS A SERVICE (SASS)

- Software as a service (or SaaS) is a way of delivering applications over the Internet—as a service. Instead of installing and maintaining software, you simply access it via the Internet, freeing yourself from complex software and hardware management.
- SaaS applications are sometimes called Web-based software, on-demand software, or hosted software. Whatever the name, SaaS applications run on a SaaS provider's servers. The provider manages access to the application, including security, availability, and performance.

PLATFORM AS A SERVICE (PAAS)

- In the Platform-as-a-Service (PaaS) model, developers essentially rent everything they need to build an application, relying on a cloud provider for development tools, infrastructure, and operating systems.
- PaaS vastly simplifies web application development; from the developer's perspective, all backend management takes place behind the scenes.

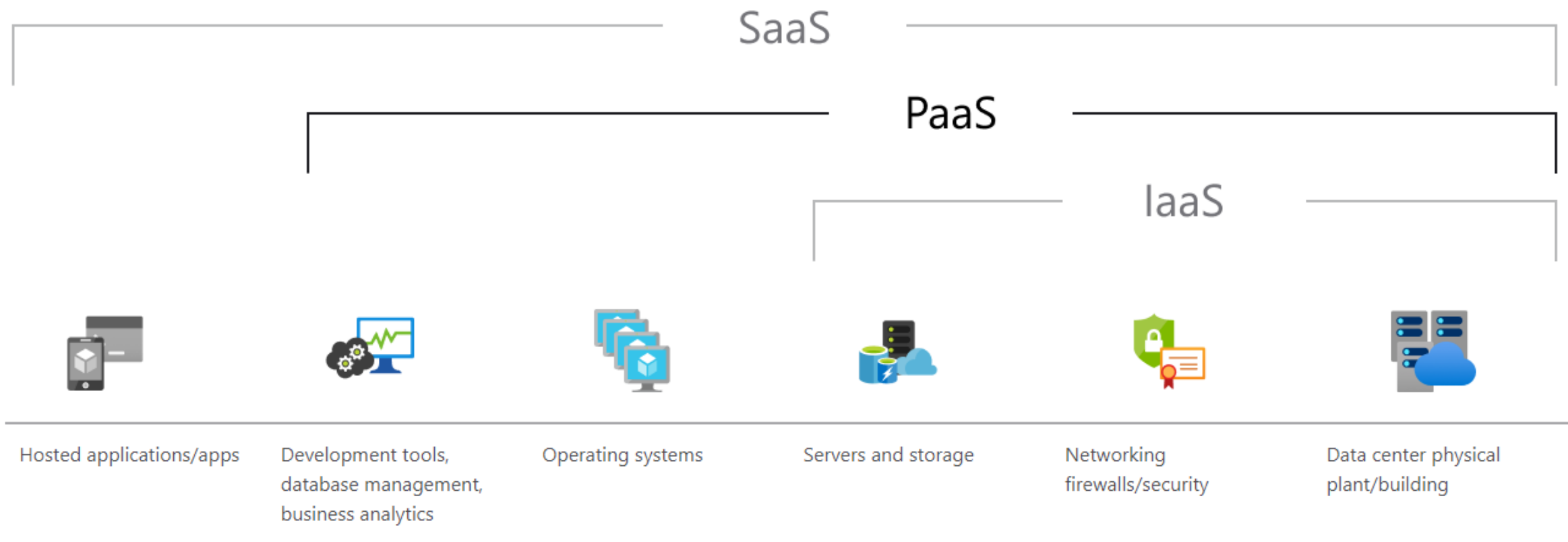


Image from Microsoft Azure dictionary

SAAS VS PAAS

- If a SaaS customer is like someone renting a house, then a PaaS customer is like someone renting all the heavy equipment and power tools necessary to rapidly build a house, if the tools and equipment were continually maintained and repaired by their owner. -- *Cloudflare*



HOSTING

- Where your website lives, where all the files of your website are located.
- PARTCH is a hosting platform

HOSTING



Google Cloud

platform.sh 



AcQUiA



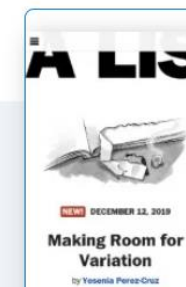


DEVELOPING FOR CMS






Start your website



← → ↻ 🏠 🔒 https://www.drupal.org/download

🔍 👤

Why Drupal? Build Solutions Services Community Resources Give Events Try Drupal



We want to invite you to DrupalCon Prague. The european community is back in person 20-23 September full of insights, information, and connections. Will we see you there?

Register today

Drupal allows you to create a unique space in a world of cookie-cutter solutions

Get Drupal with Composer

You need [php](#) and [composer](#). Run these two commands:

```
composer create-project drupal/recommended-project drupal
cd drupal && php -d memory_limit=256M web/core/scripts/drupal quick-start demo_umami
```

More options in [the quickstart docs](#), and on [how to start your site using composer](#).

Want to download Drupal without Composer?

Composer is the recommended method for using Drupal, but you can download Drupal directly and use it with Composer later.

[Download Drupal | zip](#)

[Download Drupal | tar.gz](#)

[read release notes](#)

Looking for Drupal hosting?

[Try a hosted demo](#)

[Explore Hosting](#)



DRUPAL



THEMES

- The look and feel of your website
- Not just CSS
- Design
- Content Layout
- Sometimes Content specifics (PDFS, MEDIA, ETC..)

MODULES

- The functionality of your website
- Can choose from existing or create your own
- Javascript, Python, PHP...



WORKFLOWS AND PERMISSIONS

- Different types users
- Multiple permissions to set
- Not every user needs access to everything



DEPLOYMENT*





WAS UPLOADING TO PARTCH COMPLICATED?





IT'S COMPLICATED

ENVIRONMENTS



Development



Testing/QA



Production

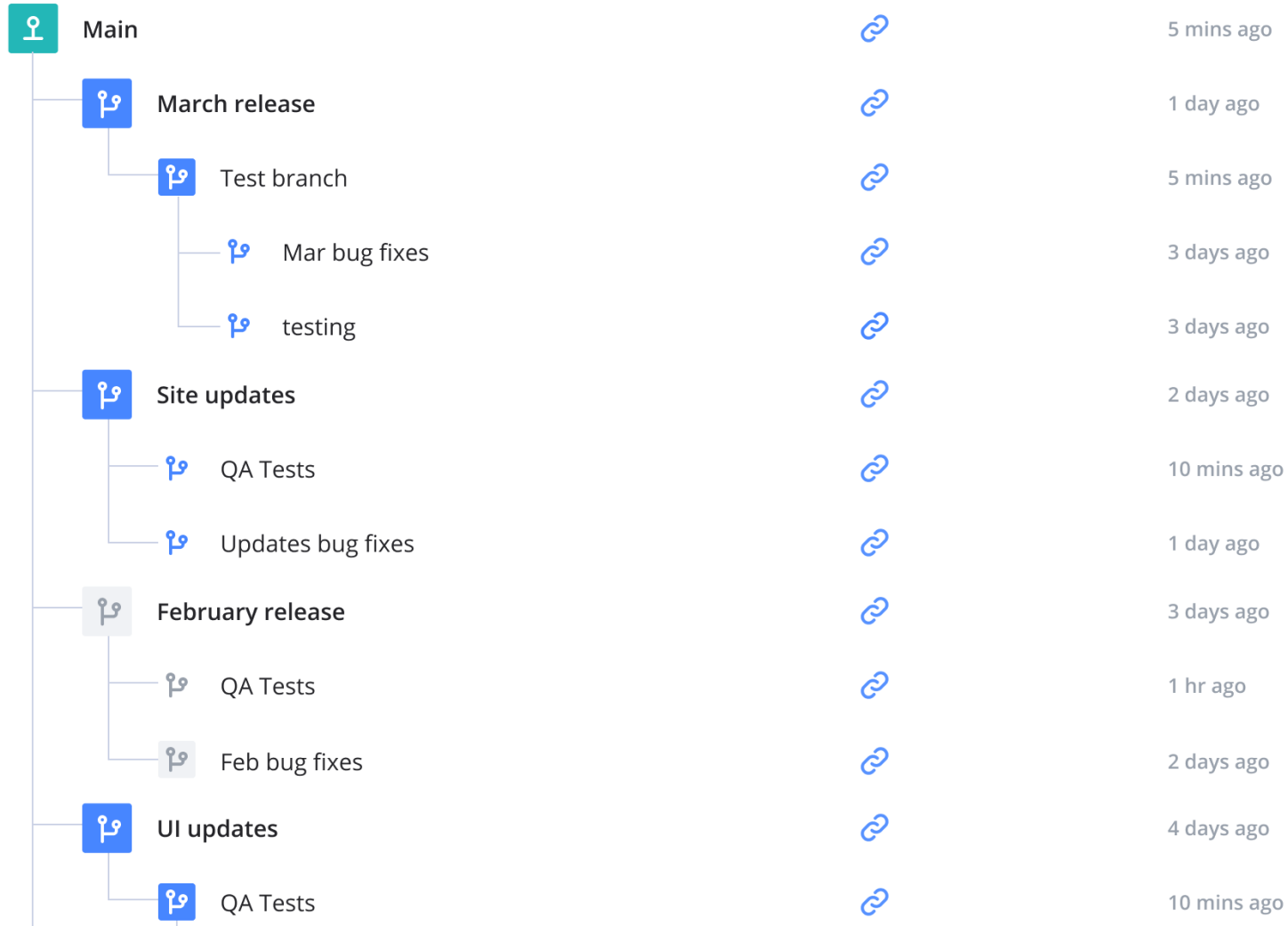
ENVIRONMENTS + CMS

- Scalable
- Multiple databases
- Easy to get out of sync
- Needs management

Environments

Search

Filter



ENVIRONMENTS + CMS EXAMPLE



VERSION CONTROL



VERSION CONTROL

- GIT VERSION CONTROL
- Accountability
- Reverting to previous versions
- Commit history
- Collaboration



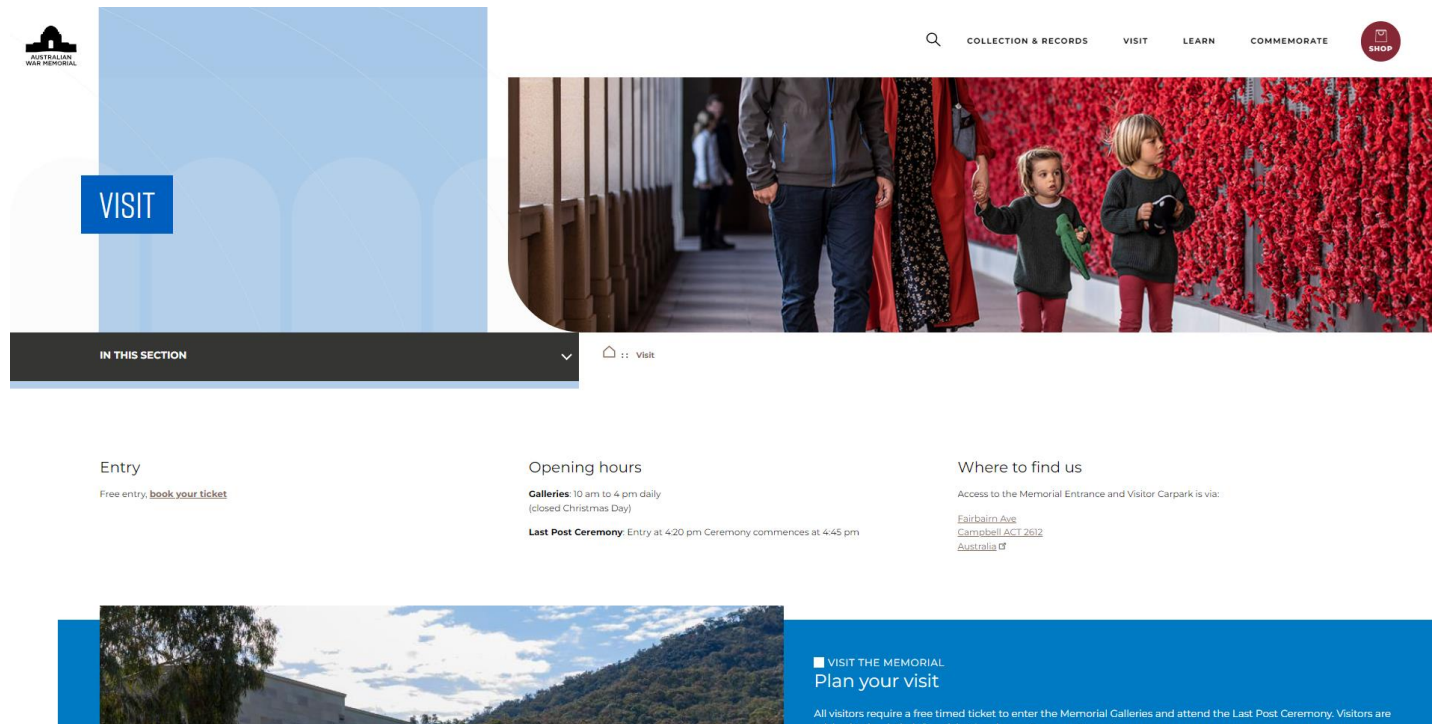


ENVIRONMENTS + CMS + VERSION CONTROL

ENVIRONMENTS + CMS + VERSION CONTROL



CASE STUDY: AUSTRALIAN WAR MEMORIAL



CASE STUDY: AUSTRALIAN WAR MEMORIAL

- Redevelopment
- Discovery
- Requirements
- Design
- Development
- UAT and Remediation
- Deployment
- Training and Documentation

RECAP

- Importance of CMS
- SAAS and PAAS
- Developing in a CMS
- Hosting
- Deployment

Q&A

