



COMP1710/6780

Web Development in the Industry

Week 10 8-12 May 2023



We will discuss



Web Development Lifecycle



Web Development Tools



WHAT

WHY

HOW

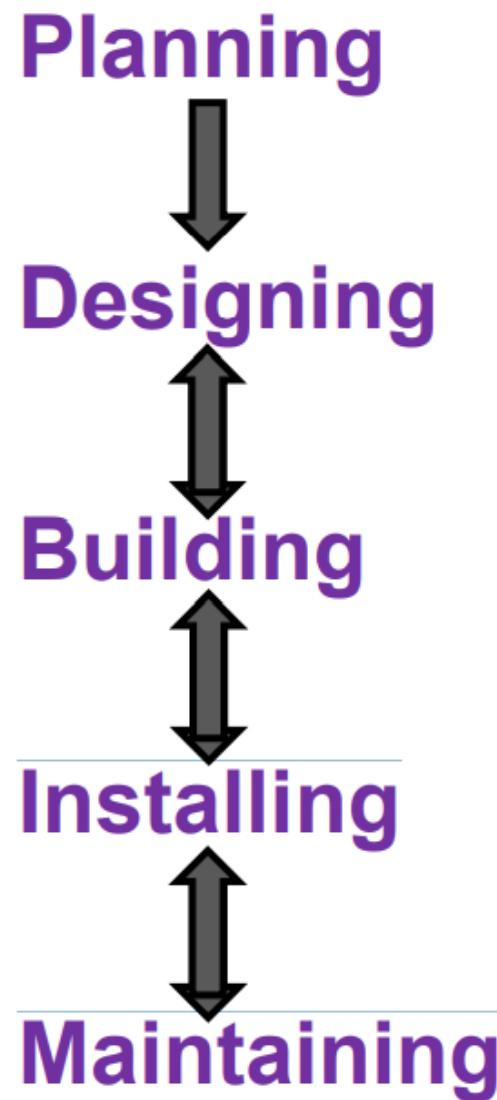


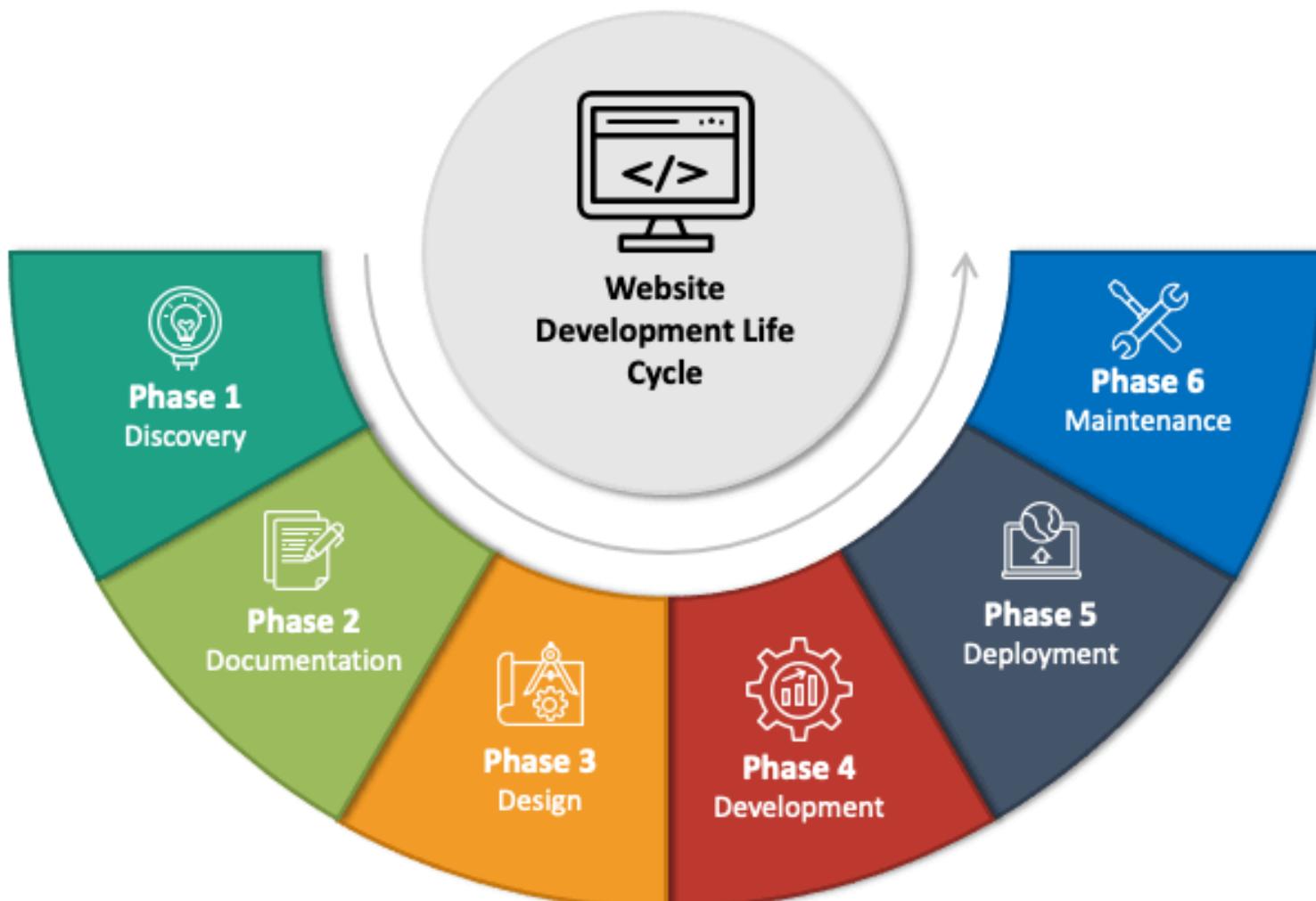
Web Development Lifecycle





Recap







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 (SaaS)

- 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.





Software as a Service (SaaS)

- 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.



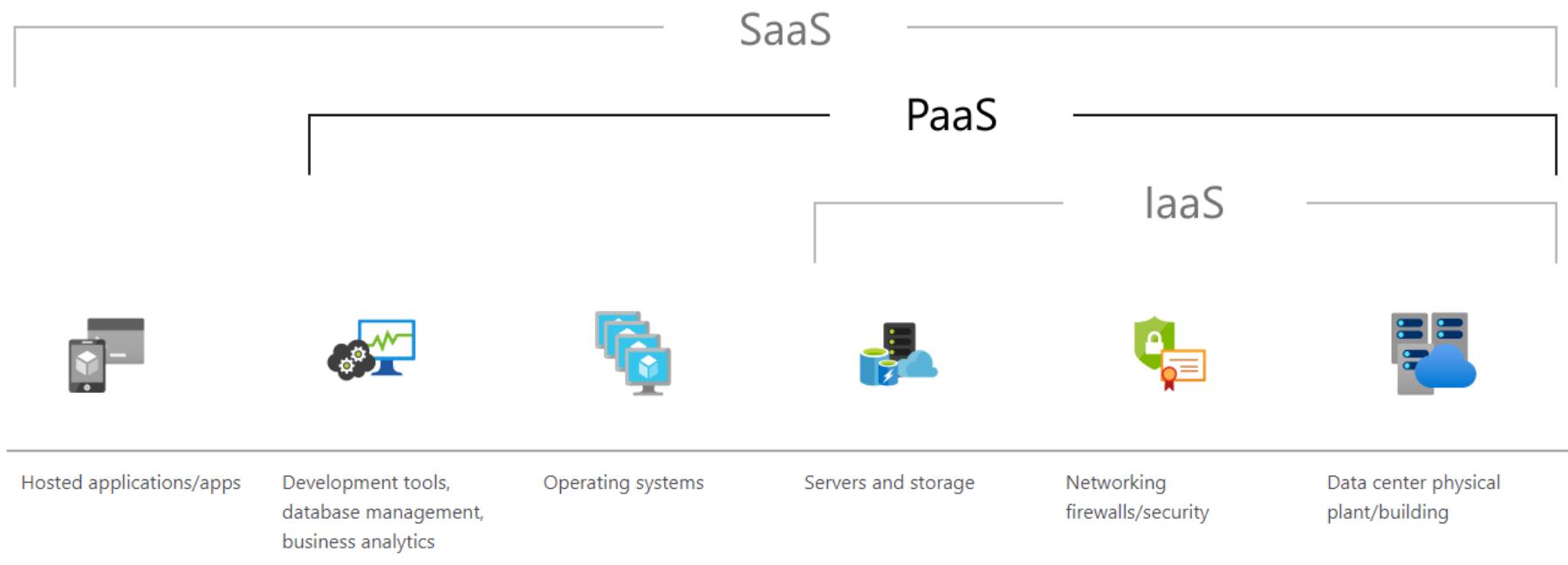


Image from Microsoft Azure



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, Domains and DNS

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





Hosting options



Google Cloud



Acquia





Developing for CMS





Wordpress

https://wordpress.com/?aff=40050

WordPress.com Products Features Resources Plans & Pricing Log In Get Started

Welcome to the world's most popular website builder.

43% of the web is built on WordPress. More bloggers, small businesses, and Fortune 500 companies use WordPress than all other options combined. Join the millions of people that call WordPress.com home.

Start your website

The image shows three mobile device screens displaying different WordPress-powered websites. The first screen on the left shows the Kelsey Art Foundation website, featuring a woman pointing at a colorful mural. The middle screen shows the RESUMIDO podcast website, with a large image of a man holding a microphone and the episode title 'Transparente'. The third screen on the right shows the A LIS website, featuring a drawing of a person and the title 'Making Room for Variation'.



Drupal

https://www.drupal.org/download

Why Drupal? Build Solutions 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.

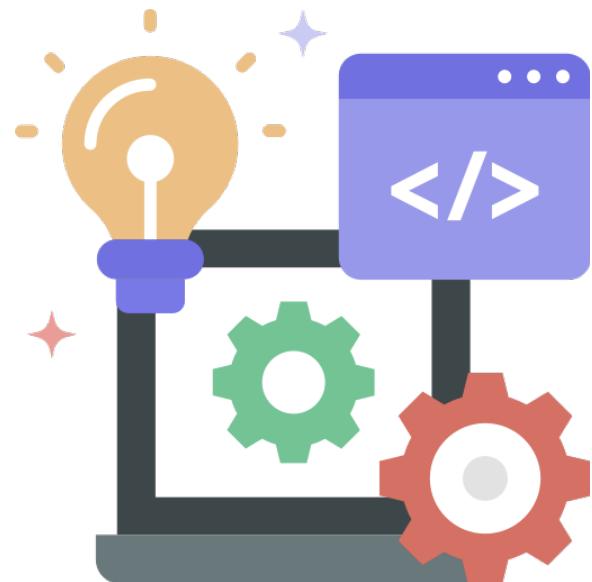
[Download Drupal | zip](#)
[Download Drupal | tar.gz](#)
[read release notes](#)

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



Was uploading to PARTCH complicated?

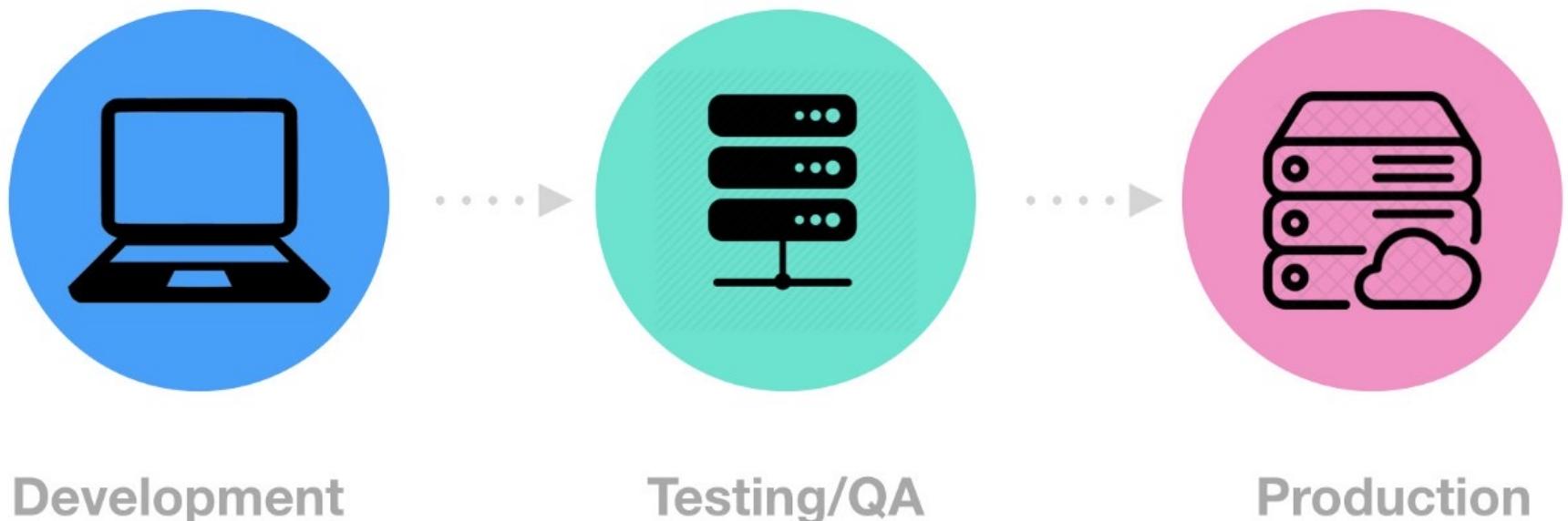




IT'S COMPLICATED



Environments



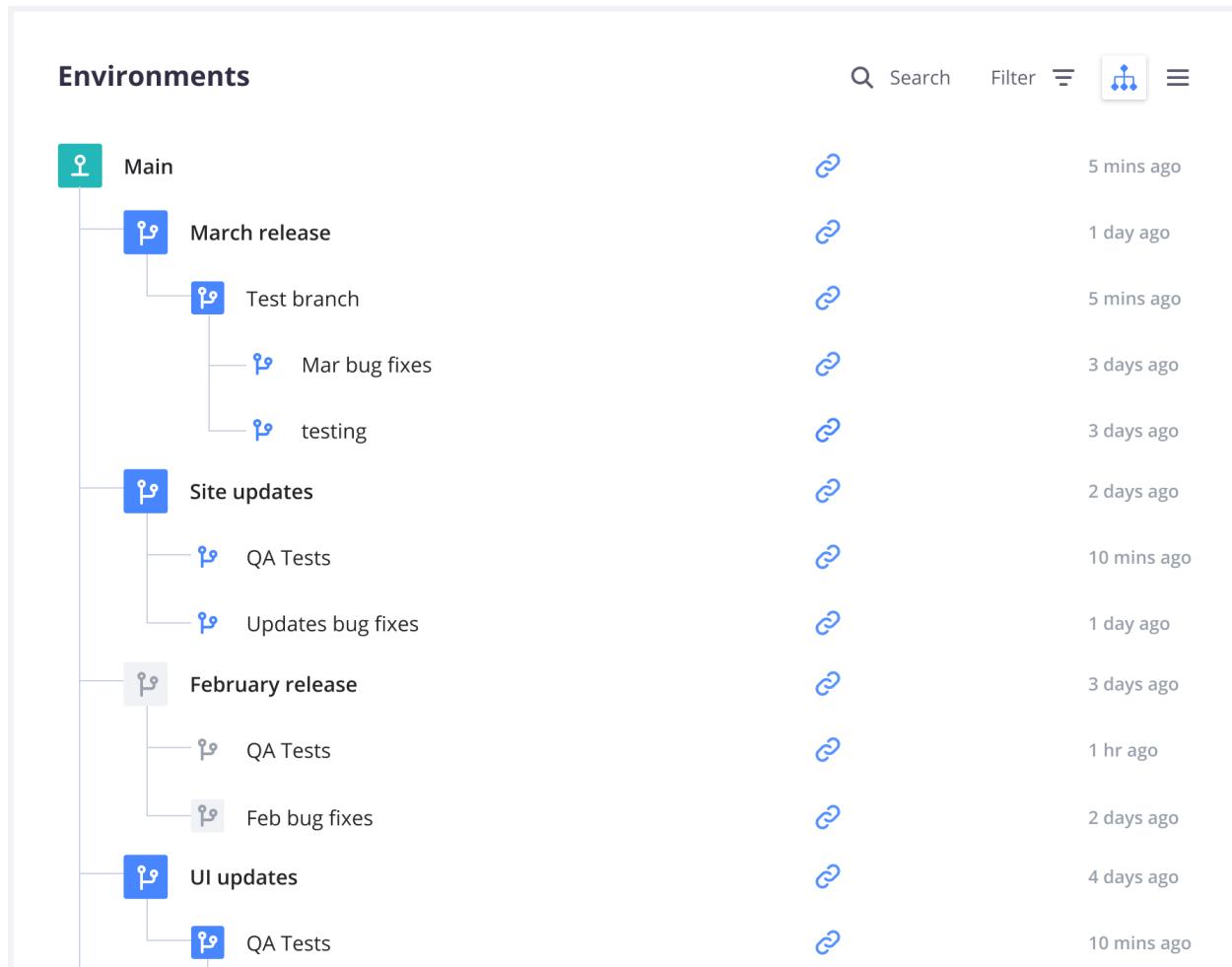


Environments + CMS

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

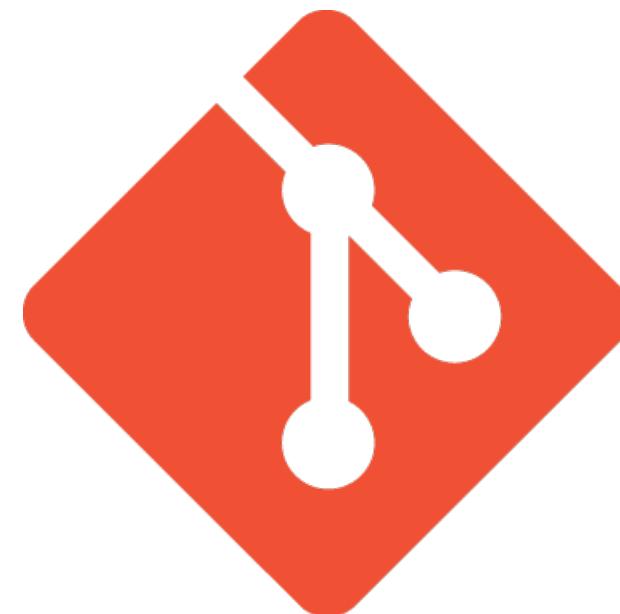


Environments + CMS Example





Version Control





Version Control

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





Environments + CMS + Version Control



Environments + CMS + Version Control





Q&As

<https://www.vecteezy.com/free-vector/ebook> Ebook Vectors by Vecteezy

<https://www.vecteezy.com/free-vector/podcast> Podcast Vectors by Vecteezy

<https://www.vecteezy.com/free-vector/cat> Cat Vectors by Vecteezy

<https://www.vecteezy.com/free-vector/device> Device Vectors by Vecteezy

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Icons made by Pixel perfect from <https://www.flaticon.com>

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<https://www.vecteezy.com/free-vector/podcast> Podcast Vectors

<https://www.thepodcasthost.com/listening/what-is-a-podcast/>

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