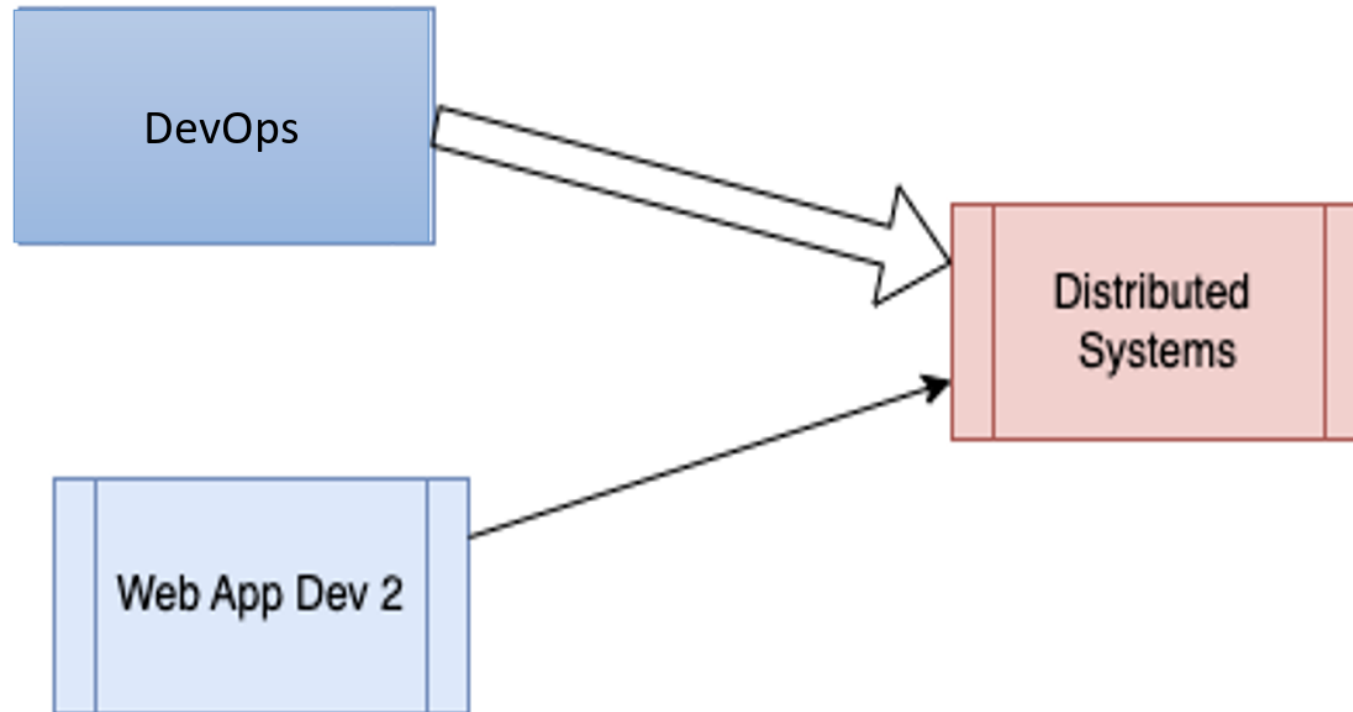




Cloud App Development (aka Distributed Systems)

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Context

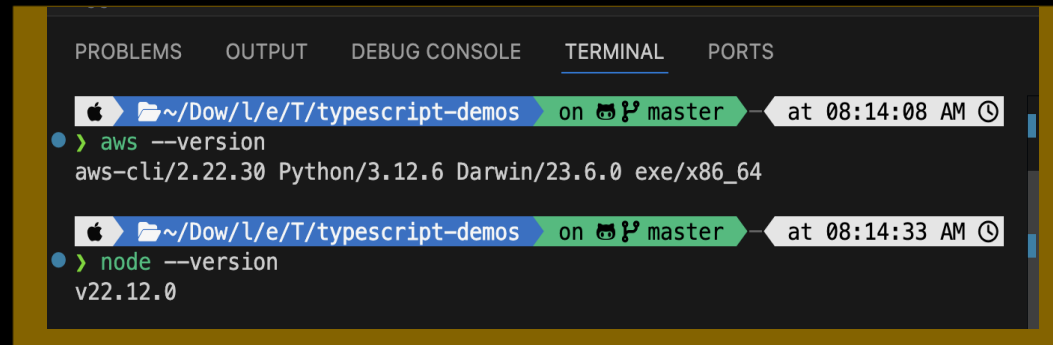


Overview

- “. . .to comprehend the architecture of a modern, distributed (cloud-based), service-oriented application and acquire the skills to develop and deploy same for a constrained set of requirements . . .” (Module Spec.)
- Key themes:
 - Infrastructure As Code (IaC)
 - Serverless architecture
 - Scalability.
 - Event-driven architecture
- Language: TypeScript

Pre-requisites

- A 'personal' AWS account (<https://aws.amazon.com/>)
- Installed locally:
 - AWS CLI (see <https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html>)
 - NodeJS platform (v20.x)
 - VS Code editor.
 - Git tool.
- A GitHub account.
- Knowledge of JavaScript.

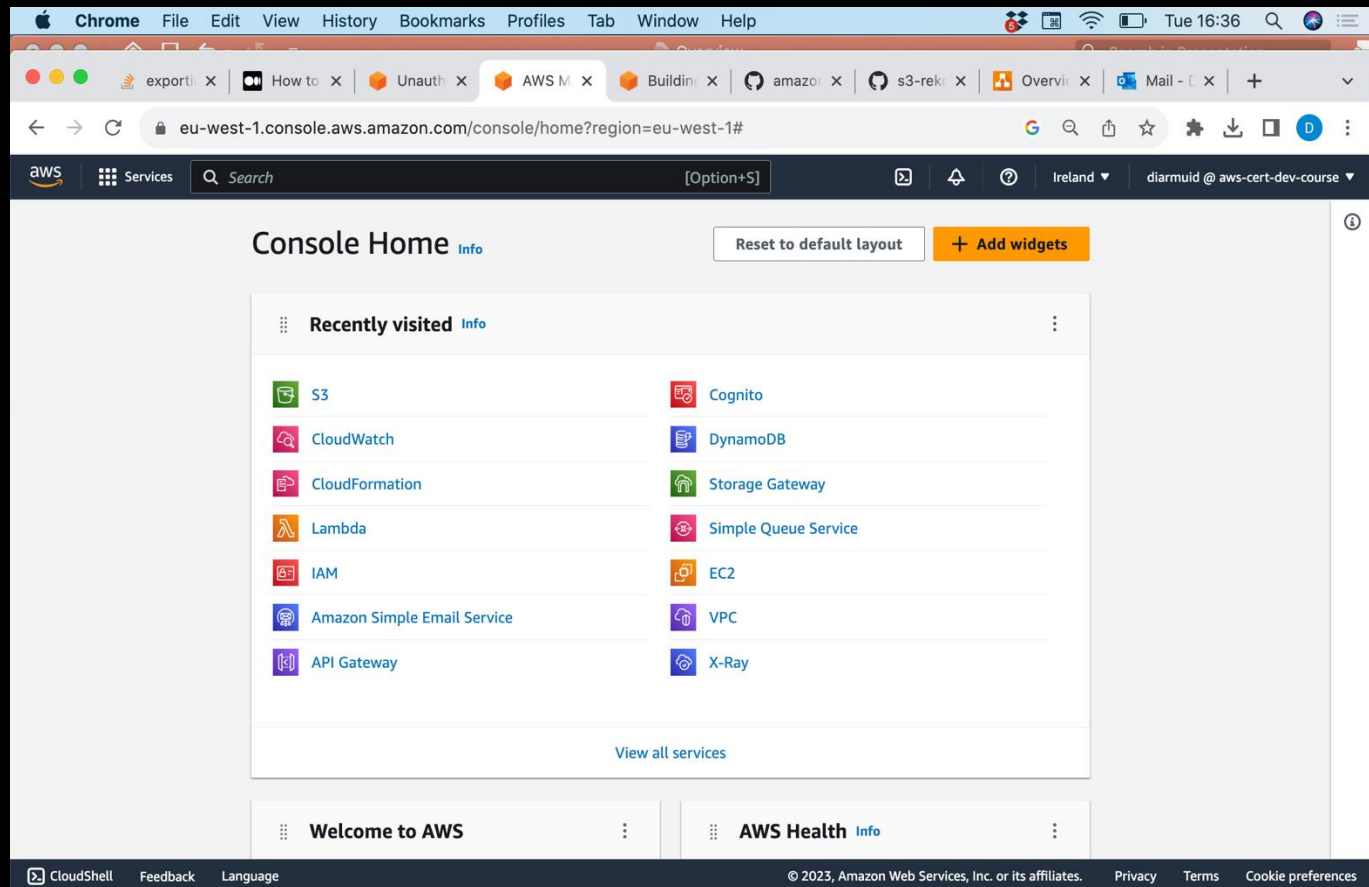


The screenshot shows a VS Code terminal window with the 'TERMINAL' tab selected. The terminal has a dark background with light blue and green text. The top bar of the terminal shows the file path `~/Dow/l/e/T/typescript-demos`, the branch `on master`, and the time `at 08:14:08 AM`. The first command executed is `aws --version`, which returns `aws-cli/2.22.30 Python/3.12.6 Darwin/23.6.0 exe/x86_64`. The second command is `node --version`, which returns `v22.12.0`.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
~/Dow/l/e/T/typescript-demos on master at 08:14:08 AM
> aws --version
aws-cli/2.22.30 Python/3.12.6 Darwin/23.6.0 exe/x86_64
~/Dow/l/e/T/typescript-demos on master at 08:14:33 AM
> node --version
v22.12.0
```

Pre-requisites

- The (AWS) Management Console



Student Information

- Contact hours:
 - Two lectures (Online) + Two lab hours.
- Assessment:
 - 100% Continuous Assessment. Breakdown (approx.):
 - Lab work hand-ups (10%)
 - One assignment (45%)
 - Lab-based exam (Week 12/13 – 45%)
- Resources:
 - Website <https://tutors.dev/course/cloud-app-dev-setu-waterford>
 - Moodle - <https://moodle.wit.ie/course/view.php?id=209056>
 - For assignment submissions only.

Content (The Website)

