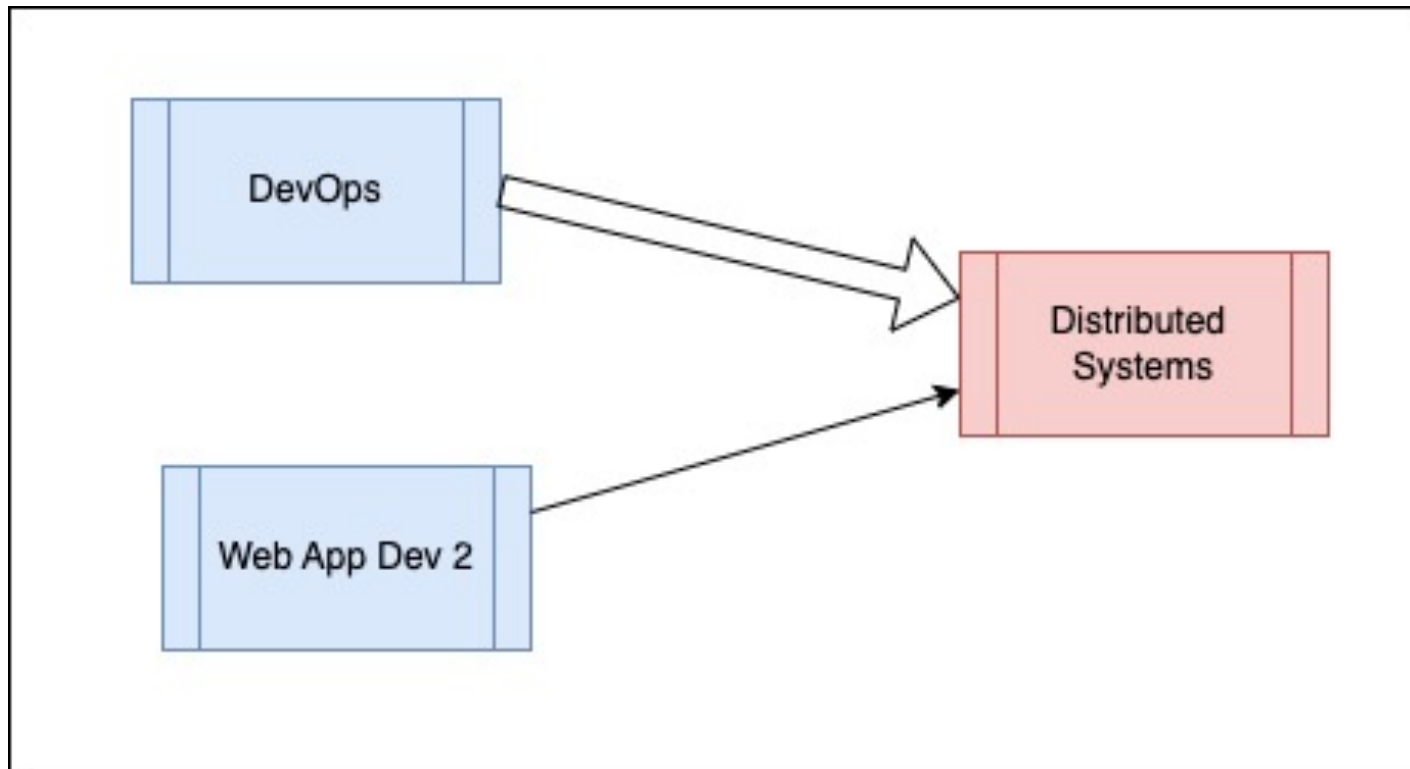




# Distributed Systems

# Context.



# Overview.

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

# Pre-requisites

- **An AWS account.**
- **AWS CLI**
- **NodeJs platform**
- **VS Code editor**
- **Git and GitHub**
- **JavaScript**



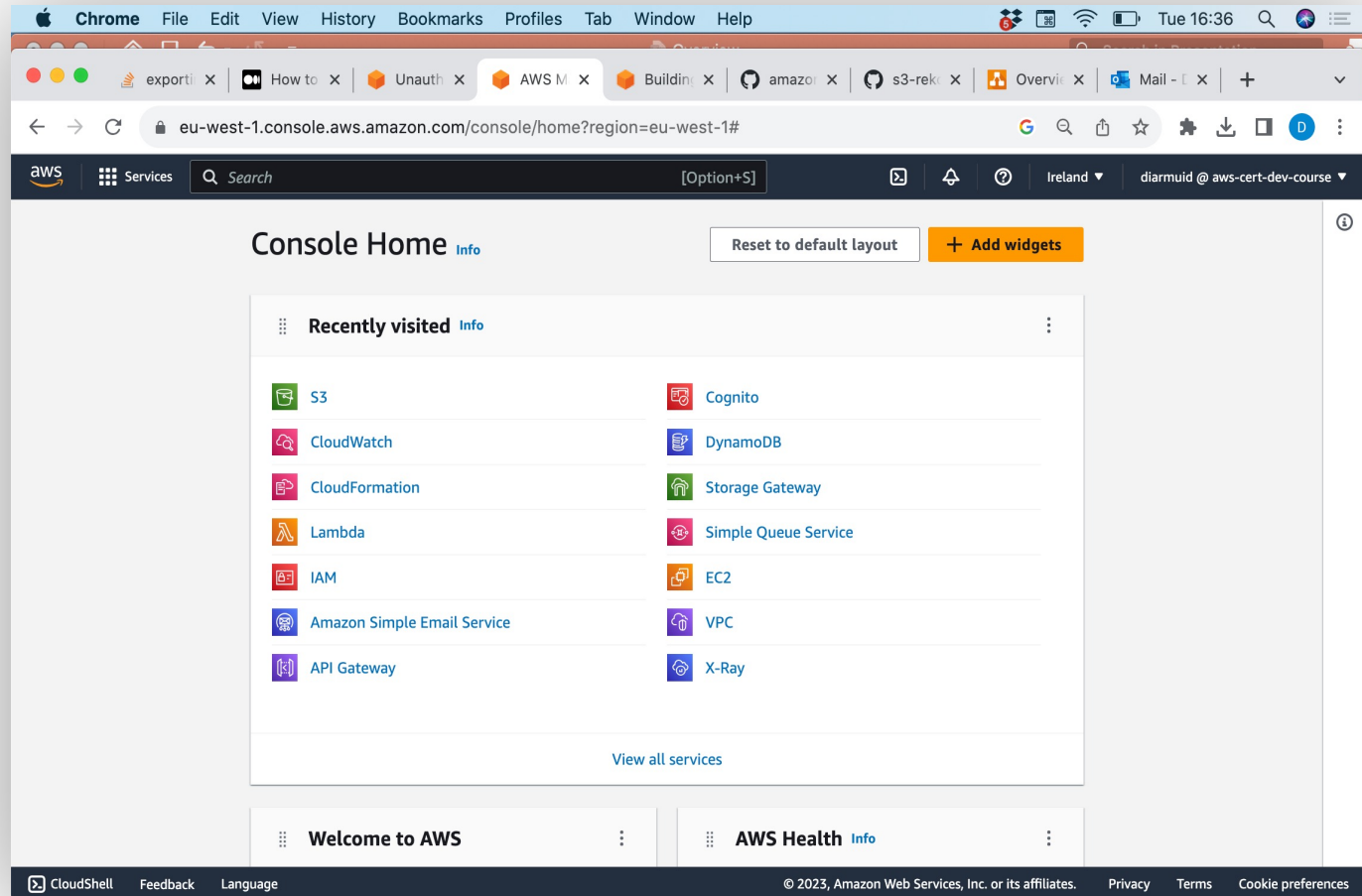
A terminal window with a dark background and light-colored text. The prompt is 'diarmuidoconnor' followed by a folder icon and a tilde '~'. The first command is 'aws --version', which outputs 'aws-cli/2.2.28 Python/3.8.8 Darwin/19.6.0 exe/x86\_64 prompt/off'. The second command is 'node -v', which outputs 'v18.13.0'. The third command is a prompt 'diarmuidoconnor' followed by a folder icon and a tilde '~'. The status bar at the bottom shows 'You, 1 second ago', 'Ln 44, Col 9', 'Spaces: 2', 'UTF-8', 'LF', and a file icon.

```
diarmuidoconnor ~$ aws --version
aws-cli/2.2.28 Python/3.8.8 Darwin/19.6.0 exe/x86_64 prompt/off
diarmuidoconnor ~$ node -v
v18.13.0
diarmuidoconnor ~$
```

φ You, 1 second ago Ln 44, Col 9 Spaces: 2 UTF-8 LF { }

# Pre-requisites

- **The (AWS) Management Console**



# Structures

- **Contact hours:**
  - Two lectures (Online)
  - Two lab hours
- **Assessment**
  - 100% Continuous Assessment
  - Lab work handups
  - Two assignments
- **Sources**
  - Website - <https://reader.tutors.dev/course/distributed-systems-setu-waterford>
  - Moodle (Assignments) - <https://moodle.wit.ie/course/view.php?id=199949>
    - Self-enrolment key – ds2023
- **Slack** – Invitation link [https://join.slack.com/t/cloudapps-hq/shared\\_invite/zt-22p1my384-R6DxsOjYJwcVRW1Tu2XaXg](https://join.slack.com/t/cloudapps-hq/shared_invite/zt-22p1my384-R6DxsOjYJwcVRW1Tu2XaXg)