CI/CD & Jenkins

Dockerisation

* Docker basics
* Docker CLI
* Docker images & dockerfile
* Docker registry
* Docker compose
* Docker security
* Docker in Devops

Simplified loop

* **Develop the code**
  + How do I configure the environment
  + Configure step by step
  + Can we do better
* **Deploy the code to staging** 
  + Work for me problem
* **Deploy the code to production**

Docker使用目的

使用一个容器能把代码在所有开发服务器使用

What is docker?

* Physical computer 🡪 virtual computer = virtualisations
* Pre-configured image
* Resource efficient

Why virtualisations

* Resource utilization

Docker architecture

* Docker daemon
* Client
* CLi
* GUI
* Container
* Image
* Resource
  + Network
  + Data volume

CI/CD

Types of repo

**Monorepos** – source control pattern where all the source code is kept in a single repo.

**Multiple** **repositories**/ traditional repositories – refer to organing your projects each into their separate repo.