# Docker

Why Docker?

Docker is a platform and tool for building, deploying, and running applications in containers.

# Containers

Containers are a form of lightweight virtualization that allow you to package an application and its dependencies into a single, portable unit.

### Portability

Docker containers can be run on any platform that supports Docker, making it easy to move your applications between development, testing, and production environments.

### Isolation

Docker containers isolate an application and its dependencies from the underlying host system, reducing the risk of conflicts between applications and improving security.

## Scalability

Docker makes it easy to scale your applications horizontally by adding or removing containers as needed.

## Reproducibility

Docker containers provide a consistent and repeatable environment, making it easier to debug issues and ensure that your application behaves the same way in different environments.

### Ease of use

Docker provides a simple and intuitive command-line interface for managing containers, making it easier for developers to quickly get started with containerization.