

SIT323/SIT737- Cloud Native Application Development

Interacting with Kubernetes

Overview

Part I- for both SIT323/737

In this task you will continue your 6.1P task in a way to interact more with your created cluster through the Kubernetes dashboard.

The required tools for doing this task are as follows:

- Git (<https://github.com>)
- Visual Studio (<https://code.visualstudio.com/>)
- Node.js (<https://nodejs.org/en/download/>)
- Docker
- Kubernetes // a computing platform to host your microservice
- Kubectl // the command-line tool for interacting with Kubernetes cluster

Instructions

Interact with the Deployed Application:

- Verify that the application is running by running `kubectl get pods` and `kubectl get services`
- Use the `kubectl port-forward` command to forward traffic from a local port to the Kubernetes service
- Access the application in a web browser by navigating to `localhost:<local port>`

Submission Details

- You can share your deliverables for this task through a GitHub repository, which can include the Dockerfile, Kubernetes deployment and service configuration files, and any other necessary files (<https://github.com/username/sit323-2025-prac6c>).
- Ensure that detailed documentation is included with your code, offering step-by-step instructions that explain the process undertaken for this part. Failure to provide this documentation will result in an incomplete mark for the task.