2.1P: Containerize Microservice

Task

In this task, you are required to demonstrate that you have successfully installed `Podman` (including *Podman Desktop*) and that you can build a `Podman` image from a Python/FastAPI application and run it within a Podman container.

Overview

Building on **Task 1.2P**, this assignment introduces *containerization*. You will learn to use *Podman* to package your microservice into a portable image. You will then demonstrate running this image as a container, making your microservice runnable in an isolated environment. This foundational skill is crucial for deploying microservices in various environments, including Kubernetes.

Tools Used

- VS Code
- Git
- Python
- Podman Desktop

Steps

To achieve this task, please follow the following steps:

1. Install Podman on your local machine from https://podman-desktop.io/downloads.
2. In this task you will run **Week-02** code. Clone the code repository `git clone https://github.com/sit722-devops/week02.git`.
3. Build podman image from product microservice.
4. Run application in browser via localhost.
5. Upload product microservice image on Docker hub public registry.

What to Submit?

You are asked to submit detailed documentation with screenshots offering *step-by-step* instructions that explain the process undertaken to **build**, **run** and **publish** podman image.

Note: Consider providing seperate screenshots for each key step (where screenshot is required) and do not crop the same. Provide complete screen.

> Task Page Limit: Sufficient pages for the screenshots ***and*** approximately 1 page of text for the **written step descriptions**, formatted reasonably, e.g., 2cm margins, 11 or 12 point font, appropriate headings/spacing, etc._