4.1 Build an Image and Run it as a Container



This section will guide you to:

* Setup and build an image in Docker Desktop and run it as a container, in the Windows operating system.

**Development Environment**

* Windows
* Docker

This guide has three subsections, namely:

4.1.1 Setting up Docker Desktop in Windows

4.1.2 Building an image in Docker and run it as a Container

4.1.3 Pushing the code to the GitHub repositories

**Step 4.1.1:** Setting up Docker Desktop in Windows

* Docker is already installed in your practice lab. Refer to **DotNet Lab guide: Phase 4** for more information.
* To test the installation, open the Windows Command Prompt and type *docker –version*
* This will show the installed version of Docker

**Step 4.1.2:** Building an image in Docker

* Right click on the Docker icon in the notifications area of the windows server
* Select **Switch to windows container**
* Open windows Powershell and pull an existing compatible base image using the following command:

*docker pull mcr.microsoft.com/windows/servercore:ltsc2016*

* After the image has been downloaded to the local server, start a container process using the following command in the Powershell:

*docker run mcr.microsoft.com/windows/servercore:ltsc2016*

**Step 4.1.3:** Pushing the code to your GitHub repositories

Open your command prompt and navigate to the folder where you have created your files.

cd <folder path>

Initialize your repository using the following command:

git init

Add all the files to your git repository using the following command:

git add .

Commit the changes using the following command:

git commit -m “Changes have been committed.”

Push the files to the folder you created initially using the following command:

git push -u origin master