

# **SCCT Development Environment**


A proof of concept for a development environment to provide a common cross-platform setup for students working either on university machines or on their own computers.

## **Required Software**

To use the development environment Visual Studio Code and the Docker engine must be installed.

- Visual Studio Code: <https://code.visualstudio.com/>
- Docker (Docker Desktop recommended):  
<https://www.docker.com/products/docker-desktop/>

## **Launching the Development Environment**

- Start Docker and open a new Visual Studio Code window.
- Click the 'Remote Connection' button in the bottom left of the window:  

- Select the "Open Folder in Container..." option and navigate to the development environment workspace - 'scct-dev-environment' (the folder this PDF is in)
- Visual Studio Code will start building the environment, this may take a while as there are several container images to be downloaded
- Once the development environment is setup you will find yourself in a Visual Studio Code workspace running inside the development environment

## **Using the Development Environment**

The development environment is a container running a Linux distribution (Ubuntu), when you first start the environment your file explorer will be in your home directory (/home/scct) in the container. Here you can create new files and folders and use these for active workspaces.

To interact with the development environment through the command line use the 'Terminal > New Terminal' option.

The development environment comes with several additional services to make development easier:

- PHPMyAdmin, an interactive mysql tool: <http://localhost:8000>
- Mongo-express, an interactive mongodb tool: <http://localhost:8001>

### **MySQL Server**

The development environment comes with a MySQL server, this can be accessed through the command line using the 'mysql' executable or through Python scripts, using the details below:

- Username: scct
- Password: scctdev
- Hostname: mysql
- Port: 3306