Hong Kong Baptist University

Department of Computer Science

COMP 7990 Principles and Practices of data analytics (2022-23)

Installation Guide for MySQL

Installation guide for using Docker (Recommended for most students)

Note: You need Windows 10 Professional or a macOS with VT-x enabled to install docker. Windows 10 Home users need to update their version to 2004 released in May 2020 and follow the instructions here after installation.

Docker is a virtualization technology that allow you to run different container instances in a very simple and efficient way. It is a paradigm in software development nowadays, especially application related to cloud services. You will probably use Docker again in other courses (e.g. Cloud Computing). At this moment you do not need to understand what it. Follow the instructions from Docker webpage (https://docs.docker.com/get-docker) to install Docker Desktop if you have not got it yet.

After you have installed Docker. Type the followings to install and run MySQL and phpMyAdmin

```
docker pull mysql

docker pull phpmyadmin/phpmyadmin

docker run --name comp7990-mysql -e MYSQL_ROOT_PASSWORD=my_password

-d mysql:latest

docker run --name myadmin -d --link comp7990-mysql:db -p 8080:80

phpmyadmin/phpmyadmin
```

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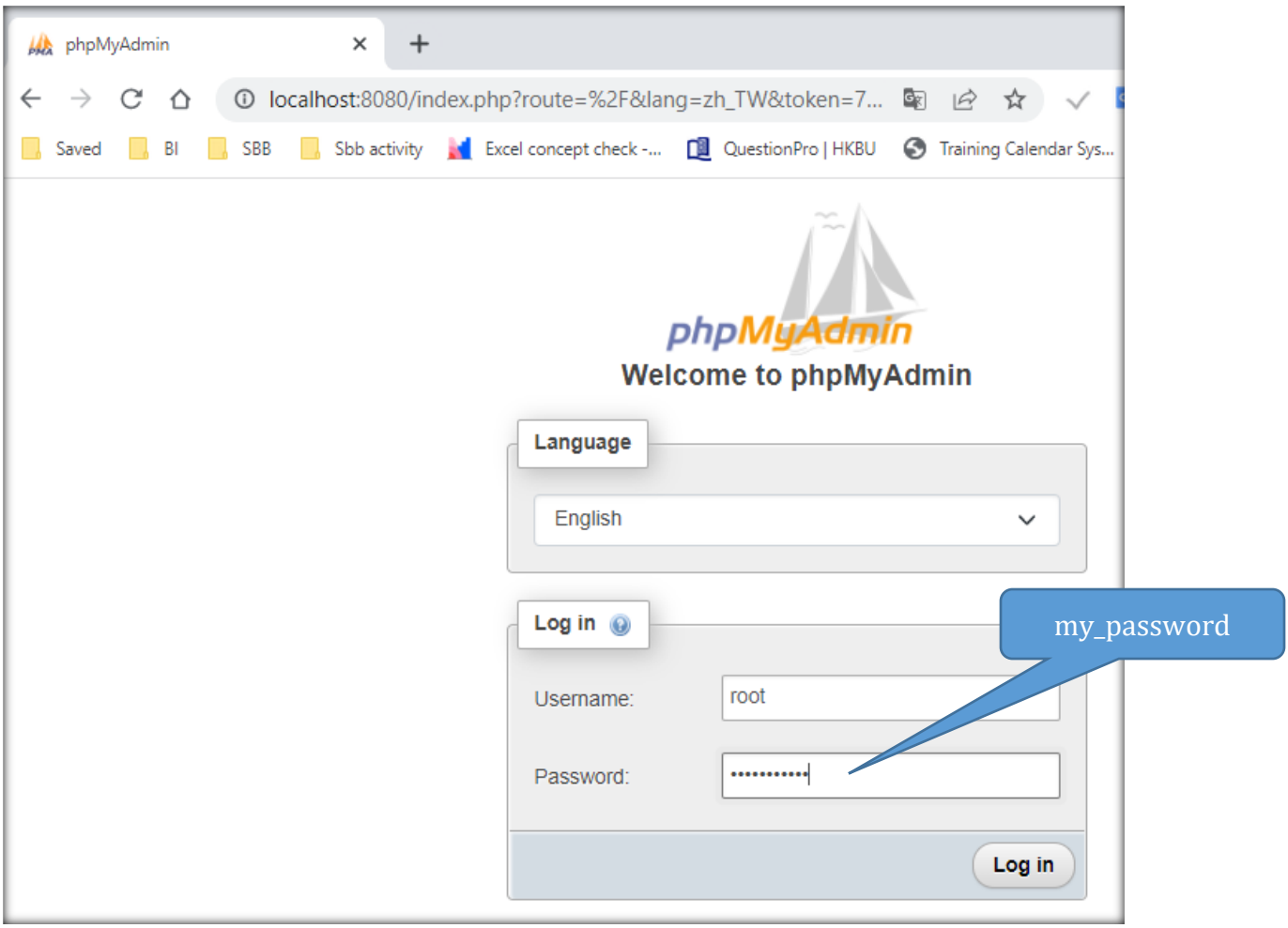
You can replace my_password with a password you choose. Then open the webpage http://localhost:8080/ to launch phpMyAdmin.

Username: **root**, Password: **my_password**



If the two commands "docker run" run successfully, you shall see a hash values like 861a04a9fb91a7c18761424ccd91d59564df88121289d7218842c383f0eb6b66, otherwise there is some error message of commands.

When you decide to stop the docker containers, type:

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```
docker stop myadmin

docker stop comp7990-mysql
```

To start the instances again, type:

```
docker start myadmin

docker start comp7990-mysql
```

Alternatively, you can launch the Dashboard from Docker Desktop (find it from your system tray after launching) and stop and restart a container in a graphical interface.

Installation guide using WAMP (For Windows)

The term WAMP came from LAMP which means Linux-Apache-MySQL-PHP, a common setup to provide dynamic webpages. WAMP swaps Linux with Windows and integrate the software Apache with PHP, MySQL into one software. This allows developers to write their code without spending too many efforts in software installation/configuration. **When you install WampServer, please make sure you have click PHP and MySQL.**

Download WampServer from the website https://www.wampserver.com/en/. After you have launched WAMPServer from the <Start Menu>, open the webpage http://localhost/phpmyadmin to login with **username: root, password: <empty>**.

Note: WAMP is extremely convenient but it is very dangerous to use in public domain if it is not securely configurated. It is recommended to run WAMP only when you are doing the lab/assignment and you should disconnect from the internet when you are using it.

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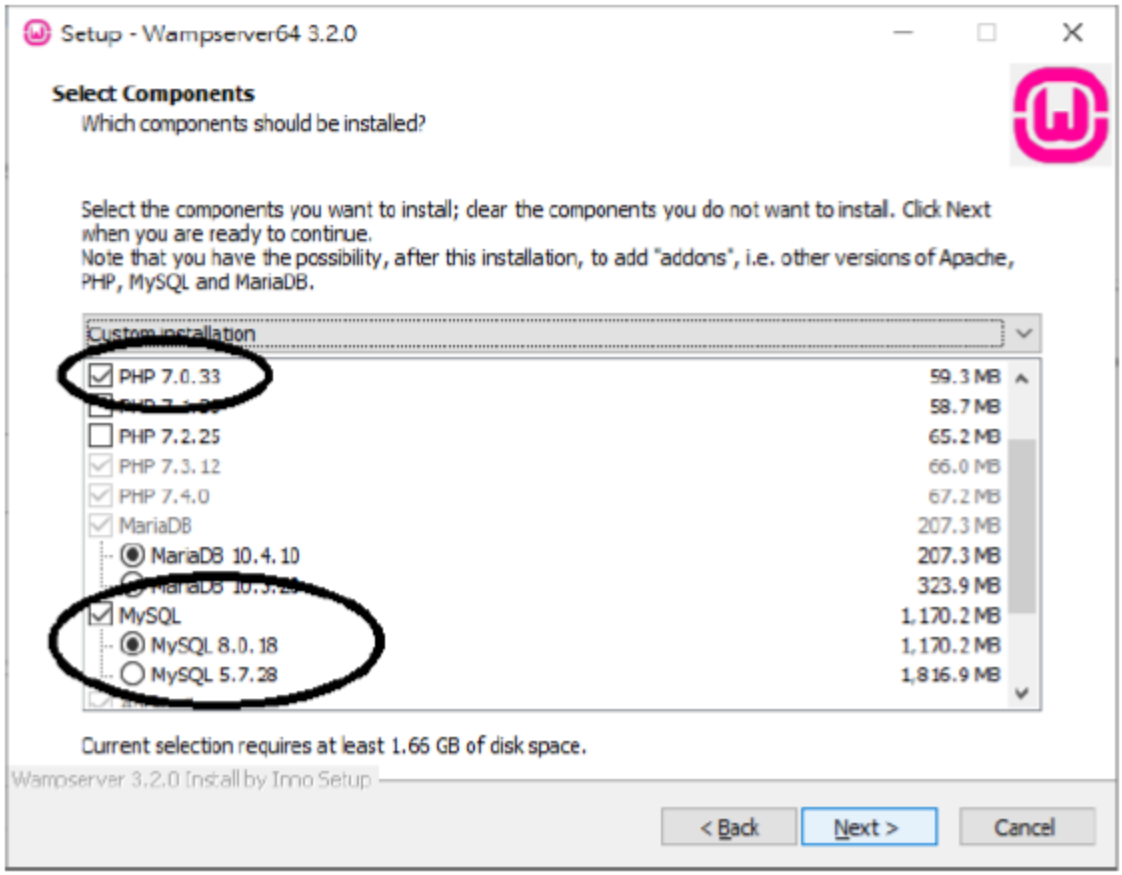

Installation guide using WAMP (For MacOS)

Similar to WAMP, MAMP is a software package that swap the OS to mac. It integrates Apache with PHP and MySQL in the same software. Follow the instructions on http://ampps.com/mamp to download MAMP from http://ampps.com/downloads You can open phpMyAdmin from http://localhost/phpmyadmin with the username “root” and password “mysql”. You should also change your default MySQL root password from here http://localhost/ampps/index.php?act=mysqlsettings

Noted that both WAMP and MAMP are considered as developing tools. They should not be used in deployment.

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