Tutorial of MySQL installation

Outline

- Install Virtual Machine
- Install Docker
- Install MySQL

Install Virtual Machine - MS Windows

1. Visit the VirtualBox website
2. Download & Install VirtualBox
3. Watch the video (Install lubuntu 18.04)

Install Virtual Machine - Ubuntu

1. Visit the VirtualBox website
2. Download & Install VirtualBox
    a. sudo dpkg -i
        <Download_PATH>/virtualbox-6.0_6.0.4-128413_Ubuntu_xenial_amd64.deb
3. Watch the [video](#) (Install lubuntu 18.04)

Install Docker

- `sudo apt update`

- `sudo apt install apt-transport-https ca-certificates curl software-properties-common`

- `curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -`

- `sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu bionic stable"`

- `sudo apt update`

- `sudo apt install docker-ce`

https://docs.docker.com/install/linux/docker-ce/ubuntu/

Install Docker --- Verify installation

- docker run hello-world

```
su@ubuntu:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
1b930d010525: Pull complete
Digest: sha256:2557e3c07ed1e38f26e389462d03ed943586f744621577a99efb77324b0fe535
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/
```

Install MySQL --- Using Docker

- Download csv files to the current path

  - ls

  - You should see match.csv & player_statistic.csv

- Start mysql server

  - docker run --name some-mysql -e MYSQL_ROOT_PASSWORD=my-secret-pw -d mysql:5.7

- Connect to mysql server

  - docker run -it --link some-mysql:mysql -v `pwd`:/data --rm mysql:5.7 sh -c 'exec mysql

    -h"$MYSQL_PORT_3306_TCP_ADDR" -P"$MYSQL_PORT_3306_TCP_PORT" -uroot -p"$MYSQL_ENV_MYSQL_ROOT_PASSWORD"'

https://hub.docker.com/_/mysql

Verify data

- ```
  mysql> system ls /data
  ```

- ```
  mysql> system head /data/match.csv
  ```

- ```
  mysql> system head /data/player_statistic.csv
  ```