# DB Practical Work 0:
# Setting the system up

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**Abstract**

The following leaflet gives the steps to set the development environment up.

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# 1 Work to do

You have to set your system up in order to get a proper development environment.
You must install the environment by following section 2.

# 2 Installation

Using the virtual machine is recommended but you can also use a personnal machine to run the Vagrant image. **Choose one of the following subsection**.

## 2.1 On the Virtual Machine

1. Get the VM called "VMWARE UBUNTU 16 64 LTS - DBPROJECT M MARTINEAU" in `D:\VM Productions\` (if needed, the username is `ubuntu` and the password `password`)
2. Start it
3. Go in `/home/ubuntu/db-project/` : here are the sources already installed.
4. Put:
   - the SQL table creation commands (`CREATE TABLE`) inside `/home/ubuntu/db-project/sql/schemas.sql`
   - the SQL entries creation commands (`INSERT INTO`) inside `/home/ubuntu/db-project/sql/entries.sql`
5. Go in `/home/ubuntu/db-project/scripts` and click on `populate_db.sh`

If you open a web browser inside the VM and go to `http://127.0.0.1`, you will find the web application. PHPMyAdmin is accessible at `http://127.0.0.1/phpmyadmin/` (user: `root`, password: `password`).

There are many scripts to manipulate the VM : they are in `/home/ubuntu/db-project/scripts`. You can click on them to execute them.

Their roles are described in section 3.

## 2.2 Using the lightweight Vagrant image

You will need the following elements for the software to work:

1. Virtualbox (`https://www.virtualbox.org/`)
2. Vagrant (`https://www.vagrantup.com/`)

Once you have got all the requirements fulfilled, you can proceed with the following steps :

1. Download `https://github.com/prafiny/db-project/archive/master.zip`
2. Unzip the archive somewhere.
3. Put:
   - the SQL table creation commands (`CREATE TABLE`) inside `sql/schemas.sql`
   - the SQL entries creation commands (`INSERT INTO`) inside `sql/entries.sql`
4. Then
   - For Windows: go in the folder `scripts/win`, click on the `launch_vagrant` script.
   - For Linux/MacOS: go in the folder `scripts/` and execute the `launch_vagrant` script.
5. Wait

The Vagrant image should be ready and running. If you open a web browser and go to `http://127.0.0.1:8080`, you will find the web application. PHPMyAdmin is accessible at `http://127.0.0.1:8080/phpmyadmin/` (user: `root`, password: `password`).

You can edit the code directly on your host operating system. To shut the image down, you can use the script `stop_vagrant`.

There are many scripts to manipulate the image :

- For Windows in `scripts/win`
- For Linux/MacOS in `scripts`

Their roles are described in section 3.

# 3 Scripts

`populate_db` This script creates the tables and entries using the files in the folder `sql/`

`snapshot_db` This script saves the current `dbproject_app` mysql database into the `sql/` files

`tests` Launches the unit tests.

`update` Update the source code and dependencies.