Tutorial for setting up Oracle and SQL Developer (Mac OS)

This tutorial is aimed at explaining how to set up Oracle's DBMS. You will use it to store the databases you will need to work with. Additionally, you will need to set up Oracle SQL Developer, a tool needed for executing SQL queries and scripts. This tutorial addresses the installation of both tools on your personal computer (with Mac OS).

SETTING UP ORACLE DATABASE 18c EXPRESS EDITION

Install **Docker** following the instructions available at https://hub.docker.com/editions/community/docker-ce-desktop-mac. Once you download the .dmg file, run it to complete the installation.

Get Docker Desktop for Mac

Docker Desktop for Mac is available for free.

Docker Desktop - macOS must be version 10.14 or newer: i.e. Mojave (10.14) or Catalina (10.15). Mac hardware must be a 2010 or a newer model.

Download Docker Toolbox for previous OS versions.

By downloading this, you agree to the terms of the <u>Docker</u> <u>Software End User License Agreement</u> and the <u>Docker Data Processing Agreement (DPA)</u>.



Next, open a terminal (\mathbb{H} + Space and write "terminal") and make sure that the docker is available, by launching it:

```
$ docker --version
Docker version 19.03.8, build afacb8b
```

(only type the command in blue after the \$ symbol)

If the output of the command does not show the program version (but instead you get an error message, such as -bash: docker: command not found), docker has not been set up correctly.

From the terminal, you should now create a clone to the official Oracle GitHub repository

```
$ git clone https://github.com/oracle/docker-images.git
```

This will create the directory docker-images. Now move to the directory docker-images/OracleDatabase/SingleInstance/dockerfiles using the following command:

```
$ cd docker-images/OracleDatabase/SingleInstance/dockerfiles
```

From here, run:

```
$ ./buildDockerImage.sh -v 18.4.0 -x
```

This command may take several minutes to complete. Once finished, check that the docker image has been created correctly:

```
$ docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

oracle/database 18.4.0-xe 8babb3a5ad97 23 minutes ago 5.89GB
```

Among the listed images, you should find one of oracle (repository oracle/database, with tag 18.4.0-xe). Now, run the container with the following command:

```
$ docker run --name myxedb -d -p 1521:1521 -e ORACLE_PWD=mysecurepassword -e ORACLE_CHARACTERSET=AL32UTF8 oracle/database:18.4.0-xe
```

You may change "mysecurepassword" with a password of your choice (make sure you use this password, with username "system", when creating a connection in SQL Developer).

Once you execute the command, you can check the status of the newly created container:

```
$ docker container ls
```

```
CONTAINER ID IMAGE COMMAND CREATED STATUS ... ad318d7836a4 oracle/[...] "/bin/[...]" 5 minutes ago Up 5 minutes (healthy) ...
```

When the status changes to "**Up**", you will be able to connect through SQL Developer (though it may take some additional minutes before the login is successful).

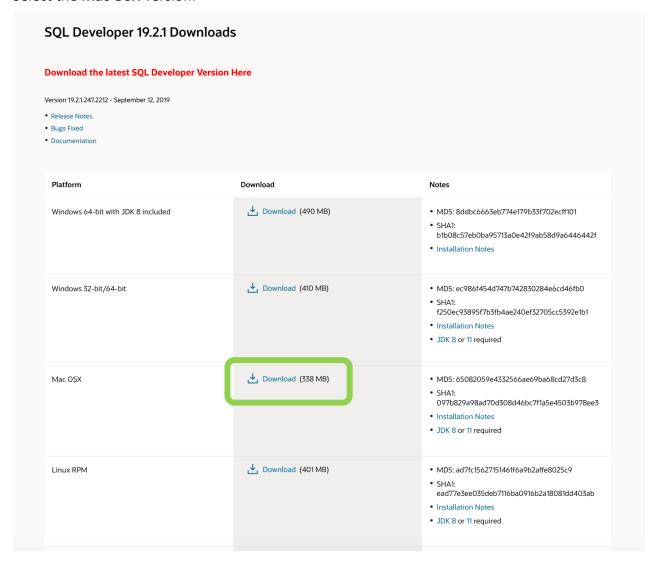
SETTING UP ORACLE SQL DEVELOPER

Prerequisites: Java 1.8.0

You can download the software from the following website:

https://www.oracle.com/technetwork/developer-tools/sql-developer/downloads/index.htm

Select the Mac OSX version.



You will need to **create an account** on Oracle before proceeding with the download. Complete the registration and the verification of the email.

Once registered, you can download the .app.zip file (e.g. sqldeveloper-19.2.1.247.2212-macosx.app.zip).

Next, open the .app.zip file: this will extract SQLDeveloper.app. Double click this file to run SQL Developer.