**MYSQL Installation Guide**

This guide is to help you download the MySQL Database software on a personal computer to run the Grease Webpage. This guide will focus on a windows device, if you use a mac refer to <https://dev.mysql.com/doc/refman/8.0/en/macos-installation.html> or on the Raspberry Pi refer to <https://dev.mysql.com/doc/mysql-apt-repo-quick-guide/en/>. Some of this guide will be relevant once the software has been installed.

1. To begin the download process, go to the MySQL website <https://dev.mysql.com/downloads/installer/> and download the MySQL installer.
2. After the MySQL installer executable has finished downloading it should be available in your download directory. Start the MySQL Installer executable. You may get a security warning to run this file. If Oracle is the Publisher, you are good to select Run.
3. Once the Installer opens, click the add option on the right hand side.

Graphical user interface, text, application

Description automatically generated

1. This will open up a new window, here you will select MySQL Servers -> MySQL Server -> MySQL Server 8.0 then click the first one in the list. Next click the arrow in the middle pointing to the right. Repeat this process with Applications -> MySQL Workbench -> MySQL Workbench 8.0. then press next.

Graphical user interface, application

Description automatically generated

1. In the new screen press execute, once complete press next.
2. Repeat step 5 in this new screen
3. Press next again opening a new screen seen below, ensure the following settings are selected, otherwise values must be changed within the Grease Webpage code.

Graphical user interface, text, application, email

Description automatically generated

1. Press next, this will open a window to input a password for the database, type root for both, if you choose a different pattern ensure to change the jdbcPassword string in the Grease Sample Dao to your selected password. Press next to continue.

Graphical user interface, application

Description automatically generated

1. Press next again then press execute to begin applying your settings.
2. Once it has finished press finish, next, and finish to return to the original screen.
3. Next open MySQL Workbench to create the table you will be using.
4. Once open press the plus beside the MySQL connections on the home screen. This will open the following screen.

Graphical user interface, text, application, email

Description automatically generated

1. Press the test connection button and enter the password you selected. This should cause a successful connection screen to appear. Then press okay, the connection should now be visible in the home screen.

Graphical user interface, text, application

Description automatically generated

1. To continue click on the local instance you have created, this will open the editor with a query file already open. Enter the following command to create the table you need.
2. To run the command, select the  button

CREATE DATABASE greasesamples;

USE greasesamples;

create table sample (

sampleId int NOT NULL AUTO\_INCREMENT,

barcodeId int,

mass DOUBLE,

PPM int,

color varchar(45),

PRIMARY KEY (sampleId)

);

1. This is all you need to do with MySQL workbench and server, but the workbench can be used to run various SQL queries if needed.