

Course: Web Application Development

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Lab 1: Setup Environment & Implement a Website

Date: February 18th, 2023

Content:

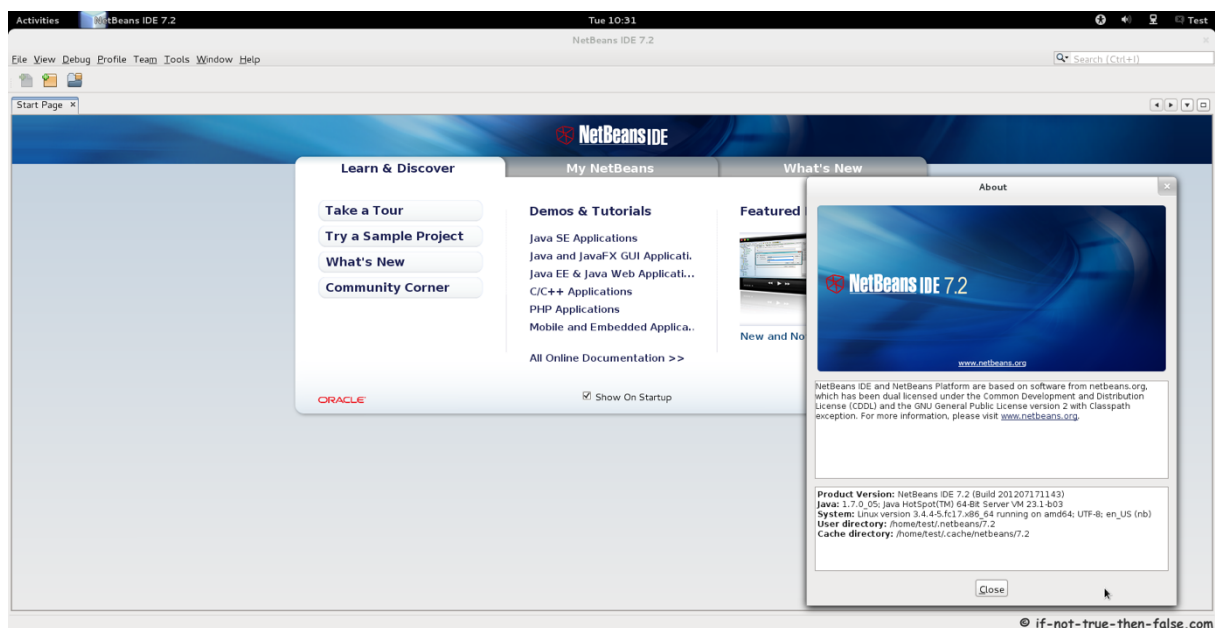
- Setup IDE: NetBeans (using the latest version, server: Tomcat/Glassfish)
- Setup database: MySQL (database server), Navicat Light(administration tool), others
- Implement a website using HTML

Duration: 3 hours

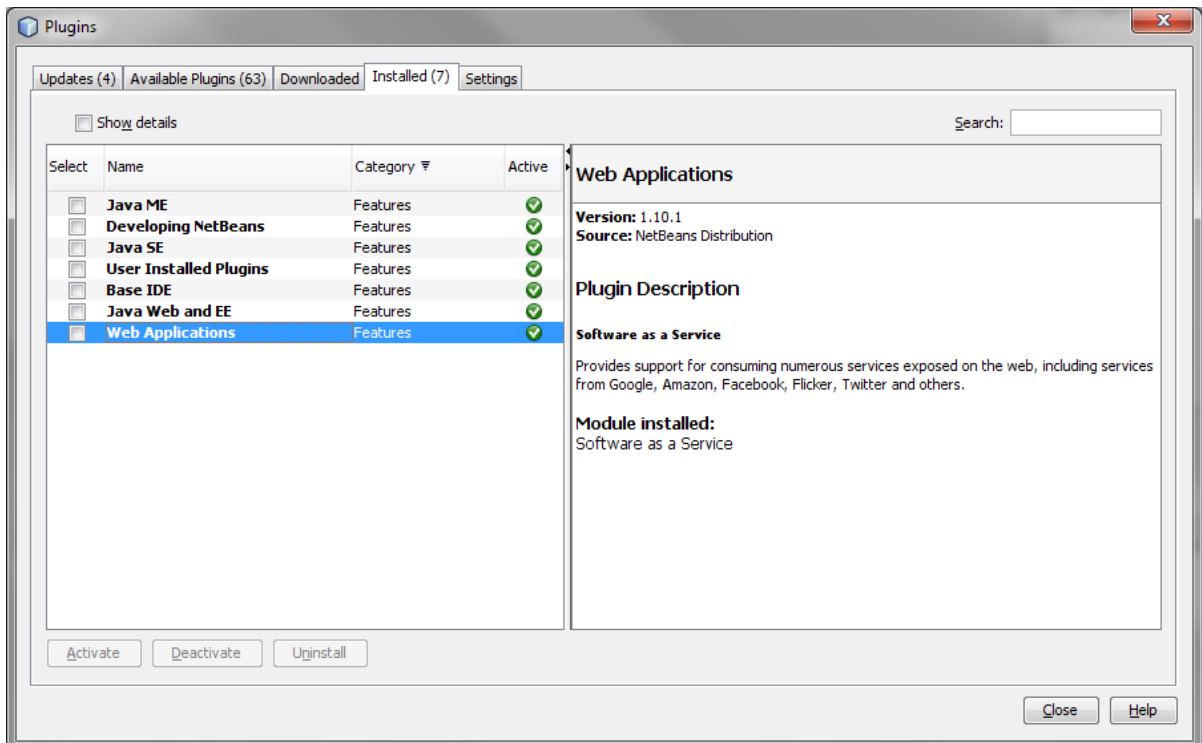
Part 1: Setup NetBeans IDE (you can also use Eclipse if you want)

The source program copy from Instructor, you can go to this website: www.netbeans.org/ to have an overview of Netbeans or download the last version.

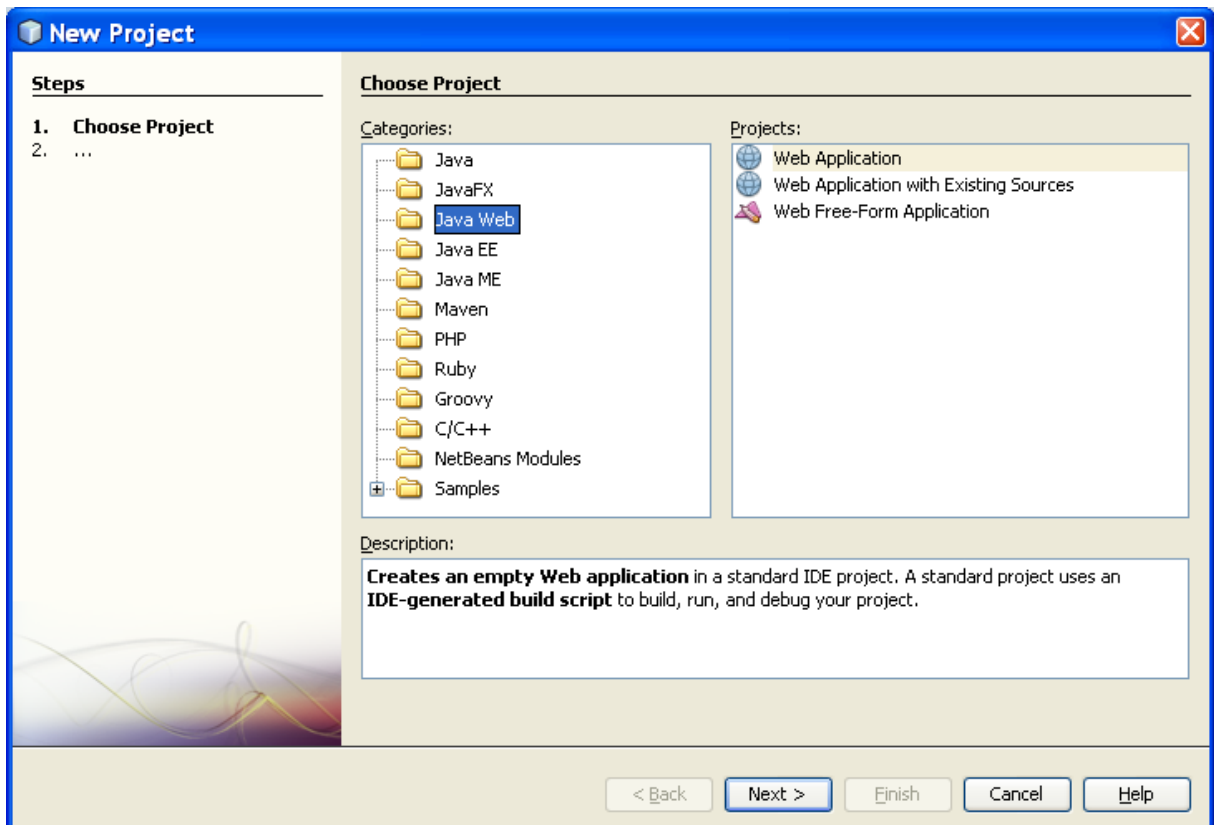
This is an example of Interface when finish installation: (note: you should download the latest version)



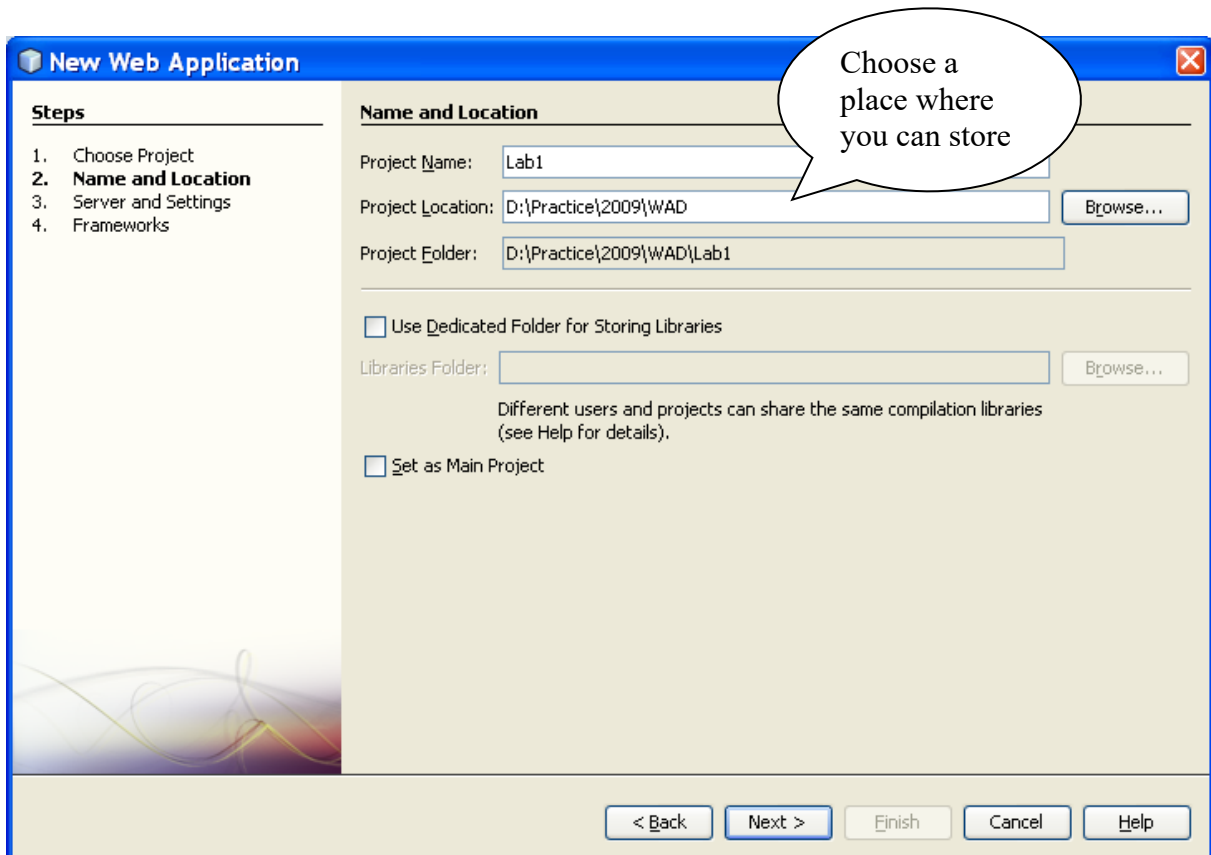
Create a website to test Netbeans environment: Select File > New Project > Java Web > Web Application: If Web Application project template does not exist, that means Web Applications plugin is not installed. You can install it by choosing Tool>Plugin>Available Plugin then choose Web Applications



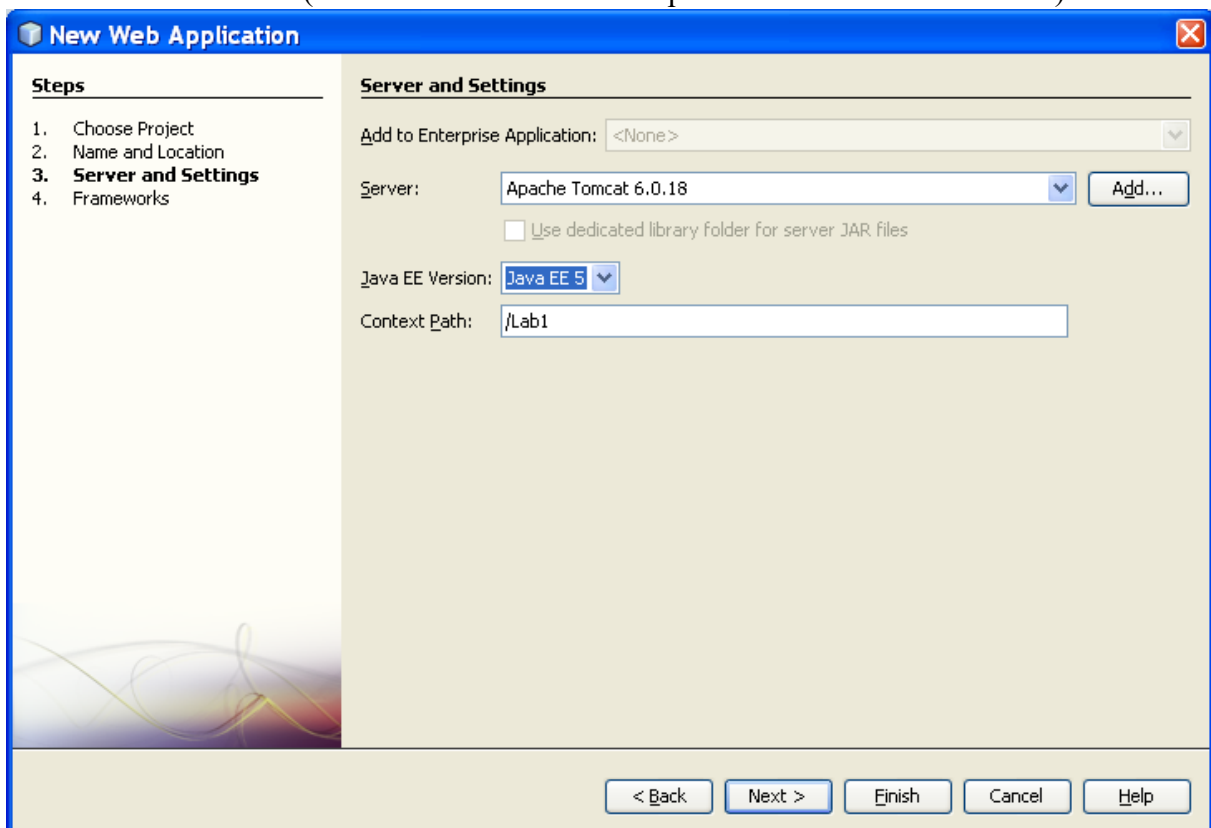
Screen of plugin installation



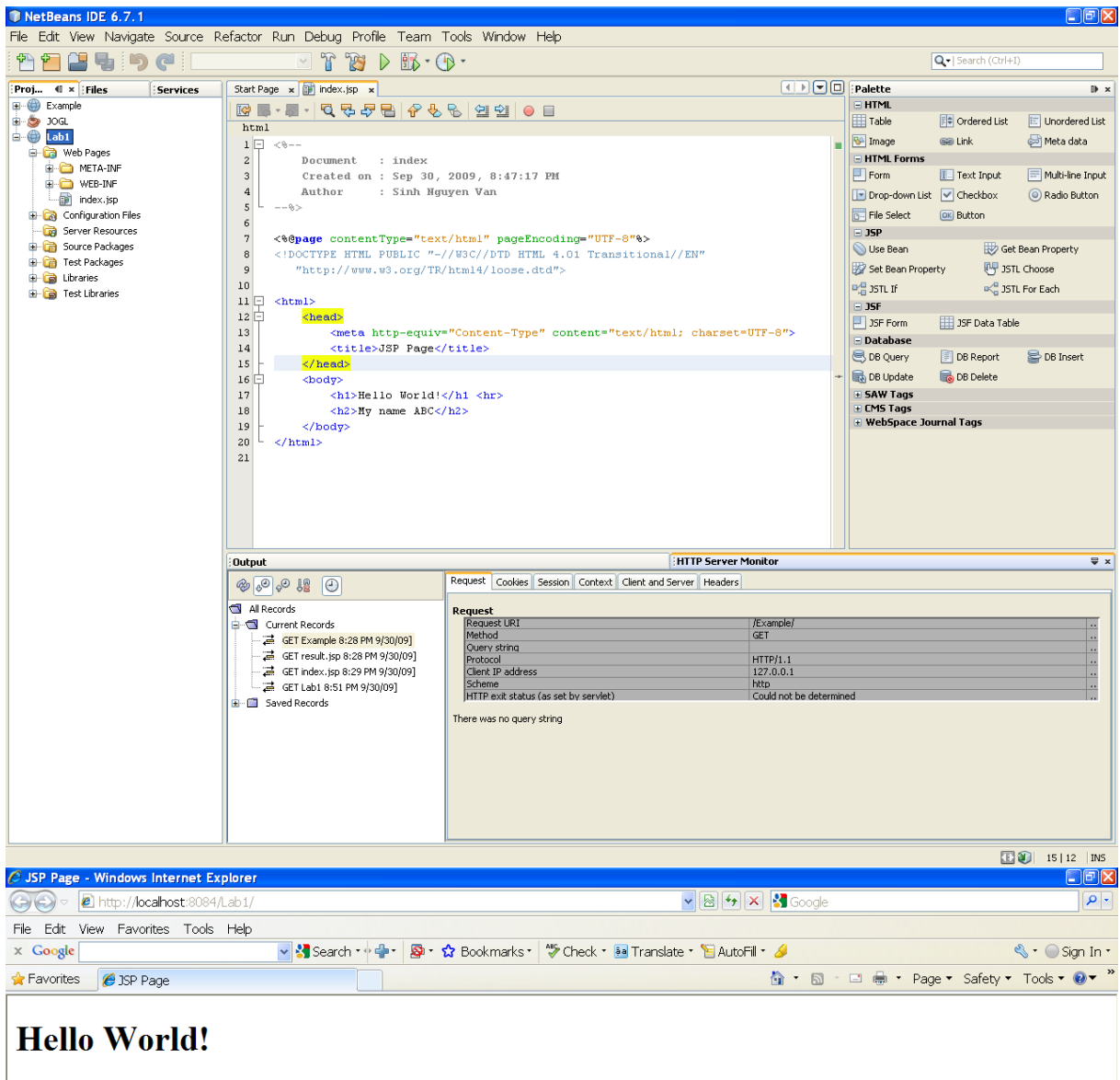
Click to “Next”, then fill in the Project Name; Name and Location, then go to Next button.



Choose the web server (there are two web server: Apache Tomcat & GlassFishV2)



Now click on Finish button to complete an example of web application.



Part 2: Setup MySQL (Database System) and Navicat Light (Tool)

In this Lab, we will install MySQL version 6.0 (source program refer from Instructor). MySQL can be controlled by two administration interfaces:

- Console (built-in console)
- Graphic User Interface (Third-Party Tools)

Third-party tools are softwares provided by many vendors, such as MySQL GUI, Navicat,... You can install Navicat Lite for MySQL. In this section, you will learn console and Navicat

a. MySQL console

Steps to launch console:

- Open window console by run "cmd" command on "Start" menu
- Locate directory contained file "mysql" (it is usually located in bin folder of installed folder). Do not forget your username and password of mysql when you was installing.
- Run mysql as figure bellow

```
C:\WINDOWS\system32\cmd.exe - mysql -u root -p

C:\Program Files\MySQL\MySQL Server 6.0\bin>mysql root -p
Enter password:
ERROR 1044 (42000): Access denied for user ''@'localhost' to database 'root'

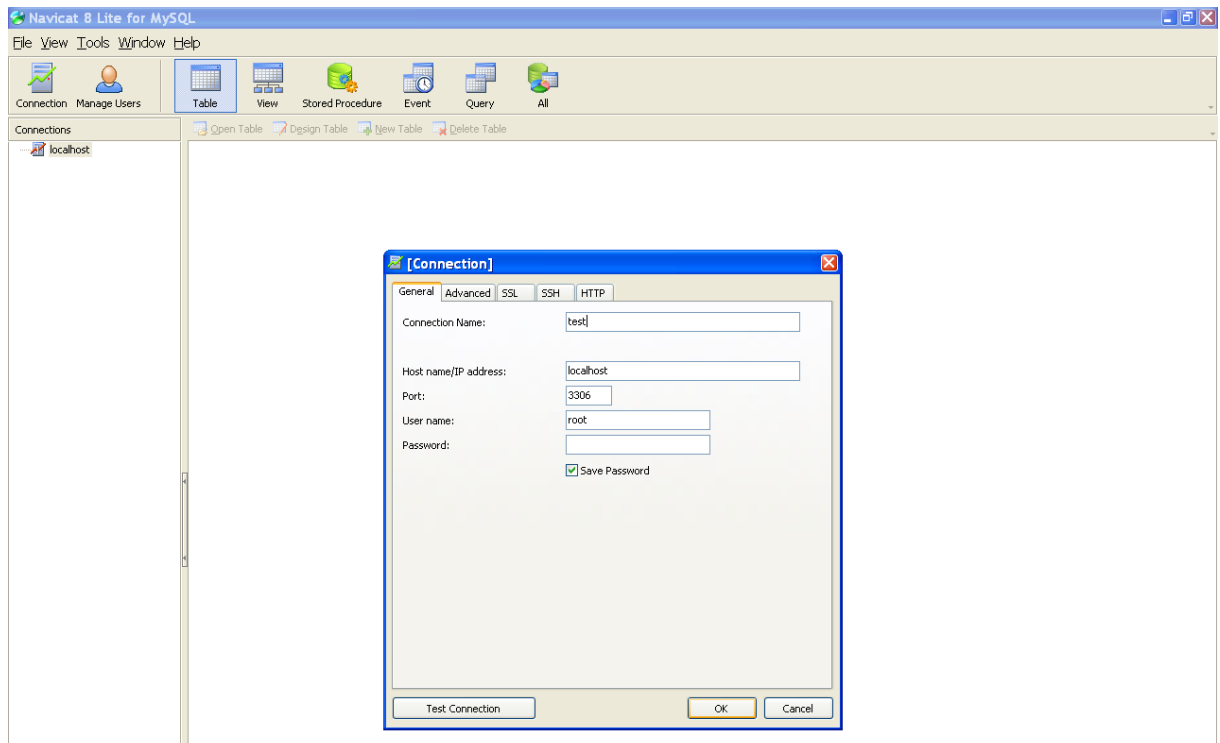
C:\Program Files\MySQL\MySQL Server 6.0\bin>mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 4
Server version: 6.0.3-alpha-community MySQL Community Server (GPL)

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> shows databases;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near 'shows
databases' at line 1
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| funtasybook |
| mysql |
| student |
| test |
| weblab5 |
| webtest |
+-----+
7 rows in set (0.24 sec)

mysql> _
```

- After connected to database, you can test MySQL feature by typing something. The syntax and purposes of command can be found on internet.
- b. Navicat (Trial version)
 - Install it on your computer
 - Connect to database, using same information as console. But you can type them on graphic user interface now.
 - Test Navicat features with your mouse.



Extend: Install the tools for drawing some diagrams (Use case, Sequence, Databases, Architecture): Power designer, Visio, etc.

Part 3: Design your personal website using HTML + CSS

In this part, you will learn how to create a new web project by using NetBeans. You also learn how to modify the web application deployment descriptor. Then, you can start using the lab sample web application.

ASSIGNMENT 1: GO ON TO DEVELOP YOUR PERSONAL WEBSITE WITH THE FOLLOWING REQUIREMENTS:

- From 5 to 10 pages
- Using Frame, Images, Link, and all components of a form.
- Using CSS to decorate your pages
- I will check directly (one by one) on the next lab section.
- Deadline: 2:00pm, February 24, 2023