

# Course: Web Application Development

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## Lab 1: Setup Environment & Implement a Website

Date: March, 2019

Content:

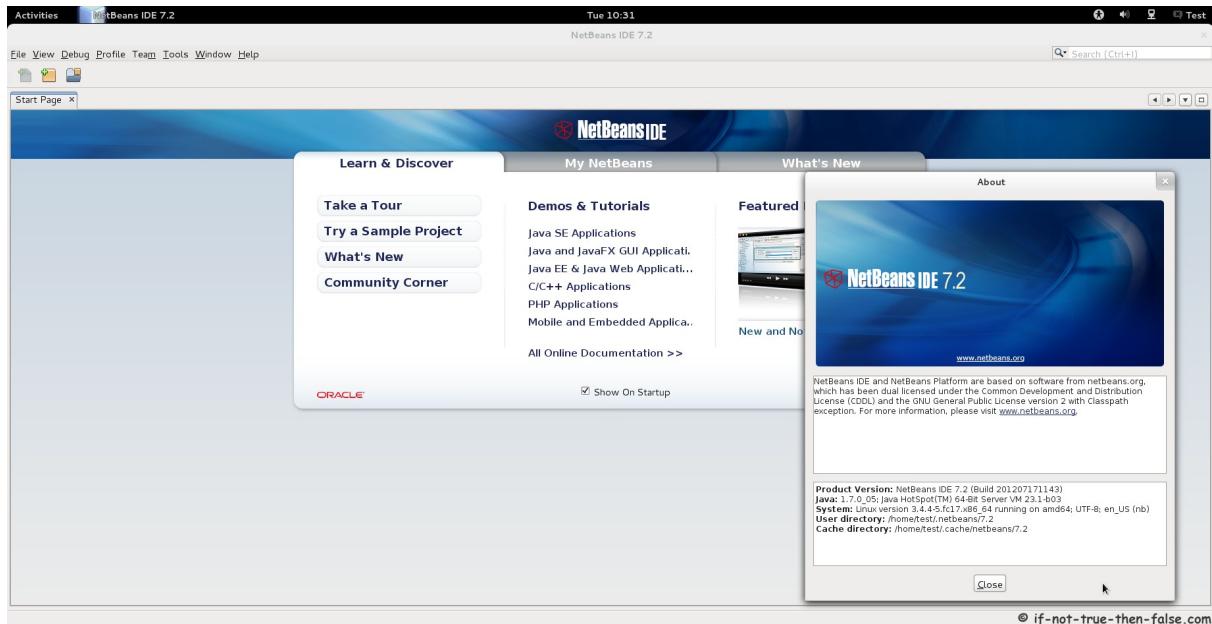
- Setup IDE: NetBeans (latest version, server: Tomcat/Glassfish)
- Setup database: MySQL (database server), Navicat Light(administration tool)
- Implement a website using HTML

Duration: 3 hours

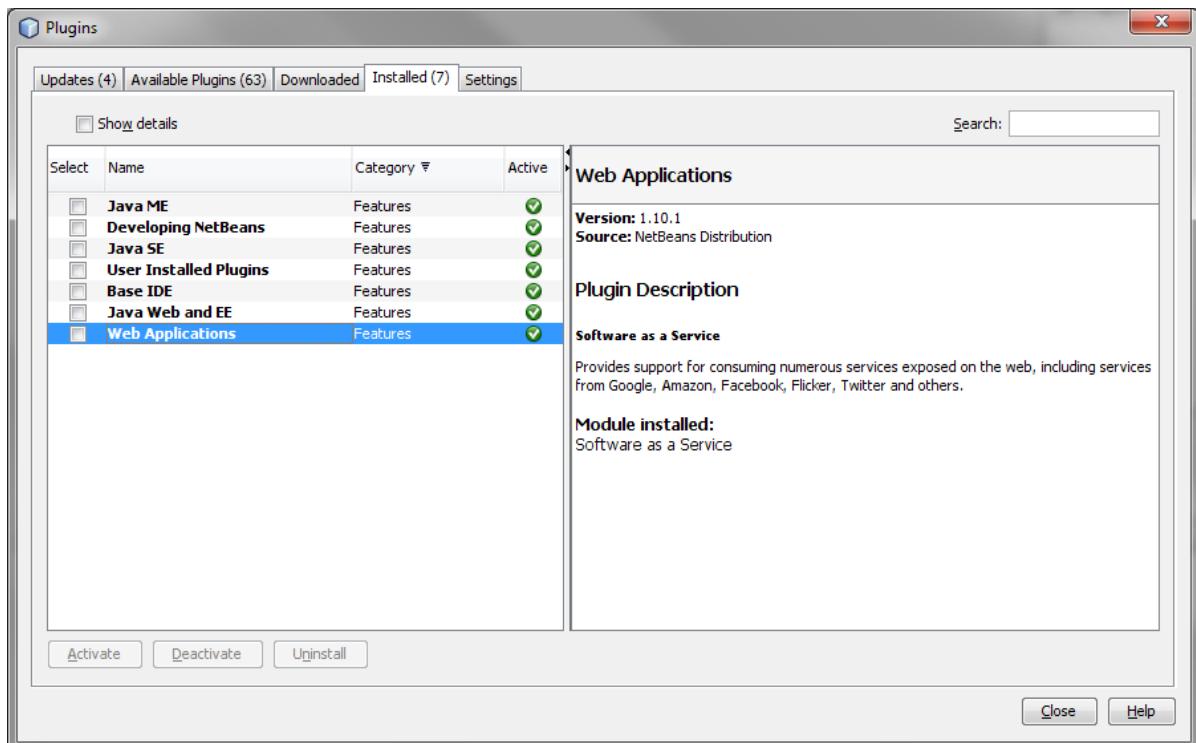
### Part 1: Setup NetBeans IDE (you can also use Eclipse if you want)

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

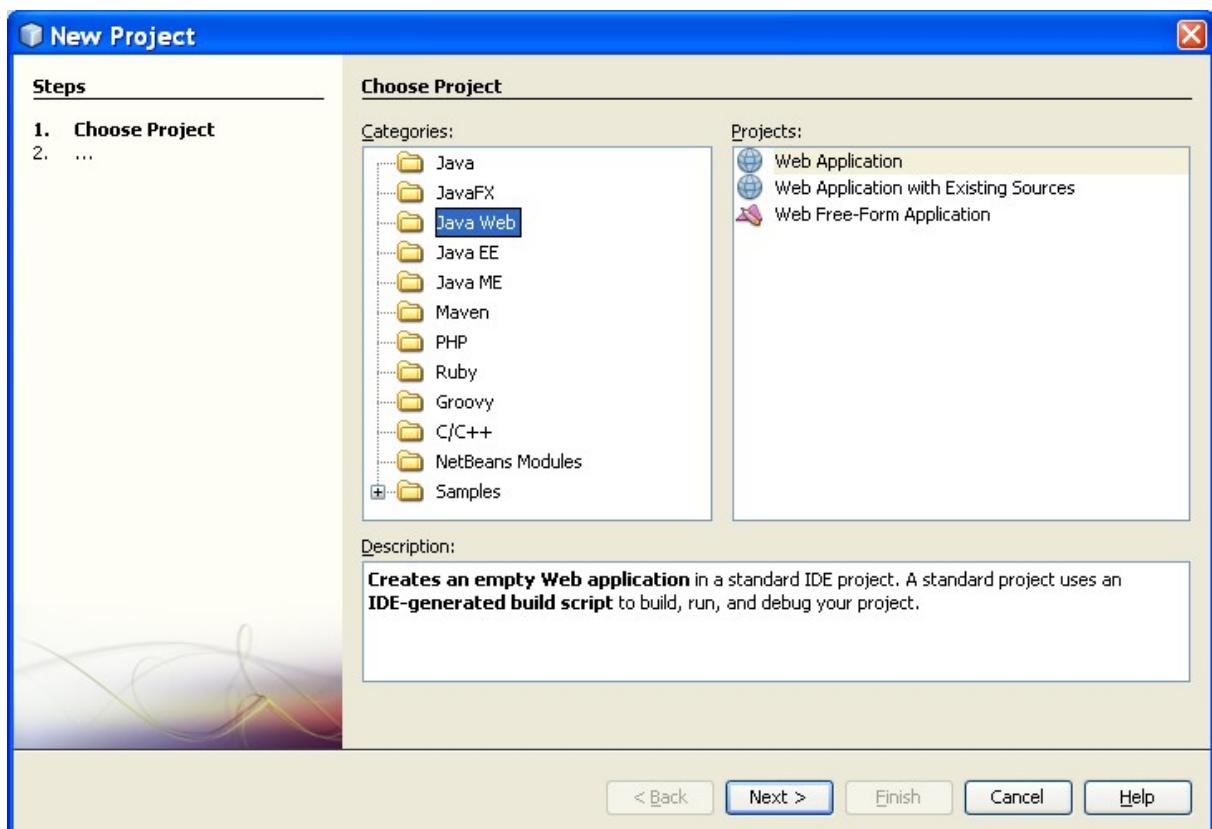
This is an example of Interface when finish installation: (note: you should download the latest version)



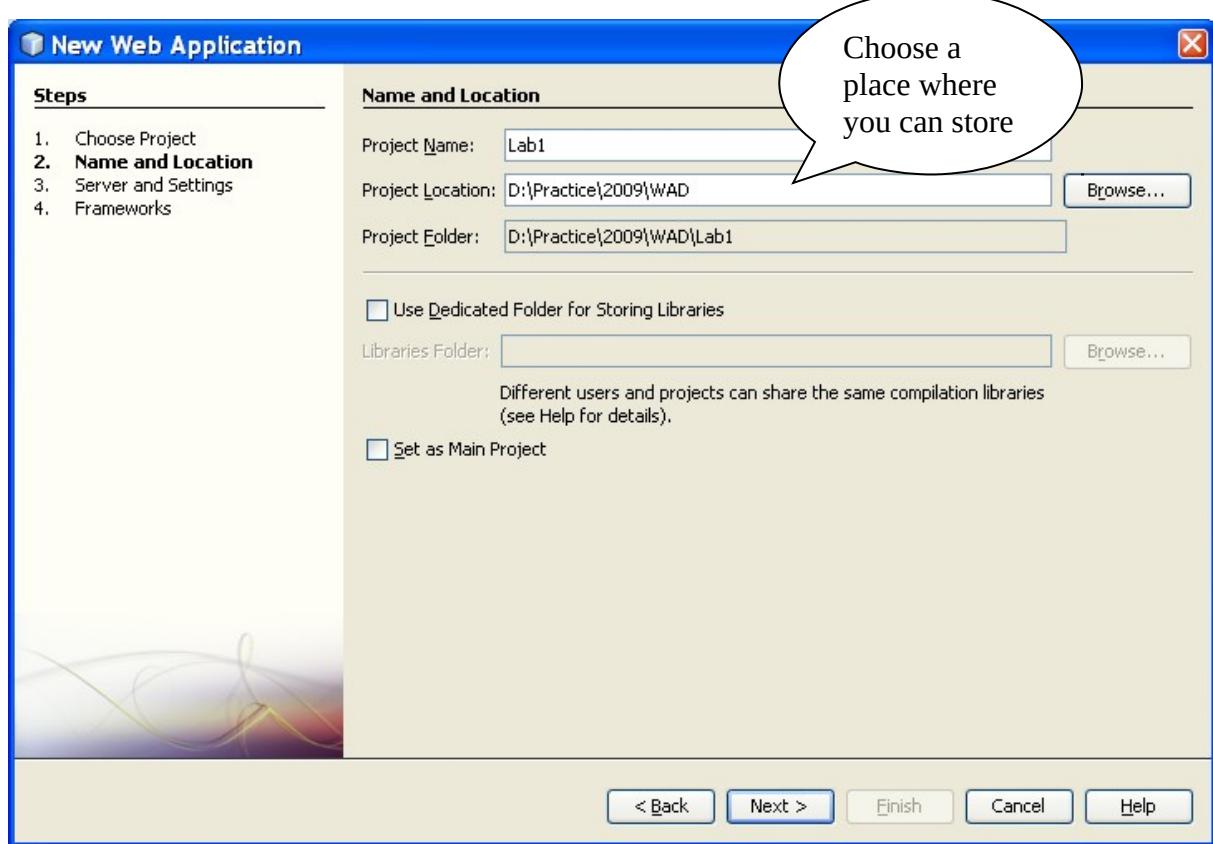
Create a website to test Netbeans environment: Select File > New Project > Java Web > Web Application: If Web Application project template does not exist, that means Web Applications plugin is not installed. You can install it by choosing Tool>Plugin>Available Plugin then choose Web Applications



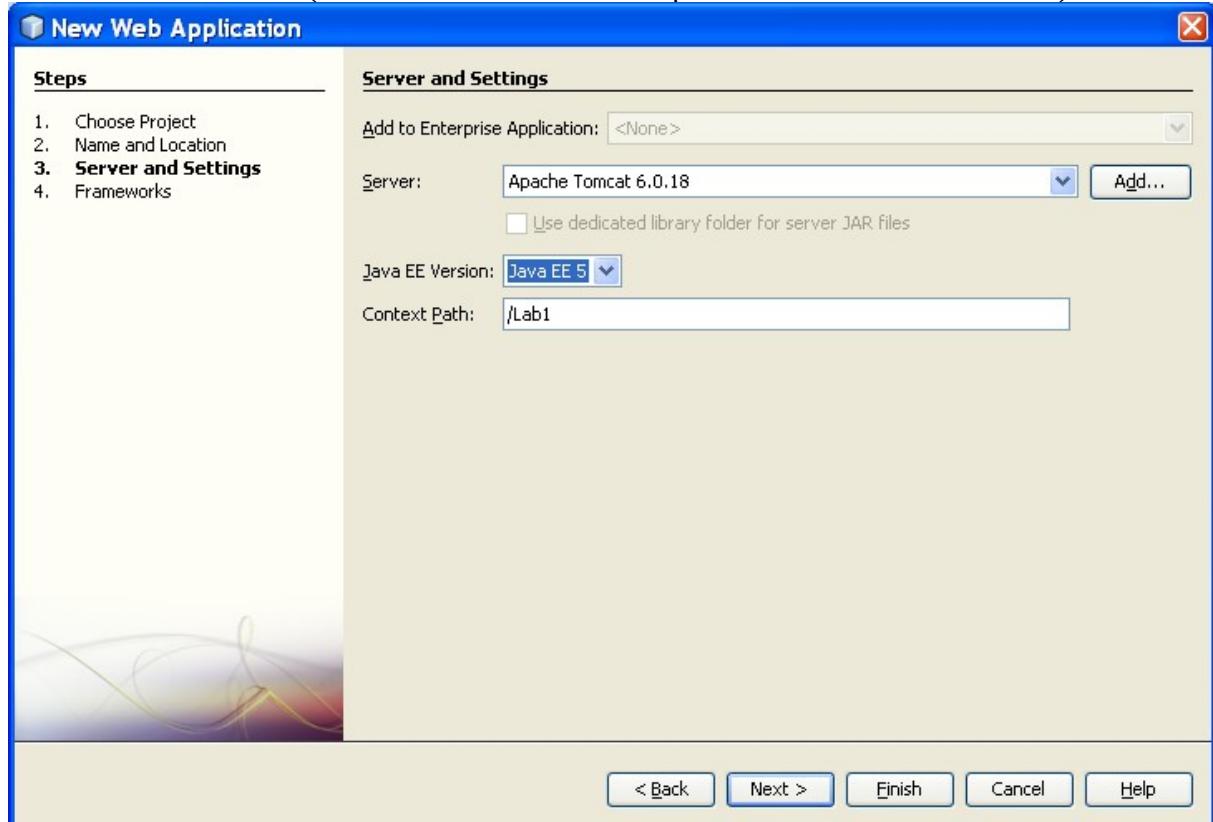
Screen of plugin installation



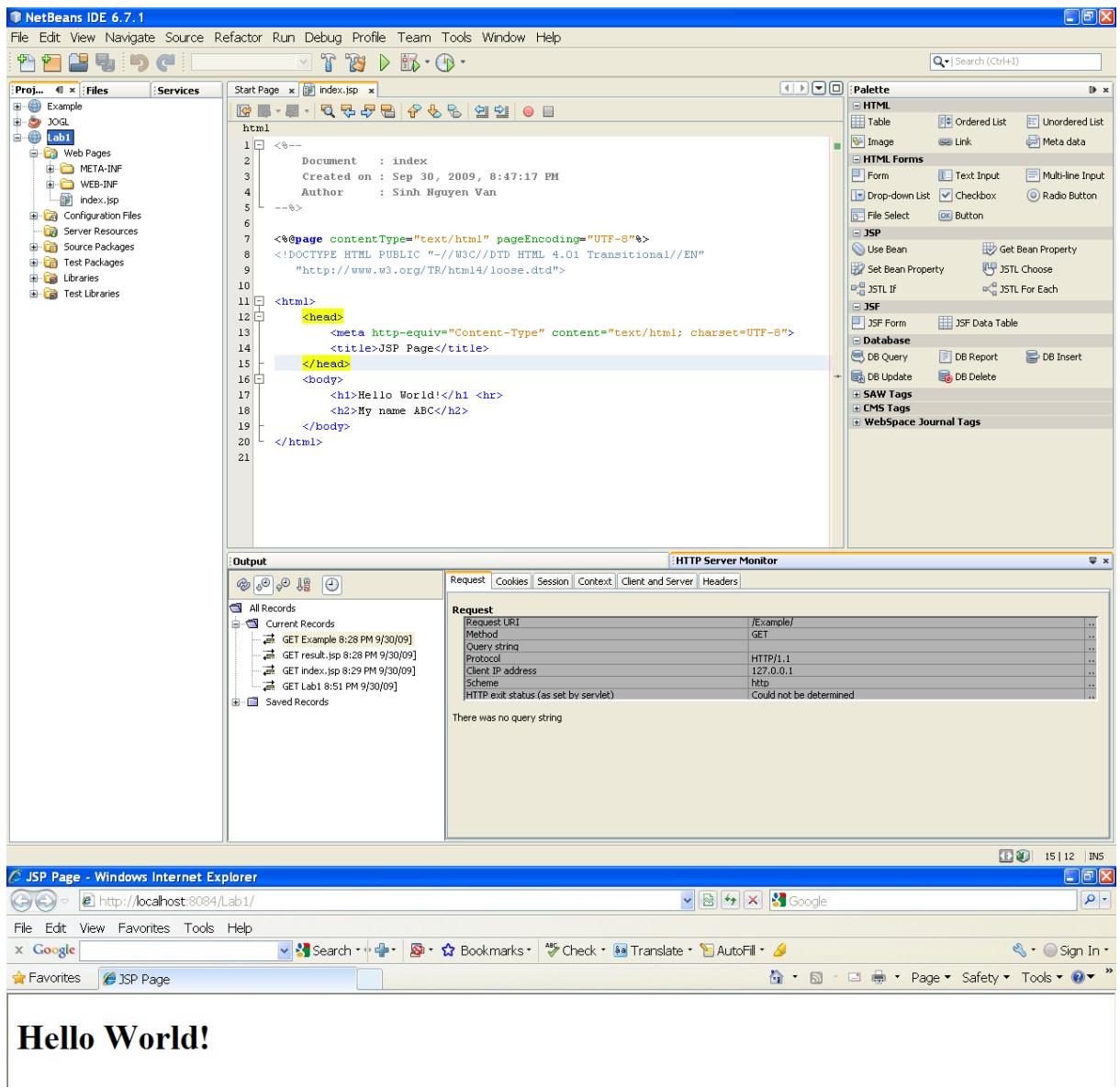
Click to “Next”, then fill in the Project Name; Name and Location, then go to Next button.



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



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



## Hello World!

### 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:

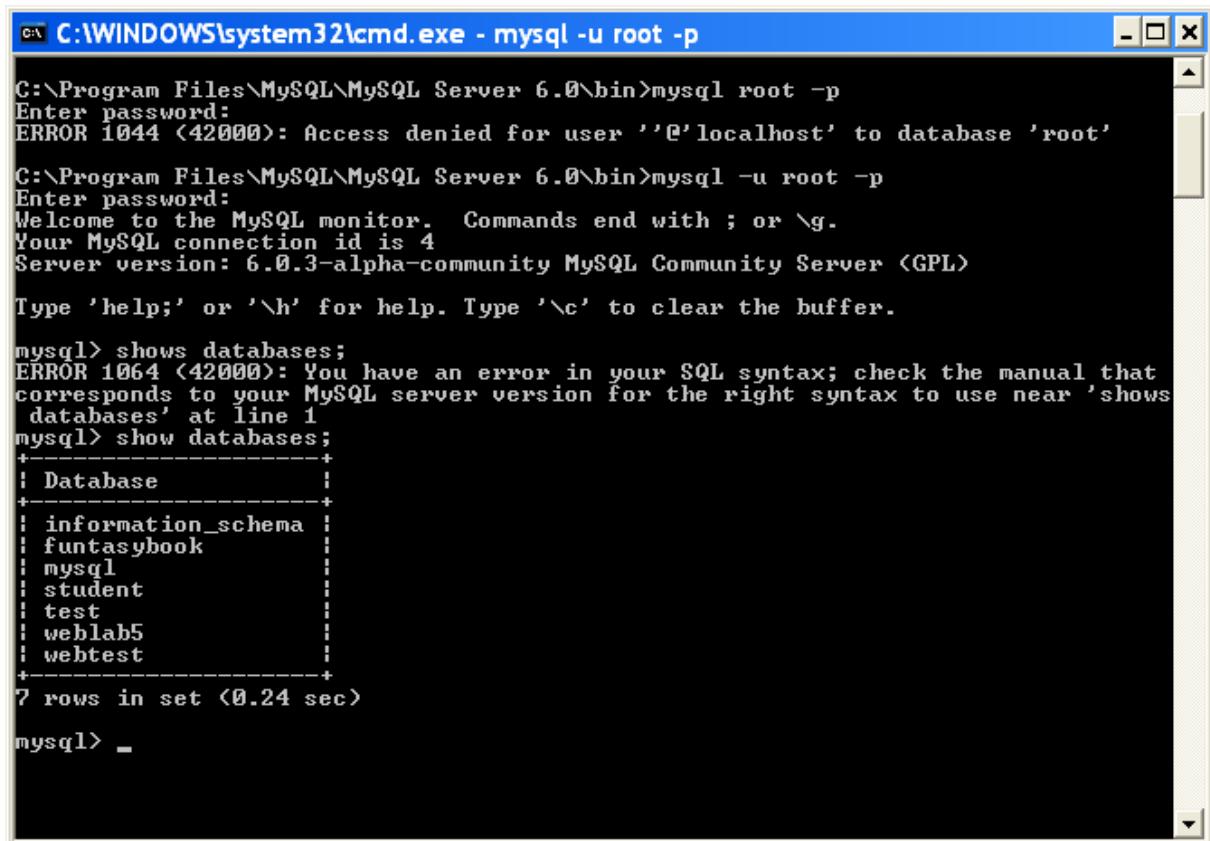
- Console (built-in console)
- Graphic User Interface (Third-Party Tools)

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

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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'

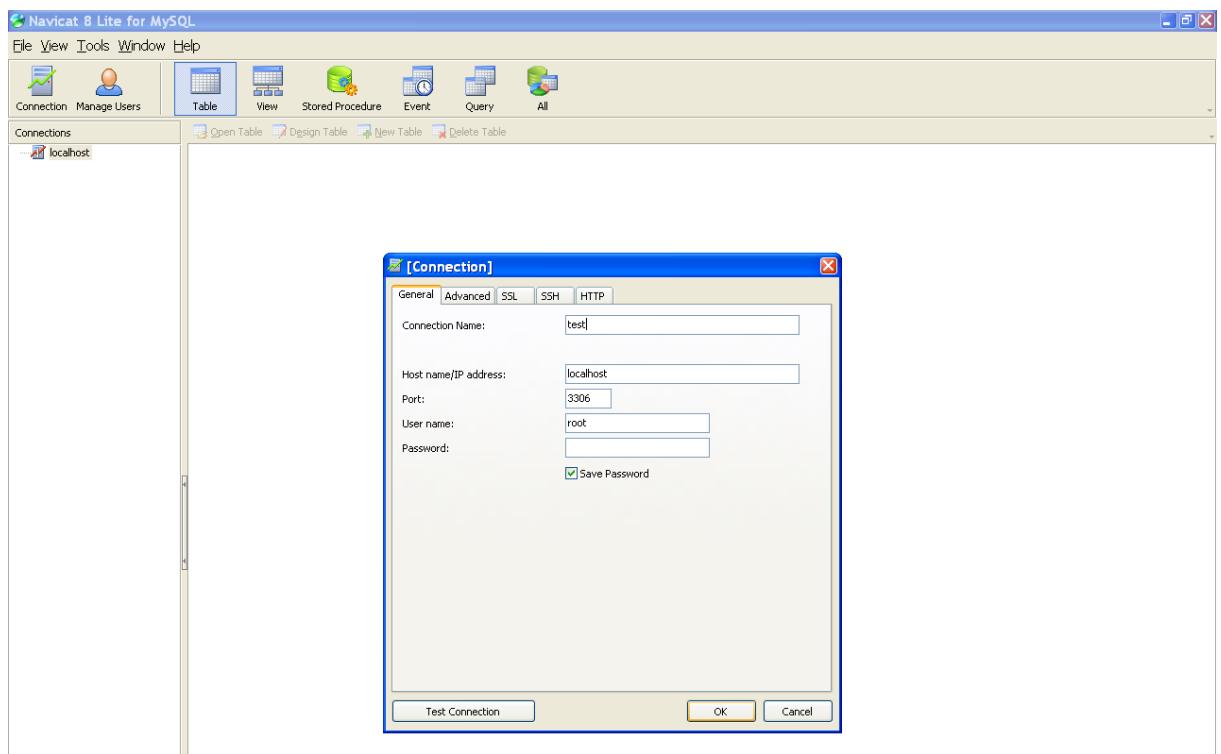
C:\>Program Files\MySQL\MySQL Server 6.0\bin>mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 4
Server version: 6.0.3-alpha-community MySQL Community Server (GPL)

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: 12PM, October 18, 2016 (Sunday's night)