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COMP2121 E-Business

Lab 10: MySQL and PHP 3

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Outline

1. Deploy to the COMP MySQL (MariaDB)
2. Deploy to the production http server (COMP)

Ex1: Create a PHP project in Apache Netbeans IDE

- Make sure that your Apache service and MySQL are running.
- Create the new PHP application Project Name as *Lab10MySQL*
- Locate the new project in your local Apache's *htdocs* folder, for example,
 - D:\eBusinessKevinYuenLabs\Apache24\htdocs*Lab10MySQL*

Project Properties - Lab10MySQL

Categories:

- Sources
- Run Configuration
- Browser
- JavaScript Libraries
 - npm
 - Bower
 - CDNJS
- JavaScript
 - RequireJs
 - Oracle JET
- CSS Preprocessors
- Include Path
- Ignored Folders
- Frameworks
 - Doctrine2
 - Nette2
 - Smarty
 - Symfony 2/3
- Testing
 - atoum
 - Codeception
 - Nette Tester
 - PHPUnit
- JavaScript Testing
- Selenium Testing
- Documentation

Configuration: COMP [New... Delete]

Run As: Remote Web Site (FTP, SFTP)

Project URL: http://www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/

Index File: index.php [Browse...]

Arguments: http://www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/index.php

Remote Connection: csdoor.comp.polyu.edu.hk [Manage...]

Upload Directory: /Lab10MySQL
sftp://csdoor.comp.polyu.edu.hk/webhome/kf2yuen/public_html/Lab10MySQL

Upload Files: On Run
Files will be uploaded when the project is run

☐ Preserve Remote File Permissions (slows down file transfer)
Permissions are not preserved for local files, only for remote ones

☐ Upload Files Directly (temporary file is not used)
File transfer is faster but less safe, so use with caution

[Advanced...]

[OK] [Cancel] [Help]

Manage Remote Connections

csdoor.comp.polyu.edu.hk [SF] Name: csdoor.comp.polyu.edu.hk

Host Name: csdoor.comp.polyu.edu.hk Port: 22

User Name: kf2yuen

Password: [Masked]

Leave password empty to be prompted.
(or specify Private Key file)

Private Key File: [Browse...]

Running ssh-agent will be used.

Known Hosts File: [Browse...]

Initial Directory: /webhome/kf2yuen/public_html

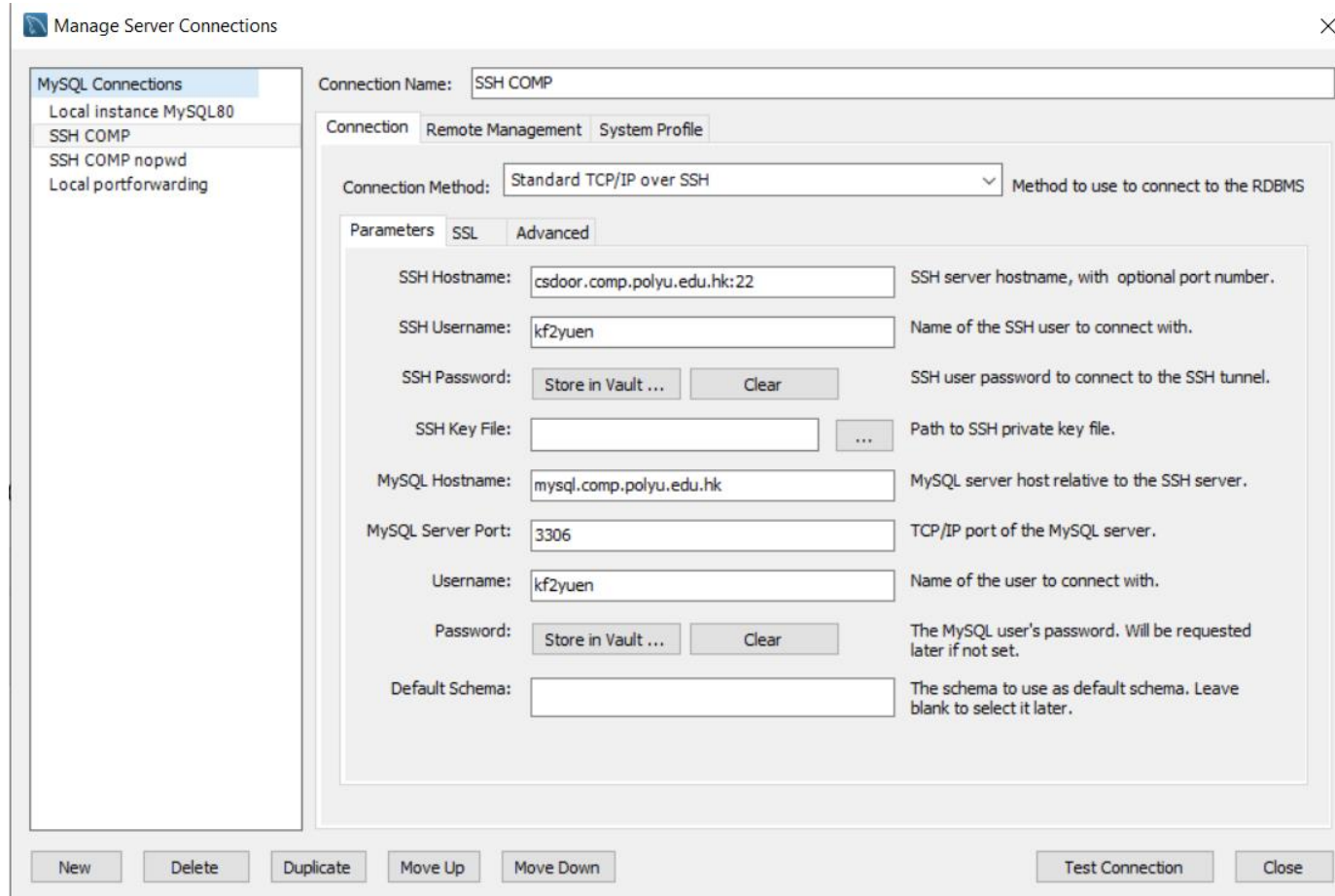
Timeout (s): 30

Keep-alive interval (s): 30 Interval 0 means disabled.

[Add...] [Remove] [Test Connection] [Configure Proxy...]

[OK] [Cancel] [Help]

Ex2: Connect COMP MySQL via TCP/IP over SSH in Workbench



Manage Server Connections

MySQL Connections

- Local instance MySQL80
- SSH COMP
- SSH COMP nopwd
- Local portforwarding

Connection Name: SSH COMP

Connection Remote Management System Profile

Connection Method: Standard TCP/IP over SSH Method to use to connect to the RDBMS

Parameters SSL Advanced

SSH Hostname: csdoor.comp.polyu.edu.hk:22 SSH server hostname, with optional port number.

SSH Username: kf2yuen Name of the SSH user to connect with.

SSH Password: Store in Vault ... Clear SSH user password to connect to the SSH tunnel.

SSH Key File: ... Path to SSH private key file.

MySQL Hostname: mysql.comp.polyu.edu.hk MySQL server host relative to the SSH server.

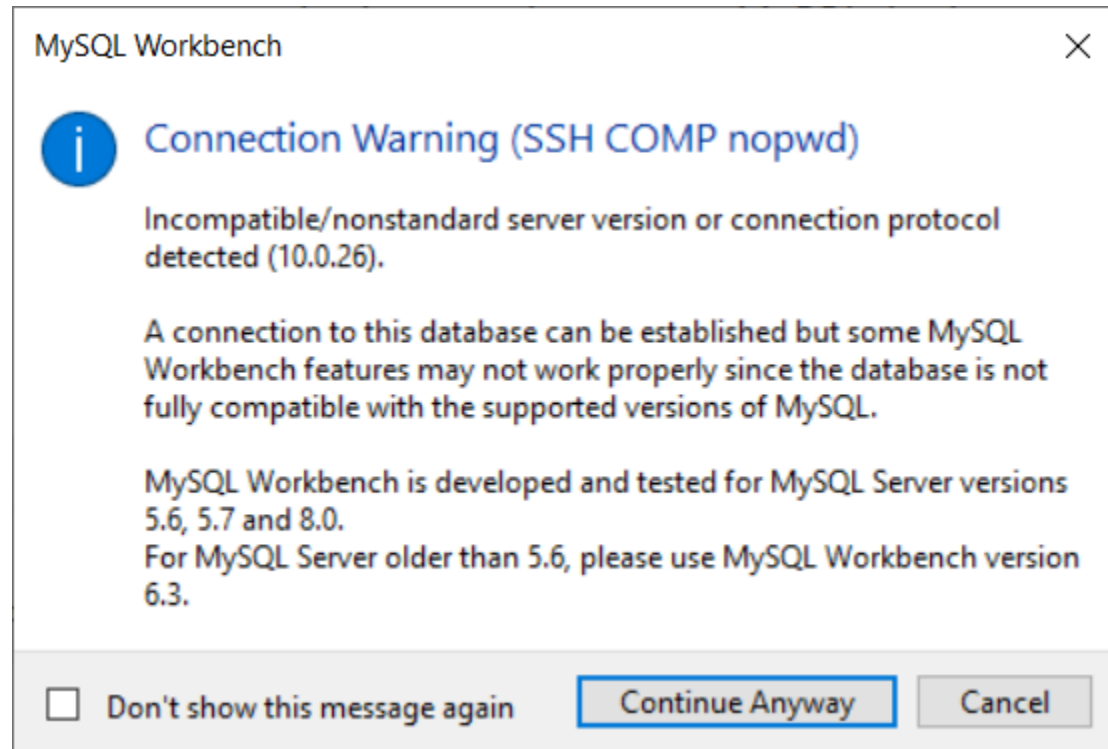
MySQL Server Port: 3306 TCP/IP port of the MySQL server.

Username: kf2yuen Name of the user to connect with.

Password: Store in Vault ... Clear The MySQL user's password. Will be requested later if not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

New Delete Duplicate Move Up Move Down Test Connection Close



COMP is using MariaDB (not oracle MySQL).
Click “Continue Anyway”.

Ex3: Create a table in COMP MySQL(MariaDB)

lab08.customer x

Info Columns Indexes Triggers Foreign keys Partitions Grants DDL

DDL for lab08.customer

```
1 CREATE TABLE `customer` (  
2   `id` int NOT NULL AUTO_INCREMENT,  
3   `name` varchar(45) DEFAULT NULL,  
4   `pwd` varchar(45) DEFAULT NULL,  
5   `email` varchar(45) DEFAULT NULL,  
6   `gender` varchar(45) DEFAULT NULL,  
7   `date` varchar(45) DEFAULT NULL,  
8   `phone` varchar(45) DEFAULT NULL,  
9   `check` varchar(45) DEFAULT NULL,  
10  PRIMARY KEY (`id`)  
11 ) ENGINE=InnoDB AUTO_INCREMENT=21 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

Copy this code of local MySQL to execute in COMP MySQL

Do not need this line of code.

Ex3: Create a table in COMP MySQL(MariaDB)

The screenshot displays a database management interface. On the left, the 'Navigator' pane shows a tree structure under 'SCHEMAS' with a search filter 'Filter objects'. The 'kf2yuen' database is expanded, showing 'Tables' and a 'customer' table. Below this, the 'Table: customer' section lists its columns: id, name, pwd, email, gender, date, phone, and check, each with its data type and constraints.

The main editor window, titled 'db*', shows the SQL code for creating the 'customer' table. The code is as follows:

```
1 • use kf2yuen;
2
3 • CREATE TABLE `customer` (
4     `id` int NOT NULL AUTO_INCREMENT,
5     `name` varchar(45) DEFAULT NULL,
6     `pwd` varchar(45) DEFAULT NULL,
7     `email` varchar(45) DEFAULT NULL,
8     `gender` varchar(45) DEFAULT NULL,
9     `date` varchar(45) DEFAULT NULL,
10    `phone` varchar(45) DEFAULT NULL,
11    `check` varchar(45) DEFAULT NULL,
12    PRIMARY KEY (`id`)
13 )
```


Ex4: Check server connection and information

Copy Ex5.php in Lab 8 and rename as checkCon.php. Change the code as below.

```

1 <!DOCTYPE html>
2 <!--
3 COMP2121
4 Lab 10
5 -->
6 <html>
7 <head>
8 <meta charset="UTF-8">
9 <title>Lab10</title>
10 </head>
11 <body>
12 <?php
13 include "pwd.php"; // to hide my MySQL passwords;
14
15 $serverName = "mysql.comp.polyu.edu.hk";
16 $userName = "kf2yuen";
17 $password = $yuenPolyU; //you may write your "password" directly
18 $dbname = "kf2yuen";
19
20 $connection = new mysqli($serverName, $userName, $password, $dbname);
21
22 if (!$connection->connect_error) {
23     echo "Connected successfully";
24 } else {
25     die("Connection failed: " . $connection->connect_error);
26 }
27
28 echo "<br> server info: " . $connection -> server_info . "<br>";
29 echo "<br> server_version: " . $connection -> server_version . "<br>";
30 echo phpinfo();
31 ?>
32
33 </body>
34 </html>

```

http://www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/checkCon.php

Lab10

Connected successfully
server info: 5.5.5-10.0.26-MariaDB
server_version: 50505

PHP Version 7.3.6

System	Linux ad-www4.COMP.POLYU.EDU.HK 3.10.0-957.21.2.el7.x86_64 #1 SMP Wed Jun 5 14:26:44 UTC 2019 x86_64
Build Date	May 28 2019 09:32:59
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
Additional .ini files parsed	/etc/php.d/10-opcache.ini, /etc/php.d/20-bcmath.ini, /etc/php.d/20-bz2.ini, /etc/php.d/20-calendar.ini, /etc/php.d/20-ctype.ini, /etc/php.d/20-curl.ini, /etc/php.d/20-dom.ini, /etc/php.d/20-exif.ini, /etc/php.d/20-fileinfo.ini, /etc/php.d/20-ftp.ini, /etc/php.d/20-gd.ini, /etc/php.d/20-gettext.ini, /etc/php.d/20-ibm_db2.ini, /etc/php.d/20-iconv.ini, /etc/php.d/20-intl.ini, /etc/php.d/20-json.ini, /etc/php.d/20-ldap.ini, /etc/php.d/20-mbstring.ini, /etc/php.d/20-mysqli.ini, /etc/php.d/20-oci8.ini, /etc/php.d/20-odbc.ini, /etc/php.d/20-pdo.ini, /etc/php.d/20-phar.ini, /etc/php.d/20-posix.ini, /etc/php.d/20-pspell.ini, /etc/php.d/20-shmop.ini, /etc/php.d/20-simplexml.ini, /etc/php.d/20-soap.ini, /etc/php.d/20-sockets.ini, /etc/php.d/20-sqlite3.ini, /etc/php.d/20-sysmsg.ini, /etc/php.d/20-sysvsem.ini, /etc/php.d/20-sysvshm.ini, /etc/php.d/20-tokenizer.ini, /etc/php.d/20-xml.ini, /etc/php.d/20-xmlwriter.ini, /etc/php.d/20-xsl.ini, /etc/php.d/30-mcrypt.ini, /etc/php.d/30-mysql.ini, /etc/php.d/30-pdo_mysql.ini, /etc/php.d/30-pdo_oci.ini, /etc/php.d/30-pdo_odbc.ini, /etc/php.d/30-pdo_sqlite.ini, /etc/php.d/30-uuid.ini, /etc/php.d/30-xmlreader.ini, /etc/php.d/30-xmlrpc.ini, /etc/php.d/40-apcu.ini, /etc/php.d/40-igmp.ini, /etc/php.d/40-memcache.ini, /etc/php.d/40-memcached.ini, /etc/php.d/40-msgpack.ini, /etc/php.d/40-zip.ini, /etc/php.d/50-memcached.ini
PHP API	20180731
PHP Extension	20180731
Zend Extension	320180731
Zend Extension Build	API320180731,NTS
PHP Extension Build	API20180731,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	provided by mbstring
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, compress.bzip2, phar, zip
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, sslv3, tls, tlsv1.0, tlsv1.1, tlsv1.2

Copy the files in Lab09 and rename as below:

Ex5a.php → Registration.php

Ex5b.php → login.php

Ex5c.php → product.php

Ex6.php → logout.php

connection.php

Change the codes for the file names accordingly.

registration.php

```
//Redirect to login.php
$time = 5 ;
// echo "this is ex5a.php";
header("refresh:$time; url= login.php");

echo " <p>Redirect to the login webpage in $time seconds;
      <br> Or press <a href='login.php'>login</a> directly. </p>";
```

product.php

```
<a href="logout.php"> logout </a>

if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] != true ){
    echo "You cannot see this webpage if you do not login.";
    echo "<p>System will go to login page in 5 seconds.<p>";
    header("refresh:5; url= login.php");
    echo "<p>Or press here <a href='login.php'>login</a>. </p>";
    exit;
}
```

Ex5

Login.php

```
$time = 5;
echo "<p>redirecting to content page with login "
    . "in $time seconds</p>";
header("refresh:$time; url= product.php");
echo "<p>Press <a href='product.php'>here</a>. </p>";
```

connection.php

```
$serverName = "mysql.comp.polyu.edu.hk";
$username = "kf2yuen";
$password = $yuenPolyU; //you may write you
$dbname = "kf2yuen";
```

logout.php

```
// Redirect to login page
echo "Please come back again.";
echo "<p>System will leave in 5 seconds.<p>";
header("refresh:5; url= login.php");
echo "<p>Or press <a href='login.php'> here </a> to leave. </p>";
exit;
~
```


www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/Registration.php

Connected successfully

Registration is successful!

Redirect to the login webpage in 5 seconds;
Or press [login](#) directly.

Membership Registration

Name:
Password:
Retype Password:
Email:
Retype email:
Gender: ☐ Female ☐ Male ☐ Others
Date of Birth (optional): 
Phone number:
Agree with the terms and services: ☐

Cookie name = Kevin Yuen
Cookie pwd = 123
Cookie email = kf2yuen@con.hk
Cookie gender = Male
Cookie date = 2020-11-17
Cookie phone = 1111
Cookie check = yes

<http://www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/Registration.php>
Please use email for your login name:
Login Name:
Password:

Connected successfully

<http://www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/logout.php>
Please use email for your login name:
Login Name:
Password:

Connected successfully

<http://www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/login.php>
Please use email for your login name:
Login Name:
Password:

Connected successfully

```
array(3) { ["name"]=> string(10) "Kevin Yuen" ["email"]=> string(14) "kf2yuen@con.hk" ["pwd"]=> string(3) "123" }
```


Hello Kevin Yuen

redirecting to content page with login in 5 seconds

Press [here](#).

www4.comp.polyu.edu.hk/~kf2yuen/Lab10MySQL/product.php

[logout](#)

You will see error below

Notice: Undefined variable: userName in /webhome/kf2yuen/public_html/Lab10MySQL/product.php on line 29

You will see your name stored in a session variable.

Kevin Yuen

This is the product page.

Please find some products here.

Please come back again.

System will leave in 5 seconds.

Or press [here](#) to leave.

Q&A
Thank you