

Fall, 2020

COMP2121 E-Business

Lab 5: PHP 1

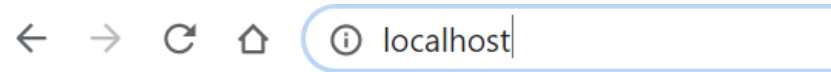
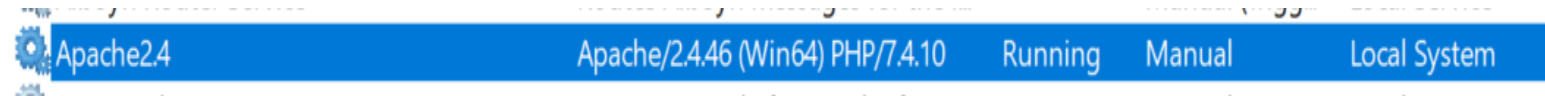
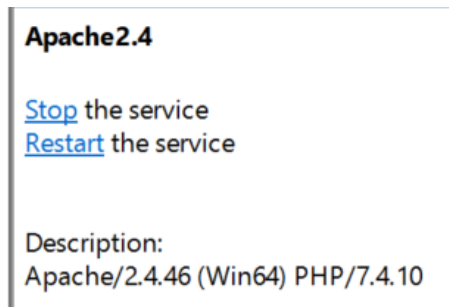
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References

- <https://www.w3schools.com/php/>
- <https://www.php.net/docs.php>

Ex1: Test your local apache server (review in Lab 1)

- Please complete the PHP installation in Lab 1.
- For some reasons, if you cannot install the PHP server, please use the COMP PHP server providing that you are in COMP network either physically or virtually.
- Launch “**services**” (for window users), making sure that your apache server is running.



- Test your web server:

It works!hahahah....

Ex2: Accessing your personal page from UNIX/Linux (review in Lab1)

All COMP students may set up their personal homepages in their Unix accounts. You have to write your own html file(s) before following the procedures below:

1. Create a directory named `public_html` in `/webhome/<Your COMP ID>/`.
Enter `mkdir /webhome/<Your COMP ID>/public_html`.
2. Make the `public_html` readable and executable for the others.
Enter `chmod a+rx /webhome/<Your COMP ID>/public_html`.
3. Copy your html file(s) to the `public_html` directory.
4. Make all your html files readable to the others.
Enter `chmod a+r *.html` in the `public_html` directory.

The URL of your personal homepage is

`http://www2.comp.polyu.edu.hk/~<your COMP ID>`

e.g. `http://www2.comp.polyu.edu.hk/~01234567d`

<https://intranet.comp.polyu.edu.hk/TechServices/TechnicalTips/89>

You need to login by your COMP account.

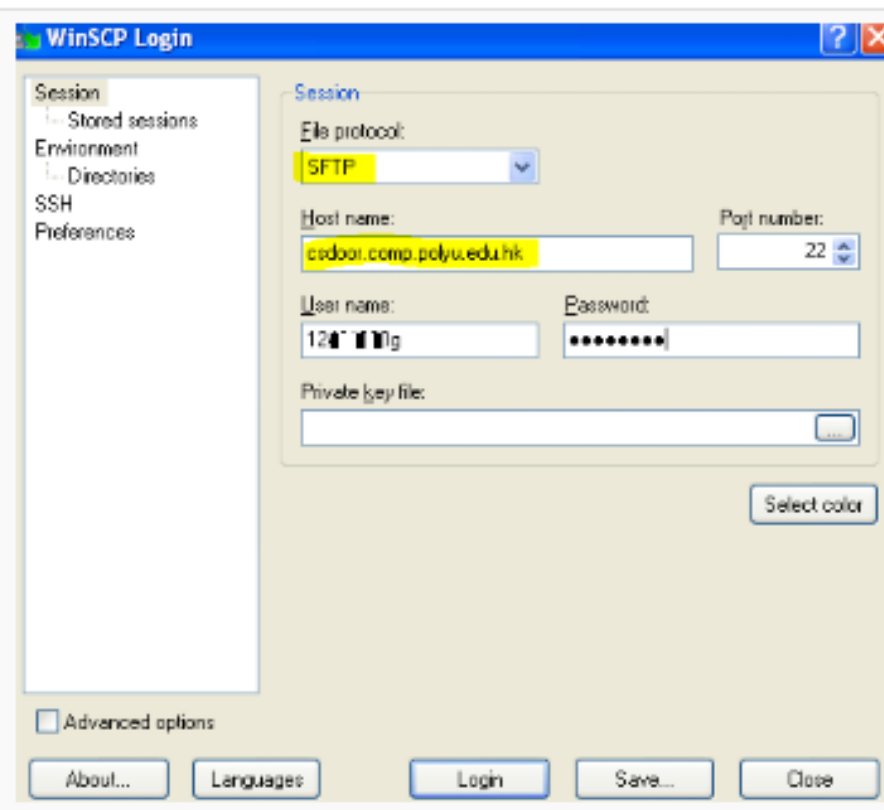
`http://www4.comp.polyu.edu.hk/~kf2yuen/`

Accessing your personal page directory from LAB PCs

- You can access your profile in the Lab Computer with W: Drive.


Accessing your personal page directory with WinSCP

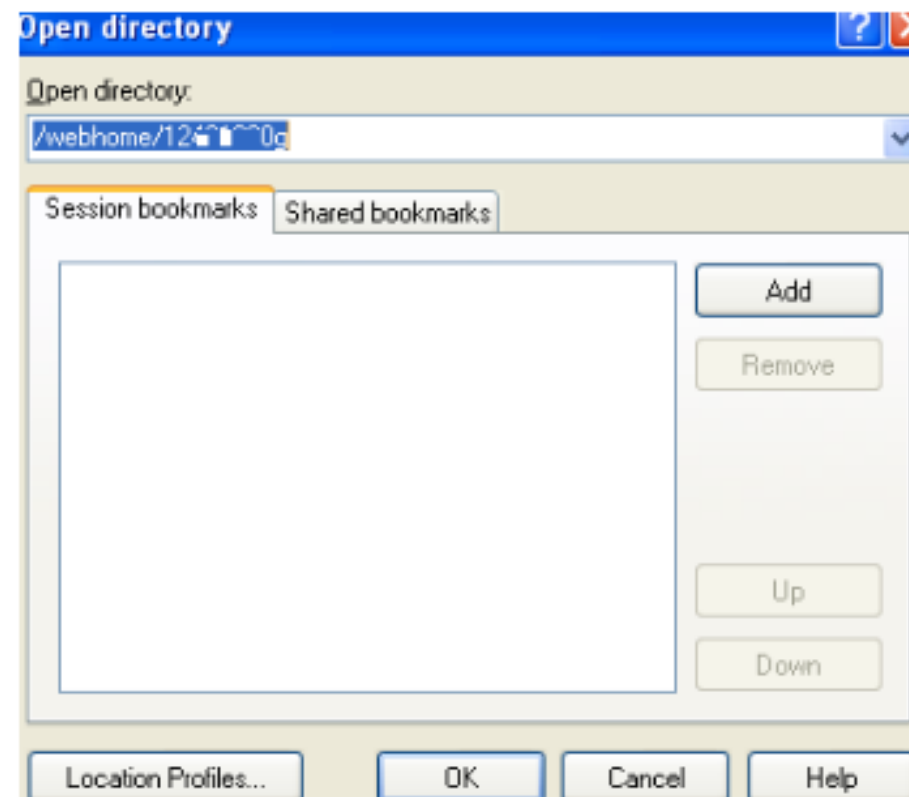
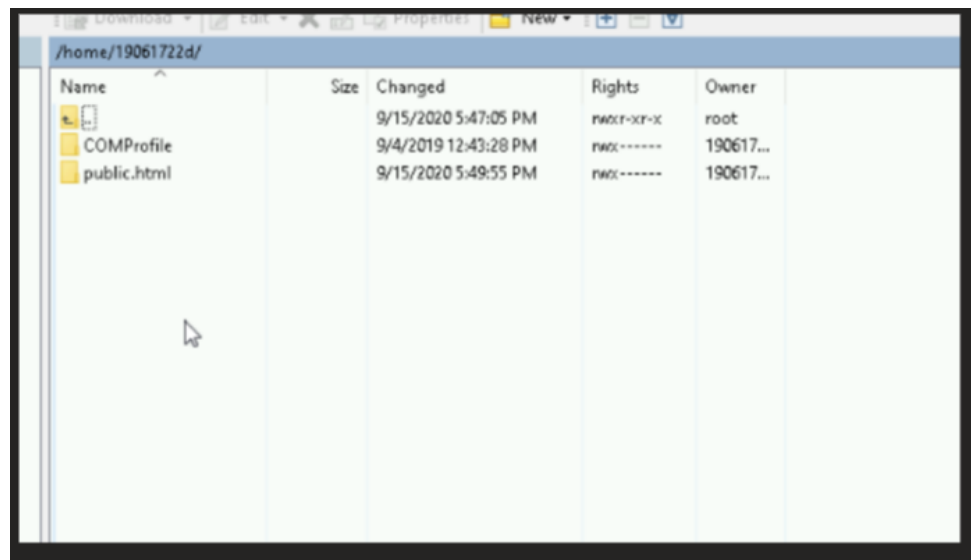
1. Download and install [WinSCP](http://winscp.net/eng/index.php). Start WinSCP and connect to our UNIX/Linux Host, e.g. `csdoor.comp.polyu.edu.hk`



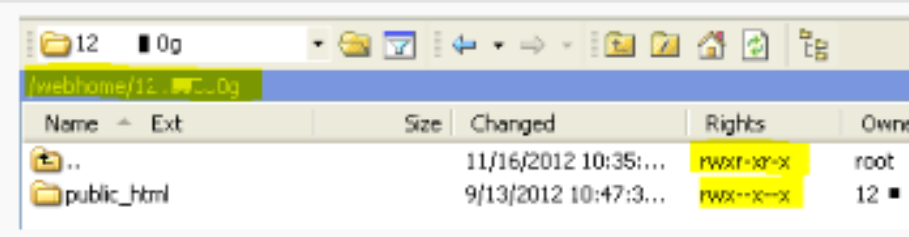
<http://winscp.net/eng/index.php>

`csdoor.comp.polyu.edu.hk`

2. Click  to open directory and type `/webhome/<your_comp_id>` in Open Directory and OK.

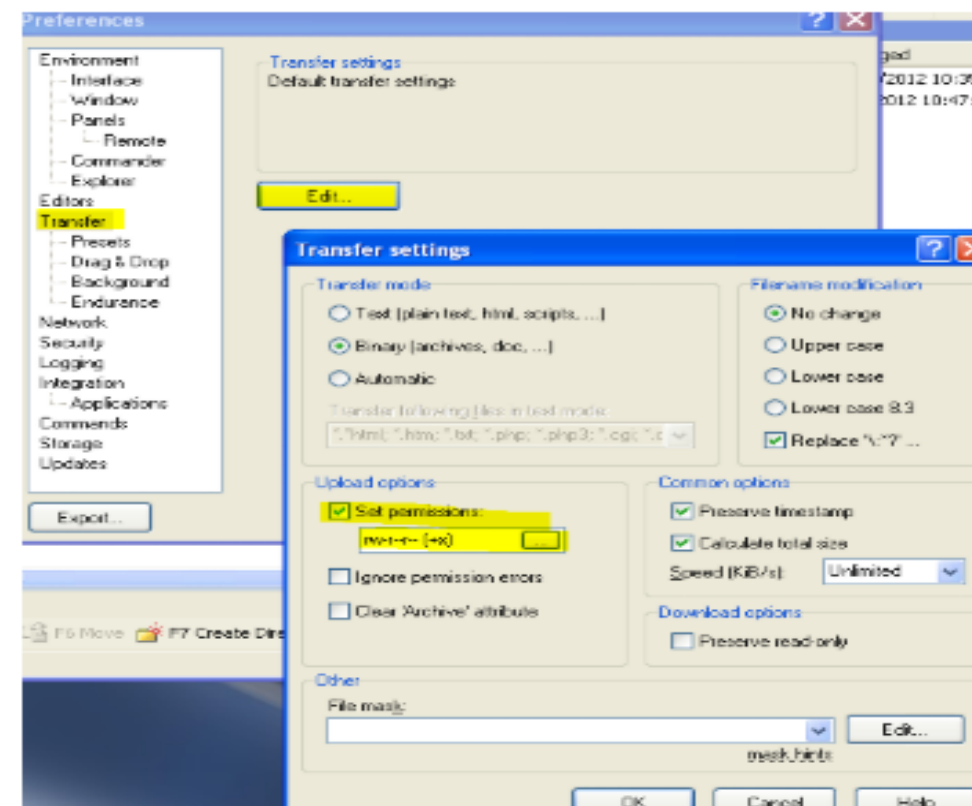


3. You are in your `/webhome/<your_comp_id>`, you have to make sure the access right of your web directory at least `rwx--x--x` or `rwxr-xr-x`



4. Setup default rights of your upload files

- You can do so by click Options -> Preferences -> Transfer -> Edit -> Set Permissions in Upload Options



About using PHP Session

By default, COMP web server uses `memcache` as session handler. It is not necessary to use `session_save_path()` to define the path to store session. Otherwise, error message will be shown.

Test your webpage in COMP Web server

← → ↻ 🏠 ⚠ Not secure | www4.comp.polyu.edu.hk/~kf2yuen/

It works!hahahah....

The URL of your personal homepage is

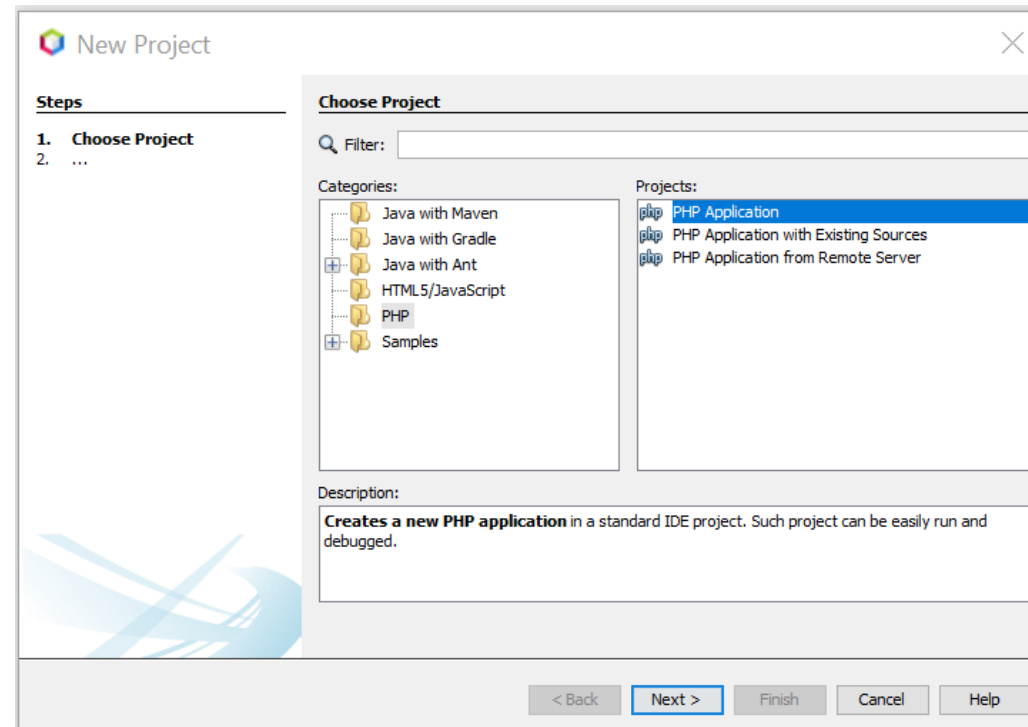
`http://www2.comp.polyu.edu.hk/~<your COMP ID>`

e.g. `http://www2.comp.polyu.edu.hk/~01234567d`

1. To view your website in COMP web server, you are required to connect to polyU network physically or virtually.
2. If you are not in Campus, you can use WinSCP to upload the file to COMP server, and use the web browser in your polyU virtual machine to test the deployment in PolyU Web server.

Ex3: Create a PHP project in Apache Netbeans IDE

- File → New Project → Choose PHP Application



Ex3: Create a PHP project in Apache Netbeans IDE

- Locate the new project under your local Apache's *htdocs* folder, for example,
 - D:\eBusinessKevinYuenLabs\Apache24\htdocs
- Under the *htdocs*, set the Project Name as *LAB05PHP*

Steps

1. Choose Project
2. **Name and Location**
3. Run Configuration
4. PHP Frameworks
5. Composer

Name and Location

Project Name:

Sources Folder:

PHP Version:
PHP version is used only for hints

Default Encoding:

☐ Put NetBeans metadata into a separate directory

- Accept the default setting

Steps

1. Choose Project
2. Name and Location
3. **Run Configuration**
4. PHP Frameworks
5. Composer

Run Configuration

Specify the way this project's files will be deployed.

Configuration settings can be added and modified later in the Project Properties dialog box.

Run As: Local Web Site (running on local web server) ▼

Project URL: http://localhost/Lab05PHP/

☐ Copy files from Sources Folder to another location

Copy to Folder:

▼

Browse...

☐ Copy files on project open

- We do not need these frameworks at this moment. Just click “Next”.

New PHP Project

Steps

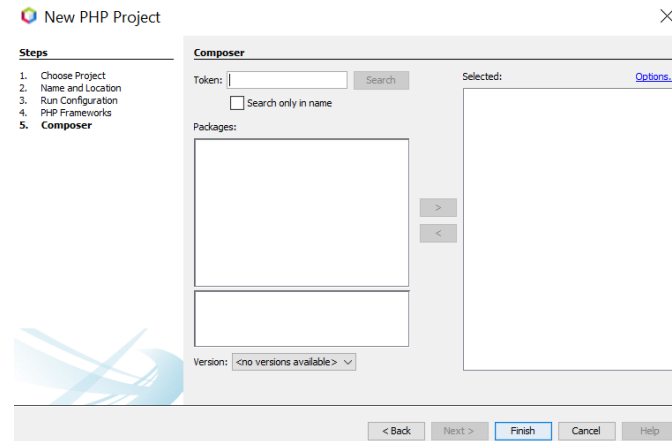
1. Choose Project
2. Name and Location
3. Run Configuration
4. **PHP Frameworks**
5. Composer

PHP Frameworks

- ☐ Symfony 2/3 PHP Web Framework
- ☐ Nette2 PHP Web Framework
- ☐ Zend2 PHP Web Framework
- ☐ Doctrine2 PHP Web Framework

Ex3: Create a PHP project in Apache Netbeans IDE

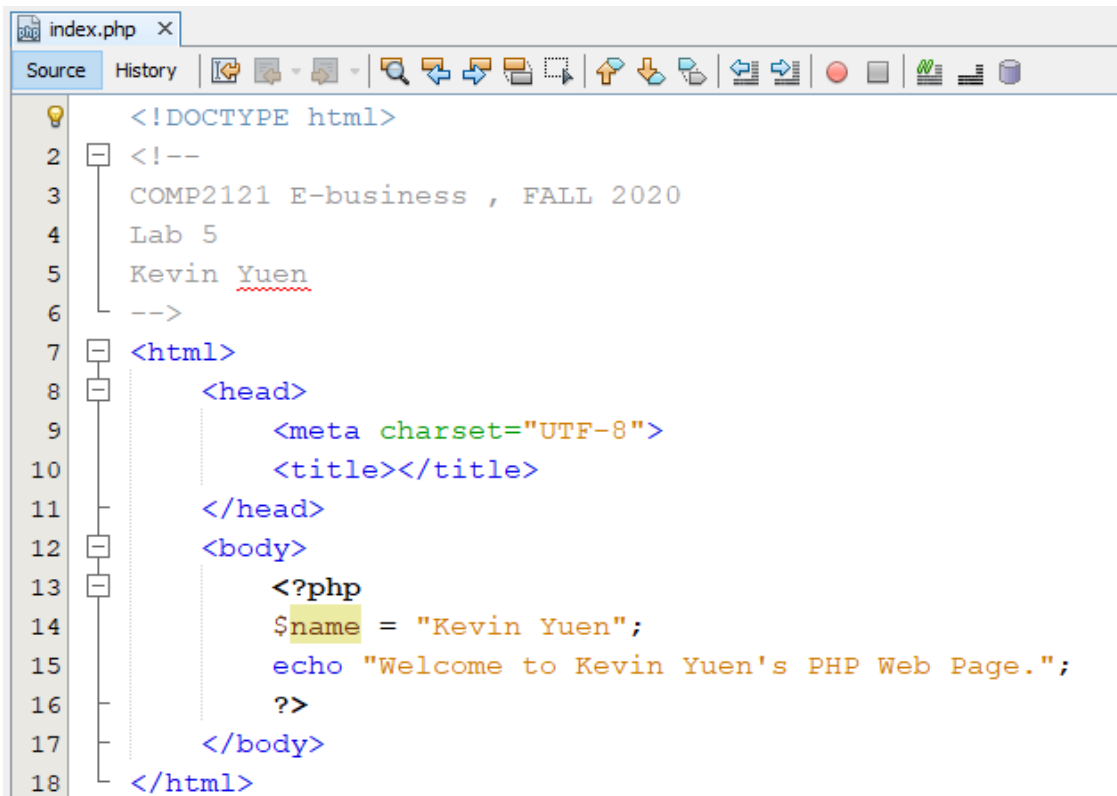
- No Composer is required. Click finish.



- You will find that a new folder named, Lab05PHP, has been created under *htdocs*.

This PC > DATA (D:) > eBusinessKevinYuenLabs > Apache24 > htdocs			
Name	Date modified	Type	Size
Lab05PHP	10/12/2020 3:11 PM	File folder	

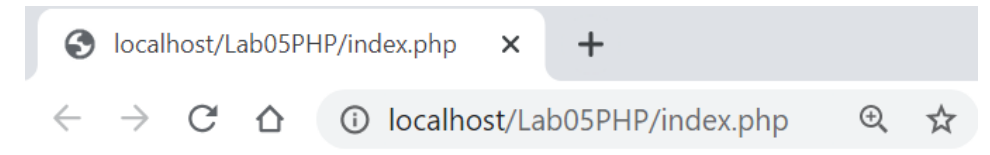
Launch your first PHP webpage with Netbeans



```
index.php x
Source History
<!DOCTYPE html>
<!--
COMP2121 E-business , FALL 2020
Lab 5
Kevin Yuen
-->
<html>
<head>
<meta charset="UTF-8">
<title></title>
</head>
<body>
<?php
$name = "Kevin Yuen";
echo "Welcome to Kevin Yuen's PHP Web Page.";
?>
</body>
</html>
```

Server-side script

Run file
(ctrl +F6)



Welcome to Kevin Yuen's PHP Web Page.

View page source

```
1 <!DOCTYPE html>
2 <!--
3 COMP2121 E-business , FALL 2020
4 Lab 5
5 Kevin Yuen
6 -->
7 <html>
8 <head>
9 <meta charset="UTF-8">
10 <title></title>
11 </head>
12 <body>
13 Welcome to Kevin Yuen's PHP Web Page.
14 </body>
15 </html>
```

Client-side script in web browser

Ex4: Connect to COMP web server by Netbeans

1. Create the Project Name as *LAB05PHPCOMP*.
2. If you create the project under htdocs, it will be easier for you to develop locally and deploy remotely.

New PHP Project

Steps

1. Choose Project
2. **Name and Location**
3. Run Configuration
4. PHP Frameworks
5. Composer

Name and Location

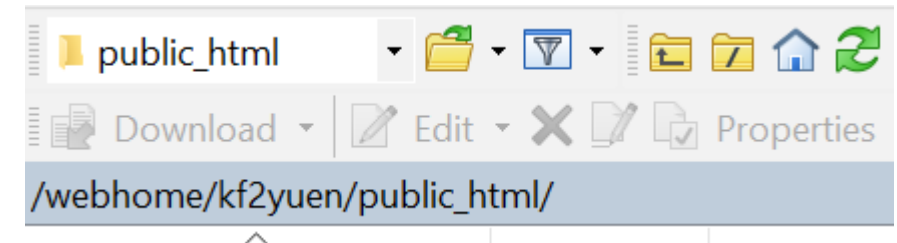
Project Name:

Sources Folder:

PHP Version:

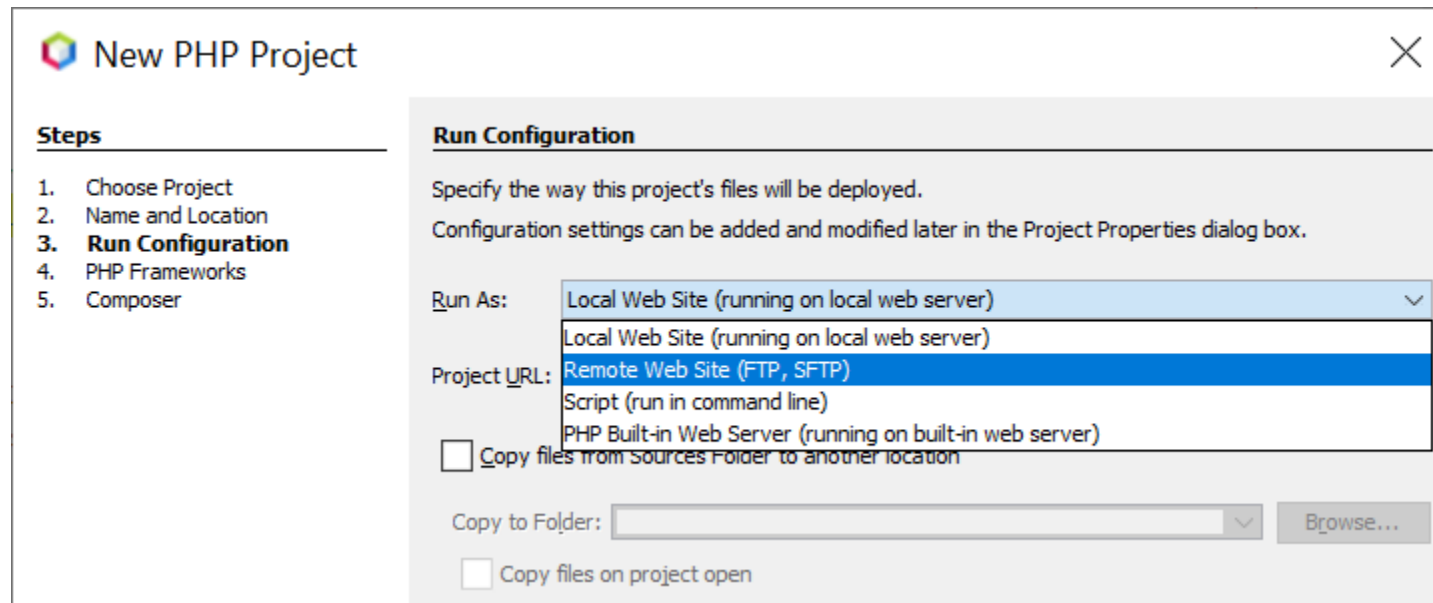
PHP version is used only for hints

Default Encoding:



Ex4: Connect to COMP web server by Netbeans

- Choose Remote Web Site (FTP, SFTP)



- Setup SFTP.

Run Configuration

Specify the way this project's files will be deployed.
Configuration settings can be added and modified later in the Project Properties dialog box.

Run As: Remote Web Site (FTP, SFTP) ▼

Project URL:

Remote Connection: <no connection defined> ▼ Manage...

Upload Directory:

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

Click "manage..."

Manage Remote Connections

Name:

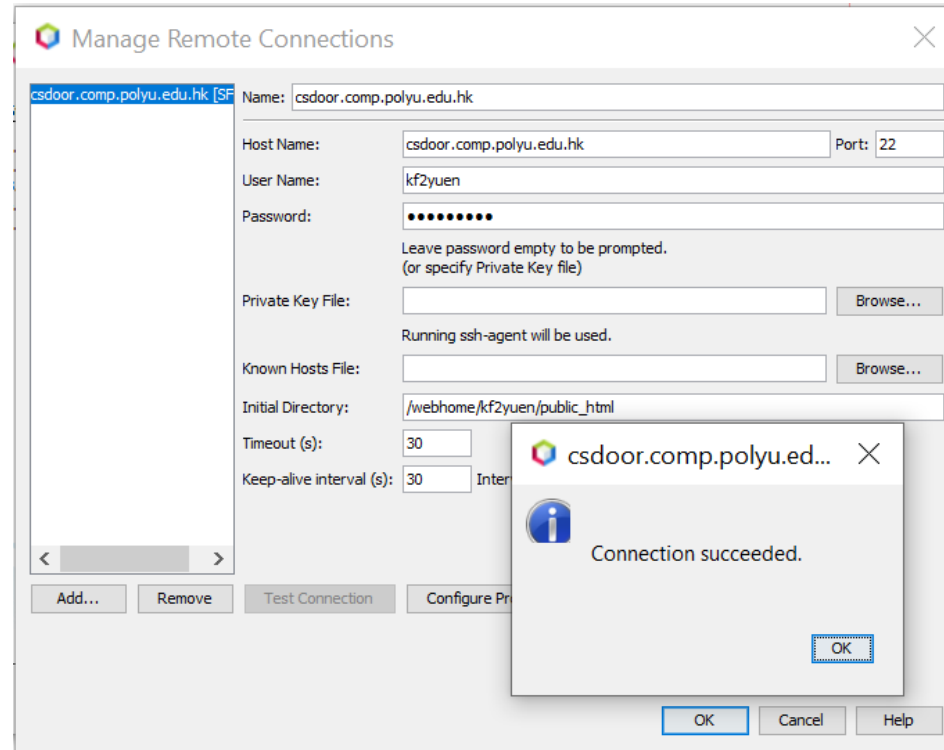
Create New Connection

Connection Name:

Connection Type: SFTP ▼

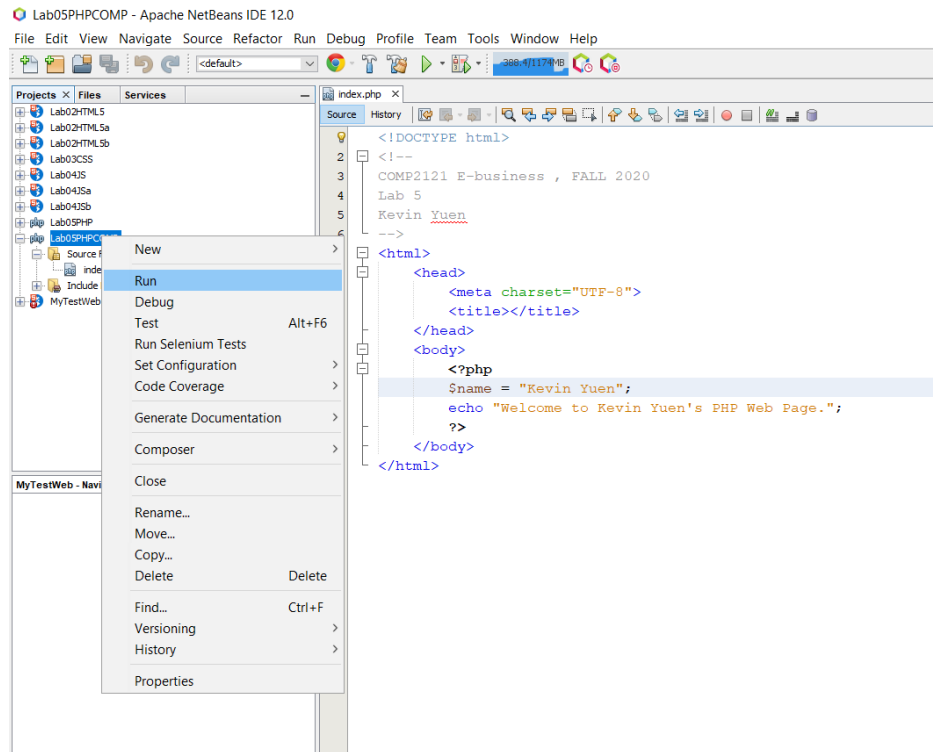
OK Cancel

- Set the remote connection



For the rest step, accept the default setting and click “next” until “finish”.

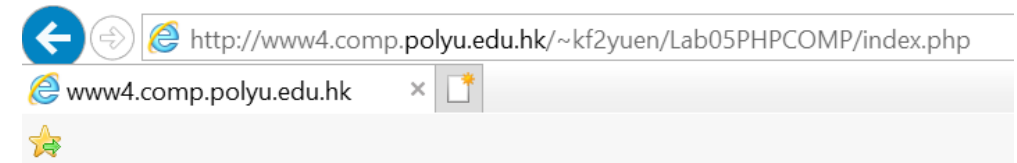
1. Copy the index.php from Lab05PHP to replace the one in Lab05PHPCOMP.
2. Select the project Lab05PHPCOMP, Right click, and choose Run.
3. Ignore the security question and continue



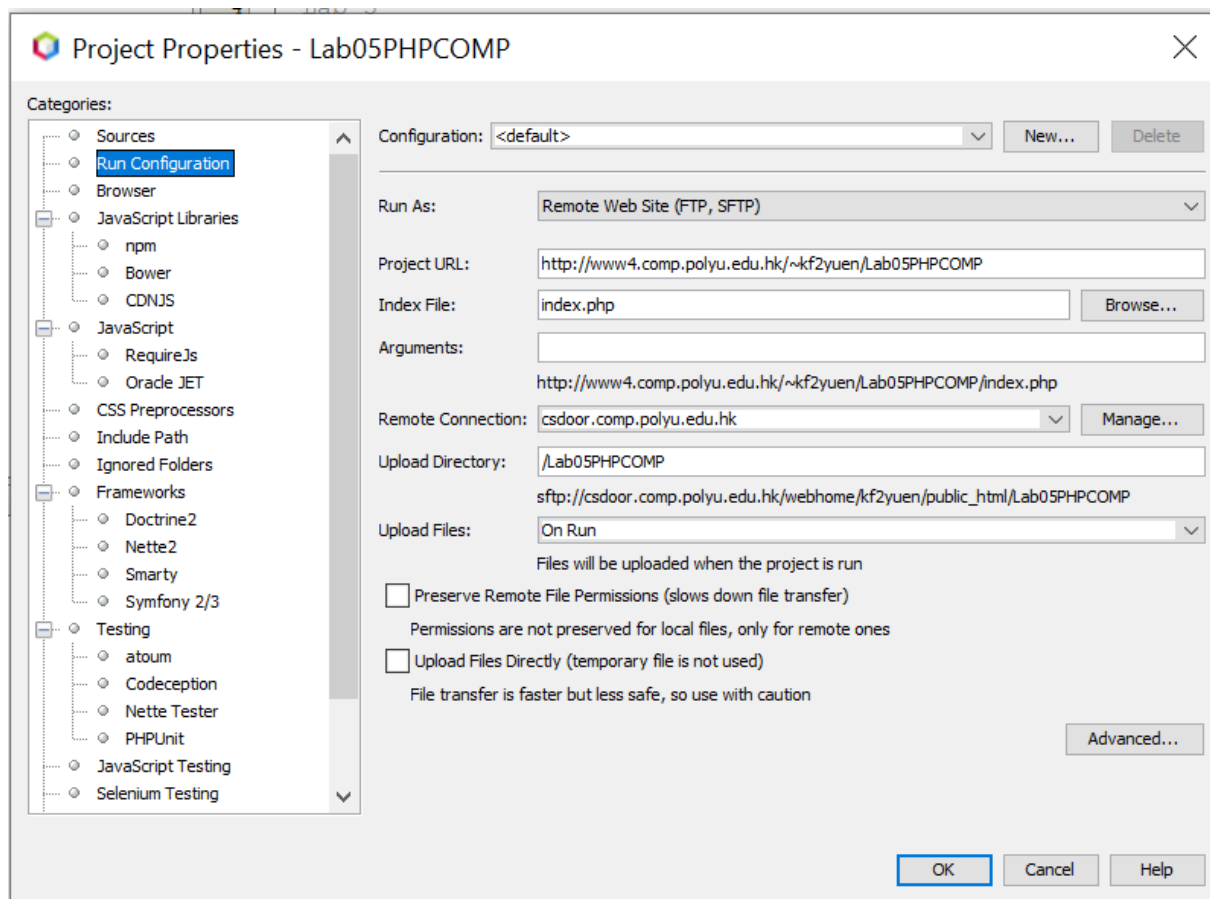
Use WINSCP to have double check

/webhome/kf2yuen/public_html/				
Name	Size	Changed	Rights	Owner
Lab05PHPCOMP		9/15/2020 5:53:57 PM	rwX--X--X	kf2yuen
		10/12/2020 3:53:27 PM	rwXr-Xr-X	kf2yuen

Congratulations!



- If you cannot launch the website, configure the project properties.
- Right click the project, and choose properties.

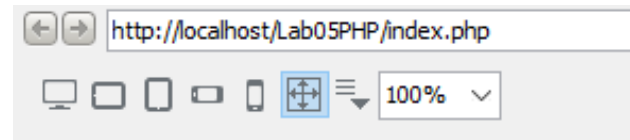


/webhome/kf2yuen/public_html/				
Name	Size	Changed	Rights	Owner
↑		9/15/2020 5:53:57 PM	rwX--X--X	kf2yuen
Lab05PHPCOMP		10/12/2020 3:53:27 PM	rwXr-Xr-X	kf2yuen

So here, we have two ways to deploy your Files into the web server in polyU COMP.

My preference

1. Develop and test the codes using localhost.



Welcome to Kevin Yuen's PHP Web Page.

2. Deploy, test, redeploy and re-test the finished codes in remote (production) server until no problem is found.

D:\eBusinessKevinYuenLabs\Apache24\htdocs\Lab05PHP\			/webhome/kf2yuen/public_html/		
Name	Size	Type	Name	Size	Changed
..		Parent directory	..		9/15/2020 5:53:57 PM
nbproject		File folder	Lab05PHPCOMP		10/12/2020 3:53:27 PM
index.php	1 KB	PHP Source File	hi.html	1 KB	9/15/2020 5:52:23 PM
			index.html	1 KB	9/13/2020 1:54:18 AM
			test.php	1 KB	9/11/2020 9:39:52 PM

Ex5: Basic PHP Syntax

```

1 <!DOCTYPE html>
2 <!--
3 COMP2121 E-business , FALL 2020
4 Lab 5
5 Kevin Yuen
6 -->
7 <html>
8 <head>
9 <meta charset="UTF-8">
10 <title>Kevin Yuen</title>
11 </head>
12 <body>
13 <?php
14 $name = "Kevin Yuen";
15 // press control + space for auto-completion
16 $currentTime = date('h:i:s, T');
17 echo "<h1> Welcome to ". $name ."'s PHP Web Page</h1>";
18 echo "<p> The time is ". $currentTime . "</p>";
19 ?>
20 </body>
21 </html>

```

Declare php script by <?php ?>

Comments: /single line / or /* multiple lines */

Declare variables by \$

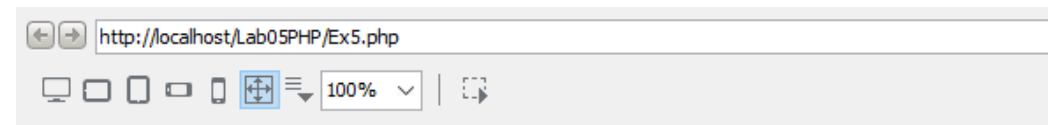
Try H or h

Concatenation .

End by semicolon (;)

Pass the variable values by calling the variable names

output html by echo



Welcome to Kevin Yuen's PHP Web Page

The time is 09:30:49, UTC

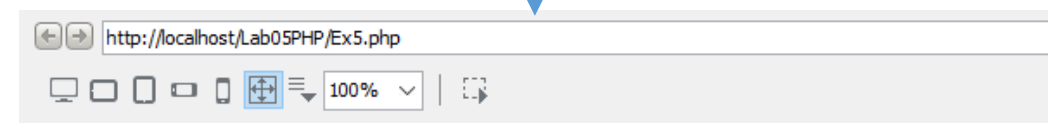
Not our local time

Ex6: set timezone in php server

php.ini

```
955 [Date]
956 ; Defines the default timezone used by the date functions
957 ; http://php.net/date.timezone
958 ;date.timezone =
959 date.timezone = "Asia/Hong_Kong"
```

<https://www.php.net/manual/en/timezones.php>



Welcome to Kevin Yuen's PHP Web Page

The time is 05:33:14, HKT

Hong Kong time

```
1 <!DOCTYPE html>
2 <!--
3 COMP2121 E-business , FALL 2020
4 Lab 5
5 Kevin Yuen
6 -->
7 <html>
8 <head>
9 <meta charset="UTF-8">
10 <title>Kevin Yuen</title>
11 </head>
12 <body>
13 <?php
14 $name = "Kevin Yuen";
15 // press control + space for auto-completion
16 // go to php.ini to set date.timezone = "Asia/Hong_Kong"
17 $currentTime = date('H:i:s, T');
18 echo "<h1> Welcome to ". $name ."'s PHP Web Page</h1>";
19 echo "<p> The time is ". $currentTime . "</p>";
20 ?>
21 </body>
22 </html>
```

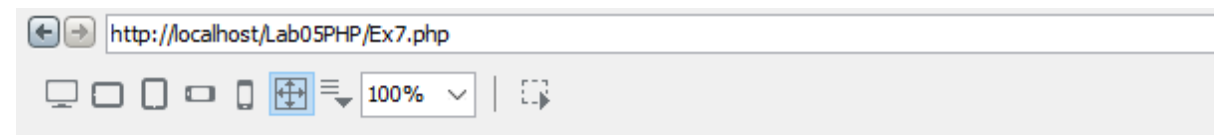
Ex7: If condition

Create a php file named Ex7.php by coping Ex5.php

```
<body>
  <?php
    $name = "Kevin Yuen";
    // press control + space for auto-completion
    // go to php.ini to set date.timezone = "Asia/Hong_Kong"
    $currentTime = date('H:i:s, T');
    echo "<h1>Welcome to ". $name . "'s PHP Web Page</h1>";
    echo "<p> Our time is ". $currentTime . "</p>";

    $hour = date("H");
    $message = "";

    if ($hour >= 5 && $hour < 12) {
        $message = "Good Morning";
    } elseif($hour >= 12 && $hour < 18)
    {
        $message = "Good afternoon";
    } elseif($hour >= 18 && $hour < 21)
    {
        $message = "Good Evening";
    } else {
        $message = "Good Night";
    }
    echo "<p>". $message . "</p>";
  ?>
</body>
```



Welcome to Kevin Yuen's PHP Web Page

Our time is 18:19:02, HKT

Good Evening

Ex8: Some PHP Operators

Create a php file named Ex8.php by copying Ex7.php

<h2>Some PHP Operators</h2>

```
<?php
$a = 3;
$b = 4;
$c = true;
$d = false;
echo $a + $b . "<br>";
echo var_dump($a != $b) . "<br>";
echo "true: " . $c . "<br>";
echo "false:" . $d;
echo "<br>";
echo "false:" . strval(false);
?>
```

Cast to string

<p> It looks that PHP cannot print Boolean value directly.
so we create a function to handle it. </p>

```
<?php
function printBool($bo)
{
    $result = "";
    if($bo){
        $result = "true";
    } else {
        $result = "false";
    }
    return $result;
}
```

Create function

Call function

```
echo "printBool(\$c): " . printBool($c) . "<br>";
echo "printBool(\$d):" . printBool($d) . "<br>";
```

// ternary operator

Ternary operator

```
echo "(\$a > \$b): ";
echo ($a > $b) ? "true" : "false";
echo "<br> However, this does not work. ";
echo "(\$a > \$b): " . ($a > $b) ? "true" : "false";
?>
```

Some PHP Operators

```
7
bool(true)
true: 1
false:
false:
```

It looks that PHP cannot print Boolean value directly. so we create a function to handle it.

```
printBool($c): true
printBool($d): false
```

```
($a > $b): false
```

```
However, this does not work. true
```


Q&A
Thank you