

Lab 1 – Preparation and Hello World

Purpose

- Install software required for this course
- Create your first website 'Hello World'
- Upload your website to a Web Server using FTP Client.

Due Date

- This lab must be handed in:
Friday May 22, 2020 – before midnight

Assessment

- This Lab is worth 2% of your total course mark.

Assigned Readings

- **Lecture Slides** posted on Brightspace
 - Module 2 -> Part 1
- The following chapters of **Fundamentals of Web Development** will be useful in completing this exercise:
 - Chapter 1
 - Chapter 2

Lab Supplies

To complete this lab you will require the following lab supplies:

- Lecture Slides (**Module 1 -> Part 1**) posted on Brightspace
- Textbook: **Fundamentals of Web Development** by Randy Connolly and Ricardo Hoar
- EasyPHP, or other WAMP server
- Eclipse, Notepad (or other text editor, or IDE)
- FileZilla (or other FTP client)

Summary of Tasks

1. Install Eclipse and FileZilla
2. Create your first website using Eclipse/Notepad
3. Upload your website to a Web Server using FileZilla
4. View your webpage using a web browser
5. Submit the URL (hyperlink) for Lab 1 on Brightspace

Task 1

Our first task is to prepare ourselves for the coming Labs and Assignments by installing the software needed to be successful in this course.

FileZilla:

1. Navigate to the following web address: <http://filezilla-project.org/>
2. Click the '**Download FileZilla Client**' button
3. Download and install the appropriate FTP Client (choose the operating system that matches your computer)

Eclipse for PHP:

1. Navigate to the following web address: <http://www.eclipse.org/>
2. Download the appropriate Eclipse client (choose the operating system that matches your computer).

Please download Eclipse from the following URL:

<http://www.eclipse.org/downloads/packages/release/photons/r/eclipse-ide-php-developers>

To know in detail about Eclipse IDE for PHP Programming platform, please review the 'PHP Developer User Guide' from the following URL:

<http://help.eclipse.org/neon/index.jsp>

IMPORTANT NOTE:

The Eclipse client does not have a standard installer. To use the software simply unzip the file you downloaded and run the 'Eclipse.exe' executable.

IMPORTANT NOTE:

In order to run Eclipse, the Java Runtime must be installed on your computer. To download the Java Runtime please go here: <http://www.java.com/en/download/>

Task 2

Create your first website using Eclipse or Notepad.

The title of the web page will be '**Basic concept of web technology**'.

Handwrite the HTML needed to create a webpage that will contain the answers of the following questions:

- Why do we need a Uniform Resource Locator (URL)?
- Give an example of Uniform Resource Locator (URL) and specify all components of an URL.
- What is the difference between a static and a dynamic web site?
- Why do we need Domain Name System (DNS)?
- What is DNS address resolution?
- Give some examples of generic top-Level domains (gTLD).
- Give some examples of country code top-Level domains (ccTLD).
- What is the function (purpose) of Hypertext Transfer Protocol (HTTP)?
- Give some examples of HTTP request methods.
- Define a Web Server.

Be sure to name this file: **index.html**

Task 3

Upload your website to a Web server. You need to purchase a web domain and 4 months of hosting for this course. Please check the announcement in the Brightspace to get detailed information about purchasing your own web hosting domain.

Use **FileZilla FTP client** to connect and deploy your code into your web hosting domain (Web Server). When you connect to the Web server using an FTP client, create a directory called '**/CST8238/Lab1**' under '**/public_html**' directory. Once your course directory has been created navigate to that new directory. Add your '**index.html**' file to this location. (Using FileZilla simply drag the index.html file into your folder)

For more information on using FileZilla, please navigate to the following material in Brightspace: [Course Content](#) → [Extra Material](#) → [FileZilla Instruction.docx](#)

IMPORTANT:

To obtain personal web hosting address, please check the instructions in the 'Announcements' section in Brightspace.

Task 4

View your website using a web browser. Open a web browser and navigate to the following web address:

`http://web-server_domain_name/CST8238/Lab1/<filename>`

For example, the web address to my page is:

<http://rejaulchowdhury.com/CST8238/Lab1/index.html>

Where 'rejaulchowdhury.com' is the domain name of the Web server, 'CST8238/Lab1' is the name of the directory I created in the Web server under '/public_html' directory using FTP client and 'index.html' is the web page of this lab.

Task 5

Once you have confirmed that your webpage is available online, you are ready to hand in your lab.

Create a word document (Lab1.doc) in which write the following Information:

- Student Number
- First Name
- Last Name
- The URL, or hyperlink, prepared in Task 4

To hand in your lab go to Brightspace and navigate to Course Content → Labs and click on 'Lab 1 - Preparation and Hello World' link.

Upload the word document (Lab1.doc) on Brightspace.

IMPORTANT NOTE:

If the URL, or hyperlink, does not direct the professor to the lab you will receive a ZERO for the lab assignment.