Lab 1 –Basic Concept of Web Technology

Purpose

- Create your first webpage '**Basic Concept of Web Technology**'

Due Date

- This lab must be handed in:
  Sept 08, 2023 – before midnight

Assessment

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

Assigned Readings
- ➢ **Lecture Slides** posted on Brightspace
  - Module 1 -> 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
- Notepad++/Notepad (or other text editor, or IDE)

Summary of Tasks
1. Create your first webpage using Notepad++/Notepad.
2. View your webpage using a web browser.

Task 1

Create your first website using Notepad++/Notepad (or any IDE).

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:
- Define HTML. (1 mark)
- Define Client-server model of communications. (1 mark)
- Write down the name of different types of servers. (1 mark)
- Define a Web Server. (1 mark)
- Define Data Centers. (1 mark)
- Why do we need a Uniform Resource Locator (URL)? (1 mark)
- Give an example of Uniform Resource Locator (URL) and specify all components of an URL. (2 marks)
- What is the difference between a static and a dynamic web site? (1 mark)
- Why do we need Domain Name System (DNS)? (1 mark)
- Describe in detail the process of DNS address resolution? (3 marks)
- Give some examples of generic top-Level domains (gTLD). (1 mark)
- Give some examples of country code top-Level domains (ccTLD). (1 mark)
- How can you pass a user's information from the client to the web server? (1 mark)
- What is the function (purpose) of Hypertext Transfer Protocol (HTTP)? (1 mark)
- Describe how a single web page is displayed on a web browser. (2 marks)
- Give some examples of HTTP request methods. (1 mark)

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

Task 2

To hand in your lab go to Brightspace and navigate to Course Content → Labs and click on 'Lab 1 –Basic Concept of Web Technology' link.

Upload the HTML document (**index.html**) on Brightspace.