Module 1 — Overview



Introduction

In this course, we will learn the concepts and technologies needed to **build** modern web applications. We will learn to build interactive, dynamic websites that can persist data from one visit to the next. Before we learn to build such websites, we need to understand some basic concepts and terminology about the web. This module is designed to give a tour of the web at a high level, introduce important terms, and explain some fundamental technologies on which the web is built.

Module Learning Outcomes

After successful completion of this module, you should be able to do the following (in addition to answering the questions listed below):

- 1. List the core technologies used by the web (CLO 1)
 - What is HTTP and what is its use?
 - What is a URL and what is its use?
 - What is HTML and what is its use?
 - What is JavaScript and what is its use?
 - What is CSS and what is its use?
- 2. Explain some important terms used in web development (CLO 1)
 - What is a client?
 - What is a server?
 - o How do a client and a server communicate over the web?
- 3. Explain HTTP request and HTTP response (CLO 1)
 - What are the different parts of an HTTP request?
 - What is in a request line?
 - What is the GET method used for?
 - What is the use of request headers?
 - What are the different parts of an HTTP response?
 - What is in the status line?
 - What is the use of response code?

- What is the use of response headers?
- What may be contained in a response body?
- 4. Explain the different parts of a URL (CLO 1)
 - What is a scheme?
 - What are the server name and port?
 - How does a URL specify which resource it wants from the server?
 - What is the use of query parameters?

Explorations

Use the pages within this module to explore the following concepts:

- Exploration Introduction to the Web and Web Applications (https://canvas.oregonstate.edu/courses/1879154/pages/exploration-introduction-to-the-web-andweb-applications)
- Exploration HTTP Part 1: The Request (https://canvas.oregonstate.edu/courses/1879154/pages/exploration-http-part-1-the-request)
- Exploration HTTP Part 2: The Response (https://canvas.oregonstate.edu/courses/1879154/pages/exploration-http-part-2-the-response)
- Exploration URL (https://canvas.oregonstate.edu/courses/1879154/pages/exploration-url)

Task List

Please make sure to complete the following assignments and other tasks:

- Complete the exercises provided in the explorations
- Complete the Module by Examining the Review Page (https://canvas.oregonstate.edu/courses/1879154/pages/module-1-review)
- Start <u>Assignment 1: HTTP</u> (https://canvas.oregonstate.edu/courses/1879154/assignments/8901643) (https://canvas.oregonstate.edu/courses/1879154/assignments/8901645)
- Complete the <u>Module 1 Feedback Survey</u> (https://canvas.oregonstate.edu/courses/1879154/assignments/8901653)



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