

Learning Guide Unit 1

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Description

Learning Guide Unit 1

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Overview

Unit 1: The Internet

Topics:

- The history of the Internet and the web
 - The role of W3C
 - The rise of web standards
 - Introduction of the underlying technologies that power the World Wide Web
 - Validating web sites against standards and compliance
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Learning Objectives:

By the end of this Unit, you will be able to:

1. Define underlying technologies that power the World Wide Web.
 2. Define standards for designing web page.
 3. Demonstrate ability to examine and validate the code behind web pages.
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Tasks:

- Read the Learning Guide and Reading Assignments
- Participate in the Discussion Assignment (post, comment, and rate in the Discussion Forum)
- Complete and submit the Written Assignment
- Make entries to the Learning Journal
- Take the Self-Quiz

Introduction

The Internet, as a global network, connects people and enables flexible communication. It changed the way we learn, the way we shop, the way we are entertained. Since its inception, every industry was affected. The music industry was the first to find out, that when people are empowered to share, they will do so no matter what the local law says. No matter how many lawyers got involved and how much money was spent, it was the industry that had to change. Today we stream music for free, download some legal files, purchase songs at a great discount.

Such a powerful force in businesses and in personal lives creates many opportunities for technologists. Creating web sites and supporting them is a growing market in most countries. However, the technologies change quickly. As you embark on learning about the Web Design and Programming field, remember to never stop learning. New technologies are always coming out and it is necessary to master them and stay current.

In this unit you will learn about how the Internet was created, what are the rules on the Internet, and what technologies make it run. There are many technologies we will touch on in this course, but please make sure to pay special attention to HTML, JavaScript, and CSS (Cascading Styling Sheets).

Reading Assignment

Study the reading material within the links provided that cover the topics of the first unit.

- Francis, M.N. (2012, March 4). *History of the Web*. Retrieved from https://www.w3.org/community/webed/wiki/The_history_of_the_Web
- MDM Developers. (2019, May 18) *How the Web Works*. Retrieved from https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/How_the_Web_works
- W3C. (2016, December 3) *The Web standards model—HTML, CSS and JavaScript*. Retrieved from https://www.w3.org/community/webed/wiki/The_web_standards_model_-_HTML_CSS_and_JavaScript
- Toothman, J. (2019, March 12), *What's the difference between the Internet and the World Wide Web?* Retrieved from <https://computer.howstuffworks.com/internet/basics/internet-versus-world-wide-web.htm>
- W3C. (n.d.). *Why Validate?* Retrieved from <http://validator.w3.org/docs/why.html>
- W3C. (n.d.). *Web Validation Service*. Retrieved from <https://validator.w3.org/>

Video Resources

W3C Web Accessibility Initiative (WAI). (2017, December 4). *Introduction to web accessibility and W3C standards* [Video]. YouTube.



Khan Academy. (2014, December 9). *HTML validation | Computer programming | Khan Academy* [Video]. YouTube.

HTML validation | Computer programm...



Discussion Assignment

The Internet is a global network and provides many benefits. Please research and consider the impact of the Internet on privacy. Locate at least two current articles about monitoring user activity online by private companies or governments. Why are users monitored, how can they prevent this, can privacy be accomplished online? Please make sure to cite sources in the APA style.

Programming Assignment

Please provide the following explanations and answers in a single document and submit it using the Assignment activity below.

1. Identify 3 web sites, which you've visited in the past. Run the HTML validating software against each site. You can select any of the validating tools available online.
2. Provide comments on results of your exercise for each web site. Make sure to list any problems identified. Also provide a link to the validation tool you used.
3. For each site answer: What works well on this site? What could be improved?

Learning Journal

Learning Journal Instructions

Why do it?

Maintaining a journal serves several purposes:

1. A means of communication, conversation (e.g., between material and yourself, yourself and instructors).
2. Provides regular feedback between you and the instructors and helps to match expectations.
3. Platform for synthesis of knowledge and ideas
4. Help develop critical thinking
5. Helps to elicit topics of interest, challenging topics that need improvement, etc.

What to write?

First write a brief summary of the contents of a lecture, lab activity, group discussion or reading material. Then reflect upon these activities. Record your own thoughts, ideas, responses and reactions to any of the above activities. Make notes about concepts, questions you have, and any confusion that may arise. Use the journal to explore possible solutions to problems being raised in class or alternative activities to the ones presented in class. Record new insights and problem solving strategies realized during discussions with fellow students and instructors. The journal reflects your own thoughts and ideas. Be as original and critical (constructive) as you can.

Some additional ideas:

Describe any feedback you received or any specific interactions you had.

Discuss how they were helpful Describe your feelings and attitudes What surprised me or caused me to wonder?

What happened that felt particularly challenging? Why was it challenging to me?

What skills and knowledge do I recognize that I am gaining?

What am I realizing about myself as a learner?

In what ways am I able to apply the ideas and concepts gained to my own experience?

What not to do:

Do not copy and paste any material from the discussion forum, your own assignment, or any other source. The entries in the journal must be your own words.

When do I use the journal?

You are expected to use the journal for each week of the course.

How will it be graded?

Each weekly journal must be at least 300 words long. Please use proper grammar and keep your writing on the class topic. Deductions from a full credit on this assignment would be taken if you copy and paste content. As long as you write down your own reflection about the learning activities, deductions will not be taken. You will receive a single grade for each week and the grades will count toward your final grade in the course.

Self-Quiz

The Self-Quiz gives you an opportunity to self-assess your knowledge of what you have learned so far.

The results of the Self-Quiz do not count towards your final grade, but the quiz is an important part of the University's learning process and it is expected that you will take it to ensure understanding of the materials presented. Reviewing and analyzing your results will help you perform better on future Graded Quizzes and the Final Exam.

Please access the Self-Quiz on the main course homepage; it will be listed inside the Unit.

Checklist

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