INSTRUCTIONAL UNIT 2 (IU2)

Instructional Design Project

EDTC 6321
Summer 2020 Module 1

by **Heather Bourgeois**

Table of Contents

I. Introduction

As discussed in Instructional Unit 1 (IU1), the topic of this instructional unit is basic web page development, using HTML and CSS. The target audience for this instructional unit is 9-10 year-old children who have an interest and aptitude in working with technology. Given the age of the target audience, it is assumed that their knowledge of the topic is limited, so this instructional unit will be at the beginner level.

Instructional Unit 2 (IU2) will build upon the audience analysis and identified goals from Instructional Unit 1 (IU1) and will provide an analysis of the required tasks for reaching this goal, as well as the performance objectives related to each of the specific goals (also identified in IU1) and the assessments that will show mastery of these objectives.

II. Goal Statement

The goal of this instructional unit is to enable learners to master the use of basic HTML and CSS when building a simple web page. This will include both the development of page structure using HTML and styling of the page elements using CSS. Learners will be able to create a very simple web page from scratch and can then build upon the skills learned through this instructional unit to create more complex web pages in the future.

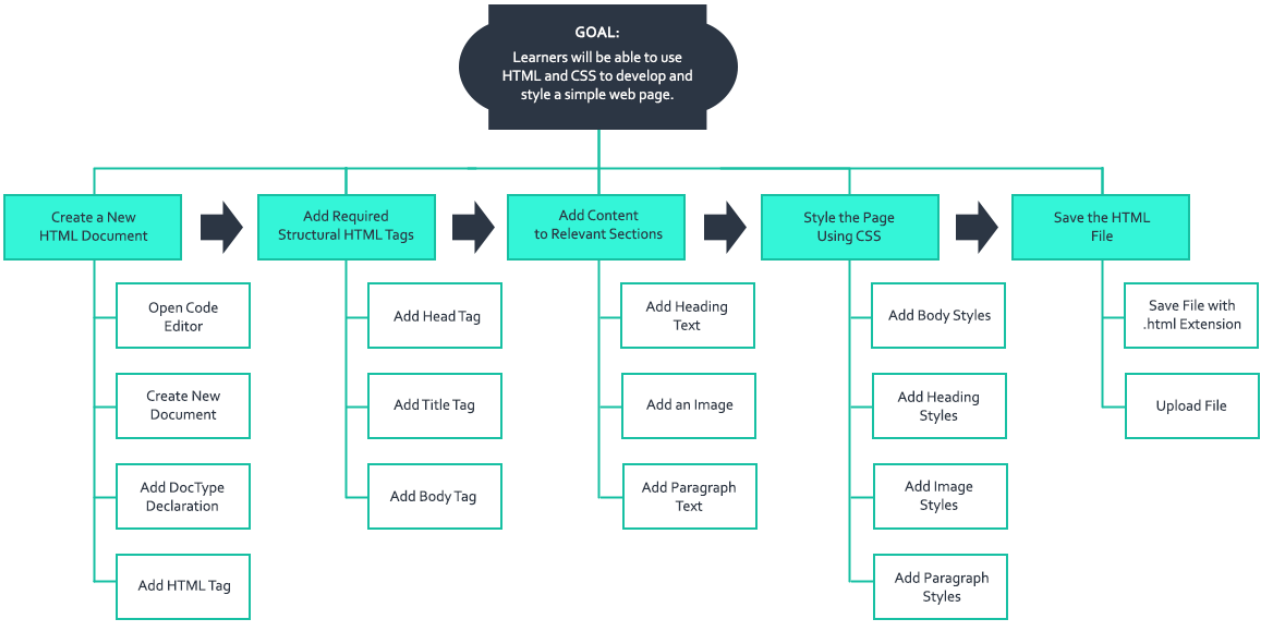
III. First-Level Task Analysis

The main tasks for reaching our instructional goal have been identified as the following:

1. Create a new HTML document.
2. Add required structural HTML tags.
3. Add content to relevant sections.
4. Style the page using CSS.
5. Save HTML document.

IV. In-Depth Task Analysis

Each of the tasks identified in the first-level task analysis has been broken down into related subtasks in the flowchart below:



V. Performance Objectives and Assessments

The table below details the performance objectives for each step identified in the task analysis, as well as specific assessments to show successful completion of the objective. The assessments for this instructional unit will include a web page creation project and a short quiz, so the assessments for each task have been split into Project-Based and Quiz-Based assessments.

Instructional Goal	Instructional Goal with Performance Context	Assessment
Learners will be able to use HTML and CSS to develop and style a simple web page.	Using a browser-based code playground (CN), the learner will create a simple web page (B), with the minimum required tags and proper use of HTML and CSS (CR).	**Project-Based Assessment:** The learner will demonstrate successful completion of this goal by submitting a link to their completed web page, via a text field within the quiz for this instructional unit.

Steps in Instructional Goal	Performance Objectives	Assessment
Learners will create a new HTML document.	Using the browser-based code playground (CN), the learner will create a new HTML document (B), with the correct doctype declaration (CR).	**Project-Based Assessment:** Learners will show successful completion of this objective through the submission of their completed web page, with the proper doctype declaration. **Quiz-Based Assessment:** *Multiple Choice Question:* 1. Which of these is the correct doctype declaration for an HTML page? a) <doctype! HTML> b) <doctype html> c) <!DOCTYPE html> d) <doctype HTML!>
Learners will add required structural HTML tags.	Using HTML (CN), the learner will create the structure of the web page (B), using the correct required tags (CR).	**Project-Based Assessment:** Learners will show successful completion of this objective through the submission of their completed web page, with the correct page structure and minimum required tags. **Quiz-Based Assessment:** *Multiple Choice Question:* 2. What tag is used as a container for ALL of the visible content of the page? a) <footer> b) <section> c) <head> d) <body>

Learners will add content to relevant sections.	Using the code playground (CN), the learner will add content to the page (B), in the correct sections (CR).	**Project-Based Assessment:** Learners will show successful completion of this objective through the submission of their completed web page, with relevant content added to each section. **Quiz-Based Assessment:** *Multiple Choice Question:* 3. Where would you put the <title> of your page? a) <head> b) <body> c) <section> d) <footer>
Learners will style the page using CSS.	Using CSS (CN), the learner will style the structure and elements of the page (B), using proper style declarations (CR).	**Project-Based Assessment:** Learners will show successful completion of this objective through the submission of their completed web page, using proper CSS to style the elements. **Quiz-Based Assessment:** *Multiple Choice Question:* 4. What tag is used to display blocks of text? a) <a> b) <p> c) <i> d)

Learners will save the HTML document.	Using the code playground (CN), the learner will save the HTML document (B), in the correct format (CR).	**Project-Based Assessment:** Learners will show successful completion of this objective through the submission of their completed web page, in the correct format. **Quiz-Based Assessment:** *Open-Ended Question:* 5. What is the correct file extension for an HTML document? _____

VI. Learning Domain

The goals for this instructional unit are intellectual in nature and therefore fall within the cognitive learning domain. This instructional unit focuses on the development of new technical skills and their application in building a web page using the relevant tools. Different categories of cognitive processes will be involved, including knowledge, comprehension and application.

VII. Peer Review

The goals and task analysis for this instructional unit were presented to another homeschool educator who also works with learners in the later elementary years. She is familiar with teaching a variety of subjects, including computer skills. While she does not have specific experience with web page development, she high level overall technical skills. Her feedback indicated that she thought the overall goal was appropriate and attainable. She also the task analysis covered all of the steps that would be required and that the performance objectives were clearly written and seemed to cover all of the skills that the learner would need to master in completing the web project. For the assessments, she overall thought that using a combination of a project and a quiz was a good way to assess mastery of the skills involved, but that the quiz was maybe a bit too short (5 questions). I will take her feedback into account when designing the instructional unit and maybe add a few more questions to the quiz, to better assess the learner's mastery of the topic.

VII. Summary

As the technology in our world advances and online resources become even more prevalent in our everyday lives, it will become more important than ever for people to have foundational technical skills that allow them to work with whatever tools are at their disposal. Getting started early with building these foundational skills will give young learners a head start and prepare them for the future. This instructional unit will support these young learners in building technical skills, through hands-on training and experience. Through the task analysis included in this document, the required steps to achieve mastery in basic web page development have been identified and broken down into specific performance objectives that will allow us to assess the successful completion of each step. Specific assessments have also been identified for each of these performance objectives, to provide a measurable way to judge the learner's mastery of each step. Through the instruction, hands-on practice and assessments included in this instructional unit, the learner will be able to learn and master the skills needed to create a simple web page. That is a skill that will benefit them far into the future and will help them as they build upon their technical skillset.