Introduction to HTML and JavaScript: Syllabus

Instructors:

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Course Description:

The target audience for this training course is individuals who are interested in learning about the core skills necessary for web development. This course is intended for individuals of all levels. Some light experience with software development is helpful but not necessary.

Learning Outcomes and Objectives:

After completing this course, we expect learners to:
- Describe the historical context and justification for HTML.
- Create HTML5 documents.
- Add content to an HTML page using HTML elements.
- Use hyperlinks to connect various HTML pages together.
- Capture user input using forms.
- Create content using HTML5 semantic elements.
- Create SVG Graphics.
- Create CSS stylesheets.
- Lay out HTML elements using CSS margin and padding.
- Implement program logic using JavaScript.
- Implement HTML5 APIs using JavaScript.
- Add advanced functionality to web applications using jQuery, AngularJS, Bootstrap, TypeScript or Sass.

Course Outline:

Module 1: Creating Web Pages using Hypertext Markup Language (HTML)

In this module, you will learn how to create a basic HTML document using the core HTML elements. You will learn about the basic structure of an HTML element (content, attributes, etc.) and how they are used in the context of your HTML web pages.

Module 2: Creating Sophisticated Document Structures using HTML

In this module, you will learn how to use advanced features of HTML such as forms and semantic elements to create more sophisticated HTML documents. You will learn when each of these components are used and their significance in the HTML markup spec. You will also learn how to use components such as SVG and media elements.

Module 3: Design Web Pages Elements using Cascading Style Sheets (CSS)

In this module, you will learn how to use CSS to design your HTML web page. You will be introduced to the basic CSS concepts (declaration, rule set, rule, selector, etc.) and implement basic designs using CSS. You will also be introduced to the CSS box model.

Module 4: Implementing Program Flow using JavaScript (JS)

In this module, you will learn how to use JavaScript to add a logical flow to your web page. You will first learn the basics of the JavaScript language and then implement simple JavaScript applications through hands-on exercises.

Module 5: Adding External Libraries to Enhance HTML Applications

In this module, you will briefly learn about various external libraries that can be used to enhance your HTML content, CSS stylesheets and JavaScript code. Featured libraries include: AngularJS, Bootstrap, jQuery, TypeScript and Sass.

Grading:

This course will be graded based on the following criteria:

Assessment Type	# of Assessments	% of Final Grade
Module Assessments	5	100%

Course Schedule:

WEEK	DATE	TOPIC	ASSIGNMENT
0	03/25/16	Introduction	---
1	03/25/16	Creating HTML Web Pages	Module Assessment

2	03/25/16	Advanced HTML	Module Assessment
3	03/25/16	Design CSS Stylesheets	Module Assessment
4	03/25/16	Programming using JavaScript	Module Assessment
5	03/25/16	Adding External Libraries	Module Assessment