Course Design Document

Course Code	
Course Name	Front End Technologies: HTML5, CSS3 and Bootstrap

Duration (in days)	4	Proficiency Level	Fundamental
Pre-requisites	• Object Oriented Concepts	Target Audience	Campus Hires

Learning Outcome

Upon successful completion of this course, participants will be able to

- Work with HTML tags, create web pages and link them
- Work with HTML5 new elements
- Change the look and feel of a webpage using Cascading Style Sheets (CSS)
- Do HTML5 styling with CSS and manage User experience across multiple browsers
- Learn how to download and install bootstrap into the website
- Learn to make a website much more responsive

Day-wise Session Plan

Day	Unit	Objectives	Hours
1	HTML Fundamentals	**HTML** • HTML documents • Using doctype • The head element • Using <head> • The body element • Using id and class attributes **HTML Text** • Headings • Block and Inline Elements • Whitespace • Additional Text Elements **HTML Lists** • List Types • Creating Lists • List Rendering **HTML Links** • Link concepts • Linking Documents • Understanding Targets • Linking to Targets • Additional Link Attributes **HTML Tables** • Table Elements • Structuring a Table • Table Data • Spanning Columns and Rows	4

		• Formatting Tables
		• Table Formatting
		HTML Images and Objects
		    • Image and Object Concepts
		    • Adding Images
		    • Adding Objects	

	HTML Forms	HTML forms fundamentals
		    • Form Basics
		    • Form Settings
		HTML form inputs
		    • Text inputs
		    • Selections
		    • Input attributes
		    • Input commands
		Organizing HTML forms
		    • Labels
		    • Fieldsets
		    • Tab index
		    • Access keys
		HTML form scenarios
		    • Scripting forms
		    • Handling multiple forms
		    • Uploading files
			4

	HTML5 Fundamentals	What's new in HTML5
		    • What is HTML5?
		    • New HTML5 Elements
		    • New JavaScript APIs
		    • When is HTML5 Fully Compliant with All Browsers?
		    • Markup Example Before and After HTML5
		    • Detecting HTML5 Features
		Semantic HTML
		    • What Is Semantic HTML?
		    • Auditing a Site for Semantic Issues
		    • Auditing Our Project for Semanticism
		    • Sectioning and Grouping Elements
		    • Semantics and Screen Readers
		    • Main Flow Content
		    • Marking up Main Flow Content
		    • Headings and Implicit Sections
		    • Creating Our Outline Using Headings
		    • HTML Outlines
		    • Outlines in HTML4 vs. HTML5
		    • Finishing up Our Outline
		    • Text-level Semantic Elements
		    • Semantic Forms
		    • Final Remarks on Semanticism
		DOM Selection
		    • Selection Basics
		    • Features of Selection API
		Forms
		    • New Input Types?
		    • New Input Types: Markup Review
		    • New Input Types: In Different Browsers
		    • to Native Validation
		    • Working with Pseudo Classes
			8

		• Exposing Custom Validation Messages: Part 1 • Native Validation Rules • Exposing Custom Validation Messages: Part 2 • Custom Validation Rules • Bootstrap Validation Module: Demo and Markup	

2	HTML5 Styling with CSS3	HTML5 Design
		  • XHTML vs. HTML5
		  • Building with HTML5
		  • HTML5 Audio & Video
		  • HTML5 Video Captions
		  • HTML5 & Geolocation
		Styling with CSS3
		  • Overview of CSS
		  • Adding CSS3 and How
		  • Fonts
		  • Colors
		  • Shadowing
		  • Rounded Corners
		  • Gradients
		  • Transforms
		  • Form Inputs
		  • CSS3 Color & Opacity
		  • CSS3 Text: Selection & Columns
		  • CSS3 Text: @font-face & Shadows
		  • CSS3 Images
		  • CSS3 Effects
		  • Advanced CSS3 Animations
		CSS3 Walkthrough
		  • How We Solve Problems
		  • Exercise: Build an American Flag
		  • Flag: Layout
		  • Flag: Resets
		  • Flag: Data Attributes and Stripes
		  • Flag: Stars
		  • Flag: Wrap-up
		User Experience Across Multiple Browsers
		  • Challenges with Browsers
		  • Fallbacks
		  • Feature Detection
		  • Usage Scenario
			8

3	Bootstrap	Bootstrap CSS Overview Bootstrap Typography Bootstrap Tables Bootstrap Forms Bootstrap Buttons Bootstrap Images Bootstrap Navbar	8
		Total	32