

Sharda University, Uzbekistan
One Year Skill Development Certification Course
On

Web Designing/Web Application Development

Course Description: This course is a complete combination of Web design and web application development. In this course we are introducing to designing effective web pages implementing web pages by writing HTML and CSS code. We also explain the use of page layout techniques, text formatting, graphics, images, and multimedia and multi-page websites. All though we also covered the complete web development with all advanced web programming languages which makes you a complete web developer.

Objective of the course: This program is a complete combination of web application design and its respective development which gives you a complete exposure of the current market scenario related to the web application domain.

The course will provide complete hands-on experiential learning using latest tools and technologies running in the market .With the help of these course students are able to stand in the huge market of web development.

Outcome of Course: Upon successful completion of the program, the students will be able to:

- Understand the principles of creating an effective web page, including an in-depth consideration of web architecture.
- Become Familiar with web design principles that are applicable to deploy theories into practical.
- Understand web terminologies using the backend.
- Understand responsive web design.
- Develop basic programming skills such as PHP, HTML5, JQuery and JavaScript.
- Be able to integrate social media content to web pages.
- understand the uses of recent tools in coding and web application development

Eligibility: 11th or 12th Pass Students

Duration: One Year

Motivation: The students will learn recent web technologies with live projects on a web server and learn its complete development and deployment under the supervision of Sharda University, School Faculty. The students will experience the interactive sessions followed by responsive Q & A. After the completion of the course, the students will be able design and develop responsive dynamic websites.

Career Opportunities: The course is especially designed to keep in mind about the recent as well as upcoming trends in the broad area of web development. There are various opportunities in IT sectors, Banking Sectors, Cloud Domain, Education, Gaming, Multimedia Agriculture, etc. Their progression pathway will start from Specialized Web designer cum developer. The other positions are Application Developer, Web Designer, Web Developer, Web Content Manager, Multimedia Programmer, ERP developer, UI Designer, UX Designer, Web Analyst etc.

Course Content of Web Application-I

Term -1

Unit1: Introduction to Web Environment

Introduction: Introduction to web environment, World Wide Web, Architecture of Client and server. Internet Browser, Web Design Introduction, Areas of Web design, Introduction to Sublime Text Editor,

Hands-on with web environment

- a. Setup of basic client and server communication on browser with HTML.
- b. Installation of software used for designing

Duration in Weeks: 02

Duration in Hours per week: 03 (T) 03 (P)

Unit2: Introduction to Web Designing

Introduction: Introduction to web design tools, Introduction to HyperText markup language .Introduction to Cascading Style sheet. Use of HTML and CSS in web designing, Design List, Text, Button and other components in HTML. Code writing on Sublime with Html and CSS

Hands-on with web designing

- a Creation of Application in HTML/HTML5
- b Design of your resume in HTML.
- c Design of an application with CSS/CSS3.

Duration in Weeks: 02

Duration in Hours per week: 02 (T) 04 (P)

Unit 3: Introduction to Scripting Languages

Scripting Languages: Definition and role of Scripting languages in web design .Introduction of Javascript , Variable and Jump statements in Javascript, Calling of javaScript in head tags. Difference between javaScript and JQuery . Advantages of AJAX over scripting languages .

Hands-on with Scripting

- a. Creating an alert on user login in HTML.
- b. Create an application to deploy on a server with JQuery and AJAX.

Duration in Weeks: 02

Duration in Hours per week: 02 (T) 04 (P)

Unit 4: Responsive Web Design

Introduction to Responsive web application. Introduction to bootstrap. Bootstrap CDN. Use of Bootstrap library in online and offline mode . Bootstrap Components.

Hands-on with Responsive web design

- a Creation of responsive desktop and Mobile web applications.
- b Create an ERP for Sharda University to introduce various courses and also deploy it on the server.

Duration in Weeks: 02

Duration in Hours per week: 02 (T) 04 (P)

Unit 5: Design of a website

This is a complete hands on unit based upon the studies of previous units .

Hands-on with Web Design .

Implement a complete website with the help of all the above units and deploy it live on server.

Duration in Weeks: 04

Duration in Hours: 08 (P)

Project

Duration in Weeks: 04

Course Content of Web Application Development -II

Term -2

Unit 1: Introduction to Web Application Development

Introduction: Introduction to web application development , Phases of web application development
Tools used in web application development. Static and Dynamic Web applications. Request and response of Server. Setup of a web server.

Hands-on with Web Application Development

- a Create a static web application in HTML/HTML5
- b Generate a response from a web server with a Dynamic request from the user.

Duration in Weeks: 02

Duration in Hours: 02 (T) 04 (P)

Unit 2: Introduction to CMS

Introduction: Introduction to Content Management System, Introduction to wordpress. Install wordpress on the local system. Setup the first web application on wordpress. Introduction to Various plugins and its use of web server.

Hands-on with CMS

- a Create your first web application on wordpress .
- b Install various plugins on your wordpress application .

Duration in Weeks: 02

Duration in Hours: 02 (T) 04 (P)

Unit 3: Introduction to Web application Development Language.

Introduction to various web application development programming languages, Introduction to PHP, Installation of PHP using various softwares . Web application creation on PHP. Introduction to OOPS concepts in PHP. Use of conditional statement in php. Use of branching statements in PHP. Introduction to server side and client scripting on PHP.

Hands-on with web application development using PHP

- a. Installation of PHP on the local system.
- b. Create even and odd numbers programs in PHP.
- c. Input from HTML and check whether the number is Prime or not.
- d. Perform a server side request from the user and generate output on HTML.

Duration in Weeks: 03

Duration in Hours: 04 (T) 06 (P)

Unit 4: Introduction to Databases

Introduction to Database. Introduction to SQL and its commands. Use of table in Database, Importance of SQL in a web application environment, Introduction to CRUD Operation in Database. Roles of Join and trigger in application development.

Hands-on with Database

- a Installation and setup MySQL using phpmyadmin and create one database with multiple tables.
- b Create a complete user registration operation using PHP and respective MySQL.

Duration in Weeks: 02

Duration in Hours: 02 (T) 04 (P)

Unit 5: Develop a complete web application

This is a complete hands on unit based upon the studies of previous units.

Project on Web application development
Develop a complete web application over

Duration in Weeks: 04

Duration in Hours: 08 (P)

Project

Duration in Weeks: 04

References (Books/ Video Lecture Link etc):

- Learning Web Design Fourth Edition, A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics, Jennifer Niederst Robbins, O'REILLY.
- Web Programming, Step by step Exercises, Hans-Petter Halvorsen.
- PHP Reference: Beginner to Intermediate PHP5, Mario Lurig
- Eloquent JavaScript 3rd edition, Marijn Haverbeke
- https://www.youtube.com/watch?v=TKYsuU86-DQ&list=PL0eyrZgxdwhwNC5ppZo_dYGVjerQY3xYU