

# App Track Syllabus

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**Prerequisites:** Before entering into the App track you should be good at basic fundamental programming skills.

The App Track is an leading - edge program purely made for Web Designers, Web developers and Digital Marketing jobs.

## FRONT - END:

Front - End web development is a great place to start your journey in the world of coding. It is the user interface of a web application.

## HTML:

- Introduction to HTML, HTML Structure, HTML tags, HTML Elements, HTML Attributes, HTML Blocks, HTML Layouts, HTML forms, Introduction to XML, The difference between XML and HTML, How XML can be used?, Displaying XML.
- **Exercise:** Create a simple html code with title, heading, paragraph. Add a horizontal rule between the heading and the paragraph. Add image, dropdown list, button, Make a ordered list. Create HTML Layouts. Add the form tag in body element, create name, user id, password using textbox. Finally add the Submit and exit buttons.

## CSS:

- Introduction to CSS, Advantages of CSS, Working of style sheet, CSS syntax and selectors, CSS Advanced Dimensions, CSS Floating, CSS Positioning, CSS Backgrounds, CSS Borders, CSS Text Effects.
- **Exercise:** Add the link, change the font-name , size and heading using CSS. Set the minimum width, height of a box, set background-color, image. Create a rounded borders.

## BOOTSTRAP:

- Introduction to Bootstrap, Containers, Bootstrap Grid system, Mobile First Strategy, Working of Bootstrap Grid System, Media Queries, Bootstrap Features, Bootstrap Jumbotron, Bootstrap Button, Bootstrap Navbar, Bootstrap Carousel, Bootstrap Pager, Responsive Web Design, Responsive Overview, Flexible layouts, Flexible Grid, Viewport, Build a responsive Grid view.
- **Exercise:** Create a Bootstrap container and add navbar menu. Create a Bootstrap container-fluid and add image, heading , paragraph and button. Create three equal

columns, two unequal columns. Create Jumbotron and page header. Create Bootstrap button and Bootstrap Pagination. Create a container-fluid add an image with carousel, Glyphicons icon. Create a Bootstrap panel and pager. Develop a Responsive web page.

### **JAVASCRIPT:**

- Introduction to JavaScript, Advantages of JavaScript, Limitations of JavaScript, JavaScript Selectors, JavaScript Syntax, JavaScript Operators, JavaScript Objects, JavaScript String, JavaScript Math Functions, JavaScript Data, JavaScript Validation, JavaScript Document Object Model, JavaScript Browser Object Model, JavaScript Window Methods and Events.
- **Exercise:** Display the current day and time, Swapping of two numbers, Choose a comparison operator to display true when 5 is less than 7. Create and validate the HTML form using Javascript. Create a HTML form email validation. Open a new window when the hyperlink is clicked. When the "Check window" button is clicked, the function check() is called and the current window status is checked. If the topmost window (window.top) is different from the current window (window.self).

### **JQUERY:**

- Introduction to JQuery, JQuery syntax, JQuery Selectors, JQuery Events, JQuery Effects, Methods of JQuery, JQuery Callbacks, JQuery UI, JQuery - Get Content and Attributes, JQuery Traversing, JQuery Traversing - Ancestors, JQuery Traversing - Descendants, JQuery Traversing - Sibling, JQuery Traversing - Filtering, JQuery - Ajax Introduction, JQuery Plugins.
- **Exercise:** Create a JQuery web page. Hide function, Click function, Hover function, Slide down function, Animate an element, Create a simple web form using JQuery UI, Add JQuery plugins.

### **BACK - END:**

Back-End or Server side is basically how the site works, updates and changes. This refers to everything the user can't see in the browser, like databases and servers.

### **PHP:**

- Installation and use of XAMPP, PHP Introduction, PHP Syntax, Commenting PHP code, Running PHP Script from Command Prompt, PHP Variables, PHP Functions, PHP Recursive Function, PHP Forms, PHP Form Validation.
- **Exercise:** Addition program, Declare a variable outside the function, Display 10 numbers using Recursive function, Write in the HTML form, add a little script after each

required field, which generates the correct error message if needed (that is if the user tries to submit the form without filling out the required fields).

#### **AJAX:**

- AJAX Introduction, How AJAX works?
- **Exercise:** When a user types a character in the input field, a function called "showHint()" is executed.

#### **MY SQL:**

- Introduction to My SQL, My SQL Basic Queries, My SQL-WHERE CLAUSE, SQL Injection  
SQL in web pages.
- **Exercise:** Create a My SQL table, Insert the records into the table using My SQL insert query, Update the records into the table using My SQL update query, Create a program to select the movie by its id and year from the database using WHERE clause.

#### **WEB HOSTING:**

- Introduction to Web Hosting, Web Servers, Major types of Web Hosting.

#### **GIT HUB:**

- Git and Git Hub

#### **DATABASE:**

A database is a collection of information that is organized so that it can easily be accessed, managed and updated.

- Getting started with My SQL, Creating Database, SQL Basics, Normalization Database Design Process, Map out Structure for Schema, Advance SQL, PHP & My SQL, PHP Functions, Open a connection to My SQL.
- **Exercise:** Installing XAMPP for local development, Create a database for your site using PHPMyAdmin, To Create, Edit, and Delete Foreign Key – phpMyAdmin, To Remove / Delete a Foreign Key Using phpMyAdmin, Create a Table, Insert, Update and Drop the Table, Write a query using a join to determine which items were ordered by each of the customers in the customers table, Create a simple MySQLi Connection using PHP, Create a database connection, Create a table in PHPMyadmin and insert data into the

table using PHP, Select the inserted data from table and display it like table in PHP. Edit and update the displayed table data using update query in PHP, Delete the row from the displayed table data using delete query in PHP.

## **DIGITAL MARKETING:**

Digital Marketing refers to advertising delivered through digital channels such as search engines, websites, social media, email and mobile apps.

- Content Strategy, Goals of Content Marketing, Social media marketing, Functions of social media for business, Social Media Advertising with Facebook, Search Engine Optimization, Search Engine Marketing (SEM), SEM vs. SEO, Display Advertising, Email Marketing, Email Newsletters, Lead Nurturing, Sponsorship Emails, Transactional Emails, Measure and Optimize with Google Analytics.
- **Exercise:** Design Email Campaigns That Target Different Stages of the Sales Cycle.

**Length of the Program:** 3 months

**Textbook required:** None