

WEB DESIGN AND  
DEVELOPMENT TRAINING



**IT Training & Placement...**

100% JOB ASSISTANCE

**WEB ADDRESS**

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## Web Technologies (Front-End Design)

- Introduction to Web Technologies
- Careers in Web Technologies and Job Roles
- How the Website Works?
- Client and Server Scripting Languages
- Domains and Hosting
- Responsive Web Designing
- Types of Websites (Static and Dynamic Websites)
- Web Standards and W3C recommendations

## Adobe Photoshop

- Introduction of Stock Photography
- Types of Image Graphics
- Introduction to Adobe Photoshop
- Interface Tour of Photoshop
- Color Modes
- Resolution and Presets
- Move Tool
- Marque Tool
- Lasso Tool
- Quick Selection, Magic Wand
- Crop, Slicing Tool
- Healing Brush, Patch Tool
- Brush Tool
- History Brush
- Eraser Tool
- Pattern Stamp, Clone Stamp
- Gradient Tool
- Blur and Exposure Tool
- Pen Tool, Shape Tool
- Text Tool
- Other Photoshop Tools
- Layers, Groups and Smart Object
- Blending Options
- Filter Effects
- Client requirement analysis
- Realtime Website Layout Design
- Practical Task in Layout Design

## HTML 4.01 and XHTML 1.1

- What is Markup Language
- Basic Structure of HTML
- Difference Between HTML and XHTML
- Head Section and Elements of Head Section
- Meta Tags
- Css Tags
- Script Tag
- Table Tag
- Div Tag
- Header Tags
- Paragraph, Span, Pre Tags
- Anchor Links and Named Anchors
- Image Tag
- Object Tag
- Iframe Tag
- Forms
- Form Tag
- Attributes of Form
- POST and GET Method
- Fieldset and Legend
- Text input, Text area
- Checkbox and Radio Button
- Dropdown, List and Optgroup
- File Upload and Hidden Fields
- Submit, Image, Normal, Reset Button
- Creating a Live Website Form
- HTML Validators

## HTML 5

- Introduction to HTML5
- Features of HTML5
- HTML5 DocType
- New Structure Tags
- Section
- Nav
- Article
- Aside
- Header

- Footer
- Designing a HTML Structure of Page
- New Media Tags
- Audio Tag
- Video Tag
- Canvas and Svg Tag
- Introduction to HTML5 Forms
- New Attributes
- Placeholder Attribute
- Require Attribute
- Pattern Attribute
- Autofocus Attribute
- email , tel, url types
- number type
- date type
- range type voice search

## CSS 2.1

- Introduction to Cascading Style Sheets
- Types of CSS
- CSS Selectors
- Universal Selector
- ID Selector
- Tag Selector
- Class Selector
- Sub Selector
- Child Combinatory Selector
- Adjacent Sibling Selector
- Attribute Selector
- Group selector
- First-line and First-letter selector
- Before and After Selector
- CSS Properties
- Type Properties
- Background Properties
- Block Properties
- Box Properties
- List Properties
- Border Properties
- Positioning Properties
- Realtime Implementation
- Conversion of Table to CSS Layout
- CSS Menu Design (Horizontal, Vertical)
- Form Designing

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## CSS 3

- Introduction to CSS 3
- New CSS 3 Selectors
- Attribute Selectors
- First-of-type
- Last-of-type
- Nth-child
- Element: empty
- New CSS3 Properties
- Custom Fonts
- Text-Shadow Property
- Text-Stroke Property
- Rounded Corners
- Box Shadows
- CSS Gradients
- CSS Multiple backgrounds
- Opacity Property
- Transition effect
- Transform effect
- Animation effects
- Css Media Queries

## Responsive Web Design with Bootstrap

- Introduction to Responsive Design
- Mobile first design concepts
- Common device dimensions
- View-port tag
- Using css media queries
- Menu conversion script
- Basic Custom Layout
- Introduction to Bootstrap
- Installation of Bootstrap
- Grid System
- Forms
- Buttons
- Icons Integration
- Using CSS3 in Practical Layout

## Java Script

- 
- Introduction to Client Side Scripting
- Introduction to Java Script
- JavaScript Types
- Variables in JS
- Operators in JS
- Conditions Statements
- Java Script Loops
- JS Popup Boxes
- JS Events
- JS Arrays
- Working with Arrays
- JS Objects
- JS Functions
- Using Java Script in Realtime
- Validation of Forms
- Related Examples

## JQuery and jQuery UI

- jQuery Features
- Installing jQuery
- jQuery Syntax
- jQuery Ready Function
- jQuery Selectors
- jQuery Actions
- jQuery plugins
- jQuery Validation plugin
- jQuery Slideshow
- jQuery Dropdown
- jQuery UI, Working with jQueryUI
- jQuery Accordions jQuery Tabs
- jQuery Tooltips
- jQuery Autocomplete

## Web Hosting

- Web Hosting Basics
- Types of Hosting Packages
- Registering domains
- Defining Name Servers
- Using Control Panel
- Creating Emails in Cpanel
-

# WordPress Fundamentals Course Description

## Getting Started With WordPress

- Web Hosting
- What is a FTP
- Installing WordPress
- Changing your WordPress site title
- Updating your WordPress site tagline
- Creating pages
- Organizing your content
- Navigation
- Adding a Blog to your site

## Structuring Your WordPress Site for Success

- Entering and formatting content
- Completing our text formatting
- Managing posts
- How to Manage Images in WordPress
- How to Manage Image Galleries in WordPress
- Finding Images
- Linking Content Inside Your Site
- Linking to Things Outside Your Website
- Theming Your WordPress Site
- Choosing Themes – The Importance of Colour

## Session 3: Adding Functionality to Your Site

- Student Project Review
- Modifying Your Theme
- Introduction to plugins
- Adding to Your Site's Appearance With Widgets
- Some Suggested Business Plugins for WordPress

## Bring It All Together

- Maintaining Your WordPress Site
- Securing Your WordPress Site
- Detecting Problems With Your Site
- Backup Your Site to Protect Your Content
- Summary of WordPress Security

# Introduction to PHP

## Introduction to PHP

- Evaluation of Php
- Basic Syntax
- Defining variable and constant
- Php Data type
- Operator and Expression

## Handling Html Form With Php

- Capturing Form Data
- Dealing with Multi-value filed
- Generating File uploaded form
- redirecting a form after submission

## Decisions and loop

- Making Decisions
- Doing Repetitive task with looping
- Mixing Decisions and looping with Html

## Function

- What is a function
- Define a function
- Call by value and Call by reference
- Recursive function

## String

- Creating and accessing String
- Searching & Replacing String
- Formatting String
- String Related Library function

## Array

- Anatomy of an Array
- Creating index based and Associative array
- Accessing array Element
- Looping with Index based array
- Looping with associative array using each() and foreach()
- Some useful Library function

## Working with file and Directories

- Understanding file& directory
- Opening and closing a file
- Coping, renaming and deleting a file
- working with directories
- Building a text editor
- File Uploading & Downloading

## Mini Project (With file Handling)

- State management
- Using query string (URL rewriting)
- Using Hidden field
- using cookies
- Using session

## String matching with regular expression

- What is regular expression
- Pattern matching in Php
- Replacing text
- splitting a string with a Regular Expression

## Generating Images with PHP

- Basics of computer Graphics
- Creating Image
- Manipulating Image
- Using text in Image

## Database Connectivity with MySQL

- Introduction to RDBMS
- Connection with MySQL Database
- Performing basic database operation(DML) (Insert, Delete, Update, Select)
- Setting query parameter
- Executing query
- Join (Cross joins, Inner joins, Outer Joins, Self joins.)

# React Js

## Introduction to React

- What is React?
- Why React?
- React version history
- React 16 vs React 15
- Just React – Hello World
- Using create-react-app
- Anatomy of react project
- Running the app
- Debugging first react app

## Templating using JSX

- Working with React. createElement
- Expressions
- Using logical operators
- Specifying attributes
- Specifying children
- Fragments

## About Components

- Significance of component architecture
- Types of components
- Functional
- Class based
- Pure
- Component Composition

## Working with state and props

- What is state and its significance
- Read state and set state
- Passing data to component using props
- Validating props using propTypes
- Supplying default values to props using defaultProps

## Rendering lists

- Using react key prop
- Using map function to iterate on arrays to generate elements

## Event handling in React

- Understanding React event system
- Understanding Synthetic event
- Passing arguments to event handlers

## Understanding component lifecycle and handling errors

- Understand the lifecycle methods
- Handle errors using error boundaries

## Working with forms

- Controlled components
- Uncontrolled components
- Understand the significance to default Value prop
- Using react ref prop to get access to DOM element

## Context

- What is context
- When to use context
- Create Context
- Context.Provider
- Context.Consumer
- Reading context in class

## Code-Splitting

- What is code splitting
- Why do you need code splitting
- React.lazy
- Suspense
- Route-based code splitting

## Hooks

- What are hooks
- Why do you need hooks
- Different types of hooks



# React Js

- Using state and effect hooks
- Rules of hooks

## Routing with react router

- Setting up react router
- Understand routing in single page applications
- Working with BrowserRouter and HashRouter components
- Configuring route with Route component
- Using Switch component to define routing rules
- Making routes dynamic using route params
- Working with nested routes
- Navigating to pages using Link and NavLink component
- Redirect routes using Redirect Component
- Using Prompt component to get consent of user for navigation
- Path less Route to handle failed matches

## Just Redux

- What is redux
- Why redux
- Redux principles
- Install and setup redux
- Creating actions, reducer and store

## Immutable.js

- What is Immutable.js?
- Immutable collections
- Lists
- Maps
- Sets

## React Redux

- What is React Redux
- Why React Redux
- install and setup
- Presentational vs Container components

- Understand high order component
- Understanding map State To Props and map Dispatch To Props usage

## Redux middleware

- Why redux middleware
- Available redux middleware choices
- What is redux saga
- Install and setup redux saga
- Working with Saga helpers
- Sagas vs promises

## Unit Testing

- Understand the significance of unit testing
- Understand unit testing jargon and tools
- Unit testing react components with Jest
- Unit testing react components with enzyme

## Webpack Primer

- What is webpack
- Why webpack
- Install and setup webpack
- Working with webpack configuration file
- Working with loaders
- Working with plugins
- Setting up Hot Module Replacement

## Isomorphic React

- What is server-side rendering (SSR)?
- Why SSR
- Working with render To String and render To StaticMarkup methods



# React Js

## Module 1: Understanding Node environment

- Extending JavaScript
- V8
- The Process Object

## Module 2: Understanding Asynchronous Event Driven Programming

- Broadcasting Events
- Listening for Events
- Timers
- Understanding the Event Loop
- Callbacks and errors

## Module 3: Streaming Data Across Node And clients

- Exporting Steams
- Creating and HTTP Server
- The Request objects
- Working with Headers
- Handling Post Data

## Module 4: Access the File System

- Directories & iterating overs files and folders
- Reading from File
- Writing to a File

## Module 5: Using Express

- Installing Express and Making it Easier to Build Web Server
- Routes
- Static File and Middleware
- JSON

## Module 6: Databases

- Relational Database and SQL
- Node & MYSQL
- NoSQL and Documents
- MongoDB and Mongoose
- CRUD operation using MongoDB

## Module 7: Working with MySQL

- CRUD Operation using MYSQL

## Module 8: Connecting Node with Angular

- Installation of Angular
- Components
- Services
- Template Form
- Event Handling