

# W3 Engineers

## Standards/ Curriculum Format for Web Application Development- PHP

Course Duration: Three Months

## Course Curriculum

### • Basic PHP

- How to keep a variable in computer memory.  
Lesson
- Naming convention of PHP code  
Lesson
- Understand how a program is run in a computer in PHP environment  
Lesson
- Traverse an array to get each of its item for further processing  
Lesson
- Apply linear search for finding a particular item from a series  
Lesson
- How to keep data in an array and find them later  
Lesson
- Traverse a series of data using foreach loop  
Lesson
- Declare and assign a string type variable.  
Lesson
- Take user name from user and show it in a message box  
Lesson
- Control business logic using if-then-else  
Lesson
- Make an application where user will input data in a range and the data between this range will be shown in list box  
Lesson

### • OOP basics

- Encapsulate your data and its functionality  
Lesson
- Define association relationship  
Lesson
- Understand the essence of inheritance relationship  
Lesson
- Find an object from problem domain  
Lesson
- Keep some field, property, method inside a class  
Lesson
- Create a class with the collection of another class in its field  
Lesson
- Create user defined type and create object from it  
Lesson
- Create association relationship between two classes

Lesson

- Make an in-memory Queue management system

- **Web basics (HTML, CSS, JavaScript)**

- How web works.

Lesson

- Understand HTML and The Web, HTML Document Structure

Lesson

- What and why: CSS

Lesson

- Why do we need JavaScript

Lesson

- HTML5 Fundamentals, HTML Foundations

Lesson

- HTML5 Semantic Page Elements, HTML5 Inline Semantic Elements

Lesson

- Make a basic web page layout using HTML5 and CSS3

Lesson

- Make a web page layout (professional look) for student registration process

- **Working with database: MySQL Server**

Lesson

- Understand the necessity of relational database for keeping user data.

Lesson

- Find out entities and their attributes from a real life scenario

Lesson

- Define the relationship between entities and draw an E-R diagram

Lesson

- Create schema from an E-R diagram

Lesson

- Understand INSERT, SELECT, DELETE & UPDATE sql for basic relational database operation

Lesson

- Apply where for filtering data retrieving from a table

Lesson

- Create a database in MySQL Server

Lesson

- Create a Table and fields to keep data of an entity

Lesson

- Create E-R, Schema, DB and queries for an simple application

- **Software Project Management & Project Work**

Lesson

- Key principles of Agile project management

Lesson

- Understand iteration and release of a project

Lesson

Understand user story

Lesson

Estimate a story

Lesson

Understand the essence of burndown chart

Lesson

Work with project stories

Lesson

Group project presentation