**SYLLABUS FOR FULLSTACK PHP**

**WEEKEND**

**WEEK ONE**

• **Introduction To HTML:**

* + Brief history of the Web
  + Elements
  + Tags
  + Attributes
  + Class activity
  + Class activity

• Images

• Hyperlinks

**• Introduction to CSS:**

• Introduction To CSS

• The style and link tags

• Selectors and Declarators

• ID and Classes

• Properties and values

**WEEK TWO**

• Common CSS properties –

* font-size
* line-height
* text-align
* text-decoration
* font-weight
* font-style and
* font-family.
* Colors
* Units
* Class Activity - https://codepen.io/w3devcampus/pen/YVeQZN
* Combining selectors
* Descendant selectors
* Precedence
* Class Activity
* The CSS box model
* Margins, Paddings and Borders
* Debugging
* Tables (HTML and Styling)
* Background images and stylings
* Decorative borders and shadows
* Class Activity
* Pseudo classes
* The Position properties

• Forms (HTML and Styling)

• **Project**

**WEEK THREE**

• Introduction to Bootstrap

• Downloading files and using CDN

• Containers

• Jumbotron

• Understanding the bootstrap grid system

• Bootstrap classes

• Activities

• SASS

• **Project**

**WEEK FOUR**

**• Version Control, Git & GitHub**

* Git (the version control software GitHub is built on)
* Github:
  + Create remote repositories on GitHub.
* Repositories:
  + Creating new Repo
  + Cloning Repo
* Branches:
  + Work on isolated development tracks by making use of Git's branches.
  + Combine branches together.
* Commits:
  + Write descriptive commit messages.
  + Make commits that are saved to the repository.
* Pull Requests:
  + Collaborate with other developers by contributing to a public project.
  + Leverage pull requests to send suggested changes to another developer.

**• Deployment**

* Deploying to a production environment

**WEEK FIVE**

**• Introduction to JavaScript**

• **Variables**:

* Creating and naming variables

**• Data-types:**

* Strings
* Numbers
* Booleans
* Null
* Undefined
* Arrays
* Objects

**• String properties and Methods:**

* Length property
* toUpperCase
* toLowerCase
* indexOf
* slice

**• Number data-types:**

* Learn about number operators:

**• Math operators:**

* Addition,
* Subtraction,
* Multiplication,
* Division
* Incremental
* Decremental

• **Comparison Operators**: Determining equality and differences between variables

* Greater than >
* Less than <
* Equal to == ===

**• Logical Operators:** Determining the logic between variables and values

* Logical And &&
* Logical Or ||
* Logical Not !

**• Concatenation:**

* Combining strings and Variables
* Template Literals

**• Conditional Statements:**

* Introducing Conditional Statements
* If else Statement
* Ternary Operators
* Switch Statements

**• LOOPs:**

* Simplify Repetitive Tasks with Loops
* For Loops
* `do ... while` Loops
* While Loop
* Exiting Loop

**WEEK SIX**

**• Introduction to Functions:**

* Introducing Functions
* Variable Scope
* Types of Functions:
  + Function Declarations
  + Function Expression
  + ES6 Arrow Function
* Getting Information From a Function
* Giving Information to Functions

• **Class Activities**

• **Arrays**:

* What is an Array?
* Accessing, adding, removing Items in an Array
* Using For Loops with Arrays
* Useful Array Methods:
  + Pop and Push
  + Shift and Unshift
  + IndexOf
  + Concat
  + ForEach
  + Map
  + Filter
  + Includes
  + Find
  + Reduce

**WEEK EVEN**

• **Objects:**

* Access an object's properties
* Create objects using object literal notation
* Add properties to objects
* Remove properties from objects using the delete operator
* Write methods to access an object with the **this** keyword
* Compare an object with another object
* Identify global variables as properties of the window object
* Identify the risks of using global variables
* Extract properties and values from an object

**• JavaScript Classes**

* Model real-world "things" using object-oriented programming
* Write a constructor function to instantiate objects
* Identify various ways a function can be invoked, including each approach's effect on the value of this
* Leverage call , apply , and bind to manually set the value of this
* Access and add properties to an object's prototype
* Implement prototypal inheritance to base an object on another object

**• ES6 Functions:**

* Learn new ES6 syntax including arrow functions and classes.

**WEEK EIGHT**

• **Welcome to the DOM:**

* What is the DOM?
* Select a Page Element By Its ID
* Select All Elements of a Particular Type
* Selecting Elements with the Same Class Name
* Using CSS Queries to Select Page Elements

• **DOM and DOM Transversal:**

* Getting and Setting Text with textContent and innerHTML
* Styling Elements
* Creating New DOM Elements
* Appending and removing Nodes
* Using parentNode to Traverse Up the DOM
* Using previousElementSibling, nextElementSibling and insertBefore
* Getting All Children of a Node with children
* Getting the First and Last Child

• **Responding to User Interaction:**

* What is an Event?
* Functions as Parameters
* Delaying Execution with setTimeout()
* Listening for Events with addEventListener()
* Event Bubbling and Delegation
* The Event Object

**WEEK NINE**

• **PROJECTS:**

* Creating a frontend JavaScript project and deploying to netlify

**WEEK TEN**

* Introduction to PHP
  + Installation
* Setup Development and Environment
* PHP Basics, Conditionals and Loops
* Arrays, Date and Time
* Cookies and Sessions
* File Uploads and Error Handling
* OOP Concepts

**WEEK ELEVEN**

* Database Integration
* PHP Modules
  + Importing and Exporting modules
* Composer
* **Creating Web Server:**
  + HTTP Header
  + Response and Request
  + Reading and Writing
* Laravel
  + Installing Laravel
* **Routing & Middleware:**
  + Path
* **Accessing Responses:**
  + write
  + send
  + sendFile
  + end

**WEEK TWELVE**

* **Request Data:**
  + Get
  + Post
  + Delete
* **Controllers:**
  + The site logic
  + Gluing models and views.
* **Form and Form Validation:**
  + Exchanging data between the frontend to backend

**WEEK THIRTEEN**

* **DATABASE:**
  + Types of Database
  + Schemas
* **MySQL:**
  + Download MySQL Database
  + MySQL Connect
  + MySQL Create DB
  + MySQL Create Table
  + MySQL Insert
  + MySQL Insert Multiple
  + MySQL Select
  + MySQL Delete
  + MySQL Update

**WEEK FOURTEEN**

* **Authentication:**
  + What authentication is
  + Levels of Authentication
  + Types of Authentication
* **Deployment:**

**WEEK FIFTEEN AND SIXTEEN**

* **Project**