

# Web Development Backend -Curriculum

## 1.Hypertext Preprocessor (PHP)

- PHP BASIC
- PHP Introduction
- PHP Getting Started
- PHP Syntax
- PHP Variables
- PHP Constants
- PHP Echo and Print
- PHP Data Types
- PHP Strings
- PHP Operators
- PHP Control, Conditional and Looping Statements
- PHP If...Else
- PHP Switch...Case
- PHP Loops
- PHP Data Structures (Basics)
- PHP Arrays
- PHP Objects
- PHP Sorting Arrays
- PHP Advanced
- PHP Functions
- PHP Math Operations
- PHP GET and POST
- PHP Date and Time
- PHP Include Files
- PHP File system
- PHP Parsing Directories
- PHP File Upload
- PHP File Download
- PHP Cookies
- PHP Sessions
- PHP Send Email
- PHP Form Handling
- PHP Form Validation
- PHP Filters
- PHP Error Handling
- PHP Classes and Objects
- PHP Magic Constants
- PHP JSON Parsing
- PHP Regular Expressions

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- PHP Exception Handling
- PHP Database Handling
- PHP MySQL Introduction
- PHP MySQL Connect
- PHP MySQL Create Database
- PHP MySQL Create Table
- PHP MySQL Insert
- PHP MySQL Prepared
- PHP MySQL Last Inserted ID
- PHP MySQL Select
- PHP MySQL Where
- PHP MySQL Limit
- PHP MySQL Order By
- PHP MySQL Update
- PHP MySQL Delete
- PHP MySQL CRUD Application
- PHP MySQL Ajax Search
- PHP MySQL Login System

### 2.SQL

- SQL Introduction
- SQL Getting Started
- SQL Syntax
- SQL Create Database
- SQL Create Table
- SQL Constraints
- SQL Insert
- SQL Select
- SQL Where
- SQL AND & OR
- SQL IN & Between
- SQL Order By
- SQL Top/Limit
- SQL Distinct
- SQL Update
- SQL Delete
- SQL Truncate Table
- SQL Drop

## Web Development Backend -Curriculum

### 3.Laravel

- Getting Started with Laravel
- What is Laravel
- Comparison with Core PHP, Code Ignitor, CAKE PHP and ZEND
- Setup Prerequisites
- PHP
- Composer
- Apache (XAMPP)
- MYSQL(XAMPP)
- Configure your System for Laravel application
- Installing Laravel in You System
- Configuring Laravel for your Web Application
- Laravel Directory Structure
- Laravel Frontend
- Routing in Laravel
- Middleware in Laravel
- CSRF Protection
- Controllers
- Requests
- Responses
- Views
- Blade Templates
- Assets
- Session
- Validation
- Error Handling
- Logging
- Artisan Console
- File Storage
- Helpers
- Queues
- Email Generation
- Laravel Security
- Authentication
- Authorization
- Hashing
- Password Reset
- Laravel Database
- Query Builder
- Eloquent
- Pagination
- Best Practices

# Web Development Backend -Curriculum

## CAPSTONE PROJECTS

### 1 Build a simple Task management System which is driven by Mysql and php

- This project aims to develop a task management system powered by PHP and MySQL, focusing on essential features such as task creation, assignment, status updates, and deadline tracking.
- The system will provide a user-friendly web interface, allowing users to manage tasks and projects effortlessly.
- The backend will utilize PHP for server-side scripting, with MySQL serving as the database for storing and retrieving task-related data.
- The project will cover fundamental concepts of CRUD operations, form handling, and data validation.
- By the end of this project, users will have a functional task management solution that can be extended with additional features as needed.

### 2 Build a Fullstack Jira like Task Management System

- The Fullstack Jira-like Task Management System project involves building a comprehensive task management tool that offers features similar to Jira, including task tracking, project management, and team collaboration.
- Utilizing full-stack technologies, this project will feature a robust backend API (using frameworks like Node.js, Java Spring, or Django) and a dynamic frontend interface built with modern JavaScript frameworks (such as React or Angular).
- The system will support task assignment, status updates, priority setting, and detailed project timelines.
- By incorporating user authentication and role-based access control, the project ensures secure and efficient task management for teams of all sizes.

### 3 Simple Blogging Platform

- The Simple Blogging Platform is a beginner-friendly web application designed to manage and display blog posts.
- It integrates HTML, CSS, JavaScript, jQuery, and Bootstrap 5 for the front-end interface, providing a responsive and user-friendly design.
- The back-end is powered by PHP and MySQL, handling CRUD (Create, Read, Update, Delete) operations for blog posts.
- Users can create new posts, view a list of all posts, edit content, and delete entries, with data persistence managed through a MySQL database.
- jQuery enhances interactivity, allowing for seamless updates and AJAX functionality for improved user experience.

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## LIVE PROJECT

### 1 Booking Management System for Room Booking

- This project focuses on the creation of a booking management system that simplifies room reservation processes for hotels, offices, or event spaces.
- The system will allow users to check room availability, make bookings, cancel reservations, and manage schedules in real-time.
- Using a combination of server-side technologies (such as PHP, Java, or Node.js) and a responsive frontend interface, the application ensures a smooth user experience across devices.
- The backend will be responsible for managing reservations, preventing double bookings, and handling user data securely.
- This project aims to offer a reliable and scalable solution for managing room bookings efficiently, catering to the needs of different business scenarios.