Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister's Hunarmand Pakistan Program

"Skills for All"

Course Contents / Lesson Plan

Course Title: CIT (Advance Web Application Development)

Tags: Front End Technologies, PHP, MySQL, LARAVEL

Duration: 6 Months

Revised Edition

Trade Name	ADVANCE WEB APPLICATION DEVELOPMENT
Course Duration	6 months
Total Training Hours	600-hours
Training Hours/week	20-Hours per Week
Training Hours/Day	4-hours per day
Intake	Bachelor (16 Years)
Training Methodology	20 % Theory 80 % Practical
Medium of Instruction	English / Urdu

AL-Khawarizmi Institute of Computer Science (Al-KICS)

Content

1. Overall objective of the course

course provides participants an opportunity to build a Great Career in web application development world, a best web development program in KICSUET to learn web development all in one, course start from basic level and moved toward advanced tools and techniques of web development. Program is covering HTML5, CSS, JS, JQ, BOOTSTRAP, PHP, MySQL, LARAVEL and Website Design Concepts and common tasks need for deployment and administration of a website.

Industry best Project based web development course, step-by-step learning from basic to advanced level!

2. Competencies gained after completion of the course

Knowledge Proficiency Details

- Knowledge to build REAL world creative and modern website from very scratch using modern web technologies
- Knowledge to new ways of coding, tips & tricks and modern best practices to build a professional website.
- Knowledge of wire-framing, HTML5, CSS3, JQuery and Bootstrap (+BS 4) Framework
- Knowledge to build a fully responsive website which will look perfect on all the small & wide screens.
- Knowledge of PHP, OOP, MYSQL
- The basic of Laravel such as installation, routing, template, controller, model, migration, seeder etc.
- You will make your first crud app with Laravel
- You will learn Laravel Foundation
- You will learn Laravel Website

Skills Proficiency Details

- Students of web development
- Anyone who wants to learn how to build websites using PHP
- Anyone interested in a proper certification in **PHP course in Lahore** or any other city
- People already working as web developers who want to learn the latest techniques and tricks in **PHP based web development**
- Employees of web development companies and software houses who want to polish their skills further in Web Development especially with focus on PHP
- Business owners who want to build and run their own websites themselves

3. Job Opportunities available in the Market

- PHP / Laravel Developer
- Front-End Developer

4. Curriculum of Web Application Development

Front End Development		
Module #	**Learning Units**	**Weekly Plan**
Module 1	- Introduction, Defines Goals / Objectives - Install Chrome Browser - Chrome Web Developer Tools - Install VS Code Editor with Extension - HTTP, HTTPS, URL, DOM - Code Validation - Dev Tools - Basic HTML & CSS	**Week 1**
Module 2	- Setup Website Folder File Structure - What Is HTML? - Create Basic HTML5 Page Structure - Add Important Meta Tags - Add Website Title & Favicon - What Is CSS? - Link CSS To HTML - Basic CSS Selectors - CSS Classes & IDs - CSS Box Model - CSS Positioning	**Week 2**
Module 3	- CSS Colors - CSS Backgrounds - CSS Borders - CSS Margins - CSS Padding - CSS Height/Width	**Week 3**

Front End Development		
Module #	**Learning Units**	**Weekly Plan**
	• CSS Box Model • CSS Outline • CSS Text • CSS Fonts • CSS Icons • CSS Links • CSS Lists • CSS Tables • CSS Display • CSS Max-width • CSS Position • CSS Overflow • CSS Float	
Module 4	• What Is JavaScript? • Link Script To HTML • JavaScript Basics	**Week 4**
Module 5	• What Is jQuery? • Add jQuery Library • How To Use jQuery	**Week 5**
Module 6	• Bootstrap Framework • Bootstrap Framework Version • What Is Bootstrap? • Add Bootstrap Library • Bootstrap Grid System • Bootstrap Grid Examples Know About Web Development Resources	**Weeks 6,7**
Module 7	• Choose Right Fonts • Important Note Before You Go Ahead • Choose Right Icons • Choose Right Colors.	**Weeks 8, 9**
Module 8	• Creative Responsive Website	

PHP AND MYSQL		
Module #	**Learning Units**	**Weekly Plan**
Module 9	- Overview of PHP - Variables - Constants - Operators - Statement Block	**Week 10**
Module 10	- Decision Making - Loop Types - String - Arrays - Functions OBJECT ORIENTED PROGRAMMING - Class - Object - Member Variable - Member function - Inheritance	**Week 11**
Module 11	- Parent class - Child Class - Polymorphism - Overloading - Data Abstraction - Encapsulation	**Week 12**
Module 12	- Creating Objects in PHP - Calling Member Functions - Constructor Functions - Destructor - Inheritance - Function Overriding	**Week 13**
Module 13	Public Members	**Week 14**

PHP AND MYSQL		
Module #	**Learning Units**	**Weekly Plan**
	• Private members • Protected members • Interfaces • Constants • Abstract Classes • Static Keyword	
Module 14	• Calling parent • Constructors • File Inclusion • PHP FORMS • File Uploading	**Week 15**
Module 15	• MYSQL basics. • Creating a database using Console and PHP MY ADMIN.	**Week 16**
Module 16	• CRUD Operations using MYSQL. • Connecting database • PHP Project	**Week 17**
Module 17	• PHP Project Continuous	**Week 18**
Module 18	• Laravel Foundation • Installation • Folder Structure • MVC, ROUTES • Controller, Blade Syntax • Middleware, Database Configuration • Eloquent ORM	**Week 19**
Module 19	• Query Builder • Model with migrations • Form Validation & Erorr Messages • Pagination • Relationship • Join Table	

Module #	Learning Units	Weekly Plan
Module 20	• Eloquent CRUD • Authentication • Email Configure • Password Option • User Profile • Soft Delete • Toaster	**Week 20**
Module 21	• Laravel Website project	**Week 21**

PHP AND MYSQL		
Module #	**Learning Units**	**Weekly Plan**
	• Laravel Website project Continuing	

Laravel		
Module #	**Learning Units**	**Weekly Plan**
Module 22	• Laravel Website project Continuing	**Weeks 22**
Module 23	• Laravel Website project Complete	**Weeks 23 & 24**
Module 24	• Success stories • Resumes and Interviews guides • Job Market Searching • Self-employment • Freelancing sites • Final Assessment	**Weeks 25**

List of Machinery / Equipment

Sr. No	Name of item as per curriculum	Quantity physically available at the training location
1	Laptop	25
2	Internet	25

5. Software List

Sr. No	Software Name
1	Sublime / Brackets / PHP Storm
2	Photoshop CC
3	XAMP
5	Microsoft Office
6	Adobe Acrobat Reader
7	Google Chrome

6. Minimum Qualification of Teachers / Instructor

The qualification of teachers / instructor of this course should be:

- MCS / MIT
- Bachelors with Computers / BSC (5 Year Experience Software House)
- Teaching Experience: With minimum 2 years of teaching experience

7. Supportive Notes

Assessment context
- The unit assessment can be taken on the job environment or at lab, may be both. The competency may also check by observing individual is working or as part of team.

Critical aspects
- The candidate must be able to vigilant to the dynamic situation and can handling of equipment, comprehend of safety measures related with computer proper maintenance.

Assessment condition
- The learner will have access to all tools, equipments material and manual required for this module. Proper time period will be given to candidate.

Resources required for assessment
- All network related equipment with necessary accessories including software and hardware tools.

- https://www.php.net/
- https://www.w3schools.com/
- https://www.tutorialspoint.com/
- https://laravel.com/
- Beginning Laravel
- Build Websites with Laravel 5.8 (Sanjib Sinha)
- Laravel 5.8 Learn A to Z | Best PHP Framework (Linus Torvalds)
- Laravel Up & Running: A Framework for Building Modern PHP Apps Matt Stauffer