

# THE

# GEEK INSTITUTE

OF CYBER SECURITY

Web Designing and Development

www.geekinstitute.org

Dear Esteemed Learner,

At The Geek Institute of Cyber Security, we recognize the profound impact we have on shaping your future, and we approach this responsibility with utmost dedication.

As the founder of The Geek Institute of Cyber Security, I am committed to providing you with unparalleled training enriched by hands-on projects and promising opportunities.

With us, your journey towards a successful and prosperous career begins.

Wishing you every success!

Warm regards,

**Mani Kumar** 

Founder, The Geek Institute of Cyber Security

### Course Description

#### **Duration: 12 Months**

This intensive Full-Stack Web Designing and Development course is designed to empower students with the skills and knowledge necessary to create dynamic, responsive, and data-driven websites and web applications.

From front-end design using HTML, CSS and JavaScript, to back-end development with PHP, MySQL, this course covers the entire spectrum of web development technologies.

Students will also learn how to enhance the efficiency and functionality of their projects using Sass for CSS preprocessing and manage databases with phpMyAdmin.

#### Prerequisites:

Basic Computer Skills: Familiarity with operating systems (Windows, Linux, macOS) and file management is essential.

**Web Browsing:** Comfortably navigate the internet, use search engines, and visit websites.

### Who can Enroll?

**Beginners:** This course cater to complete beginners with little to no prior experience in web development or design. If you've never coded or designed a website before, you're a prime candidate.

**Students:** High school, college, or university students studying computer science, information technology, graphic design, or related fields can benefit from our Web Designing and Development course to supplement their education.

**Career Changers:** If you're looking to switch careers or add new skills to your existing skill set, our Web Designing and Development course offer a viable pathway into the tech industry.

**Coding Enthusiasts:** If you're simply passionate about coding or have a keen interest in web technologies, this course offer an opportunity to explore and deepen your knowledge.

**Job Seekers:** Individuals seeking employment in techrelated roles, such as front-end or full-stack developers, can benefit from this course to improve their job prospects.

Anyone with a Curiosity for the Web: Our Web Designing and Development course is open to anyone curious about how websites are created. They can be taken for personal enrichment and self-improvement.

### Course Objectives

**Fundamental Understanding:** Provide students with a fundamental understanding of web development concepts, including HTML, CSS, and JavaScript.

**Programming Skills**: Teach students how to write code for both front-end and back-end development, allowing them to create interactive and dynamic websites.

**Responsive Design:** Train students in responsive web design principles to ensure that websites function well on various devices and screen sizes.

**Version Control:** Teach the use of version control systems with Git & GitHub, which is essential for collaborative web development.

**Web Security:** Address web security concepts, including common vulnerabilities and best practices for securing web applications.

**Database Integration:** Provide knowledge and skills related to database management and integration with web applications.

Server-Side Scripting: Teach server-side scripting languages (PHP) for building dynamic web applications.

**API Integration**: Show how to integrate external APIs (Application Programming Interfaces) into web applications for enhanced functionality.

### **Job Profiles**

Web Designing and Development course opens up a wide range of job opportunities in the field of Website Development and Design.

**Front-end Developer:** Front-end developers are responsible for creating the user interface and user experience of a website. They work with HTML, CSS, and JavaScript to build responsive and visually appealing web applications. Knowledge of design principles is also important in this role.

**Back-end Developer:** Back-end developers focus on the server-side of web development. They work with technologies like PHP, Python, Ruby, Node.js, and databases like MySQL or MongoDB to handle data, user authentication, and server operations.

**Full Stack Developer:** Full-stack developers have expertise in both front-end and back-end development. They are capable of building complete web applications, from the user interface to server-side functionality.

**Web Designer:** Web designers focus on the visual aspects of a website or web application. They work with graphic design tools, HTML, CSS, and sometimes JavaScript to create visually appealing and user-friendly layouts, graphics, and interfaces.

**E-commerce Developer:** E-commerce developers build and maintain online stores, integrating payment gateways, managing product databases, and ensuring a secure shopping experience.

### Course Syllabus

#### 1. Introduction to Web Designing and Development

- Role of front-end and back-end development in web projects.
- Overview of the full stack: HTML, CSS, JavaScript, PHP, MySQL.
- Setting up development environment: text editor, browser, local server.

#### 2. HTML, CSS, and Responsive Design

- Structuring web content with HTML5.
- Styling web pages with CSS3, including Flexbox and Grid.
- Creating responsive layouts using media queries

#### 3. JavaScript and DOM Manipulation

- Introduction to JavaScript and its applications.
- Document Object Model (DOM) manipulation for interactivity.
- Event handling, user input, and dynamic content.

#### 4. Advanced JavaScript and jQuery

- Advanced JavaScript concepts: closures, scope, this keyword.
- Introduction to jQuery for simplifying DOM manipulation.
- Creating interactive elements and animations with jQuery.

#### 5. Sass and Advanced CSS Techniques

- · Utilizing Sass for organized and efficient CSS development.
- Using variables, mixins, and nesting in Sass.
- Implementing advanced CSS techniques like animations and transitions.

#### 6. PHP Basics and Server-Side Scripting

- Introduction to PHP and its role in server-side scripting.
- Variables, data types, control structures, and functions in PHP.
- Integrating PHP with HTML to create dynamic web pages.

#### 7. Database Design and MySQL

- Fundamentals of relational databases.
- Creating and managing databases using MySQL.
- Structuring tables, defining relationships, and writing SQL queries. Privacy laws and regulations

#### 8. PHP and MySQL Integration

- Connecting to MySQL database using PHP.
- Querying, updating, and manipulating database records.
- Handling user input, form validation, and data security.

#### 9. User Authentication and Security

- Implementing user registration and login systems.
- Hashing passwords for secure storage.
- User authentication and access control.

#### 10. Git and GitHub for Version Control

- · Introduction to version control with Git.
- Collaborative development workflows using GitHub.
- Cloning, branching, merging, and resolving conflicts.

#### 11. Building a Dynamic Website

- Integrating front-end and back-end technologies.
- Creating a dynamic website with user registration, login, and data retrieval.
- Implementing a CRUD (Create, Read, Update, Delete)
  interface.

#### 12. Project Deployment and Web Hosting

- Preparing a website for deployment.
- Hosting a website on a web server.
- Domain management and DNS configuration.

#### 13. Advanced Topics and Emerging Trends

- Exploring advanced PHP topics (sessions, cookies, APIs).
- Introduction to front-end build tools (npm, Webpack).
- Staying updated with the latest web development trends.

#### 14. Artificial Intelligence in Web Development

- Introduction to AI and its role in modern web development
- Using AI tools like ChatGPT and Copilot for coding assistance
- Basics of integrating AI APIs (e.g., OpenAI API, Google AI) into web applications
- Personalization and recommendation systems using AI



## What You Will Learn in This Course









HTML

CSS JavaScript Sass









MySQL

PHP phpMyAdmin Bootstrap









jQuery VS Code XAMPP REST API









Apache2

Nginx Linux

Windows

### Our Popular Courses

Geek Certified
Cyber Security
Professional
(GCCSP)



Full Stack Web Development (MERN) Advanced
Diploma in
Computer
Applications
(ADCA)

### **Contact Information**

Ready to unlock a secure future? Reach out to us and let's code the path to success together!

**Call Now To Get Fee Details** 

Call Now to Book 3-Days of FREE Demo Classes



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