ABOUT THE COURSE:

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| TOTAL DURATION: | 45 HRS |
| MODE OF DELIVERY | Virtual Instructor led by Industry Experts + Physical Session conducted by FDP faculty |
| TRAINER TO STUDENT RATIO: | 1:60 |
| TOTAL MARKS: | 75 |

| TABLE 1 | |
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| OVERALL COURSE OBJECTIVE: | • This program is designed to develop learners' capabilities by enabling them to apply essential skills and analyze foundational knowledge required for a successful career in Front-End Development.<br><br>• Learners will evaluate key concepts, tools, and technologies in modern web development, applying them as the foundational step toward becoming proficient Front-End Developers.<br><br>• Students will analyze and apply core concepts of HTML, CSS, and JavaScript, while also gaining the ability to evaluate basic cloud computing principles within the context of front-end development.<br><br>• Learners will create and deploy responsive web pages by utilizing version control systems such as Git and GitHub, demonstrating practical implementation of front-end projects. |

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| LEARNING OUTCOME: | 1. Implement web development basics and its relevance to personal profile webpages.<br>2. Use HTML to create structured webpages with headings, paragraphs, and lists.<br>3. Apply CSS styles for webpage enhancement<br>4. Develop responsive web design skills to ensure the webpage looks good on various devices. |

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| | 5. Implement JavaScript to add interactivity and dynamic content to the webpage.<br>6. Manipulate the DOM with JavaScript for dynamic updates to webpage content.<br>7. Explore web hosting options and deploy the webpage online for public access.<br>8. Customize the webpage with advanced CSS techniques, animations, and transitions.<br>9. Integrate third-party libraries or frameworks for added functionality and design options.<br>10. Create a functional personal profile webpage as a final project, demonstrating acquired skills. |

| TABLE 2: MODULE-WISE COURSE CONTENT AND OUTCOME | | | | |
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| SL.NO | MODULE NAME | MODULE CONTENT | MODULE LEARNING OUTCOME | DURATION (HRS) |
| Week 1 | Program Introduction | 1. Introduction to Skills Build Program (Orientation and Registration in Portal)<br>2. Introduction to Coding and Cloud Computing (Explaining the Syllabus and Future Program Instruction) | 1. Learners will analyze the structure and goals of the Skills Build Program and successfully complete the registration process through the learning portal.<br>2. Learners will evaluate foundational coding and cloud computing concepts, and interpret the program syllabus to set clear | 2 HRS |

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| | | | expectations for future modules. | |
| Week 2 | Introduction to HTML | 1. Understanding of WEB.<br>2. Introduction to HTML-Fundamentals of Required tools and technologies like Visual Studio Code, notepad++, Eclipse for frontend web application development.<br>3. HTML-Elements, Tags, Components and Structures, Formatting | 3. Learners will explore and analyze the foundational elements of the web, including its architecture, components, and functional layers<br>4. Learners will demonstrate proficiency in using essential tools like Visual Studio Code, Notepad++, and Eclipse to build and manage HTML-based frontend applications. | 2 HRS |
| Week 3 | HTML Web Applications | 1. Web Application: List, Table, Form, Media, graphics, Semantic tags<br>2.Link HTML 5 APIs: Geolocation, Web Storage | 5. Design and construct well-structured and accessible web applications by effectively utilizing lists, tables, forms, media, graphics, and semantic tags to ensure clarity, | 2 HRS |

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| | | | organization, and usability.<br>6. Integrate and evaluate the use of advanced HTML5 APIs, such as Geolocation and Web Storage, to enhance interactivity and functionality in dynamic web applications. | |
| MileStone-1 | Students should share the Screenshot of their HTML page (Self- Paced) | | | 4 HRS |
| Week 4 | Introduction to CSS | 1. Introduction to CSS<br>2. CSS syntax and embedding, CSS selector | 7. Analyze and evaluate the core principles of CSS to understand its role in enhancing the visual structure and presentation of web pages.<br>8. Develop and implement effective CSS styling by writing syntactically correct rules, utilizing appropriate embedding techniques, | 2 HRS |

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| | | | | and applying various selectors to achieve desired design outcomes. | |
| Week 5 | CSS Properties | 1. CSS properties: Colour, Background, Text, Font, Position, List style, table<br>2. CSS Properties: pseudo-element, Transformations, Animation, and Media Queries, grid, flex | 9.<br><br><br><br><br><br><br><br><br>10. | Apply and evaluate core CSS properties—such as color, background, text, font, position, list style, and table—to design visually engaging and logically structured web pages.<br>Design and construct responsive and interactive web layouts by leveraging advanced CSS techniques, including pseudo-elements, transformations, animations, media queries, grid, and flexbox, to optimize user experiences | 2 HRS |

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| | | | across various devices. | |
| MileStone-2 | Students should share the Screenshot of their HTML & CSS page (Self- Paced) | | | 4 HRS |
| Week 6 | Introduction of JS | 1.Java Script: Types of JS, JS console, Dialog box, Operators and Functions<br>2. Java Script: Control Structures, Document Object Model (DOM) | 11. Analyze and apply JavaScript fundamentals—including data types, console operations, dialog boxes, operators, and functions—to build dynamic and functional web applications.<br>12. Design and implement interactive and responsive user interfaces by utilizing JavaScript control structures and manipulating the Document Object Model (DOM) effectively. | 2 HRS |
| Week 7 | Applications of JS | 1. Java Script: Objects and Nodes, Handling DOM using JavaScript<br>2.Java Script: JavaScript | 13. Create and manage dynamic web interactions by manipulating the Document | 2 HRS |

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| | | Events, Animation, Cookies & session | Object Model (DOM) using JavaScript objects and nodes to modify and control page content in real-time.<br>14. Design and implement enhanced user experiences by effectively managing JavaScript events, creating animations, and handling cookies and sessions to optimize web application functionality. | |
| Week 8 | Introduction of Cloud | 1. Introduction of Cloud Computing-(Git & GitHub)<br>2. Deploying the Web page in GIT & GitHub | 15. Analyze and evaluate the core concepts of cloud computing, with a focus on version control using Git and collaborative development through GitHub.<br>1. Apply and demonstrate the deployment of web pages by | 2 HRS |

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| | | | utilizing Git and GitHub platforms to manage, track, and publish web projects effectively. | |
| MileStone-3 | Students should share the Screenshot of their Deployment Model (Self- Paced) | | | 4 HRS |

| TABLE 3: OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USECASES | | | |
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| LEARNING OUTCOME | ASSESSMENT CRITERIA | PERFORMANCE CRITERIA | USE CASE |
| Web development basics and its relevance to personal profile webpages. | Explain the structure of the web and its role in personal webpage creation. | Demonstrate understanding of web components, including structure, tools, and technologies. | Use Case: Building a Personal Blog – A user creates a basic blog explaining their background and interests. |
| Apply HTML to create structured webpages with headings, paragraphs, and lists. | Create HTML documents with headings, paragraphs, lists, and other structural elements. | Develop error-free and semantically correct HTML pages, ensuring structured and accessible content. | Use Case: Creating a Resume Page – Build a webpage to display a well-structured resume using headings and lists. |
| Apply CSS styles for webpage enhancement. | Implement CSS to style webpages, including text, layout, and design properties. | Demonstrate the ability to enhance webpage presentation with effective CSS rules and advanced selectors. | Use Case: Styling a Portfolio Page – Customize fonts, colors, and layout to make a portfolio visually appealing. |
| Develop responsive web design skills to ensure the webpage looks | Use media queries and responsive layouts (grid and flexbox) for | Build dynamic and visually responsive web designs compatible across | Use Case: Building a Mobile-Friendly Page – Ensure a profile page works seamlessly on |

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| good on various devices. | different screen sizes. | devices and resolutions. | phones, tablets, and PCs. |
| Learn JavaScript to add interactivity and dynamic content to the webpage. | Write JavaScript code for basic interactivity, including functions, control structures, and events. | Apply JavaScript to add interactive features, ensuring dynamic content and user engagement. | Use Case: Interactive Contact Form – Add validation and interactivity to a contact form for user engagement. |
| Manipulate the DOM with JavaScript for dynamic updates to webpage content. | Use JavaScript to manipulate the DOM elements dynamically. | Demonstrate DOM manipulation to update webpage content based on user input or interaction. | Use Case: Dynamic Content Update– Update a user's project gallery dynamically based on clicks or filters. |
| Explore web hosting options and deploy the webpage online for public access. | Successfully deploy a personal webpage on platforms like GitHub using Git version control. | Host and share a fully functional webpage, verifying accessibility and correctness in deployment. | Use Case: Deploying a Personal Site – Upload a personal website to GitHub for professional visibility. |
| Customize the webpage with advanced CSS techniques, animations, and transitions. | Create CSS animations, transitions, and advanced styling techniques for visual appeal. | Demonstrate proficiency in advanced CSS, creating engaging animations and ensuring smooth transitions. | Use Case: Animating Portfolio Sections – Use transitions to make portfolio sections smoothly appear on scroll. |
| Integrate third-party libraries or frameworks for added functionality and design options. | Use external libraries (e.g., Bootstrap) to enhance the webpage design and add pre-built features. | Incorporate third-party libraries seamlessly into the project to improve functionality and design. | Use Case: Using Bootstrap for Quick Design – Integrate Bootstrap to create a professional layout with less effort. |
| Create a functional personal profile webpage as a final project, demonstrating acquired skills. | Develop and showcase a complete personal profile webpage incorporating HTML, CSS, JavaScript, and hosting. | Demonstrate integration of learned skills into a cohesive final project, meeting functional, responsive, and design standards. | Use Case: Showcasing a Personal Profile – Develop a comprehensive webpage summarizing skills, projects, and bio. |

| TABLE 4: LIST OF FINAL PROJECTS (PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME) | |
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| SL.NO | FINAL PROJECT |
| 1 | Completion of the Learning Plan |
| 2 | Submission of Student Digital Portfolio using GitHub |

| TABLE 5: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 75) | | | | |
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| ASSESSMENT CRITERIA | DESCRIBE THE CRITERIA OF THE BELOW CATEGORY PERFORMANCE | | | TOTAL MARKS |
| | FAIR | GOOD | EXCELLENT | |
| 1 | 33 | 50 | 75 | 75 |

| Category | Assessment Criteria | Performance Levels | Weightage (Marks) |
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| Practical Skills Proficiency | Demonstrates ability to perform job-specific tasks effectively, using relevant tools, techniques, or methodologies | Fair, Good, Excellent | 20 |
| Technical Knowledge Application | Applies theoretical concepts to practical scenarios with accuracy and relevance | Fair, Good, Excellent | 15 |
| Project Execution | Completes assigned projects or use cases demonstrating innovation, thoroughness, and skill application relevant to industry standards. | Fair, Good, Excellent | 30 |
| Communication and Reporting | Clearly presents findings, solutions, or project outcomes using professional communication and documentation standards (e.g., reports, presentations). | Fair, Good, Excellent | 10 |