

Front end Development Lectureflow

Module 1 - Foundation	3
<ul style="list-style-type: none"> • How does the Internet Work • DNS and how it works • What is HTTP • Browsers and how they work? • What is Domain Name? • What is hosting? 	
WD----->Module 1) WD - HTML	10
<ul style="list-style-type: none"> • Student Intro , Career Center Login ,What is Internet, HTTP/HTTPS, WWW, Domain name and Top Domain name • SEO, What is HTML, What is Text Editor, Web Browser, Downloading Text Editor , HTML Structure, First Program in HTML • 1) HTML Introduction 2) HTML Getting Started 3) HTML Elements 4) HTML Attributes 5) HTML Basic Tags • 1) HTML Doctypes 2) HTML Layout 3) HTML Head 4) HTML Meta 5) HTML Scripts • Practical Examples: 1) Create any simple web page to display your name. 2) Importance of meta tag and Doctypes • Tags and self Closing Tags, Basic Tag , Attribute and Events, Marquee Tag • HTML - Meta Tags, HTML - Comments, HTML - Images, HTML - Tables, HTML - Lists, HTML - Text Links, HTML - Image Links • HTML Headings HTML Paragraphs HTML Links HTML Text Formatting HTML Styles HTML Images • HTML - Frames, HTML - Iframes, HTML - Blocks, HTML - Backgrounds, HTML - Colors, HTML - Fonts • Anchor Tag, Img Tag, Image Mapping • HTML - Fonts, HTML - Forms, HTML - Embed Multimedia ,HTML - Marquees, HTML - Header, HTML - Style Sheet, HTML - Javascript ,HTML - Layouts • List Tag, Tables, Forms • HTML - Tags Reference, HTML - Attributes Reference, HTML - Events Reference, HTML - Fonts Reference, HTML - ASCII Codes, ASCII Table, Lookup, HTML - Color Names, HTML - Entities, HTML - Fonts, Ref HTML - Events, Ref MIME Media Types, HTML - URL Encoding Language, ISO Codes HTML - Character Encodings, HTML - Deprecated Tags • PRactical Examples: 1) Create simple Doc and display your name using different heading tag 2) Create link for open google. 3) Create document using all text formatting tags • HTML online editor • HTML Tables HTML Lists HTML Forms HTML Iframes • Practical Examples: 1) Create simple table 2) Create time table for your school 3) Create table with colspanrowspan example 4) Create invoice using table 5) Create hotel menu. 6) Create index page for your book. 7) Create list with different categories. • PRactical Examples: Create registration form with all fields and validation 	
Module 2) WD - CSS and CSS 3	16

- 1) CSS 2) In-line CSS Internal Style External Style Sheet @import Style Sheet 3) CSS Class CSS ID
- What is CSS How to Implement CSS Class and ID Width and Height Css Unit Box Model (Margin,padding,Border) and create basic template design
- Practical example : Create page with difference color text
- CSS Selectors , Pseudo Classes and Elements , Float and Clear and Alignment , Font Styling , Opacity and Visibility , Line Height
- 1) CSS Text 2)CSS Font 3) CSS Background 4) CSS Links 5) CSS Lists 6) CSS Display 7) CSS Visibility
- Creating Header of Website , Outline , Background , Counter increment , Counter reset ,Cursor , Overflow
- PRactical Example : Create layout for your project
- Position , Creating Submenu , Border Radius, Transform , Animation , Font Awesome Icons
- 1) CSS Layout Model 2) CSS Border 3) CSS Margin 4) CSS Padding 5) CSS Outline
- Font Family Through Google Font , import fontface rule ,FlexBox
- 1) CSS Float 2) CSS Align 3) CSS Position 4) CSS Element Size 5) CSS Layer
- Practical Example : Create image gallery
- 1) CSS Pseudo Class Selector 2) CSS Pseudo Element Selector
- CSS Properties 1) Background, 2) border 3) bottom 4) caption-side 5) clear 6) clip 7) color 8) content
- Practical Example: Create Menu with logo at left side and contact info at right side using clear effect
- 1) counter-increment 2) counter-reset 3) cursor 4) direction 5) display 6) empty-cells
- Practical Example: 1) Create submenu list using counter
- 1) float 2) font 3) height 4) left 5) letter-spacing 6) line [height, style, style-7) image, style-position, 8) style-type] 9) margin 10) outline 11) overflow 12) padding
- 1) page-break 2) position 3) quotes 4) right 5) table-layout 6) text 7) top 8) vertical-align 9) visibility 10) white-space 11) width 12) word-spacing 13) z-index
- Practical Example: wireframe layout for your template using div
- Media Query (For Responsive Website) , Creating a Responsive Website
- Validate a Website, Hosting a website with free domain name, Column , Clippath , Gradient Color , Filter, Border Image

Module 3) Website Designing - HTML5

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- HTML5 Tags, HTML5 Input and Attribute
- Audio and Video, Semantic Element in HTML5
- Canvas, Svg
- Display Grid

Module 4) WD - JAVASCRIPT BASIC & DOM

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- 1) JS Introduction 2) JS Getting Started 3) JS Syntax 4) JS Variables 5) JS Generating Output 6) JS Data Types 7) JS Operators 8) JS Events 9) JS Strings 10) JS Numbers 11) JS If, Else 12) JS Switch Case
- What is Javascript, Creating First Javascript Program, Way to apply Javascript , Event in Javascript , How to select Tag Classes and Id
- Practical Example: 1) Create program for input color and output that code 2) Create program for pattern using loop
- Functions, Alert ,Confirm , Prompt , Addition of Two Number , Hide and Show Password
- a) JS Arrays b) JS Sorting Arrays c) JS Loops d) JS Functions e) JS Objects
- How to apply CSS using Javascript, Image Changing
- Practical Example: 1) Create function Finding the Maximum and Minimum Value in an Array 2) Create pyramid pattern program
- If Else Statement, Javascript Form Validation
- JAVASCRIPT & DOM 1) JS DOM Nodes 2) JS DOM Selectors 3) JS DOM Styling 4) JS DOM Get Set Attributes 5) JS DOM Manipulation 6) JS DOM Navigation
- How to see Traffic in Our Website
- Practical Examples: 1) Get input data and perform different operations 2) Make dynamic CSS by click
- JAVASCRIPT ADVANCED 1) JS Date and Time 2) JS Math Operations 3) JS Type Conversions 4) JS Event Listener 5) JS Regular Expressions 6) JS Error Handling
- Practical Example: Create custom Validation

Module 5) WD - JQuery Basic, Effects & Advanced

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- jQuery Basic a) jQuery Introduction b) jQuery Getting Started c) jQuery Syntax d) jQuery Selectors e) jQuery Events
- What is JQuery , Downloading JQuery File , First Program in JQuery
- Practical Example: Change CSS
- JQuery Syntax , Query Selector, Hide , Slide , Fade Effect in JQuery
- JQuery Effects 1) jQuery Show/Hide 2) jQuery Fade 3) jQuery Slide 4) jQuery Animation 5) jQuery Stop 6) jQuery Chaining 7) jQuery Callback
- How to Apply CSS Using JQuery, How to Add Class and Remove Class in JQuery , JQuery Animation
- Practical Example: Create slider with animation
- Filter using JQuery , JQuery Slider Plugin , Validation Plugin
- JQuery Advanced 1) jQuery Traversing 2) jQuery Ancestors 3) jQuery Descendants 4) jQuery Siblings 5) jQuery Filtering 6) jQuery Load 7) jQuery No-Conflict
- Zoom Plugin, Now Make Your Existing Website Dynamic with Javascript and JQuery

Module 6) WD - Bootstrap Basic & Advanced

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<ul style="list-style-type: none"> • Bootstrap Basic 1) Bootstrap Introduction 2) Bootstrap Getting Started 3) Bootstrap Grid System 4) Bootstrap Fixed Layout 5) Bootstrap Fluid Layout 6) Bootstrap Responsive Layout • Practical Example: Create Navigation Menu • 1) Bootstrap Typography 2) Bootstrap Tables 3) Bootstrap Lists 4) Bootstrap List Groups 5) Bootstrap Forms 6) Bootstrap Custom Forms 7) Bootstrap Input Groups 8) Bootstrap Buttons 9) Bootstrap Button Groups • Practical Example: Create login registration form • 1) Bootstrap Images 2) Bootstrap Cards 3) Bootstrap Media Objects 4) Bootstrap Icons 5) Bootstrap Navs 6) Bootstrap Navbar 7) Bootstrap Breadcrumbs 8) Bootstrap Pagination 9) Bootstrap Badges 10) Bootstrap Progress Bars 11) Bootstrap Spinners 12) Bootstrap Jumbotron 13) Bootstrap Helper Classes • Practical Example: 1) Create image gallery 2) Create model for login Product list page with pagination • Bootstrap Advanced 1) Bootstrap Modals 2) Bootstrap Dropdowns 3) Bootstrap Tabs 4) Bootstrap Tooltips 5) Bootstrap Popovers 6) Bootstrap Alerts 7) Bootstrap Stateful Buttons 8) Bootstrap Accordion 9) Bootstrap Carousel 10) Bootstrap Typeahead 11) Bootstrap ScrollSpy 12) Bootstrap Toasts • Practical Example: Create your project website using bootstrap 	
Adv. Javascript -> Module - 1) Introduction and Code Quality	6
<ul style="list-style-type: none"> • Introduction to JavaScript, Code editors, Developer console • Fundamentals, Hello, world!, Code structure, The modern mode, "use strict", Variables, Data types • Interaction: alert, prompt, confirm, Type Conversions, Basic operators, maths, Comparisons, Conditional branching: if, '?' • Logical operators, Nullish coalescing operator '??', Loops: while and for, The "switch" statement, Functions • Code quality, Debugging in Chrome, Coding Style, Comments 	
Module 2) Data types and objects	4
<ul style="list-style-type: none"> • Data types, Methods of primitives, Numbers, Strings, Arrays, Array methods, Iterables, Map and Set, WeakMap and WeakSet • Object.keys, values, entries, Destructuring assignment, Date and time, JSON methods, toJSON • Objects: the basics, Objects, Object references and copying, Garbage collection, Object methods, "this" • Constructor, operator "new", Optional chaining '?.', Symbol type, Object to primitive conversion 	
Module 3) Document, Event and Controls	6
<ul style="list-style-type: none"> • Document, Browser environment, specs, DOM tree, Walking the DOM, Searching: getElement*, querySelector* • Node properties: type, tag and contents, Attributes and properties, Modifying the document, Styles and classes • Introduction to Events, Introduction to browser events, Bubbling and capturing, Event delegation, Browser default actions, Dispatching custom events • UI Events, Mouse events, Moving the mouse: mouseover/out, mouseenter/leave, Drag'n'Drop with mouse events, Pointer events, Keyboard: keydown and keyup, Scrolling • Forms, controls, Form properties and methods, Focusing: focus/blur, Events: change, input, cut, copy, paste, Forms: event and method submit 	
Module 4) Network Request	3
<ul style="list-style-type: none"> • Network requests, Fetch, Form Data, Fetch: Download progress, Fetch: Abort, Fetch: Cross-Origin Requests, Fetch API • URL objects, XMLHttpRequest, Resumable file upload, Long polling, WebSocket, Server Sent Events 	
React JS----->Module 1) Introduction	3

Module 2) JavaScript Essentials	6
<ul style="list-style-type: none"> • Basic JavaScript - Understanding var, let and Const - JS switch, if, else, - JS loop - Javascript JSON • Functions - Function Declaration in JS - Arrow Functions - Higher Order Functions - Map, Reduce and Filter • Classes - Javascript Classes and Objects - Class Properties and Methods - This keyword and binding in JS - Class inheritance - Exports and Imports • Array in JS - Creating Array - Array methods - The Spread & Rest operators - Destructuring • JS Async - Callbacks - Promises - Async/Await • ES6 Basics and Babel • Understanding the DOM • Small Project using ES6 	
Module-3) React - Components, State, Props	8
<ul style="list-style-type: none"> • Installation - Add React to a HTML Website - Create New React App - Hello World • Getting started in React • JSX • Components • Component Composition • JSX - Why JSX? - Embedding Expressions in JSX - Attributes with JSX - Children with JSX • Props & Prop Types • Event Handlers • State • React Web App • Components, State, Props - Function Component - Class Component - Props - State - Class Component Lifecycle 	
Module 4) Lists and Hooks	6
<ul style="list-style-type: none"> • Conditional Rendering - Lists and Keys - Forms - Handling Events - Lifting State up • Hooks - Introduction - Using the State hook - Using the Effect hook - Rules of Hook - Custom Hook 	
Module-5) React - Styling & Advance React	5
<ul style="list-style-type: none"> • Creating the first App • Understanding the App • Styling the App • Inspecting & Debugging styles • Built-in components • Working with Images • ListViews • TextInput • Styling React Components - CSS stylesheet - Inline Styling - CSS Modules - CSS in JS Libraries (styled components) • Creating Views (Scenes) • Conditional Rendering - Lists and Keys - Forms - Handling Events - Lifting State up • Hooks - Introduction - Using the State hook - Using the Effect hook - Rules of Hook - Custom Hook • Advance Concepts - Context, useContext() - Working with Refs and useRefs() - Fragments - Performance optimization with useMemo() - Styling React Components - CSS stylesheet - Inline Styling - CSS Modules - CSS in JS Libraries (styled components) • Bootstrap with React • React Router - Browser - Router - Link - Route - Template integration - Http Request in React - Get and Post data 	
Module 6) React Router	8

<ul style="list-style-type: none"> • React Router • Browser - Router - Link - Route • Template integration - HttpRequest in React - Get and Post data 	
Module-7) React - Applying Redux	8
<ul style="list-style-type: none"> • State • State storage problem • Redux Basics • Redux Principles • Implementing Redux • React-Redux • Middleware • Counter App Demo • Redux - Complexity of Managing state - Understand the Redux Flow - Setting up Reducer and store - Dispatching Actions - Passing and Retrieving Data with Action - Combining Multiple Reducers - Adding Middleware - Redux Dev tools 	
Interview Prep for Web designing	6
<ul style="list-style-type: none"> • SDLC, Models/Methodology, OOPS, SQL • CSS, Box Model, position, Pseudo-classes & Pseudo-elements, Navigation Bar, 2D Transforms & 2D Transforms • Media Queries, Animations, CSS & CSS3, Selectors, Dropdown, Tooltip • Javascript & JQuery, Fundamental, Variables & Operators, Data Types, Function, Loop, Array & object, Form Validation, JS Async • Bootstrap Basic, Grid System, Alerts, Buttons, Button Groups, Pagination, Cards & Modal, Forms, Carousel HTML • Basic HTML, Table, List & Iframe, HTML5 Form, Input Attributes, HTML5 Multimedia elements • Practical Test 	