

MERNSTACK

Course Content:

HTML COURSE

1. Introduction to Web-technology :

- What is web?
- What is network?
- What is internet?
- What is web-development?
- What is browser?
- What is web-server?
- What is http?
- What is the use of http?
- What is html?
- What is website?
- What is web-page?

- Structure of Web
- Definition of all the points
- Install of Editors
- How to write program using editors

2. Introduction

- What is HTML?
- Versions of HTML
- Structure Of HTML
- Types of Webpages
- Introduction To Doctypes
- Types of tags
- Explanation about html, head and body tags
- What is attribute?
- Input controls and attributes
- How to divide web page with div tag
- Formating Tags
- How to create order list and unordered list
- Table tag
- Form tag
- Frame Tag
- What is Meta Description?

3. List

- How to create list
- Attributes of list
- Example

4. Multimedia:

- Attributes of audio, video & image tag
- How to create audio page
- How to create video page
- How to create image
- Formats of multimedia

5. I-frame :

- What is nested web-page?
- How to create nested web-pages
- Attributes of nested web-pages

6. SVG :

- How to define graphics in html
- Attributes of SVG

7. Form :

- What is form
- How to create forms using html
- How to create log-in page

- How to create registration page using form
- Attributes of form

8. Tables:

- How to create table in Html
- Attributes of table
- Example

9. Semantic & Non Semantic Elements

- Introduction
- What are Semantic Elements?
- What are Non-Semantic Elements
- New Semantic Elements in HTML5

CSS

1. Introduction

- What is css?
- What is the use of css?
- Types of css
- How to call css inside html pages

2. Selectors (id,class,tag, grouping, universal)

- What is selector?

- Types of selector (id, class, tag, grouping, universal)
- How to apply selector

3. Box model properties

- What is box-model in css
- How to work with box-model

4. Background & Borders

- Background
- background-color
- background-image
- background-repeat
- background-attachment
- background-position

5. Text properties

- letter-spacing
- Word-spacing
- line-height
- text-decoration
- text-transform
- vertical-align

6. Font Properties

- letter-spacing
- Word-spacing
- line-height
- text-decoration
- text-transform
- vertical-align

7. Position properties

- Use of position properties
- Types of position properties

8. Display Properties

- Use of Display properties
- Types of display properties

9. Flexbox

- What is flex?
- Use of flex
- Grid Parent Properties
- Grid flex Properties

10. Grid

- What is Grid?

- Use of Grid
- Grid Parent Properties
- Grid Child Properties

11. Pseudo elements & classes & combinators, attributes selectors

- What is pseudo-class?
- What is pseudo-elements
- What is combinators?
- Types of pseudo-class
- Types of pseudo-elements
- Types of combinators
- How to apply

12. Transformations , Transitions & Animations

- How Does it Work?
- Types of 2D Transforms
- transition-property, duration and delay
rotate()
- Animation, animation-duration ,Animation-iterations
- Use of Transition, Transform & Animation

13. Media Queries (responsiveness)

- What is Media Query?
- How to implement the web pages for different screens
- Max-width
- Min-Width

JavaScript

Basics [core concepts]

14. Introduction to JavaScript

- What is JavaScript?
- Advantages & Disadvantages
- Syntax & rules to write JavaScript
- Printing statements

15. Variables

- Var
- Let
- Const
- scope & Hoisting

16. Data types

- Primitive Data types
- String

- Number
- Boolean
- Undefined
- Null
- Non-Primitive
- Objects
- Array

17. Operators

- Arithmetic
- Assignment
- Comparison
- Logical
- Bitwise
- Ternary
- type of

18. Functions

- default functions
- arrow functions
- Anonymous functions
- call back functions
- IIFE

19. Conditions

- simple if
- if-else
- else –if ladder
- switch and case

20. Loops

- for
- while
- do-while
- for-of
- for-in
- Break
- Continue

21. Arrays & Array methods (basic methods and advanced methods)

22. strings & String methods

23. objects and Types and JSON

24. Dom (methods & properties)

25. Events

26. BOM

- Window
- Navigator
- History
- Local storage
- session storage

27. Event handlers (event loop)

28. Error Handling

- Try
- Catch
- Throw
- Custom

Advanced JS

29. ES6

- Destructuring
- spread operators
- rest operators
- promises and call-backs
- Sync & Await

30. Oops

31. Closures and object prototypes

32. Regular Expressions

33. Form Validation

34. Introduction to API's

Bootstrap

1. Introduction:

- What is bootstrap
- How to apply bootstrap in web-pages
- Benefits of using bootstrap
- Colors in bootstrap
- Grid system in bootstrap
- Classes in bootstrap
- How to create table using bootstrap-class
- How to create forms using bootstrap-class
- What is carousel in bootstrap
- How To create Accordion in bootstrap
- How To create Modal in bootstrap
- How to apply all of this create one project

React Js

1. ES6 modules in JavaScript

a) ES6

- Destructuring
- spread operators
- rest operators
- promises and call-backs
- Sync & Await

b) Oups

c) Closures

d) Local Storage & session Storage

2. Introduction to React js

- Introduction to React
- Original DOM vs Virtual DOM
- What is Reconciliation & Diffing Algorithm
- Types of React Components
- React Components with JSX
- Props and state
- Fragments
- How to apply Bootstrap?

- Ways to apply CSS?

3. Handling Events

4. Conditional Rendering

5. Lists and Keys

6. Creating Forms & Tables

7. React Routers

- Basic Routing
- Advanced Routing

8. Hooks

- What is Hook?
- Why Hooks?
- Rules for Hooks
- Types of Hooks
- useState
- useEffect
- useContext
- useRef
- useMemo
- useCallback
- useReducer

- CustomHooks

9. Redux

- What is Redux?
- Why Redux?
- Flow of Redux
- Redux Toolkit
- Hooks in redux
- MiddleWare (Redux Thunk)

10. CRUD operations using API's

11. Github

- What is Github?
- How to use?
- Advantages of using github?
- Commands for(push,pull,stash)
- How to create Branches?

12. Deployment

Module7: Node.js & Express

- Introduction to Node.js (Node Architecture, How Node works, Installing Node)

- Modules: Built-in and custom & promises & event emitters.
- NPM Packages
- Introduction to Express & use it of
- Different HTTP methods (GET,POST,PUT,DELETE,HEAD) and diff and then use what?
- Defining routes in EJS and setting an END point in the nodes and
- Handling the request response object middleware
- Security of API end points

JWT TOKEN

- Authentication and Authorization
- Building a simple REST API with NodeJS and express. Module 8: Mongo DB

Module8: Mongo DB

- Database and its kind
- Difference between Sql & nosql
- Introduction to Mango DB, Importing, Exporting, Querying data

- Creating & Manipulating Documents
- Advanced CURD operations
- Indexing & Aggregation Pipeline
- Building a Simple Web application With Node, Express & Mango DB
- Library of Mongo DB using mongoose to setup the link b/w code and database
- Doing all CURD Operation on Database using API

Module 9: Version Control

- Introduction to version control
- Introduction to Git and GitHub
- Centralized and Distributed Versions Control system
- Git Basics
- Forking
- Cloning
- Making changes to Local Repositories
- Committing and Branching
- Collaborating with Multiple Developers



For More : <https://acquiescent.in>