install **VScode** (https://code.visualstudio.com/)

-> install these extensions (my recommendation)

>> HTML Snippets

>> HTML CSS Support

>> Prettier - Code Formatter

>> vscode-icons

>> open in browser

>> Atom one dark

>> Close HTML/XML tags

1) Learn **HTML**. (https://www.w3schools.com/html/html_intro.asp)

know atleasts basics e.g

> html elements (<p>, <h1> , other tags) , classes vs ids

> understand tags

> reading from w3schools is enough.

> (don't spend more than 1 day on html).

2) **CSS** (https://www.w3schools.com/css/default.asp)

> again, w3schools to understand basics. don't read all of it just yet. go through different ones like float/overflow etc.

> CSS you'll learn with practice. don't memorize anything. Just try to understand how it works.

> Learn ways to we use css on a page. practice all of them.

3) Learn **Bootstrap** (https://www.w3schools.com/bootstrap/default.asp) , (https://getbootstrap.com/docs/4.1/getting-started/introduction/)

>import bootstrap to your website

>use various components provided by bootstrap (jumbotron, buttons, wells, collapse etc)

>build a nice GUI.

4) **Javascript** (https://www.w3schools.com/js/default.asp)

start with w3schools to get an idea.

spend a little time on this.

be familiar with datatypes and functions in JS.

how to use JS in web page (<script> tag)

will come back to JS later

5) **DOM (Document Object Model)** (https://www.w3schools.com/js/js_htmldom.asp)

> Learn what is DOM and how we make changes to DOM using javascript

> Understand what jQuery is and what it does and why it is used. (Atleast know what it is but you won't be using it).

link : https://www.w3schools.com/jquery/jquery_intro.asp

6) **JSON** (https://www.w3schools.com/js/js_json_intro.asp)

just know what JSON is. its structure and why its used (sending and recieving data from servers)

7) Learn **Git** (very important)
(https://www.youtube.com/watch?v=Y9XZQO1n_7c)

> learn basics of git. why and how is it used. A little bit of command line experience.

> create an account on Github.com .check what Github actually is.

8) **Front-end vs Back-end**

> learn difference b/w Library and Framework

Atleast know various tools / frameworks that are available

> Back-end Options:

java (spring) , C#, python (Django), **Node.js (Express.js)**, Ruby on Rails, Go, and many more

> Front-end:

Almost always Javascript is used.

> Front-end frameworks

Best ones **: React.js , Vue.js , Angular 5,6**. Pick any of the three. (ideally React.js) (dont start learning them yet. just know they exist).

Old Ones: Ember, Angularjs (v1) , Knockout, Aurelia (dont learn them but atleast know they exist)

Back-end Frameworks for Node.js

Express.js (recommended), Loopback, Koa, Sails.js (only writing their names so you atleast know they exist).

Other small things to learn:

> Learn what **REST API** is: GET/POST/PUT (https://www.youtube.com/watch?v=7YcW25PHnAA&t=1s)

> Learn what **NoSQL** is. (https://www.infoworld.com/article/3240644/nosql/what-is-nosql-nosql-databases-explained.html)

Different types of NoSQL DBs (column based, key-value pair, Graph etc) . MongoDB would be a good pick. Atleast know the names of various NoSQL databases e.g MongoDB, Redis

> learn what **LocalStorage** is in the browser. and other DBs in the browser. (https://www.w3schools.com/html/html5_webstorage.asp)

> Learn **AJAX**. what it is. (https://www.w3schools.com/xml/ajax_intro.asp)

> Learn what **SPA** is **(Single Page Applications)**. React/Angular/Vue.js help us build Single Page Applications. (https://www.youtube.com/watch?v=xfGciVdbktI)

> Website vs Web Application difference

> Learn Chrome Developer tools (Inspect Elements). very important.

> A very good video describing all web development areas (https://www.youtube.com/watch?v=gVXcqO9A1vo&t=447s)

> A little idea of what ES6 is. Various Javascript versions such as ES5, ES6, ES7

> A little idea of TypeScript.

One important tip: always write what you learn. and read them later. make notes.