

Programming entrance week : 1 Lesson 1

1. What is programming ?
2. Types of programming languages
- 3 Types of frameworks and Why we need ?
4. How it works
5. Coding environments (IDE ,Code editors)
6. Types of developer
7. Type of OS (Operating systems)

1. What is programming .

: What we can do with programming

2. Types of programming languages

: C , C++ , C# , Java , JavaScript , Python , PHP

3. Types of frameworks and Why we need ?

: Angular Angularjs (difference), React , Vuejs , Nodejs
Expressjs , Nestjs

4. How it works ?

: Compiled and interpreter language human code to machine code

: High level to Low level languages

5. Coding environments (IDE ,Code editors)

: IntelliJ IDEA , Vs-code , Text Editor , Sublime , Brackets .etc

6. Types of developer

: web developer ,Front-end developer,Back-end developer, Mobile developer (IOS , Android), Dev-ops , Full stack developer

7. Type of OS (Operating systems)

: Windows , Linux , Mac-OS

Front-end week : 1 Lesson 2

1. HTML and CSS W-1-2-3
- 2 Deployment (Project+Github) W-4
3. JavaScript W-5,6,7,8
4. Type-Script W-9,10
5. Angular

1. HTML

- : HTML elements
- : HTML attributes
- : HTML headings
- : HTML paragraphs
- : HTML styles (inline and outer)
- etc.

2. CSS

- : CSS syntax
- : CSS selectors
- : CSS how to add CSS to our project
- : CSS background

: CSS margin

: CSS padding

etc.

3. Git hub , vercel .etc deployment

4. JavaScript

: Introduction to java-script

: java-script debugging

: Where to use JavaScript inside HTML tag

: JavaScript syntax

: JavaScript variables

: java-script let

: java-script const

: java-script operators

: java-script data type

: java-script functions

: function definition

: function parameters

: function calling

: function lexical scope

: type of functions

: function expression and function declaration

:java-script arrow functions

:java-script Objects

: java-script this keyword

: java-script string (double single quotation)

: java-script conditions

: java-script loops

: java-script arrays

: java-script scope

: java-script strict mode

: java-script hoisting

: java-script classes

: java-script modules

: java-script json

: java-script Mistakes

5 Type-Script

: Introduction

- : Simple types
- : Special types
- : Arrays
- : Tuples
- : Object types
- : Enums
- : Interfaces
- : Union types
- : Functions
- : Casting
- : Class

Front-end **React**

1 Introduction to React

2 Installation (React)

3 Architecture

4 Creating React application

5 React jsx

6 Component

7 React - Style

8 React properties

9 React state management

10 React Http client

11 React form programming

12 React Routing

13 React Redux

14 React animation

15 React testing

16 React Cli Commands

17 React Building and Deployment

Front-end **Angular**

1 Angular introduction

2 Environment setup Angular

3 Project Setup

4 Angular Components

5 Angular Modules

6 Angular data binding

7 Angular Event binding

8 Angular Property binding

9 Angular templates

10 Directives

11 Pipes

12 Routing

13 Services

14 Http Client

15 Cli prompts

16 Angular forms

 Template driven

 Model driven

 Form validation

17 Angular materials

18 Angular testing

Back-end Nodejs

1 Node Js introduction

2 Node Js advantages and disadvantages

3 Installing Node Js setting project

Reference

HTML <https://www.w3schools.com/html/default.asp>

<https://developer.mozilla.org/en-US/docs/Web/HTML>

Css <https://www.w3schools.com/css/default.asp>

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https://developer.mozilla.org/en-US/docs/Learn/Tools_and_testing/Client-side_JavaScript_frameworks/React_getting_started

Typescript https://www.w3schools.com/typescript/typescript_intro.php

Angular <https://angular.io/start>

https://developer.mozilla.org/en-US/docs/Learn/Tools_and_testing/Client-side_JavaScript_frameworks/Angular_getting_started