## UI / UX / Frontend Development (60 days)

(HTML5, CSS3, JavaScript, JQuery, TypeScript, ES6, Bootstrap 4, Angular JS)

#### Introduction to UI / UX

Roles of UI Developer

Roles of UI Designer

Difference between UI Developer & UI Designer

Technologies required for UI Development

## Tools Used for UI / UX

Notepad++, Atom, Sublime Text, Brackets

Visual Studio Code, WebStorm IDE

Live Server using npm

All tools installation and usage

#### Basics of UI

Introduction to Web

#### Introduction to HTML 5

How it works

Structure of an HTML Doc

**HTML First Application** 

Rules of HTML coding

Header Tags, Paragraph tag

DIV tag, Span Tag, Text Formatting

Unordered List, Ordered List

Images, Tables, Links, HTML Entities, Iframes

#### Mini Project (The Great India Website)

#### Forms in HTML 5

Introduction, Form Elements

Input Types, Attributes

#### Mini Project (Online Job Application)

#### Semantic Elements in HTML 5

Introduction

<Section>, <Article>, <Header> <Footer>

<Aside>, <nav>, <figure>, <figcaption>

<Details>, <Summary>, <time>, <main>

#### Mini Project (Company Website)

#### Media Elements in HTML 5

<audio>, <video>

#### Introduction to CSS3

Introduction,

CSS Selectors, CSS Pseudo classes selection

Inline CSS, Internal CSS, External CSS

Div, Id, Classes, Colors, Borders

Margins, Paddings, Text-formatting

Fonts, Lists, Styling Links, Tables, Box Model

Display, Position, Float, Align, Pseudo Elements

#### Navbars, Tooltips, Forms, Opacity, Image Gallery

#### 2D Transforms in CSS 3

Introduction

translate(), rotate(), scale(), skewX(), skewY()

skew(), matrix()

#### 3D Transforms in CSS 3

Introduction

RotateX, RotateY, RotateZ

#### **Transitions in CSS3**

Introduction

**Transition & Transformation** 

Speed Curve, Delay Transition

#### **Animations in CSS3**

Key frames rule, Delay Animation

Specify animation speed curve

Animation shorthand

## Images in CSS3

Rounded Images, Thumbnail Images, Image Text

#### **Buttons in CSS3**

Basic Button Styling, Buttons Colors, Button Sizes,

Rounded Buttons, Hover able Buttons

Shadow Buttons, Disabled Buttons

**Button Groups, Animated Buttons** 

#### Mini Project (Technology Portal Website)

#### **Basic JavaScript**

Introduction to JavaScript

JavaScript features

**Understanding Runtime Env** 

Why to Learn JavaScript

Interesting Facts of JS

History of JavaScript

Setting up Development Env

**JavaScript Basics** 

Inline JavaScript

Internal JavaScript

External JavaScript

Variable Declaration in JS

JS Data Types

JS Operators

JS Conditional Statements

JS Objects

JS Arrays

JS Functions

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JS Math & Date Objects

JS DOM Manipulation

## **Advanced JavaScript**

**JS Scopes Concepts** 

JS Advanced functions

JS Closures

JS Objects advanced

JS Prototypes

JS Objects Inheritance

#### Mini Project (Typing Speed Tester App)

## **JQuery**

Introduction

JQuery selectors

**JQuery Events** 

JQuery Effects

JQuery with HTML

## **ECMA Script 6 Features**

**Default Parameters** 

**Template Strings** 

Let & Const

For....of loops

Lambdas

Destructing

The Spread Operator

**Computed Properties** 

## **TypeScript Development**

Introduction to TypeScript

TypeScript Overview

Differences between JavaScript and TypeScript

TypeScript Editors

Installing TypeScript

Project Setup in TypeScript

TypeScript Hello World

TS Data Types

TS Enums

**TS Functions** 

**TS Default Arguments** 

**TS Optional Arguments** 

TS Function Overloading

TS Interfaces

TS Classes

**TS Constructors** 

TS Methods

**TS Getters & Setters** 

TS Lambda Expressions

## **Bootstrap 4 Development**

#### Introduction

What is Bootstrap?

Features of Bootstrap

History of Bootstrap

**Bootstrap Overview** 

**Bootstrap Installation** 

Tools Used for Web Development

**Setting Development Environment** 

**Bootstrap First Application** 

**Bootstrap Components Overview** 

**Basic Typography** 

**Text Alignment & Display** 

Floats Position in Bootstrap

Colors Background

Spacing in Bootstrap

Sizing in Bootstrap

Breakpoints in Bootstrap

**Buttons in Bootstrap** 

Navbars in Bootstrap

List groups and Badges in Bootstrap

Forms in Bootstrap

Input groups in Bootstrap

Alerts & Progress bars in Bootstrap

**Tables & Pagination in Bootstrap** 

Cards in Bootstrap

Media Objects

Grid System in Bootstrap

Grid Alignments in Bootstrap

Flex boxes in Bootstrap

Auto margin & wrapping order in

Carousels in bootstrap

Collapse classes in Bootstrap

**Tooltips in Bootstrap** 

Popovers in Bootstrap

Modals in bootstrap

## **Introduction to Angular JS**

Introduction

What is Single Page Application?

**Declarative vs Imperative Programming** 

**How Angular Application Works** 

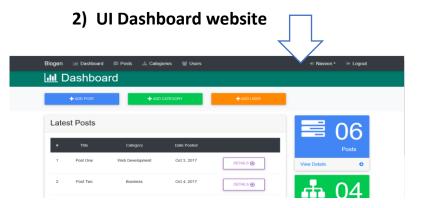
# UI / UX / Frontend Development (60 days)

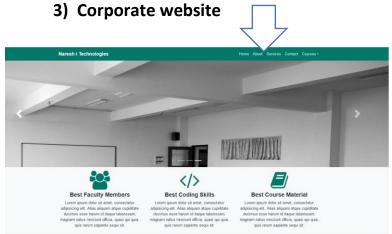
(HTML5, CSS3, JavaScript, JQuery, TypeScript, ES6, Bootstrap 4, Angular JS)

First Angular JS Application
Angular Directives
Angular Controllers
Angular Modules
Dependency Injection
Two way Data binding
Examples of Two way Data binding
Mini Project (Simple Angular JS App + Bootstrap 4)

## Major Real Time Projects & live Coding







## **Course Highlights:**

- Please note we are going to develop 6 Mini
   Projects and 3 Major Projects with live coding in this entire course.
- 2) **Laptops** are mandatory for attending this course.
- 3) Each Technology will be covered from **Zero** to **Hero** strategy.
- 4) Each Technology is perfectly organized with **Starter Template** and **Completed Template**.
- 5) Real Time Oriented Course Structure.
- Complete Source code will be provided to you time to time after completion of each technology.

Thanks for your interest in learning and Development of UI Technologies.

- Naveen Saggam