



Course Calender

Frontend Development With HTML

Day I	
HTML	
what is HTML	
Attributes	
Basic Structure of Html	
Doctype and HTML tags	
Creating a HTML file	
Adding Text to your Webpage	
Headings	
Paragraph	
White space	
Line Breaks	
Horizontal Rule	
Strong Tag	
Emphasis tag	

Frontend Development with HTML

Day I	
Quotations	
Blockquote	
quote	
Abbreviation	
Superscript	
Useful HTML character entities (symbols)	
Less than	
Greater than	
Ampersand	
Naira	
Copyright	

Frontend Development with HTML

Day I	
List	
List tag	
Types of list	
Ordered list	
Unordered list	
Description list	
Nested list	

Frontend Development with HTML

Day 2	
Links	
what are links	
Link tag	
Link Attributes	
Linking to other site	
Links that open a new tab	
Linking to other pages on the same site	
Directory structure	
Linking to a specific part of the same page	
Linking to specific part of another page	
Links to other files (Word documents, ZIP files, PDFs, etc)	

Frontend Development with HTML

Day 2	
Images	
Image Tag	
Image Attributes	
src	
alt	
title	
Figure and Figure Caption	
Images as link	
HTML Validators	

Frontend Development with HTML

Day 2	
Tables	
Table element	
Table row	
Table data	
Table heading	
Table caption	
Merging cells in a table	
Spanning rows	
Spanning the columns	

Frontend Development with HTML

Day 3	
Forms	
Form structure	
form	
action	
method	
Get ,Post	
id	
Label element	
Text input	
name	
maxlength	

Frontend Development with HTML

Day 2	
Password input	
Textarea	
Radio button	
Checkbox	
Dropdown list box	
File input box	
Reset button	
Image button	
Button Tag	
Fieldset element	
Legend element	
New html5 input types	
New html5 attributes	

Frontend Development with HTML

Day 3	
Iframe	
Iframe embeds: Google Map	
Iframe embeds: Youtube	
Multimedia in HTML5	
The video element	
Preload	
Multiple video format	
The audio element	
The audio element	
Meta tags, comments, block level and inline elements	
Meta tags	
description	
keywords	
author	

Frontend Development with HTML

Day 3	
pragma	
expires	
Comments	
Block level	
Grouping Text & Elements in a Block	
Division Tag	
Grouping Text & Elements in a Inline	
span Tag	

Frontend Development with CSS

Day I	
What is CSS	
Types of CSS	
CSS Selectors <ul style="list-style-type: none">1. Type2. Class3. Id4. Descendant Selector	
CSS Rules <ul style="list-style-type: none">1. Last Rule2. Specificity3. Important4. Initial	
Pseudo Classes <ul style="list-style-type: none">1. Link2. Hover3. Active4. Focus	

Frontend Development with CSS

Day I	
Font & Text Properties	
Font weight	
Font style	
Text decoration	
Text align	
Text transform	
Text indent	
Class Work	
Assignment	

Frontend Development with CSS

Day 2	
Google Fonts, Web fonts, font icons	
Web Developer Tools	
Background	
Background-color	
Background-image	
Background-size	
Background-repeat	
Background-attachment	
Background-position	
Display	
Inline	
Block	
Inline Block	

Frontend Development with CSS

Day 2	
Border-radius, box-sizing, box-shadow	
Box Model (Padding, Margin, Border)	
Class Work	
Assignment	

Day 3	
Position	
Relative	
Absolute	
Relative-Absolute	
Fixed	
z-index	

Frontend Development with CSS

Day 3	
FLOAT	
Left	
Right	
None	
14. Flex Box	
Flex Container	
Align Items	
Justify content	
Flex Direction	
Flex Wrap	
Flex flex	
Align Content	

Frontend Development with CSS

Day 3	
Flex Item	
order	
flex-grow	
flex-shrink	
flex-basis	
flex	
align-self	

Frontend Development with CSS

Day 4	
Responsive Design with Media Query	
Media Query Intro	
Media Queries For Menus	
Media Queries For Columns	
Responsive Images	
Responsive Videos	
Class Work	
Assignment	

Frontend Development with Bootstrap

Day I	
Bootstrap Introduction	
What is Bootstrap	
Advantages of Bootstrap	
Bootstrap History	
Bootstrap competition	
CDN Installation	
Self Hosting	
Bootstrap Grid System	
Containers	
Bootstrap Grid Classes	
Dynamic Layout	
Design for desktop	
Design for tablet	
Design for mobile	
Nesting columns	
Offsetting columns	
Responsive width	

Frontend Development with Bootstrap

Day I	
Gutters	
Horizontal Gutters	
Vertical Gutters	
Row column gutters	
No gutters	
Utilities	
Flexbox options	
Margin and padding	
Images, Tables, Figures	
Alerts, Badge, Breadcrumb, Buttons	

Frontend Development with Bootstrap

Day 2

Nav and tabs

Base nav

Horizontal Alignment

Vertical Alignment

Tabs

Pills

Fill and justify

Navbar

Navbar Image

Navbar Image & Text

Placement

Default

Fixed top

Fixed bottom

Sticky top

Off Canvas

Frontend Development with Bootstrap

Day 2	
Cards	
Kitchen Sink	
Card group	
Forms	
Form Control	
Select	
Checkbox	
Radio button	
Form Layout	
Accordion, Modal, Carousel	

Programming With Git

Day I	
Operating system	
Different types of operating system	
Server Os/Client Os	
How linux is the dominant OS in the server space	
Windows is the dominant OS in the client space	
Linux Commands	
Command Line Interface	
Difference between OS X prompt, Linux and Windows Prompt	
Linux command for listing Directories/files in a folder	
Linux command for listing hidden files	

Programming with Git

Day I	
Changing Directory	
Showing Current file path	
Command for creating a directory	
Command for moving out of a directory	
Command for creating a file	
Command for creating multiple folders at once	
Command for creating multiple files at once	
Command for renaming a folder	
Command for renaming a file	
Command for copying a file	
Command for copying a folder	
Command for copying multiple files at once	
Command for copying multiple folders at once	
Command for copying all files at once	

Programming with Git

Day I	
Command for moving a file	
Command for moving a folder	
Command for moving multiple files at once	
Command for moving multiple folders at once	
Command for moving all files at once	
Command for deleting a file	
Command for deleting a folder	
Command for deleting all files	
Git	
What is Github?	
Difference between Git and Github	
Create github account	
Class Work	
Assignment	

Programming with Git

Day 2	
Configure Git	
View git configuration	
git username configuration	
git email configuration	
Initializing your git repository	
Viewing .git folder	
Different ways to add files to repository	
Git commit	
Git branch concept	
Git branch creation	

Programming with Git

Day 2	
List branch	
Git checkout	
Renaming a branch	
Deleting a branch	
Merging a branch	
Git Log	
Resetting a repository	
Resetting a repository to a particular commit ID	
Gitignore concept	

Programming with Git

Day 2	
Create A remote repo	
Pushing local repo to remote	
Pulling remote repo locally	
Git Fetch	
Pushing a branch to remote	
Pulling a remote branch locally	
Creating Github pages	

Programming with Javascript

Day I	
Introduction	
Creating a Js file	
Js statements	
JS Syntax	
Comments	
Variables	
Let	
Const	
Operators	
Arithmetic	
Data types	
Class Work	
Assignment	

Programming with Javascript

Day 2	
Objects	
Events	
Strings	
String methods	
string Search	
Numbers	
Number methods	
JS Arrays	
JS Array Methods	
Array Const	
if, if else, if/elseif/else	
Switch	
Class Work	
Assignment	

Programming with Javascript

Day 3	
For loop	
loop for In	
loop for of	
loop while	
Break	
JS iterables	
JS Sets	
JS Maps	
JS Typeof	
JS Type Conversion	
Class Work	
Assignment	



Programming with Javascript

Day 4	
Function	
What is a function	
Why function	
Function with no Parameters	
Function with Parameters	
Function with default values	
Function that returns a value	
The () Operator Invokes the Function	
Functions Used as Variable Values	
Local Variables	
ClassWork	
Assignment	



Programming with Javascript

Day 5	
JavaScript Arrow Function	
Arrow Function With Parameters:	
Arrow Function Without Parentheses:	
Block Scope	
Local Scope	
Function Scope	
Global JavaScript Variables	
Global Scope	
Automatically Global	
JavaScript Declarations are Hoisted	
ClassWork	
Assignment	

Programming with Javascript

Day 6	
JavaScript Classes	
JavaScript Class Syntax	
Using a Class	
The Constructor Method	
Class Methods	
JavaScript JSON	
What is JSON?	
JSON Example	
The JSON Format Evaluates to JavaScript Objects	
JSON Syntax Rules	
JSON Data - A Name and a Value	
JSON Objects	
JSON Arrays	
Converting a JSON Text to a JavaScript Object	
Class Work	

Programming with Javascript

Day 7	
The HTML DOM (Document Object Model)	
The DOM Programming Interface	
The getElementById Method	
The innerHTML Property	
JavaScript HTML DOM Document	
The HTML DOM Document Object	
Changing HTML Elements	
Adding and Deleting Elements	
Adding Events Handlers	
Finding HTML Objects	

Programming With Javascript

Day 7	
JavaScript HTML DOM Elements	
Finding HTML Elements	
Finding HTML Element by Id	
Finding HTML Elements by Tag Name	
JavaScript HTML DOM - Changing HTML	
Changing HTML Content	
Changing the Value of an Attribute	
Dynamic HTML content	
ClassWork	
Assignment	

Programming with Javascript

Day 8	
JavaScript Forms	
JavaScript Form Validation	
JavaScript Can Validate Numeric Input	
Automatic HTML Form Validation	
Data Validation	
HTML Constraint Validation	
Constraint Validation CSS Pseudo Selectors	

Programming with Javascript

Day 8	
JavaScript Changing CSS	
Changing HTML Style	
Using Events	
DOM Animations	
DOM Events	
DOM Event Listener	
DOM Navigation	
ClassWork	
Assignment	

Frontend Development With React

Day I	
Introduction to React, What is React, Why React was built	
- what is react	
- advantages	
Environment Setup	
- Installation : Node.js, Create-React-App	
- How to use Nodejs and Package managers (NPM, YARN)	
- understanding Webpack	
- understanding Folder structure with Create-react-app	
Class Work	
Assignment	

Frontend Development with React

Day 2	
Rendering UI with React	
- Identify functional JavaScript concepts in React to render UI	
- Components and its types	
- Creating Components	
- Nesting Components	
Class Work	
Assignment	

Frontend Development with React

Day 3	
- Understanding Props and State	
-How to use state within the different types of components	
- Creating Dynamic UI with state and props	
- passing data between react component - Parent, Child , Siblings	
Styling a component	
Class Work	
Assignment	

Frontend Development with React

Day 4	
State Management, Forms and User Interaction	
-conceptualizing lifecycle of a component	
-handling forms with state binding	
- input events	
- crud operations using props and states.	
- understanding controlled and uncontrolled input	

Frontend Development with React

Day 5	
Explain how Hooks in React enable state and lifecycle in functional components	
Use React useState hook to manage state	
Introduction to Promises	
Use React useEffect hook for HTTP requests and side effects using fetch ,axis	

Frontend Development with React

Day 6

Manage App Location with React Router

- Use React Router to add different routes to applications
- Use state to dynamically render a different “page”
- Use React Router’s route component
- Use React Router’s link component

Software Development With JS

Day 1	
Introduction to Node.js	
What is Node.js	
Why Node.js	
What can Node.js Do?	
Getting Started	
Introduction to REPL terminal	

Software Development With JS

Day 2	
What is Node.js REPL terminal used for?	
Node.js REPL terminal Usage	
Introduction to node.js in-built modules	
Modules in node.js	
Exploring Node.js in built modules	

Software Development With JS

Day 3	
Continuation on Node.js modules	
Node.js Http module	
What is HTTP?	
Node.js as a Web server using the http module	

Software Development With JS

Day 4	
Continuation on node.js http module	
Transferring Data over the HTTP (hyper text transfer protocol)	
Creating web-server using the node.js HTTP module	

Software Development With JS

Day 5	
Introduction to node.js FS(file system) module	
Node.js file system module	
Working with the file system module with your computer	

Software Development with JS

Day 6	
Continuation on Node.js file system module	
Performing various task synchronously and asynchronously using the node.js file system module	
What is the meaning of ASYNCRONOUS and SYNCRONOUSLY	
Difference between SYNCRONOUS and ASYNCRONOUS	

Software Development with JS

Day 7	
Continuation on Node.js file system module using synchronous method	
Carrying out file system task using synchronous method	
Reading file synchronously from your computer using node.js fs module	
Creating file synchronously from your computer using node.js fs module	
Updating file synchronously from your computer using node.js fs module	
Deleting file synchronously from your computer using node.js fs module	
Renaming file synchronously from your computer using node.js fs module	

Software Development with JS

Day 8

Continuation on Node.js file system module using asynchronously method

Carrying out file system task using asynchronously method

Reading file asynchronously from your computer using node.js fs module

Creating file asynchronously from your computer using node.js fs module

Updating file asynchronously from your computer using node.js fs module

Deleting file asynchronously from your computer using node.js fs module

Renaming file asynchronously from your computer using node.js fs module

Software Development with JS

Day 9	
Introduction to node.js URL module	
Node.js URL module	
Splitting up web addresses into readable part using node.js URL module	

Software Development with JS

Day 10	
Introduction to NPM	
Node.js NPM	
What are packages in node.js	
Downloading packages using NPM and using packages downloaded	

Software Development with JS

Day 11	
Introduction to node.js Events	
Node.js Events modules	
Onward to express	

Software Development with JS(Database)

Day 12	
Introduction to Database	
What is Database?	
What is NoSQL database	
What is RDBMS database	
Difference between NoSQL and RDBMS database	

Software Development with JS(MongoDB and Mongoose)

Day 13

Introduction to MongoDB and mongoose

Objectives, goals and what the mongo shell are.

MongoDB installation

Software Development with JS(MongoDB and Mongoose)

Day 14	
Continuation on Database	
Data modelling and MongoDB	
Data Schema, Design Patterns in MongoDB and mongoose	

Software Development with JS(MongoDB and Mongoose)

Day 15	
Continuation on Database	
CRUD OPERATIONS in MongoDB	
Creating data in mongo Shell	
Reading Data from mongo shell	

Software Development with JS(MongoDB and Mongoose)

Day 16	
Continuation on MongoDB and Mongoose	
Updating data from mongo shell	
Deleting Data from mongo shell	
JSON meaning and its structure	
Query operators in MongoDB	

So

Software Development with JS(Express)

08069268340 | info@softwareacademy.ng

Day 17	
Introduction to Express	
What is Express.js	
Why Express.js	
What can Express.js Do	
Introduction to Routing in express	



Software Development With JS(Express)

Day 18

Getting Started Express

Routing in Express



Sc

Software Development with JS(Express and EJS)

Day 19	
HTTP methods in Express.js	
Express Middleware and application to real life applications	
Templating using express.js templating engine EJS	

08069268340 | info@softwareacademy.ng



Software Development with JS(Express)

Day 20	
Static files using Express.js	
File uploading using Express.js	



Software Development with JS(Express)

Day 21	
Continuation on file uploading in express.js	
Files uploading to google cloud or clouinary	



Software Development With JS(Express)

Day 22

Introduction to JWT(jsonwebtoken) in express

Validation using JWT(jsonwebtoken) in express



Software Development with JS(Express.js)

Day 23	
Continuation on JWT(jsonwebtoken)	
Authentication and Authorization in Express.js using JWT(jsonwebtoken)	

Software Development with JS(express)

Day24	
Introduction to express.js Error handling	
Error Handling in express.js	
Catch and process error both synchronously and asynchronously	

Software Development with JS (Express and POSTMAN)

Day 25	
Introduction to API'S	
What's API'S	
Introduction to API's platforms for building, testing and sharing out API'S	
Building RESTFUL API'S using express.js and node.js	

Software Development with JS

Day 26	
Deploying our web application and API'S on the web	
The End	

