In this project I have implemented the Portfolio application using an Angular framework. And developed a front-end application that includes a sign up page, a sign in page, and a landing page.

The JavaScript runtime in the browser has the implementation of JavaScript that enables the developers to develop applications for the web. The web browser’s runtime has the following three important components:

* **The Core Based On ECMAScript** - The base implementation of JavaScript with all the input and output functions that the developers can use.
* **Document Object Model (DOM)** - This is what the browser renders as a hierarchy of nodes to be displayed to the client or the user for XML and HTML.
* **Browser Object Model (BOM)** - This is what allows the developers to manipulate the browser window. Using the BOM the developers can access the browser features and manipulate them outside the context of the DOM or the page that is being rendered.

The event binding allows you to add an event handler for a specified event so that your chosen JavaScript function will be invoked when that event is triggered for the associated DOM element. This can be used to bind to any event, such as keypress, mouseover or mouseout.

Data Validation

Data validation is the process of ensuring that user input is clean, correct, and useful.

Typical validation tasks are:

* has the user filled in all required fields?
* has the user entered a valid date?
* has the user entered text in a numeric field?

Most often, the purpose of data validation is to ensure correct user input.

Validation can be defined by many different methods, and deployed in many different ways.

**Server side validation** is performed by a web server, after input has been sent to the server.

**Client side validation** is performed by a web browser, before input is sent to a web server.

**The JavaScript Pipeline Operator** **( |> )** is used to pipe the value of an expression into a function. This operator makes chained functions more readable. This function is called using **( |> )** operator and whatever value is used on the pipeline operator is passed as an argument to the function. The functions are placed in the order in which they operate on the argument.

**Syntax:**

expression |> function

**A router is a JavaScript** object that maps URLs to functions. The router calls a function based on the URL.

In the past, a web application was a series of interconnected pages. This could either be static pages or dynamic pages that are generated on the server.

A single-page web application was a new concept where the app’s life span revolved around a single HTML document.

Web pages were then replaced by views. In most web frameworks, links are no longer used to generate and navigate between pages, instead, they are bound to views.

A view is a JavaScript object that contains the logic for a single web page. The view handles page rendering and user input. All views are controlled by the router.