**Module 2 -Assignment to note down descriptions of technologies**

**Vanilla** **JavaScript:** Vanilla JS is a fast, lightweight, cross-platform framework  
for building incredible, powerful JavaScript applications.

**React JS:** In computing, React (sometimes styled React.js or ReactJS) is a JavaScript library for building user interfaces. It is maintained by Facebook, Instagram and a community of individual developers and corporations.

React allows developers to create large web-applications that use data and can change over time without reloading the page. It aims primarily to provide speed, simplicity, and scalability. React processes only user interfaces in applications. This corresponds to View in the Model-View-Controller (MVC) pattern and can be used in combination with other JavaScript libraries or frameworks in MVC, such as AngularJS.

**Angular JS:** AngularJS (commonly referred to as "Angular.js" or "AngularJS 1.X") is a JavaScript-based open-source front-end web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications.

The JavaScript components complement Apache Cordova, a framework used for developing cross-platform mobile apps. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model–view–controller (MVC) and model–view–view model (MVVM) architectures, along with components commonly used in rich Internet applications.

**Backbone JS:** Backbone.js is a JavaScript library with a RESTful JSON interface and is based on the model–view–presenter (MVP) application design paradigm. Backbone is known for being lightweight, as its only hard dependency is on one JavaScript library, Underscore.js, plus jQuery for use of the full library.

It is designed for developing single-page web applications, and for keeping various parts of web applications (e.g. multiple clients and the server) synchronized. Backbone was created by Jeremy Ashkenas, who is also known for Coffee Script and Underscore.js.

**RequireJS:** RequireJS is a JavaScript library and file loader which manages the dependencies between JavaScript files and in modular programming. It also helps to improve the speed and quality of the code.

**SASS: Sass** (Syntactically awesome style sheets) is a style sheet language. Sass is a scripting language that is interpreted or compiled into Cascading Style Sheets (CSS). Sass Script is the scripting language by itself.

**LESS:** Less (sometimes stylized as LESS) is a dynamic style sheet language that can be compiled into Cascading Style Sheets (CSS) and run on the client side or server side.

Less is influenced by Sass and has influenced the newer "SCSS" syntax of Sass, which adapted its CSS-like block formatting syntax. Less is open source.

**AWS:** Amazon Web Services (AWS) is a subsidiary of Amazon.com that provides on-demand cloud computing platforms to individuals, companies and governments, on a paid subscription basis. The technology allows subscribers to have at their disposal a full-fledged virtual cluster of computers, available all the time, through the Internet.

**Azure:** Microsoft Azure is a cloud computing service created by Microsoft for building, testing, deploying, and managing applications and services through a global network of Microsoft-managed data centers.

It provides software as a service (SaaS), platform as a service (PaaS) and infrastructureas a service (IaaS) and supports many different programming languages, tools and frameworks, including both Microsoft-specific and third-party software and systems.

**Mocha, Chai, Karma:** JavaScript unit testing tools in one simple package

**SOAP:** SOAP (originally Simple Object Access Protocol) is a protocol specification for exchanging structured information in the implementation of web services in computer networks. Its purpose is to induce extensibility, neutrality and independence.

It uses XML Information Set for its message format, and relies on application layer protocols, most often Hypertext Transfer Protocol (HTTP) or Simple Mail Transfer Protocol (SMTP), for message negotiation and transmission.

**API:** An application program interface (API) is a set of routines, protocols, and tools for building software applications. Basically, an API specifies how software components should interact.

Additionally, APIs are used when programming graphical user interface (GUI) components. A good API makes it easier to develop a program by providing all the building blocks. A programmer then puts the blocks together.

**Rest API:** A RESTful API is an application program interface (API) that uses HTTP requests to GET, PUT, POST and DELETE data.

A RESTful API -- also referred to as a RESTful web service -- is based on representational state transfer (REST) technology, an architectural style and approach to communications often used in web services development.

**AJAX:** Ajax is a set of Web development techniques using many Web technologies on the client side to create asynchronous Web applications. With Ajax, Web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behavior of the existing page.

By decoupling the data interchange layer from the presentation layer, Ajax allows for Web pages, and by extension Web applications, to change content dynamically without the need to reload the entire page. In practice, modern implementations commonly utilize JSON instead of XML due to the advantages of JSON being native to JavaScript.

**JSON:** JavaScript Object Notation or JSON is an open-standard file format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types (or any other serializable value).

It is a very common data format used for asynchronous browser–server communication, including as a replacement for XML in some AJAX-style systems.

**jQuery:** jQuery is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML

**.NET:** .NET Framework is a software framework developed by Microsoft that runs primarily on Microsoft Windows. It includes a large class library named Framework Class Library (FCL) and provides language interoperability (each language can use code written in other languages) across several programming languages.

**C#:** C# is a multi-paradigm programming language encompassing strong typing, imperative, declarative, functional, generic, object-oriented (class-based), and component-oriented programming disciplines.