1. xHTML

What Is XHTML?

* XHTML stands for E**X**tensible **H**yper**T**ext **M**arkup **L**anguage
* XHTML is almost identical to HTML
* XHTML is stricter than HTML
* XHTML is HTML defined as an XML application
* XHTML is supported by all major browsers
* XHTML is HTML redesigned as XML.

<https://www.w3schools.com/html/html_xhtml.asp>

1. REST Web Services / API’s

REST is acronym for **RE**presentational **S**tate **T**ransfer. It is architectural style for **distributed hypermedia systems** ans was first presented by Roy Fielding in 2000 in his famous [dissertation](https://www.ics.uci.edu/~fielding/pubs/dissertation/rest_arch_style.htm).

1. PHP

PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages.

PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

1. Campaign Tracking

In its broadest definition, campaign tracking refers to a method of identifying how users discover your site. Specifically, you use campaign tracking in Google Analytics to accurately track online advertising campaigns to your website, both from AdWords-generated campaigns as well as from other advertising sources. You can use some of the campaign tracking customizations to adjust whether subsequent ad referrals override earlier referrals to your site, either organic or paid.

1. Angular JS, KkockoutJS, BackboneJS, ReactJS, ES2015+ (Javscript library)

AngularJS is a structural framework for dynamic web apps. It lets you use HTML as your template language and lets you extend HTML's syntax to express your application's components clearly and succinctly. AngularJS's data binding and dependency injection eliminate much of the code you would otherwise have to write. And it all happens within the browser, making it an ideal partner with any server technology.

AngularJS simplifies application development by presenting a higher level of abstraction to the developer. Like any abstraction, it comes at a cost of flexibility. In other words, not every app is a good fit for AngularJS. AngularJS was built with the CRUD application in mind. Luckily CRUD applications represent the majority of web applications. To understand what AngularJS is good at, though, it helps to understand when an app is not a good fit for AngularJS.

<https://docs.angularjs.org/guide/introduction>

Backbone.js gives structure to web applications by providing **models** with key-value binding and custom events, **collections** with a rich API of enumerable functions, **views**with declarative event handling, and connects it all to your existing API over a RESTful JSON interface.

<http://backbonejs.org/>

React is a javascript library for building user interfaces

<https://reactjs.org/>

1. JQuery (Javascript Framework)

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

1. Apache Web Server

Apache is the most widely used web server software. Developed and maintained by Apache Software Foundation, Apache is an open source software available for free. It runs on 67% of all webservers in the world. It is fast, reliable, and secure. It can be highly customized to meet the needs of many different environments by using extensions and modules. Most WordPress hosting providers use Apache as their web server software. However, WordPress can run on other web server software as well.

Wondering what the heck is a web server? Well a web server is like a restaurant host. When you arrive in a restaurant, the host greets you, checks your booking information and takes you to your table. Similar to the restaurant host, the web server checks for the web page you have requested and fetches it for your viewing pleasure. However, A web server is not just your host but also your server. Once it has found the web page you requested, it also serves you the web page. A web server like Apache, is also the Maitre D’ of the restaurant. It handles your communications with the website (the kitchen), handles your requests, makes sure that other staff (modules) are ready to serve you. It is also the bus boy, as it cleans the tables (memory, cache, modules) and clears them for new customers.

So basically a web server is the software that receives your request to access a web page. It runs a few security checks on your HTTP request and takes you to the web page. Depending on the page you have requested, the page may ask the server to run a few extra modules while generating the document to serve you. It then serves you the document you requested. Pretty awesome isn’t it.

1. CSS pre-processing platforms such as LESS and SASS

A preprocessor is a program that takes one type of data and converts it to another type of data. In the case of HTML and CSS, some of the more popular preprocessor languages include [Haml](http://haml.info/) and [Sass](http://sass-lang.com/). Haml is processed into HTML and Sass is processed into CSS.

1. Cross platform / browser compatibility

**Browser Compatibility** is the manner in which a web page looks in different web**browsers**. Different **browsers** read the website code differently. ... The major**browsers** to ensure your site is **compatible** include IE, Chrome, Firefox, Opera, Safari and on mobile devices

**Cross**-**browser** refers to the ability for a website, web application, HTML construct or client-side script to support all the web **browsers**. The term **cross**-**browser** is often confused with multi-**browser**. Multi-**browser** means something works with several web **browsers**.

1. Google App Engine platform

The **Google** Cloud **Platform** is a group of cloud computing tools for developers to build and host web applications. It started with services such as the **Google** App Engine and quickly evolved to include many other tools and services

Amongst its various Cloud based products, **Google app engine** has become quite popular. The **app engine** is a Cloud based platform, is quite comprehensive and combines infrastructure as a service (IaaS), platform as a service (PaaS) and**software as a service** (**SaaS**

1. Google Datastore

Google Cloud Datastore is a NoSQL document database built for automatic scaling, high performance, and ease of application development

1. BigQuery

Storing and querying massive datasets can be time consuming and expensive without the right hardware and infrastructure. Google BigQuery is an [enterprise data warehouse](https://cloud.google.com/solutions/bigquery-data-warehouse) that solves this problem by enabling super-fast SQL queries using the processing power of Google's infrastructure. Simply move your data into BigQuery and let us handle the hard work. You can control access to both the project and your data based on your business needs, such as giving others the ability to view or query your data.

You can access BigQuery by using a [web UI](https://bigquery.cloud.google.com/) or a [command-line tool](https://cloud.google.com/bigquery/docs/cli_tool), or by making calls to the [BigQuery REST API](https://cloud.google.com/bigquery/docs/reference/v2) using a variety of [client libraries](https://cloud.google.com/bigquery/docs/reference/libraries) such as Java, .NET, or Python. There are also a variety of [third-party tools](https://cloud.google.com/bigquery/third-party-tools) that you can use to interact with BigQuery, such as visualizing the data or loading the data.

BigQuery is fully-managed. To get started, you don't need to deploy any resources, such as disks and virtual machines. Get started now by [running a web query](https://cloud.google.com/bigquery/quickstart-web-ui) or [using the command-line tool](https://cloud.google.com/bigquery/quickstart-command-line).

1. NoSQL

A **NoSQL** (originally referring to "non SQL" or "non relational")[[1]](https://en.wikipedia.org/wiki/NoSQL#cite_note-1) [database](https://en.wikipedia.org/wiki/Database) provides a mechanism for [storage](https://en.wikipedia.org/wiki/Computer_data_storage) and [retrieval](https://en.wikipedia.org/wiki/Data_retrieval) of data that is modeled in means other than the tabular relations used in [relational databases](https://en.wikipedia.org/wiki/Relational_database). Such databases have existed since the late 1960s, but did not obtain the "NoSQL" moniker until a surge of popularity in the early twenty-first century,[[2]](https://en.wikipedia.org/wiki/NoSQL#cite_note-leavitt-2) triggered by the needs of [Web 2.0](https://en.wikipedia.org/wiki/Web_2.0) companies such as [Facebook](https://en.wikipedia.org/wiki/Facebook), [Google](https://en.wikipedia.org/wiki/Google), and [Amazon.com](https://en.wikipedia.org/wiki/Amazon.com).[[3]](https://en.wikipedia.org/wiki/NoSQL#cite_note-3)[[4]](https://en.wikipedia.org/wiki/NoSQL#cite_note-4)[[5]](https://en.wikipedia.org/wiki/NoSQL#cite_note-5) NoSQL databases are increasingly used in [big data](https://en.wikipedia.org/wiki/Big_data) and [real-time web](https://en.wikipedia.org/wiki/Real-time_web)applications.[[6]](https://en.wikipedia.org/wiki/NoSQL#cite_note-6) NoSQL systems are also sometimes called "Not only SQL" to emphasize that they may support [SQL](https://en.wikipedia.org/wiki/SQL)-like query languages.[[7]](https://en.wikipedia.org/wiki/NoSQL#cite_note-7)[[8]](https://en.wikipedia.org/wiki/NoSQL#cite_note-8)

Motivations for this approach include: simplicity of design, simpler ["horizontal" scaling](https://en.wikipedia.org/wiki/Horizontal_scaling#Horizontal_and_vertical_scaling) to [clusters](https://en.wikipedia.org/wiki/Cluster_computing) of machines (which is a problem for relational databases),[[2]](https://en.wikipedia.org/wiki/NoSQL#cite_note-leavitt-2) and finer control over availability. The data structures used by NoSQL databases (e.g. key-value, wide column, graph, or document) are different from those used by default in relational databases, making some operations faster in NoSQL. The particular suitability of a given NoSQL database depends on the problem it must solve. Sometimes the data structures used by NoSQL databases are also viewed as "more flexible" than relational database tables.[[9]](https://en.wikipedia.org/wiki/NoSQL#cite_note-9)

1. ESNext ecosystem

**esnext** modernizes your JavaScript source code, and is a compliment to [babel](https://babeljs.io/). Update your legacy code to modern JavaScript with esnext, then use babel to make it run in legacy environments as needed.