Purpose of Website

Different kinds of websites have different purposes depending on who the intended audience is. Some websites are geared towards selling products and other websites are geared towards providing practical information, while others are merely for entertainment. Let’s take a look at some of the different types of websites that are out there.

The Purpose of Informative / Practical Information Websites

The purpose of an information centric website is to convey specific, helpful information to a specific user/audience so that the reader learns something new or understands a topic better. These websites are geared around more actionable information and may contain “how to’s”, tips and tricks, fix and repair, guidance, support information, directions, instructions, etc.

Target Audience

A **target audience** is the intended [audience](https://en.wikipedia.org/wiki/Audience) or readership of a publication, advertisement, or other message. In [marketing](https://en.wikipedia.org/wiki/Marketing) and [advertising](https://en.wikipedia.org/wiki/Advertising), it is a particular group of [consumers](https://en.wikipedia.org/wiki/Consumer" \o "Consumer)within the predetermined [target market](https://en.wikipedia.org/wiki/Target_market), identified as the targets or recipients for a particular advertisement or message.[[1]](https://en.wikipedia.org/wiki/Target_audience#cite_note-:0-1) Businesses that have a wide target market will focus on a specific target audience for certain messages to send, such as The Body Shops Mother’s Day advertisements, which were aimed at the children and spouses of women, rather than the whole market which would have included the women themselves.

A target audience is formed from the same factors as a target market, but it is more specific, and is susceptible to influence from other factors. An example of this was the marketing of the USDA’s food guide, which was intended to appeal to young people between the ages of 2 and 18. The factors they had to consider outside of the standard marketing mix included the nutritional needs of growing children, children's knowledge and attitudes regarding nutrition, and other specialized details. This reduced their target market and provided a specific target audience to focus on. Common factors for target audiences may reduce the target market to specifics such as ‘men aged 20-30 years old, living in Auckland, New Zealand’ rather than ‘men aged 20-30 years old’. However, just because a target audience is specialized doesn’t mean the message being delivered will not be of interest and received by those outside the intended demographic.Failures of targeting a specific audience are also possible, and occur when information is incorrectly conveyed. Side effects such as a campaign backfire and ‘demerit goods’ are common consequences of a failed campaign. Demerit goods are goods with a negative social perception, and face the repercussions of their image being opposed to commonly accepted social values.

Defining the difference between a target market and a target audience comes down to the difference between marketing and advertising. In marketing, a market is targeted by business strategies, whilst advertisements and media, such as television shows, music and print media, are more effectively used to appeal to a target audience. A potential strategy to appeal to a target audience would be advertising toys during the morning children’s TV programs, rather than during the evening news broadcast.

Reaching a target audience is a staged process, started by the selection of the sector of the target market. A successful appeal to a target audience requires a detailed media plan, which involves many factors in order to achieve an effective campaign.

Website Technologies

# 1. Browsers

Browsers are the interpreters of the web. They request information and then when they receive it, they show us on the page in a format we can see and understand.

* [Google Chrome](https://www.google.com/chrome/) - Currently, the most popular browser brought to you by Google
* [Safari](https://www.apple.com/safari/) - Apple’s web browser1
* [Firefox](https://www.mozilla.org/en-US/firefox/new/) - Open-source browser supported by the Mozilla Foundation
* [Internet Explorer](http://windows.microsoft.com/en-us/internet-explorer/download-ie) - Microsoft’s browser. You will most often hear web developers complain about this one.

# 2. HTML

[HTML](https://developer.mozilla.org/en-US/docs/Web/HTML) is a markup language. It provides the structure of a website so that web browsers know what to show.

# 3. CSS

[CSS](https://developer.mozilla.org/en-US/docs/Web/CSS) is a Cascading Style Sheet. CSS let’s web designers change colors, fonts, animations, and transitions on the web. They make the web look good.

* [LESS](http://lesscss.org/) - a CSS pre-compiler to make working with CSS easier and add functionality
* [SASS](http://sass-lang.com/) - a CSS pre-compiler to make working with CSS easier and add functionality

# 4. Programming Languages

Programming languages are ways to communicate to computers and tell them what to do. There are many different programming languages just like there are many different lingual languages (English, Spanish, French, Chinese, etc). One is not better than the other. Developers typically are just proficient at a couple so they promote those more than others. Below are just some of the languages and links to their homepages

* [Javascript](https://developer.mozilla.org/en-US/docs/Web/JavaScript) - used by all web browsers, Meteor, and lots of other1 frameworks
* [Coffeescript](http://coffeescript.org/) - is a kind of “dialect” of javascript. It is viewed as simpler and easier on your eyes as a developer but it complies (converts) back into javascript
* [Python](https://www.python.org/) -used by the Django framework and used in a lot of mathematical calculations
* [Ruby](https://www.ruby-lang.org/en/) - used by the Ruby on Rails framework
* [PHP](http://php.net/) - used by Wordpress
* [Go](https://golang.org/) - newer language, built for speed.
* [Objective-C](https://developer.apple.com/library/mac/documentation/Cocoa/Conceptual/ProgrammingWithObjectiveC/Introduction/Introduction.html)- the programming language behind iOS (your iPhone), lead by Apple
* [Swift](https://developer.apple.com/swift/) - Apple’s newest programming language
* [Java](https://www.java.com/en/about/) - Used by Android (Google) and a lot of desktop applications.

# 5. Frameworks

Frameworks are built to make building and working with programming languages easier. Frameworks typically take all the difficult, repetitive tasks in setting up a new web application and either does them for you or make them very easy for you to do.

* [Meteor](https://www.meteor.com/) - a full-stack (front and back end) javascript framework
* [Node.js](http://nodejs.org/) - a server-side javascript framework
* [Ruby on Rails](http://rubyonrails.org/) - a full-stack framework built using ruby
* [Django](https://www.djangoproject.com/) - a full-stack framework built using python
* [Ionic](http://ionicframework.com/) - a mobile framework
* [Phonegap / Cordova](http://phonegap.com/) - a mobile framework that exposes native api’s of iOS and Android for use when writing javascript
* [Bootstrap](http://getbootstrap.com/) - a UI (user interface) framework for building with HTML/CSS/Javascript
* [Foundation](http://foundation.zurb.com/) - a UI framework for building with HTML/CSS/Javascript
* [Wordpress](https://wordpress.org/) - a CMS (content management system) built on PHP. Currently, about 20% of all websites run on this framework
* [Drupal](https://www.drupal.org/) - a CMS framework built using PHP.
* [.NET](http://www.microsoft.com/net) - a full-stack framework built by Microsoft
* [Angular.js](https://angularjs.org/) - a front-end javascript framework.
* [Ember.js](http://emberjs.com/) - a front-end javascript framework.
* [Backbone.js](http://backbonejs.org/) - a front-end javascript framework.

# 6. Libraries

Libraries are groupings of code snippets to enable a large amount of functionality without having to write it all by yourself. Libraries typically also go through the trouble to make sure the code is efficient and works well across browsers and devices (not always the case, but typically they do).

* [jQuery](http://jquery.com/)
* [Underscore](http://underscorejs.org/)

# 7. Databases

Databases are where all your data is stored. It’s like a bunch of filing cabinets with folders filled with files. Databases come mainly in two flavors: SQL and NoSQL. SQL provides more structure which helps with making sure all the data is correct and validated. NoSQL provides a lot of flexibility for building and maintaining applications.

* [MongoDB](http://www.mongodb.org/) - is an open-sourced NoSQL database and is currently the only database supported by Meteor.
* [Redis](http://redis.io/) - is the most popular key-value store. It is lighting fast for retrieving data but doesn’t allow for much depth in the data storage.
* [PostgreSQL](http://www.postgresql.org/) - is a popular open-sourced SQL database.
* [MySQL](http://www.mysql.com/) - is another popular open-sourced SQL database. MySQL is used in Wordpress websites.
* [Oracle](https://www.oracle.com/database/index.html) - is an enterprise SQL database.
* [SQL Server](http://www.microsoft.com/en-us/server-cloud/products/sql-server/) - is an SQL server manager created by Microsoft.

# 8. Client (or Client-side)

A client is one user of an application. It’s you and me when we visit http://google.com. Client’s can be desktop computers, tablets, or mobile devices. There are typically multiple clients interacting with the same application stored on a server.

# 9. Server (or Server-side)

A server is where the application code is typically stored. Requests are made to the server from clients, and the server will gather the appropriate information and respond to those requests.

# 10. Front-end

The front-end is comprised of HTML, CSS, and Javascript. This is how and where the website is shown to users.

# 11. Back-end

The back-end is comprised of your server and database. It’s the place where functions, methods, and data manipulation happens that you don’t want the clients to see.

# 12. Protocols

Protocols are standardized instructions for how to pass information back and forth between computers and devices.

* [HTTP](http://www.w3.org/Protocols/) - This protocol is how each website gets to your browser. Whenever you type a website like “http://google.com” this protocol requests the website from google’s server and then receives a response with the HTML, CSS, and javascript of the website.
* [DDP](https://www.meteor.com/ddp) - is a new protocol created in connection with Meteor. The DDP protocol uses websockets to create a consistent connection between the client and the server. This constant connection lets websites and data on those websites update in real-time without refreshing your browser.
* [REST](http://en.wikipedia.org/wiki/Representational_state_transfer) - is a protocol mainly used for API’s. It has standard methods like GET, POST, and PUT that let information be exchanged between applications.

# 13. API

An API is an application programming interface. It is created by the developer of an application to allow other developers to use some of the application’s functionality without sharing code. Developers expose “end points” which are like inputs and outputs of the application. Using an API can control access with API keys. Examples of good API’s are those created by Facebook, Twitter, and Google for their web services.

# 14. Data formats

Data formats are the structure of how data is stored.

* [JSON](http://www.json.org/) - is quickly becoming the most popular data format
* [XML](http://www.w3.org/XML/) - was the main data format early in the web days and predominantly used by Microsoft systems
* [CSV](http://en.wikipedia.org/wiki/Comma-separated_values) - is data formatted by commas. Excel data is typically formatted this way.

Thanks for reading and I hope you found something in here that gave you a new way to think about or talk about web technologies. This was not meant to be an all-encompassing list, but rather a way to talk about all the great technologies we have at our finger tips.

And next week, we will tackle this mess (not really, my fingers hurt)

Web Space Hosting

There are several essential things a [web hosting](https://www.ntchosting.com/web-hosting/) provider must actually provide. The first thing is a stable [server](https://www.ntchosting.com/apache-server-linux.html), on which the [websites](https://www.ntchosting.com/encyclopedia/internet/website/) should run. Once he has the physical machine, it's time to install suitable software, such as [Mail SMTP server](https://www.ntchosting.com/email/smtp-server.html) and [DNS server](https://www.ntchosting.com/dns/dns-server.html) software. And when everything is ready to go, the hosting provider must face the hardest task - to define his offers. And one of the features every client first looks for is the web space.

On the World Wide Web scene it's all about web hosting. The web is the large virtual space accommodating our websites and handling the exchange of email between different recipients. On the whole, thanks to the multi-sided nature of the web hosting services today we can all reside in a parallel virtual world offering endless social and business opportunities.

Website Budget

When creating a website budget at the website planning stage seriously consider your time investment. Instead of doing all or any of the following yourself, **would your time be better spent marketing or producing the product**.

### Building Webpages

In a website planning budget an allowance has to be made for the web pages to be built. This would cover the cost of hiring a professional or cost of your time invested to make your own web pages.

* What part of the website building process can you do yourself?
* Is this efficient use of time to save some money?
* Would it be more cost effective in the long run to hire someone to do all or part of the work?

If you are going to build the web pages yourself do you have the knowledge, time and technologies in place to make your own web pages or will you have to invest time and money to aquire the proper skills, software and technologies?

### Website Content

Next in the website planning budget consider website content creation and management.

Website content is the actual words the visitor and [***search engines***](http://www.htmlbasictutor.ca/how-search-engine-works.htm) see. The website content has to be actual information, not just a bunch of links to other sites or images.

* Who will create the initial website content?

If you have done any website marketing research, you will know that lots of quality website content is important to the success of your website. Website content must be continually updated with new fresh content to give visitors a reason to return and for the search engines to keep visiting the site.

* Who will handle website content management?
* Who will create the website content now and in the future? Yourself or someone else?
* Would some kind of [***content management system***](http://www.webpagemistakes.ca/how-content-management-system-works/) make things easier or even be [***appropriate***](http://www.webpagemistakes.ca/choosing-a-content-management-system/) for your business?

### Website Graphics

A website planning budget needs to include for quality website graphics required. Don't go over board on this. Remember website content is important. A site that uses a lot of website graphics will not do well in the search engines.

* Do you have graphics suitable for the web already?
* Are you going to have to build, convert, purchase or hire someone to build any website graphics required?

Consider the size of the website graphics. These can take up webspace and add to bandwidth costs. Recycle as many as possible throughout the site.

### Website Advertising

Every business needs an advertising budget. A website planning budget is no different. Now that you have a website, all letterhead, business cards and any promotional items need to have the website address and email on them. Be sure to include in your website planning budget for new stationary and brochures.

How are you planning to advertise the website?

If you are going to submit to search engines has the site been optimized properly to maximize results? [***Search engine optimization***](http://www.htmlbasictutor.ca/search-engine-optimization.htm) is another item to include in the website planning budget.

### Third Party Features

A website that uses third party features needs to incorporate the costs of these features in the website budget. Even if it is decided to use free services someone still has to manage the features.

* What are the costs to use third party services?

The actual costs to use these features and your time to manage these features, be it checking that they are working properly, charging you correctly or sending you your commission if you are using an affiliate program as a source of income.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | Heading |  |  | | --- | | Images Animation |  |  | | --- | | Navigation Bar Titles |  |  | | --- | | Introduction |  |  | | --- | | Footer | |

Structure of Webpage