What is web design and development?

There is a lot of confusion when it comes to web design and web development. Even though they work side by side they are often completely different.

Generally speaking Web Design and Development is an umbrella term that describes the process of creating a website. Like the name suggests, it involves two major skill sets: web design and web development.

Web design determines the look and feel of a website, while web development determines how it functions.
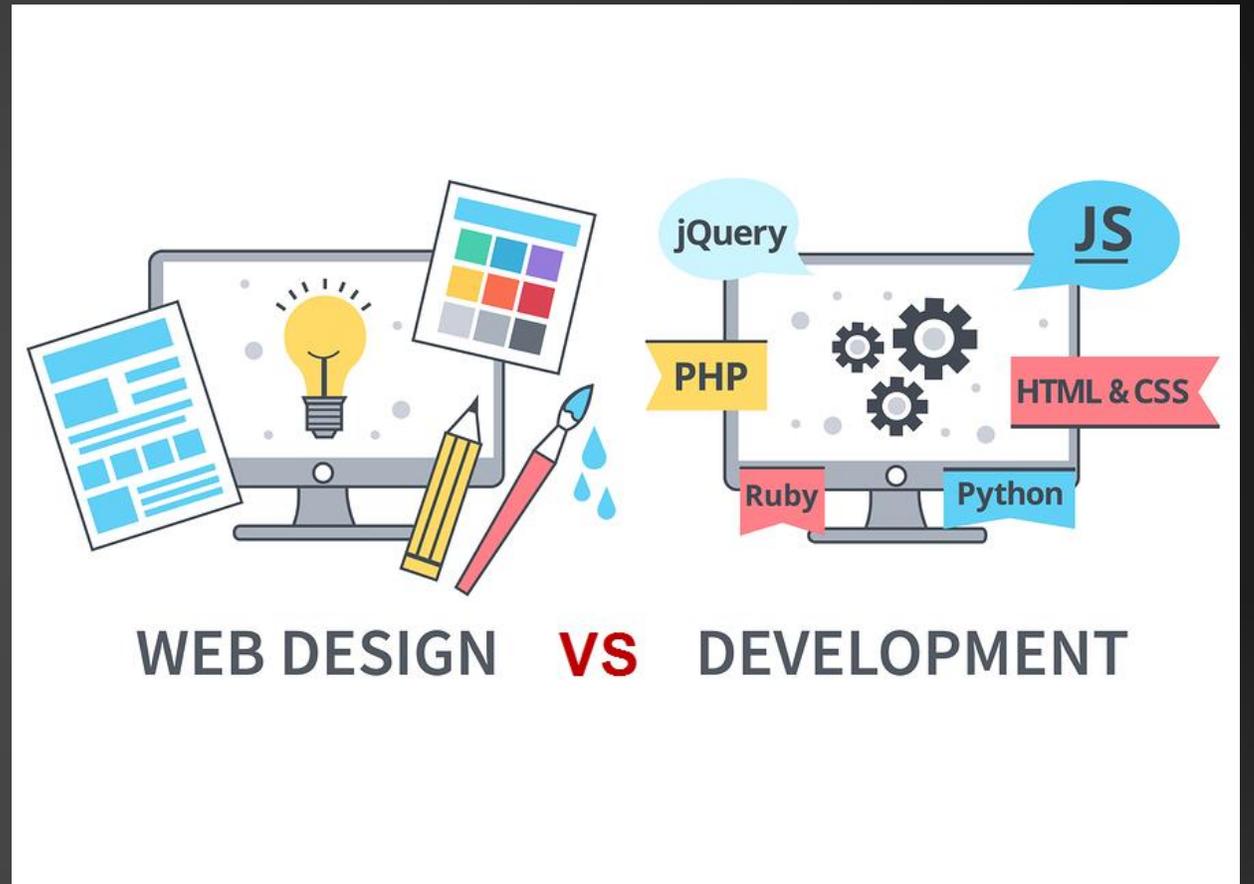
Because there isn't always a hard line that separates the two roles, the titles are often used interchangeably. As the web continues to evolve, so do the roles.

In the almost 30 years since the first website was created, numerous job titles have emerged to describe various skill sets used to create a website. These titles often overlap, and their meanings change from company to company.

Design vs. front-end development vs. back-end development

To keep it simple, let's separate website creation into two categories: what the user sees, and what the user doesn't see.

What the user sees takes place in a browser and involves design and front-end development. Design defines a website's colors, layout, font, and images—all the stuff that goes into a website's branding and usability—and requires tools like Photoshop, Illustrator, Fireworks, and Sketch.

Using coding languages like HTML, CSS, and Javascript to implement that design is called front-end development. These languages make it possible for users to interact with buttons, images, text, contact forms, and navigation menus. And they're integral to responsive and adaptive design.

Some designers code and some front-end developers design. Some designers don't touch a piece of code. And some front-end developers stick to coding and nothing else.

What the user doesn't see takes place on a server and involves back-end development.

A website needs a back end to store and organize all the data that comes through the front end. So if a user buys something or fills out a form, they're entering information into an application on the front end of the website. And that information is stored in a database that lives on a server.

A website works the way you want it to because the front and back ends of a website are always communicating. A back-end developer is like the conductor. They make sure applications, databases, and servers work together harmoniously using languages like Ruby, PHP, .Net, and Python along with frameworks like Ruby on Rails and Code Igniter.

Front End

- Markup and web languages such as HTML, CSS and Javascript
- Asynchronous requests and Ajax
- Specialized web editing software
- Image editing
- Accessibility
- Cross-browser issues
- Search engine optimisation
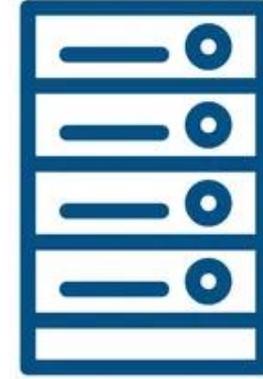
Back End

- Programming and scripting such as Python, Ruby and/or Perl
- Server architecture
- Database administration
- Scalability
- Security
- Data transformation
- Backup

CSS = cascading style sheets

BASIC TRAINING

If you wish to be a web designer you should start with an "Introduction to Web Design" course which includes learning the basics or fundamentals of web design, such as the use of hyperlinks, tables, and CSS. You will learn how to edit and create webpages using text and images. You will also learn to think creatively about content. The designs for website appearance will be based upon that content.
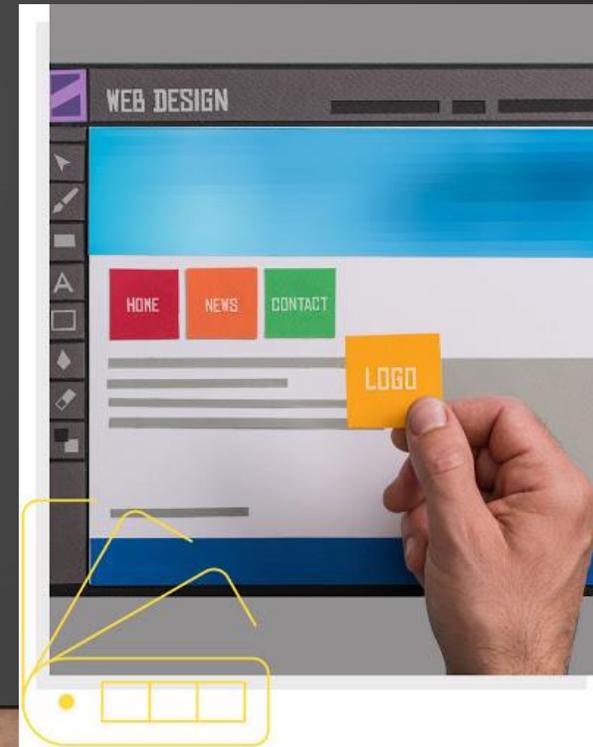
Another course that might be useful but related to web developing this time would teach students the fundamentals of building websites. This would include coding with html and xml. You can learn how to increase website functionality and usability. Techniques for improving website visibility and navigation may also be covered. Introduction to Web Design is often a prerequisite to this class.
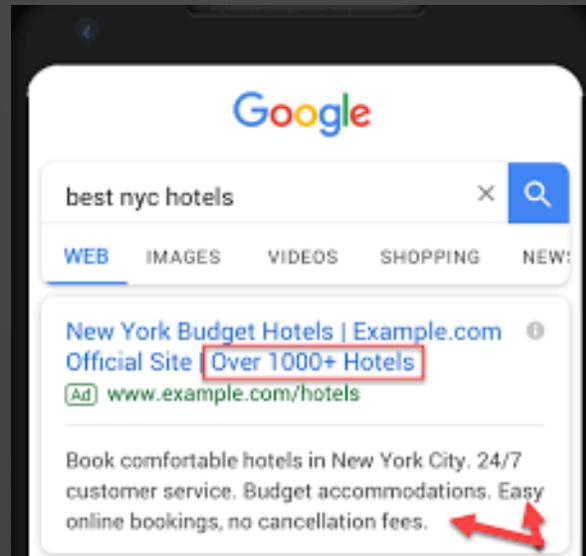
Exercise A

Read the sentence pairs and choose which word best fits each blank.

1. functionality / usability

A This website works well, so it has high functionality
B This website is very helpful, so it has high usability

2. appearance / visibility

A   The bright colors on this webpage make its appearance very pleasing.
B   The better a website's visibility is, the more likely people are to find it.

Exercise B

Match the words or phrases (1-8) with the definitions (A-H)

1. CSS   C   A   the look of something
2. web development   B   B   to create a computer programme
3. functionality   G   C   a programming language used to format the style of a webpage
4. code   B   D   the material in a document or site
5. appearance   A   E   the act or process of planning a website
6. web design   E   F   the act or process of building a website
7. navigation   H   G   how well something works
8. content   D   H   the act of moving to different parts of a website

Exercise C

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