What's the Difference Between the Front-End and Back-End?

Two terms thrown around a lot in the web industry are front-end and back-end. It can be a little frustrating since the difference between the front-end and back-end isn't always perfectly clear. They're terms often used to describe aspects of the web industry. The front-end is also referred to as the client-side and is sometimes considered "web design". The back-end of the web industry is often called the server-side. Often when someone says they're a "web developer" they're saying they work on the back-end of sites. While that explanation seems simple, the line between the two is often blurry. Here are some basic guidelines to help tell the difference between the front-end and back-end or at least be able to begin to understand what someone does when they say they're a "front-end developer."

Front-End

The front-end is everything involved with what the user sees, including design and some languages like HTML and CSS. There are a lot of different jobs associated with the front-end. A common front-end job title is "web designer." A web designer, you guessed it, designs websites. The job title of web designer is pretty broad, though. A web designer could just be someone who designs the sites in a program like Photoshop or Fireworks and will never touch the code. But in another location, a web designer could do all the design comps in Photoshop, and then be responsible for creating all the HTML and CSS (and sometimes even JavaScript) to go along with it. A User Interface (UI) Designer is basically a visual designer and is generally focused on design. They're not usually involved in the implementation of the design, but they might know light HTML and CSS so they can communicate their ideas more effectively to the developers.

User Experience (UX) designers work in the front-end and study and researches how people use the sites and make changes through a lot of testing. A front-end designer or developer can create a site without any back-end development.

The sites they would create without a web developer, or using the back-end, is a static site. A static site is something like a site for a restaurant or hair salon. It doesn't require any information to be stored in a database. The pages will almost always stay the same, unless it's time for a redesign.

Dr. Rafah M. Almuttairi

A front-end developer may be required to have a grasp on testing, as well as be well versed in HTML, CSS and JavaScript. This person may or may not have experience with creating the design in a design program. A different version of this title is front-end engineer. Specific front-end languages like "JavaScript developer" are also considered front-end developers.

Back-End

The back-end, or the "server-side", is basically how the site works, updates and changes. This refers to everything the user can't see in the browser, like databases and servers. Usually people who work on the back-end are called programmers or developers. Back-end developers are mostly worried about things like security, structure and content management. They usually know and can use languages like HTML and CSS, but that's definitely not their focus. Back-end developers, or at least back-end development, is required to create a dynamic site. A dynamic site is a site that's constantly changing and updated in real-time. Most sites are dynamic sites, as opposed to static sites. Facebook, Google Maps and this blog are all considered dynamic sites. Blogs are dynamic sites, since their content is constantly changing and updating. A dynamic site requires a database to work properly. All information, like user profiles or images they've uploaded, or blog posts, are stored in the database. Web developers work with programming languages like PHP or .Net, since they need to work with something the database understands. The code they write communicates with the server and then tells the browser what to use from the database. It give to the user the ability to update dynamically without going back to the designer. In some web applications, the Back End developer designs a control panel to the user to give the ability to add and remove news or photos,…etc.
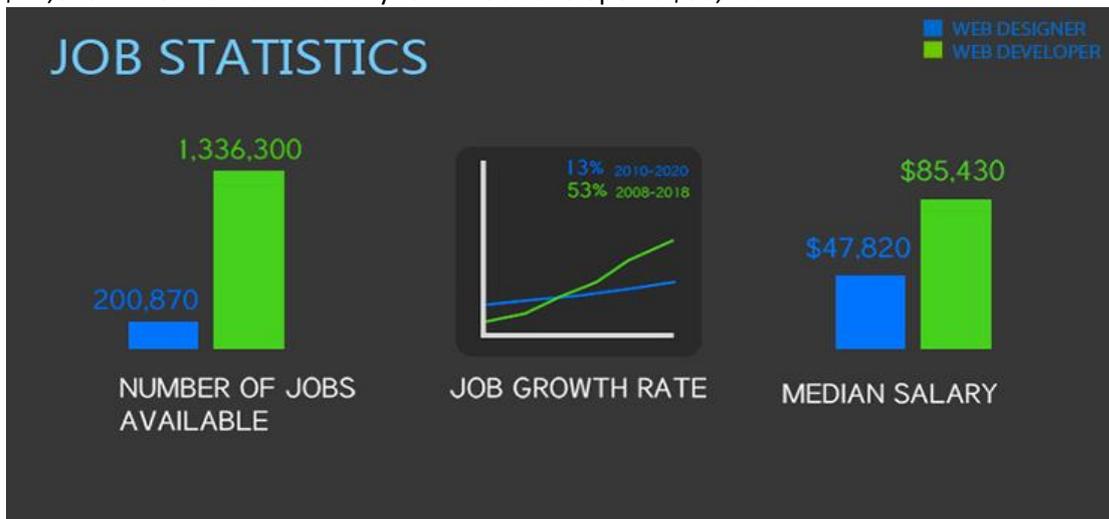
In Conclusion

Hopefully by now you've got a little better of a grasp on the differences between the front-end and back-end in the web industry. It can be a confusing topic, especially since there's not really an industry standard for what's always in the front-end and what's always in the back-end. However, there are also a lot of people who work in and understand both the front-end and back-end. Those people are often called "full stack developers". If you're still a little confused about the difference between the front-end and back-end, always remember that the front-end is related to the browser and everything sent to it. If it's got something to do with a database, then it's back-end related.

Dr. Rafah M. Almuttairi

What is the difference Between Web Designer and Web Developer?

First of all we have to know that, people who are great designers and developers, are fairly rare and incredibly sought after in today's market. The difference in the number of jobs available for designers versus developers is drastic.

According to a Visual.ly info-graphic, there are 1,336,300 available jobs for web developers compared with a meager 200,870 open positions for web designers. Not only is the hiring demand a huge difference, but also the salary difference is stark. The median salary for a web designer is $47,820 while the median salary for a web developer is $85,430.

Job demand is heavily skewed in favor of web developers.

Dr. Rafah M. Almuttairi

So why does one get paid so much more than the other if they're both working together to produce the same outcome: a beautiful and functional website or an application?

Web designer

Web designers are architects of the web. They focus on the look and feel of the website; and so, they should be visual arts experts, who are skilled in color scheming, graphic design and information flow. Designers are typically more in tune with their right brain hemisphere, utilizing their creativity, intuition and imagination, to design amazing user experiences.

The education requirement of a web designer is debatable. While a degree may not be needed, a full portfolio of your past work is a must. Of course others would argue that a degree from a university is just as important. Also, you should be skilled in software such as Adobe Illustrator, Photoshop and Dreamweaver.

If web designers are the architects of the web then developers are the builders. Without coders, the plans would never come to life. They work with designers in making semantic mark-up languages like XHTML and CSS and transform static PSDs into interactive working web browser pages. Typically, programmers are skilled in programming languages such as PHP, ASP, Ruby on Rails, Python, HTML, CSS and more depending on what they specialize in and their experience level. The nice thing about being a good developer is that since their skills are in such a high demand then any programmer with a good portfolio can easily get a coding job.

Web developers speak a different language (or more than one) than front-end designers.

No matter how different or not different being a designer and/or a developer may be, the two occupations do seem to come with the same pros and cons.

Flexible work hours and ability to work from anywhere seem to be the biggest perks aside from doing something these people love to do.

Dr. Rafah M. Almuttairi

Recap:

A web designer:

- Focuses on look and feel of a website
- Uses HTML, CSS, and JavaScript
- Is competent in color scheming, graphic design, and information flow
- Creates a great user experience
- Is right-brained: Strong intuition, creativity, & imagination
- Portfolio is worth more than a degree
- Median salary: $47,820

A web developer:

- Creates the inner workings of a website
- Is competent in programming languages (PHP, .NET, Python, C, Ruby)
- Develops the user interface
- Is left-brained: logic, linear thinking, technical
- Hands-on coding experience is required (either your own products or github)
- Median salary: $85,430

Web Application Team :

1- Designer
Layout Designing → Graphic Designer (Books: Photoshop for Web || Videos foe Web)

→ UI/UX

2- Coder
Content Layer → HTML → HyberText Markup Language
Presentation Layer → CSS → Cascade Style Sheet

3- Developer

Front End Developer
Behavior/ Interactivity Layer → JavaScript
Back End Developer
Dynamic update Layer → PHP → Preprocessor Hypertext
(Book: Beginning PHP and MySQL Novice to Professional)

Dr. Rafah M. Almuttairi