

Back-end Resources

Back-end resources are typically what makes the site actually function. Programming languages like Python, PHP, and Ruby on Rails, are all back-end technologies and are usually what handles the information that the User is sending to it. For example, the data from a “contact us form” needs a server to actually save the data someone entered. This server needs to know what to do, something like Python would tell that server what to do with the data. On the other hand, the way the “contact us form” looks can be changed by front-end technologies like CSS or Javascript.

Python

*Python is a powerful programming language that is the closest to the English language and therefore a great language for individuals new to programming.

<http://www.python.org/>

Download: <http://www.python.org/download/>

Learn more: [http://en.wikipedia.org/wiki/Python_\(programming_language\)](http://en.wikipedia.org/wiki/Python_(programming_language))

Python-Related

PIP

*For making (python) installations easier on Mac OS X and Linux

<https://pypi.python.org/pypi/pip>

Learn More: [http://en.wikipedia.org/wiki/Pip_\(Python\)](http://en.wikipedia.org/wiki/Pip_(Python))

Django

*For Rapid Web Development in Python

<http://www.djangoproject.com>

Learn more: [http://en.wikipedia.org/wiki/Django_\(web_framework\)](http://en.wikipedia.org/wiki/Django_(web_framework))

South

*For running database migrations; makes it easier to make changes on your database.

<https://pypi.python.org/pypi/South/>

Learn more: <http://south.aeracode.org/wiki>

Django-Registration

*Makes it easy for user sign ups on Django. Made to use on live sites.

<https://pypi.python.org/pypi/django-registration>

Install (from Terminal):

pip install django-registration

or

sudo pip install django-registration

Python Imaging Library (PIL)

*Adds the ability to use images in Django

Download: <http://www.pythonware.com/products/pil/>

Install (from Terminal):

```
pip install django-registration
```

or

```
sudo pip install django-registration
```

MySQL

*A Database for storing your all of your web application's information.

<http://www.mysql.com/>

Download: <http://dev.mysql.com/downloads/mysql/>

Learn more: <http://en.wikipedia.org/wiki/Mysql>

Front-End Resources

The front-end is what a person visiting your website will see. A lot of people are under the false impression that the backend is the reason things look the way they do. Although this can be true, it's typically not. HTML, CSS, & Javascript are typically what controls your front-end for your web application. You can usually change the way a front-end looks and works without touching the backend code (like Python, Ruby on Rails, PHP, etc.).

Twitter Bootstrap

This will save you hours and hours on design HTML and CSS user interfaces for your project. It's highly customizable and overall VERY awesome. We will use it a lot!

<http://twitter.github.io/bootstrap/>

JQuery

JQuery is a Javascript Library. That means, it makes it easier to write javascript-like code. Twitter Bootstrap uses JQuery. JQuery is great for animations, form-validation, improving user experience, and much, much more. Google search "top jquery plugins" to get an idea of what you can do with jquery.

<http://jquery.com/>

Your Computer Resources

Code-editors

Code editors help you type your code; think of it like *Microsoft Word* for Code.

Komodo Edit

*A good code editor that will help you in your development. It checks your syntax (programming grammar) as you type which makes finding mistakes a lot easier.

Works with: Mac OS X, Windows, Linux

<http://www.activestate.com/komodo-edit>

Gedit

*A simple code editor

Works with: Windows or Mac OS X

<http://projects.gnome.org/gedit/>

XCode:

*Made for iOS development, works with python.

Works with Mac OS X

<https://developer.apple.com/xcode/>

*** Windows Resources

Cygwin

This will give you “terminal” like features on your Windows computer.

<http://cygwin.com/>