Setting Up 'UniPlanner' Dev Environment on OS X 10.8 Mountain Lion

Summary:

This document explains the steps to set up a development environment for UniPlanner on a Mac running OS X 10.8 Mountain Lion.

UniPlanner was made using the following technologies Python, Django, pip, PostgreSQL, Heroku, Facebook Apps, git, Django-Facebook.

The following tools were also used to make development easier. zsh, oh my zsh, GitHub, GitHub App for mac, Sublime Text 2, pgadmin

Prerequisites:

- Experience with Django, or at the very least completion of the official Django tutorial for Django 1.5.1
  - https://docs.djangoproject.com/en/1.5/intro/tutorial01/
- Experience with PostgreSQL databases.
- Familiarisation with the setup instructions for Django-Facebook
  - https://github.com/tschellenbach/Django-facebook
- You will need an email account for sending our registration emails from. The details of this email account need to be added to uniplanner/settings.py
- You will need a Facebook app, for a website, configured to the same domain that you are using for uniplanner. The secret key of this app needs to be added to uniplanner/settings.py.

Steps:

1. Install a PostgreSQL Server
   a. install postgres app.
      Download from http://postgresapp.com/
   b. Add to postgress app to system path with instructions from http://postgresapp.com/documentation
      i. Will probably need to make a bashrc file and put commands in there. Also need to put "source ~/.bashrc" at END of .zshrc if using zsh.
      ii. Running "psql" from command line now works and "whereis psql" shows we are using the postgres app executable.
2. put the following 2 lines in .bashrc
   a. export PATH="/Applications/Postgres.app/Contents/MacOS/bin:$PATH"
   b. export PIP_REQUIRE_VIRTUALENV=true
3. If using GitHub, checkout github project (optionally using GitHub app for Mac).
   If setting up app from files on compendium CD, skip this step.
4. Need to install virtualenv (and need to install pip in order to do this).
   a. http://www.pip-installer.org/en/latest/installing.html says:
      i. The easiest way to install and use pip is with virtualenv, since every virtualenv has pip (and it's dependencies) installed into it automatically.
   b. BUT http://www.virtualenv.org/en/latest/ says:
      i. To install globally with pip (if you have pip 1.3 or greater installed globally):
         $ [sudo] pip install virtualenv
   c. These counter each other out so we google installing pip and get
      i. http://docs.python-guide.org/en/latest/starting/install/osx.html

which says use "easy_install pip" which works fine.

we then do "sudo pip install virtualenv"

5. Create a virtual environment in the root git repo.

(make sure it is named "env" or "venv" so it will be ignored as per the .gitignore file)

6. Install the pip requirements

found instructions at bottom of this page http://jontourage.com/2011/02/09/virtualenv-pip-basics/

ie running "pip install -r requirements.txt" installs everything.

7. Press Apple+I on a python file (.py)and set Sublime Text 2 to always open them.

8. Create database and superuser "sam".

type "createdb uniplanner_dev" in the command.

--- in the psql prompt type:

"psql"

"create user sam superuser"

9. make manage.py executable.

   a. cd to the right directory

      "chmod +x manage.py "

10. install pgadmin

latest version from http://www.pgadmin.org/download/macosx.php :

http://www.postgresql.org/ftp/pgadmin3/release/v1.16.1/osx/

Run postgres. Initially there are no databases to connect to.

Connect to a new one. Use port 5432 (shouldn't need to change) and change username to "sam".

This should then allow you to connect,

11. Type "./manage.py syncdb" in the command line.

12. Check server works.

./manage runserver

then goto

http://127.0.0.1:8000/facebook/example/

13. Make the url sgcwuni.com redirect to http://127.0.0.1 on your local machine.

There are some instructions here

http://decoding.wordpress.com/2009/04/06/how-to-edit-the-hosts-file-in-mac-os-x-leopard/

add

"127.0.0.1 sgcwuni.com" to "sudo subl /private/etc/hosts"

If the redirect does not work at this point, reset the computer.

14. Try to signup with Facebook to the site. Everything should now work.