Issues Encountered during the Setup of the Teacher Portal on Ubuntu

```
ggiger@JimmyOlsen:/var/lib$ sudo apt-get install postgresql
Reading package lists... Done
Building dependency tree
Reading state information... Done
postgresql is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.
ggiger@JimmyOlsen:/var/lib$ sudo -u postgres psql
psql: could not connect to server: No such file or directory
        Is the server running locally and accepting
        connections on Unix domain socket "/var/run/postgresql/.s.PGSQL.
5432"?
ggiger@JimmyOlsen:/var/lib$
ggiger@JimmyOlsen:/var/lib$ sudo /etc/init.d/postgresql start
 * Starting PostgreSQL 9.1 database server                                      * The
PostgreSQL server failed to start. Please check the log output:
2013-05-07 17:53:22 AST LOG:  could not bind IPv4 socket: Cannot assign requested address
2013-05-07 17:53:22 AST HINT:  Is another postmaster already running on port 5432? If
not, wait a few seconds and retry.
2013-05-07 17:53:22 AST WARNING:  could not create listen socket for "192.168.1.1"
2013-05-07 17:53:22 AST FATAL:  could not create any TCP/IP sockets
                                                                        [fail]
ggiger@JimmyOlsen:/var/lib$
```

Steps to resolve the TCP/IP issue

1) I made sure port 5432 was not I use using the command below

```
sudo netstat -antp
```

After reviewing the output, port 5432 was open.

Th make sure nothing was listening on this port, I ran the command below

```
lsof -i :5432
```

No output was listed which means nothing else was using this port.

I ran the command below to search for the file `.s.PGSQL.5432`. Running this command may take a while.

```
sudo find / -name .s.PGSQL.5432 -ls
```

If you don't get any results, then delete the file below and try running postgres command again.

```
/usr/local/var/postgres/postmaster.pid
```

Reference to this problem can be found [here](#).

----

2) Next I went into the file /etc/postgresql/9.1/main/postgresql.conf and made sure the following were set:

```
listen_addresses = localhost
port = 4532
```

The `listen_address` was set to something else so I changed it back to localhost

I opened the file /etc/postgresql/9.1/main/pg_hba.conf and changed the line below to trust

```
local   all           postgres                              trust
```

I then ran the command below and the postgres DB started up.

```
sudo /etc/init.d/postgresql start
```

I was able to open the postgres terminal using the command

```
sudo -u postgres psql
```

Steps to continue to get the teacher portal up and running.

Next I downloaded the teacher portal code from git, unzipped it, changed into that directory in a terminal window and ran the command below.

```
sudo bundle install
```

After installing a bunch of different packages, it gave me the error below

```
An error occurred while installing pg (0.15.0), and Bundler cannot continue.
Make sure that `gem install pg -v '0.15.0'` succeeds before bundling.
```

So I ran the suggested command. I received the following output

```
ggiger@JimmyOlsen:~/projects/cs15239/TeacherPortal-master$ sudo gem install pg -v
'0.15.0'
```

```
Building native extensions.  This could take a while...
ERROR:  Error installing pg:
    ERROR: Failed to build gem native extension.

        /usr/bin/ruby1.9.1 extconf.rb
checking for pg_config... yes
Using config values from /usr/bin/pg_config
You need to install postgresql-server-dev-X.Y for building a server-side extension or
libpq-dev for building a client-side application.
You need to install postgresql-server-dev-X.Y for building a server-side extension or
libpq-dev for building a client-side application.
checking for libpq-fe.h... no
Can't find the 'libpq-fe.h header
*** extconf.rb failed ***
Could not create Makefile due to some reason, probably lack of
necessary libraries and/or headers.  Check the mkmf.log file for more
details.  You may need configuration options.

Provided configuration options:
    --with-opt-dir
    --without-opt-dir
    --with-opt-include
    --without-opt-include=${opt-dir}/include
    --with-opt-lib
    --without-opt-lib=${opt-dir}/lib
    --with-make-prog
    --without-make-prog
    --srcdir=.
    --curdir
    --ruby=/usr/bin/ruby1.9.1
    --with-pg
    --without-pg
    --with-pg-dir
    --without-pg-dir
    --with-pg-include
    --without-pg-include=${pg-dir}/include
    --with-pg-lib
    --without-pg-lib=${pg-dir}/lib
    --with-pg-config
    --without-pg-config
    --with-pg_config
    --without-pg_config


Gem files will remain installed in /usr/lib/ruby/gems/1.9.1/gems/pg-0.15.0 for
inspection.
Results logged to /usr/lib/ruby/gems/1.9.1/gems/pg-0.15.0/ext/gem_make.out
```

After looking at the `ge_make.out` file I saw that I needed to install the library `libpq-dev` by running the command below

```
sudo apt-get install libpq-dev
```

After installing it I ran the command below and everything seemed to install without error.

```
sudo bundle install
```

I then went into the postgres command prompt and changed the password using the command below

```
postgres=#  USER postgres PASSWORD 'postgres';
```

and I received the following output

```
ALTER ROLE
```

I then went into the file `config/database.yml` and changed all of the password fields to the following

```
password: postgres
```

I then ran the command `rails server` in the console window from the teacher portal directory, but received the following error:

```
ggiger@JimmyOlsen:~/projects/cs15239/TeacherPortal-master$ rails server
=> Booting WEBrick
=> Rails 3.2.13 application starting in development on http://0.0.0.0:3000
=> Call with -d to detach
=> Ctrl-C to shutdown server
Exiting
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/p
ostgresql_adapter.rb:1216:in `initialize': FATAL:  database "TeacherPortal_development"
does not exist (PG::Error)
    from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/p
ostgresql_adapter.rb:1216:in `new'
    from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/p
ostgresql_adapter.rb:1216:in `connect'
    from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/p
ostgresql_adapter.rb:324:in `initialize'
    from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/p
ostgresql_adapter.rb:28:in `new'
    from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/p
ostgresql_adapter.rb:28:in `postgresql_connection'
    from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:315:in `new_connection'
```

```
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:325:in `checkout_new_connection'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:247:in `block (2 levels) in checkout'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:242:in `loop'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:242:in `block in checkout'
        from /usr/lib/ruby/1.9.1/monitor.rb:211:in `mon_synchronize'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:239:in `checkout'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:102:in `block in connection'
        from /usr/lib/ruby/1.9.1/monitor.rb:211:in `mon_synchronize'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:101:in `connection'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_pool.rb:410:in `retrieve_connection'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_specification.rb:171:in `retrieve_connection'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/connection_adapters/a
bstract/connection_specification.rb:145:in `connection'
        from
/usr/lib/ruby/gems/1.9.1/gems/activerecord-3.2.13/lib/active_record/railtie.rb:88:in
`block in <class:Railtie>'
        from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/initializable.rb:30:in
`instance_exec'
        from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/initializable.rb:30:in
`run'
        from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/initializable.rb:55:in
`block in run_initializers'
        from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/initializable.rb:54:in
`each'
        from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/initializable.rb:54:in
`run_initializers'
        from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/application.rb:136:in
`initialize!'
        from
/usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/railtie/configurable.rb:30:in
`method_missing'
        from /home/ggiger/projects/cs15239/TeacherPortal-master/config/environment.rb:5:in
`<top (required)>'
        from
/usr/lib/ruby/gems/1.9.1/gems/activesupport-3.2.13/lib/active_support/dependencies.rb:251
```

```
:in `require'
    from
/usr/lib/ruby/gems/1.9.1/gems/activesupport-3.2.13/lib/active_support/dependencies.rb:251
:in `block in require'
    from
/usr/lib/ruby/gems/1.9.1/gems/activesupport-3.2.13/lib/active_support/dependencies.rb:236
:in `load_dependency'
    from
/usr/lib/ruby/gems/1.9.1/gems/activesupport-3.2.13/lib/active_support/dependencies.rb:251
:in `require'
    from /home/ggiger/projects/cs15239/TeacherPortal-master/config.ru:3:in `block in
<main>'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/builder.rb:51:in
`instance_eval'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/builder.rb:51:in `initialize'
    from /home/ggiger/projects/cs15239/TeacherPortal-master/config.ru:in `new'
    from /home/ggiger/projects/cs15239/TeacherPortal-master/config.ru:in `<main>'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/builder.rb:40:in `eval'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/builder.rb:40:in `parse_file'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/server.rb:200:in `app'
    from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/commands/server.rb:46:in
`app'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/server.rb:304:in `wrapped_app'
    from /usr/lib/ruby/gems/1.9.1/gems/rack-1.4.5/lib/rack/server.rb:254:in `start'
    from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/commands/server.rb:70:in
`start'
    from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/commands.rb:55:in `block
in <top (required)>'
    from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/commands.rb:50:in `tap'
    from /usr/lib/ruby/gems/1.9.1/gems/railties-3.2.13/lib/rails/commands.rb:50:in `<top
(required)>'
    from script/rails:6:in `require'
    from script/rails:6:in `<main>'
```

Run the commands below to create the database and to migrate it.

```
rake db:create
rake db: migrate
```

Some other errors encountered during setting up the Teacher Portal for the Techcafe Games
project.

```
ERROR:  Error installing rails:
 ERROR: Failed to build gem native extension.

        /usr/bin/ruby1.8 extconf.rb
extconf.rb:1:in `require': no such file to load -- mkmf (LoadError)
 from extconf.rb:1
```

```
Gem files will remain installed in /usr/lib/ruby/gems/1.8/gems/json-1.8.0 for inspection.
Results logged to
/usr/lib/ruby/gems/1.8/gems/json-1.8.0/ext/json/ext/generator/gem_make.out
sdjoshi@whale:~$ gem install json pure
^CERROR:  Interrupted
sdjoshi@whale:~$ sudo gem install json pure
Building native extensions.  This could take a while...
ERROR:  Error installing json:
 ERROR: Failed to build gem native extension.

        /usr/bin/ruby1.8 extconf.rb
extconf.rb:1:in `require': no such file to load -- mkmf (LoadError)
 from extconf.rb:1

Gem files will remain installed in /usr/lib/ruby/gems/1.8/gems/json-1.8.0 for inspection.
Results logged to
/usr/lib/ruby/gems/1.8/gems/json-1.8.0/ext/json/ext/generator/gem_make.out
```

Link that may help resolve this issue [here](#)

```
Gem::Installer::ExtensionBuildError: ERROR: Failed to build gem native extension.

        /usr/bin/ruby1.8 extconf.rb
*** extconf.rb failed ***
Could not create Makefile due to some reason, probably lack of
necessary libraries and/or headers.  Check the mkmf.log file for more
details.  You may need configuration options.

Provided configuration options:
 --with-opt-dir
 --without-opt-dir
 --with-opt-include
 --without-opt-include=${opt-dir}/include
 --with-opt-lib
 --without-opt-lib=${opt-dir}/lib
 --with-make-prog
 --without-make-prog
 --srcdir=.
 --curdir
 --ruby=/usr/bin/ruby1.8
extconf.rb:2:in `require': no such file to load -- debugger/ruby_core_source (LoadError)
 from extconf.rb:2


Gem files will remain installed in /usr/lib/ruby/gems/1.8/gems/debugger-linecache-1.1.2
for inspection.
Results logged to
/usr/lib/ruby/gems/1.8/gems/debugger-linecache-1.1.2/ext/trace_nums/gem_make.out

An error occurred while installing debugger-linecache (1.1.2), and Bundler cannot
```

```
continue.
Make sure that `gem install debugger-linecache -v '1.1.2'` succeeds before bundling.


--------------------------------------------------


ERROR:  Error installing debugger-linecache:
 ERROR: Failed to build gem native extension.

        /usr/bin/ruby1.8 extconf.rb
*** extconf.rb failed ***
Could not create Makefile due to some reason, probably lack of
necessary libraries and/or headers.  Check the mkmf.log file for more
details.  You may need configuration options.

Provided configuration options:
 --with-opt-dir
 --without-opt-dir
 --with-opt-include
 --without-opt-include=${opt-dir}/include
 --with-opt-lib
 --without-opt-lib=${opt-dir}/lib
 --with-make-prog
 --without-make-prog
 --srcdir=.
 --curdir
 --ruby=/usr/bin/ruby1.8
extconf.rb:2:in `require': no such file to load -- debugger/ruby_core_source (LoadError)
 from extconf.rb:2
```

Given the error above "`extconf.rb:2:in \`require': no such file to load -- debugger/ruby_core_source (LoadError)`", the link here below says that installing Ruby 1.9.3 resolved this issue.