

How should GQLapp be executed?

In this document, we will show you how to use Eclipse to create a Google App Engine (GAE) Python web project (GQLapp program), run it locally.

Tools used :

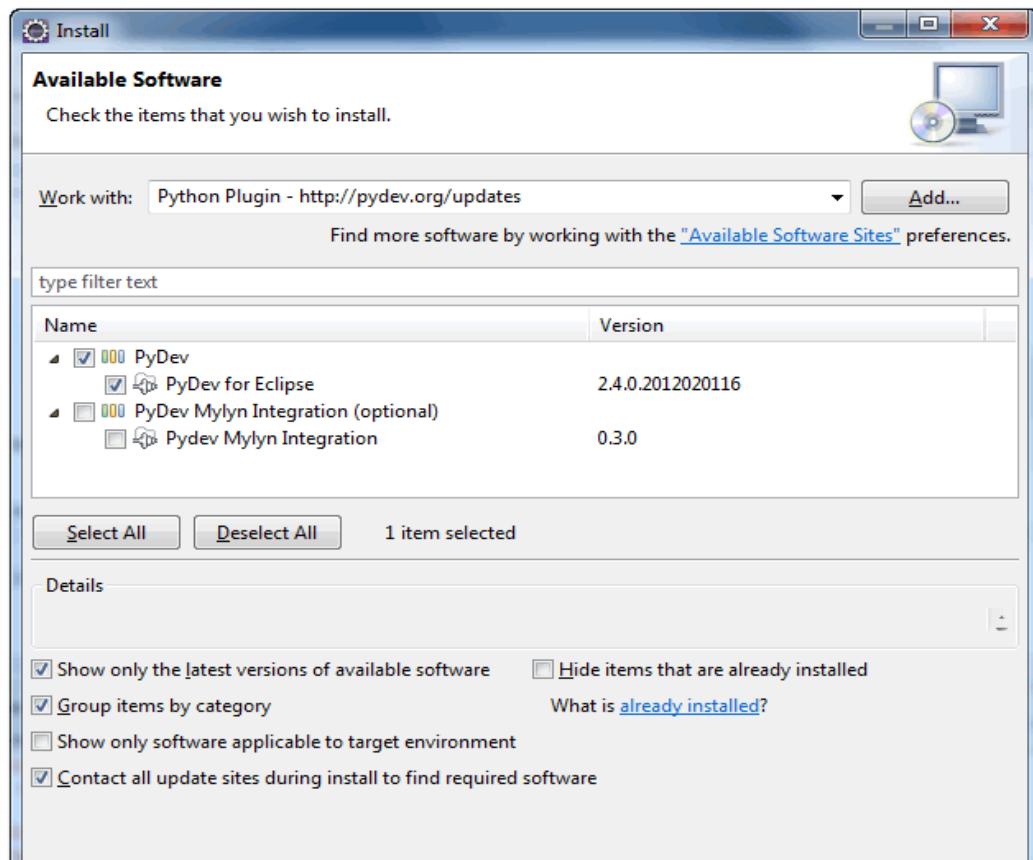
- Python 2.7
- Eclipse 3.7 + PyDev plugin
- Google App Engine SDK for Python 1.6.4

P.S Assume Python 2.7 and Eclipse 3.7 are installed.

1. Install PyDev plugin for Eclipse

Use the URL to install PyDev as Eclipse plugin: <http://pydev.org>

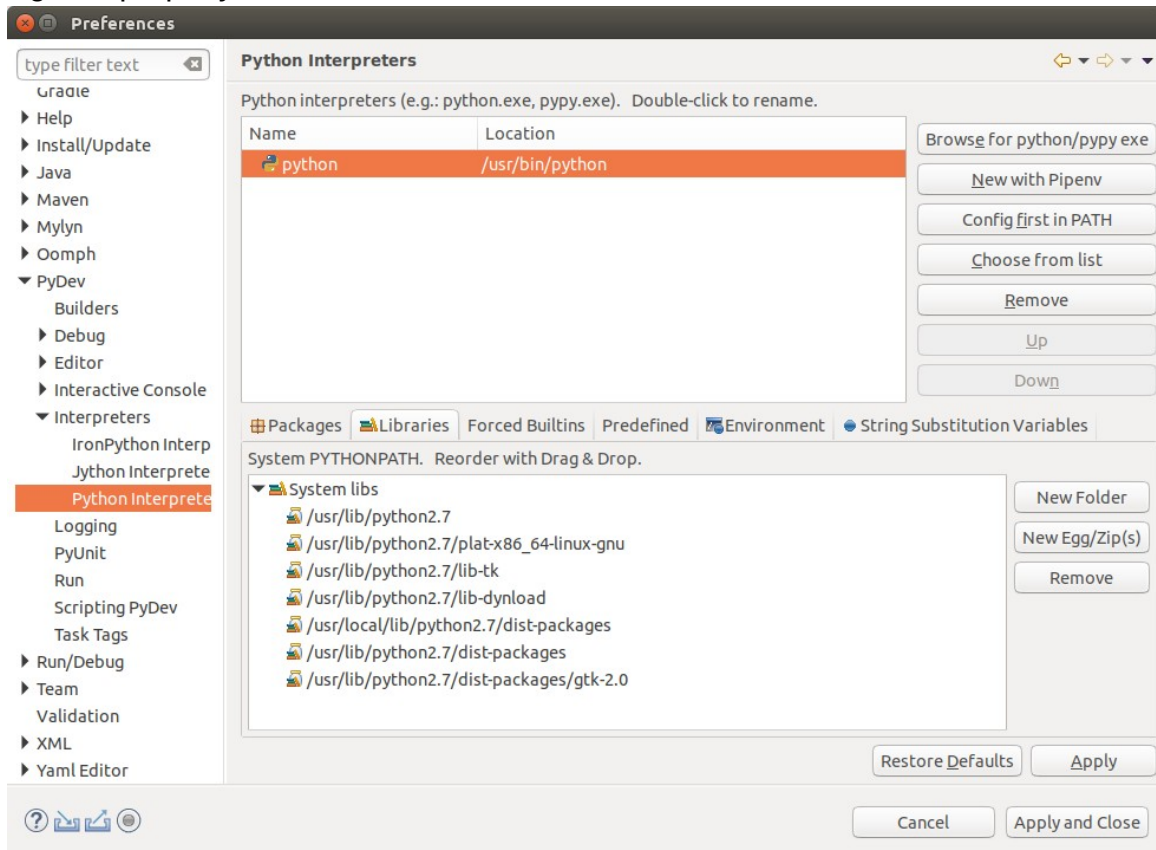
Figure 1 – In Eclipse , menu, “Help → Install New Software..” and put above URL. Select “**PyDev for Eclipse**” option, follow steps, and restart Eclipse once completed.



2. Verify PyDev

After Eclipse is restarted, make sure PyDev's interpreter is pointed to your "python" executable.

Figure 2 – Eclipse -> Windows -> Preferences, make sure **"Interpreter – Python"** is configured properly.



3. Google App Engine SDK Python

Download and install Google App Engine SDK for Python:

https://cloud.google.com/appengine/downloads#Google_App_Engine_SDK_for_Python

4. Python GQLapp in Eclipse

Following steps to show you how to create a GAE project via Pydev plugin.

Figure 4.1 – Eclipse menu, File -> New -> Other... , PyDev folder, choose “**PyDev Google App Engine Project**”.

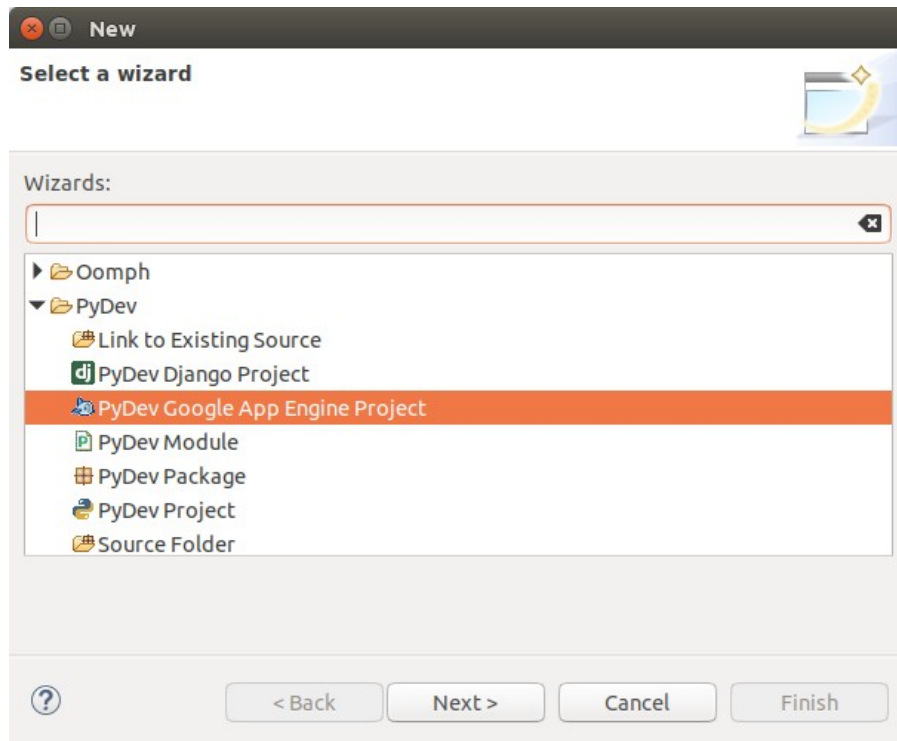
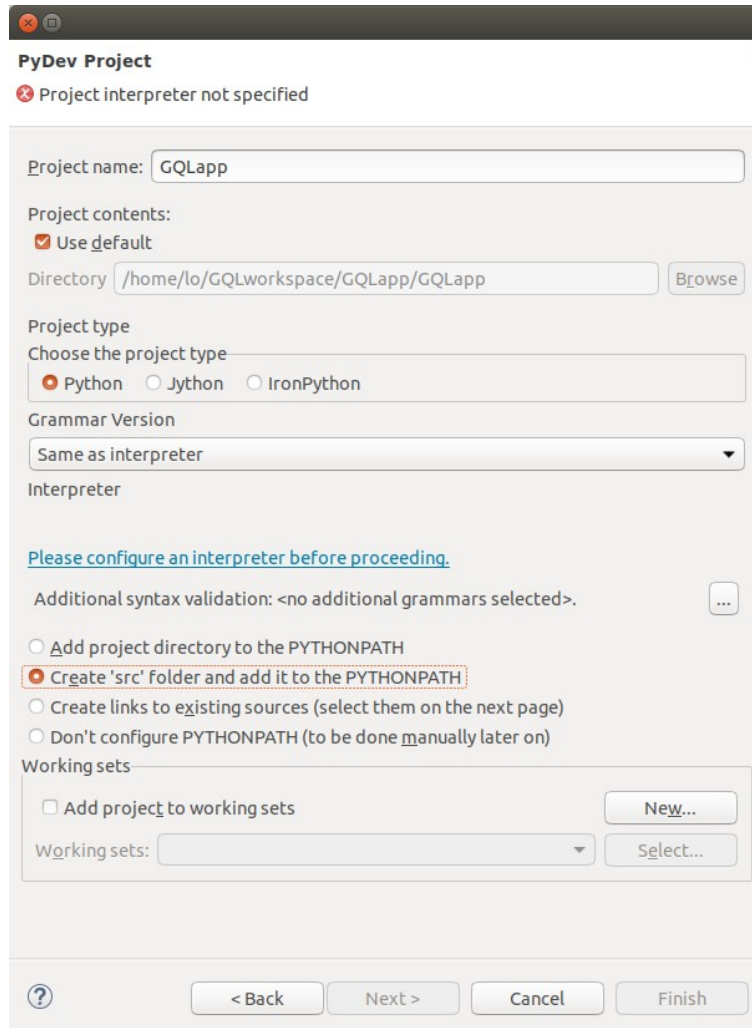


Figure 4.2 – Type project name, if the interpreter is not configure yet (in step 2), you can do it now. And select this option – **“Create ‘src’ folder and add it to PYTHONPATH”**. Configure the Python Interpreter; you can do it manually (indicating the path), or choosing one from a list (choose python).



The image shows a 'PyDev Project' configuration window. At the top, there's a title bar with standard window controls. Below the title, a red error icon and the text 'Project interpreter not specified' are visible. The main area contains several sections: 'Project name:' with a text field containing 'GQLapp'; 'Project contents:' with a checked 'Use default' checkbox and a 'Directory' field showing '/home/lo/GQLworkspace/GQLapp/GQLapp' with a 'Browse' button; 'Project type' with a 'Choose the project type' section containing three radio buttons: 'Python' (selected), 'Jython', and 'IronPython'; 'Grammar Version' with a dropdown menu set to 'Same as interpreter'; 'Interpreter' section with a blue link 'Please configure an interpreter before proceeding.' and a text field 'Additional syntax validation: <no additional grammars selected>' with a menu button; a list of three radio buttons for PYTHONPATH configuration, where 'Create 'src' folder and add it to the PYTHONPATH' is selected and highlighted with a red dashed box; and 'Working sets' with an unchecked 'Add project to working sets' checkbox, a 'New...' button, and a 'Working sets:' dropdown with a 'Select...' button. At the bottom, there's a row of buttons: a help icon, '< Back', 'Next >', 'Cancel', and 'Finish'.

PyDev Project

Project interpreter not specified

Project name: GQLapp

Project contents:

☒ Use default

Directory: /home/lo/GQLworkspace/GQLapp/GQLapp Browse

Project type

Choose the project type

☒ Python ☐ Jython ☐ IronPython

Grammar Version

Same as interpreter

Interpreter

[Please configure an interpreter before proceeding.](#)

Additional syntax validation: <no additional grammars selected> ...

☐ Add project directory to the PYTHONPATH

☒ Create 'src' folder and add it to the PYTHONPATH

☐ Create links to existing sources (select them on the next page)

☐ Don't configure PYTHONPATH (to be done manually later on)

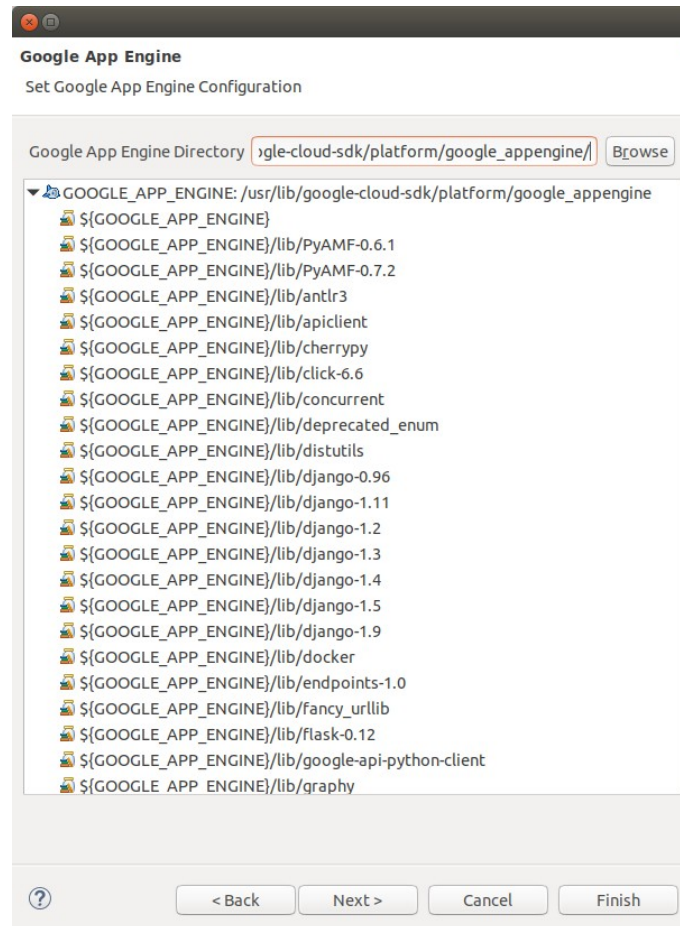
Working sets

☐ Add project to working sets New...

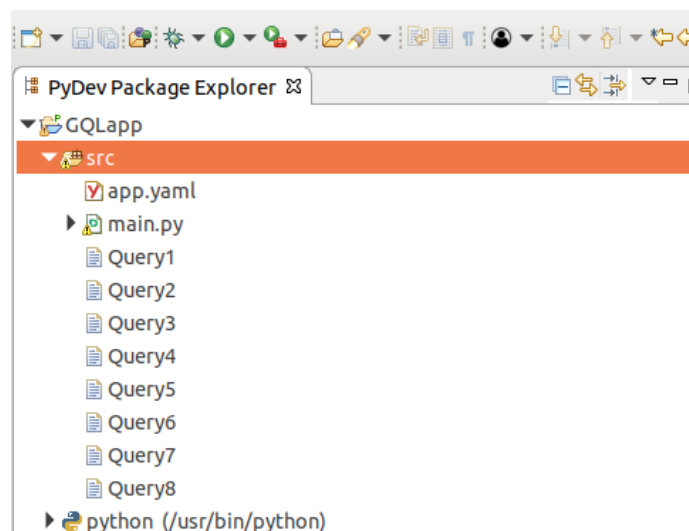
Working sets: Select...

? < Back Next > Cancel Finish

Figure 4.3 – Click “Browse” button and point it to the Google App Engine installed directory (in step 3). The path: /usr/lib/google-cloud-sdk/platform/google_appengine/



Move **main.py** and **app.yaml** files to the **src** folder of your Eclipse working directory and refresh the project in Eclipse. If you want execute the queries used in the experiment, move to the same directory the queries and refresh the project in Eclipse.



5. Run it locally

To run it locally, right click on the helloworld.py, choose “Run As” → “Run Configuration”, create a new “**PyDev Google App Run**”.

Figure 5.1 – In Main tab -> Main module, select the directory path of “**main.py**”.

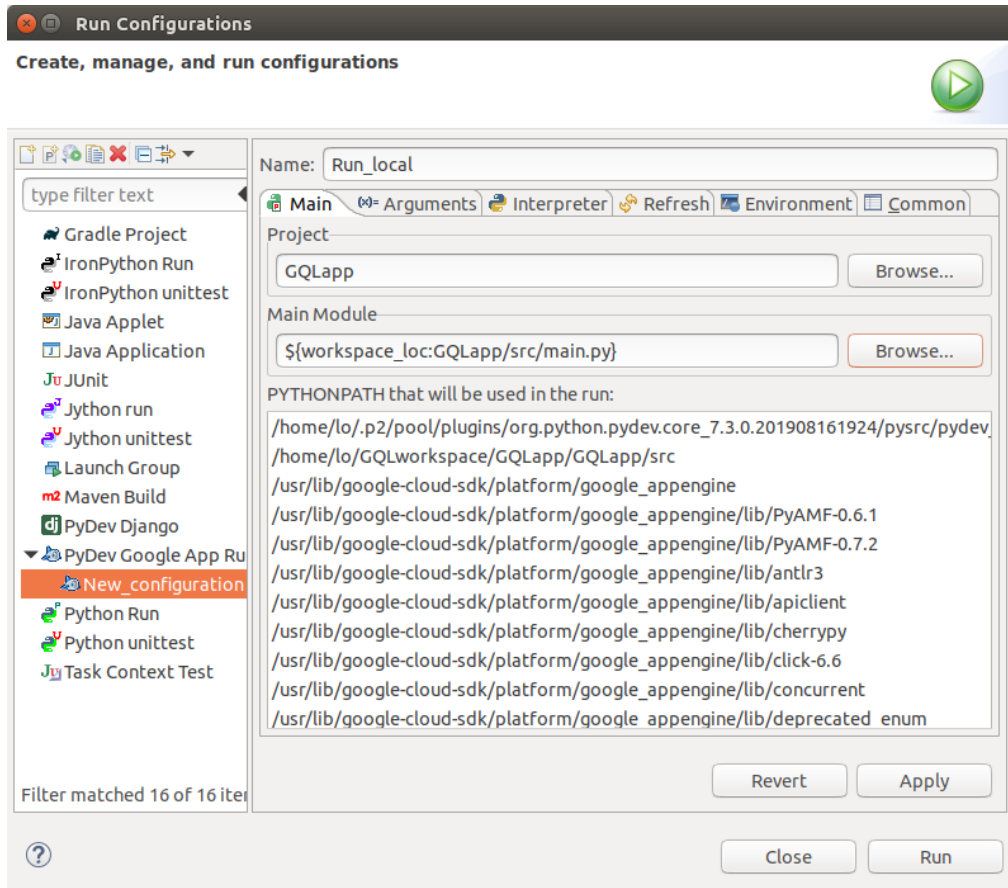


Figure 5.2 – In Arguments tab -> Program arguments, put “`${project_loc}/src`”.

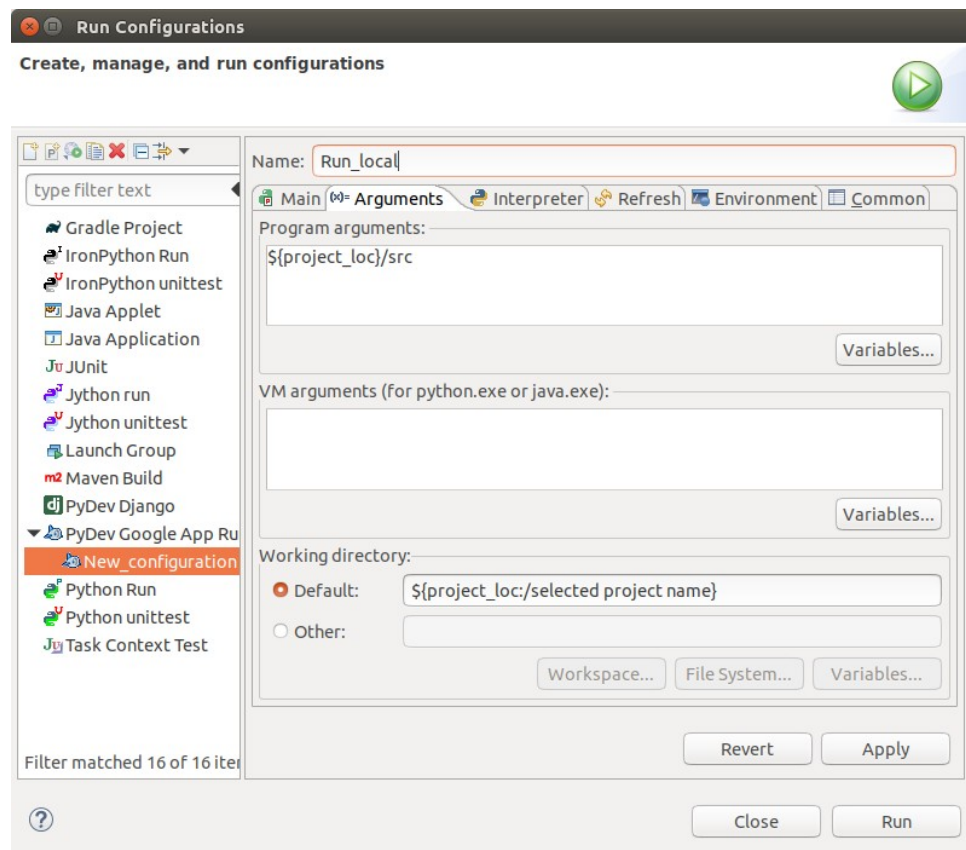
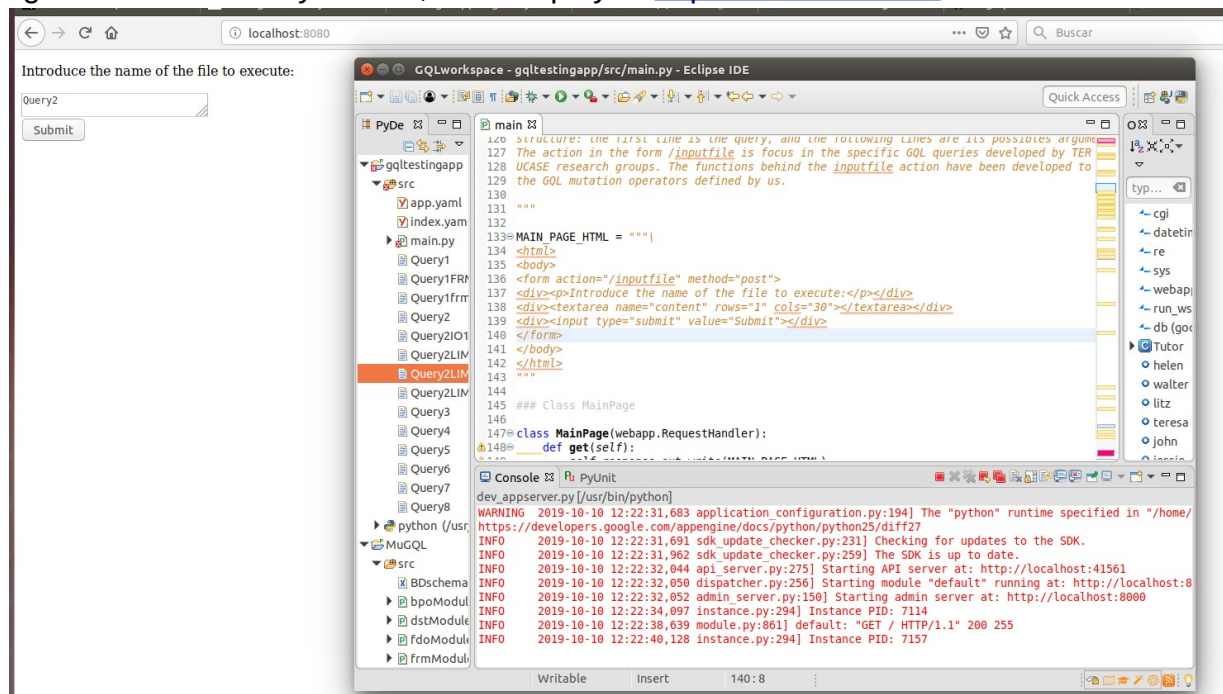


Figure 5.3 – Run it. By default, it will deploy to <http://localhost:8080>.



References

PyDev Plugin for Eclipse : References

1. [PyDev Plugin for Eclipse](#)
2. [Yaml Official Website](#)
3. [GAE getting start with Python](#)
4. [Install PyDev for Eclipse](#)
5. [Google app engine Python hello world example using Eclipse](#)