



Google™ Google App Engine – Grandma's guide !

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To achieve this App !

Applications Overview

MyToDoList

BBC BBC - Homepage

New Tab

http://localhost:8080/

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)

Other Bookmarks

Todos

Logout test@example.com

You have a total number of 2 Todos.

Short description	Due Date	Long Description	URL	Created	Updated	Delete	Update	Email Me
Go and read BBC news on the web	27th July	I need to get back to the Offices and read the latest on BBC news .	http://www.bbc.com	07.07.2010	07.07.2010	Done	Update	Email
What about check out the latest on Twitter	3rd August	i need to get back to tweeting off by busy schedule around that date .	http://www.twitter.com	07.07.2010	07.07.2010	Done	Update	Email

Create a new MyToDoList-Ngamita?

Summary

Due Date

Description

URL

Create

Examples

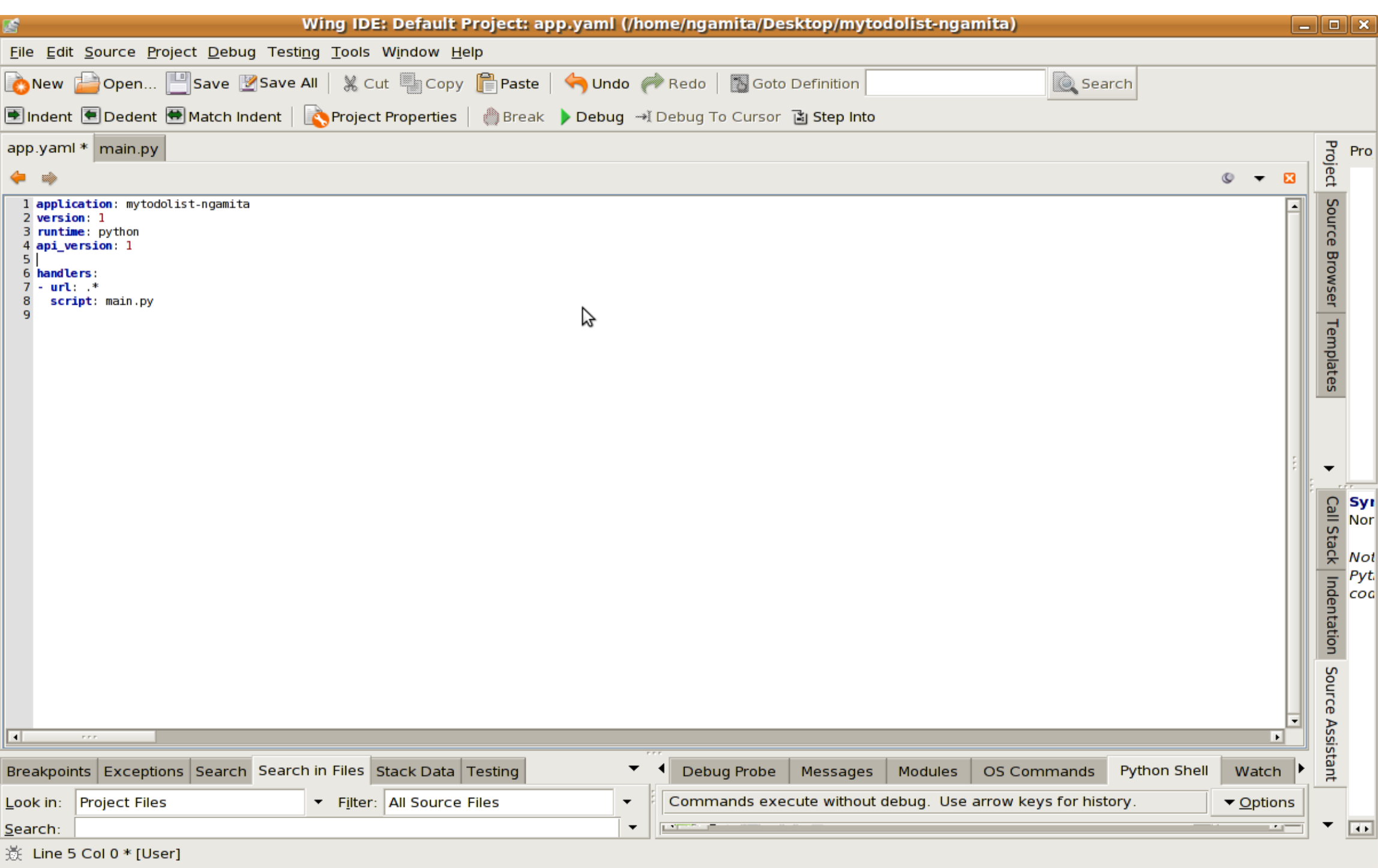
Getting Started

Google

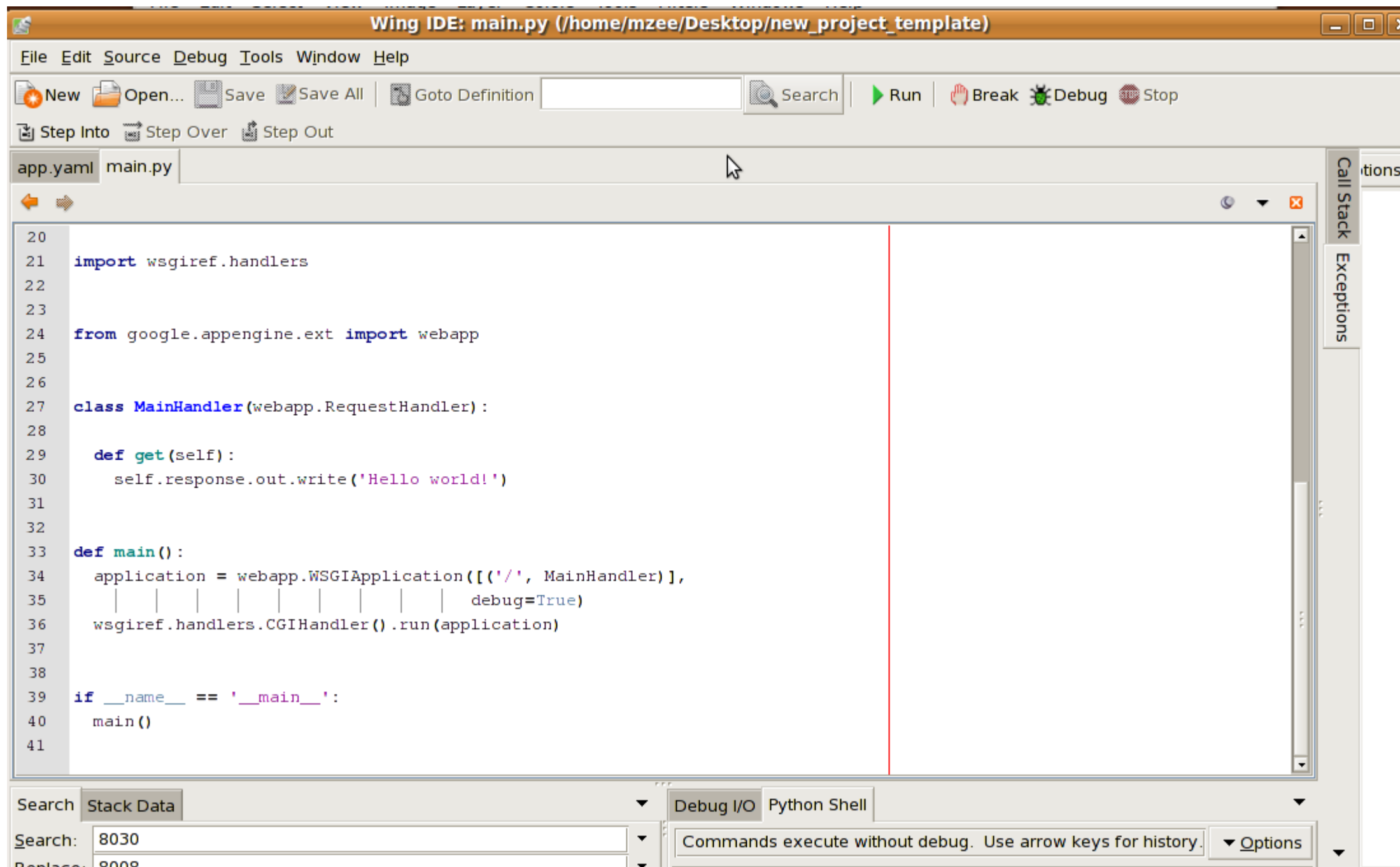
Hello World



Hello World



Hello World

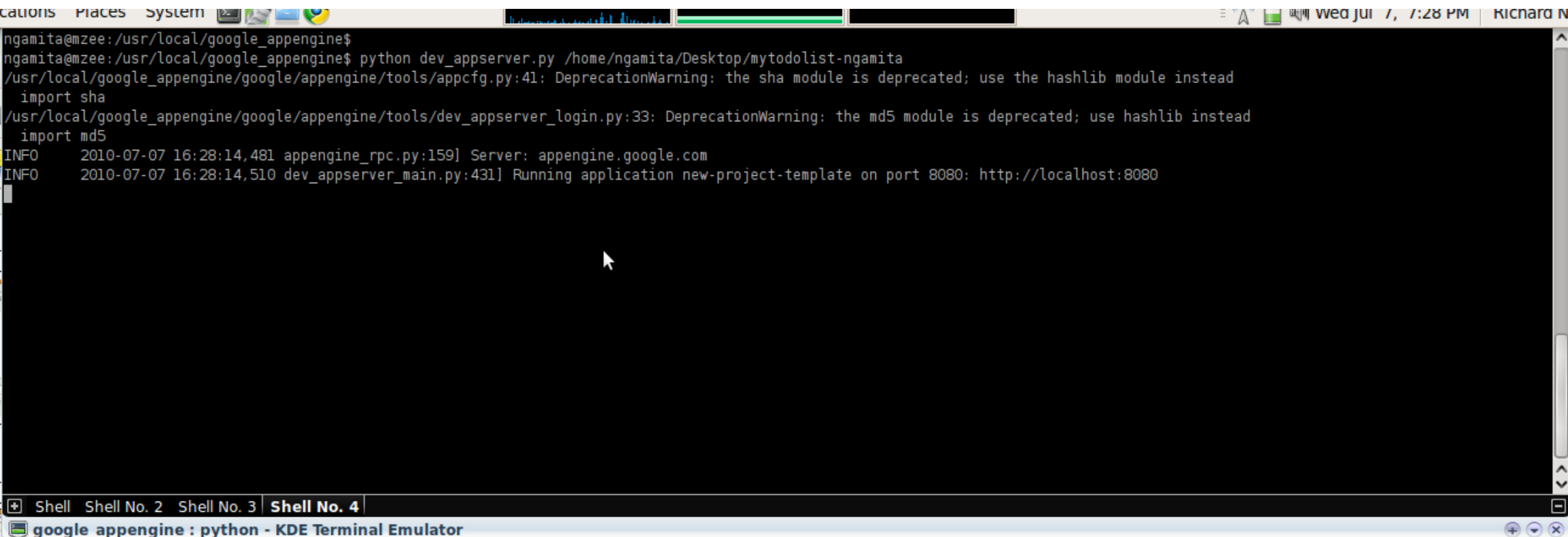


Hello World

~/googleappengine/

\$./dev_appserver.py /to/dir/yourApp OR

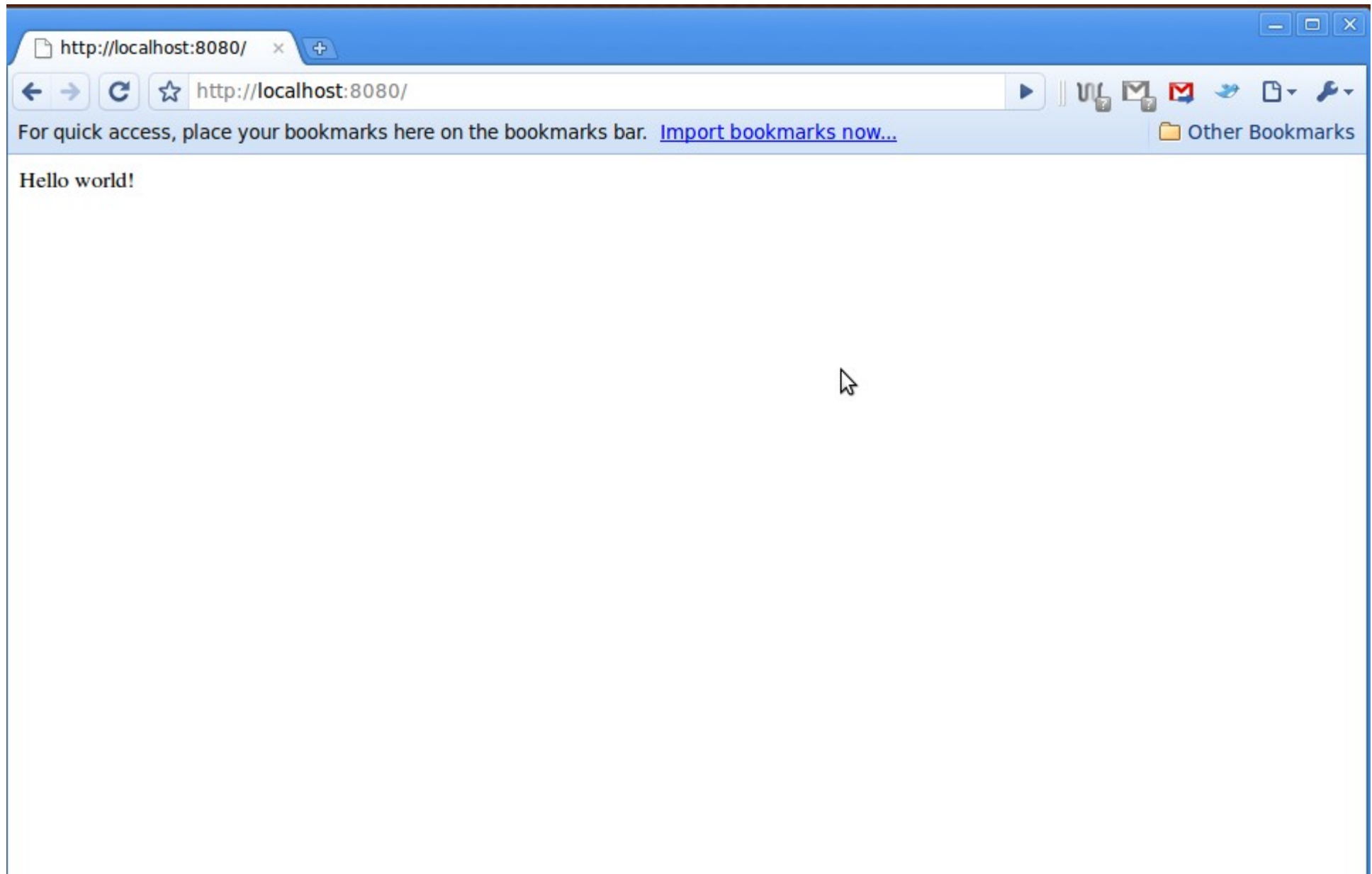
\$ python dev_appserver.py /to/dir/yourApp



```
ngamita@mzee:/usr/local/google_appengine$
ngamita@mzee:/usr/local/google_appengine$ python dev_appserver.py /home/ngamita/Desktop/mytodolist-ngamita
/usr/local/google_appengine/google/appengine/tools/appcfg.py:41: DeprecationWarning: the sha module is deprecated; use the hashlib module instead
import sha
/usr/local/google_appengine/google/appengine/tools/dev_appserver_login.py:33: DeprecationWarning: the md5 module is deprecated; use hashlib instead
import md5
INFO     2010-07-07 16:28:14,481 appengine_rpc.py:159] Server: appengine.google.com
INFO     2010-07-07 16:28:14,510 dev_appserver_main.py:431] Running application new-project-template on port 8080: http://localhost:8080
```

The screenshot shows a KDE Terminal Emulator window with a title bar containing 'cautions', 'Places', 'System', and a date/time/status bar showing 'wed Jul 7, 7:28 PM' and 'Richard N'. The terminal window has a tab labeled 'Shell No. 4' and a title bar 'google_appengine : python - KDE Terminal Emulator'. The terminal output shows the user 'ngamita' at host 'mzee' in the directory '/usr/local/google_appengine'. They run the command 'python dev_appserver.py /home/ngamita/Desktop/mytodolist-ngamita'. The output includes two deprecation warnings about the 'sha' and 'md5' modules, followed by two INFO messages: 'Server: appengine.google.com' and 'Running application new-project-template on port 8080: http://localhost:8080'.

Hello World



Hello World Upload !

```
~/googleappengine/  
$ ./appcfg.py update /to/dir/yourApp
```

Examples

Hello World with Templates

Google

Hello World + HTML

Wing IDE: Default Project: main.py (/home/ngamita/Desktop/mytodolist-ngamita)

File Edit Source Project Debug Testing Tools Window Help

New Open... Save Save All Cut Copy Paste Undo Redo Goto Definition Search

Indent Dedent Match Indent Project Properties Break Debug → Debug To Cursor Step Into

app.yaml main.py

MainHandler get

```
8 #
9 # http://www.apache.org/licenses/LICENSE-2.0
10 #
11 # Unless required by applicable law or agreed to in writing, software
12 # distributed under the License is distributed on an "AS IS" BASIS,
13 # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
14 # See the License for the specific language governing permissions and
15 # limitations under the License.
16 #
17 from google.appengine.ext import webapp
18 from google.appengine.ext.webapp import util
19
20
21 class MainHandler(webapp.RequestHandler):
22     def get(self):
23         self.response.out.write('Hello world!')
24
25     greeting = '''
26     <html>
27     <body>
28
29     <p>Hello World</p>
30     </body>
31     </html>
32
33     '''
34     self.response.out.write(greeting)
35
36
37 def main():
38     application = webapp.WSGIApplication([('/', MainHandler)],
39                                         debug=True)
40     util.run_wsgi_app(application)
41
42
43 if __name__ == '__main__':
44     main()
45
```

Breakpoints Exceptions Search Search in Files Stack Data Testing Debug Probe Messages Modules OS Commands Python Shell Watch

Look in: Project Files Filter: All Source Files

Search:

Commands execute without debug. Use arrow keys for history. Options

Line 27 Col 14 - [User]

Template File – Create index.html!

```
~/mytodolist-ngamita/  
$ touch index.html
```

Hello World + HTML

Wing IDE: Default Project: main.py (/home/ngamita/Desktop/mycodollist-ngamita)

File Edit Source Project Debug Testing Tools Window Help

New Open... Save Save All Cut Copy Paste Undo Redo Goto Definition Search

Indent Dedent Match Indent Project Properties Break Debug Debug To Cursor Step Into

app.yaml main.py

MainHandler get

```
16 #
17
18 import os
19 import wsgiref.handlers
20
21
22 from google.appengine.ext import webapp
23 from google.appengine.ext.webapp import util
24 from google.appengine.ext.webapp import template
25
26
27 class MainHandler(webapp.RequestHandler):
28     def get(self):
29         template_values = {
30             'greetings': "Hello World !"
31         }
32
33         template_files = os.path.join(os.path.dirname(__file__), 'index.html')
34         self.response.out.write(template.render(template_files, template_values))
35
36
37
38
39
40
41
42
43
44
45 def main():
46     application = webapp.WSGIApplication([('/', MainHandler)],
47                                         debug=True)
48     util.run_wsgi_app(application)
49
50
51 if __name__ == '__main__':
52     main()
53
```

Project Source Browser Templates Call Stack Indentation Source Assistant

Breakpoints Exceptions Search Search in Files Stack Data Testing

Debug Probe Messages Modules OS Commands Python Shell Watch

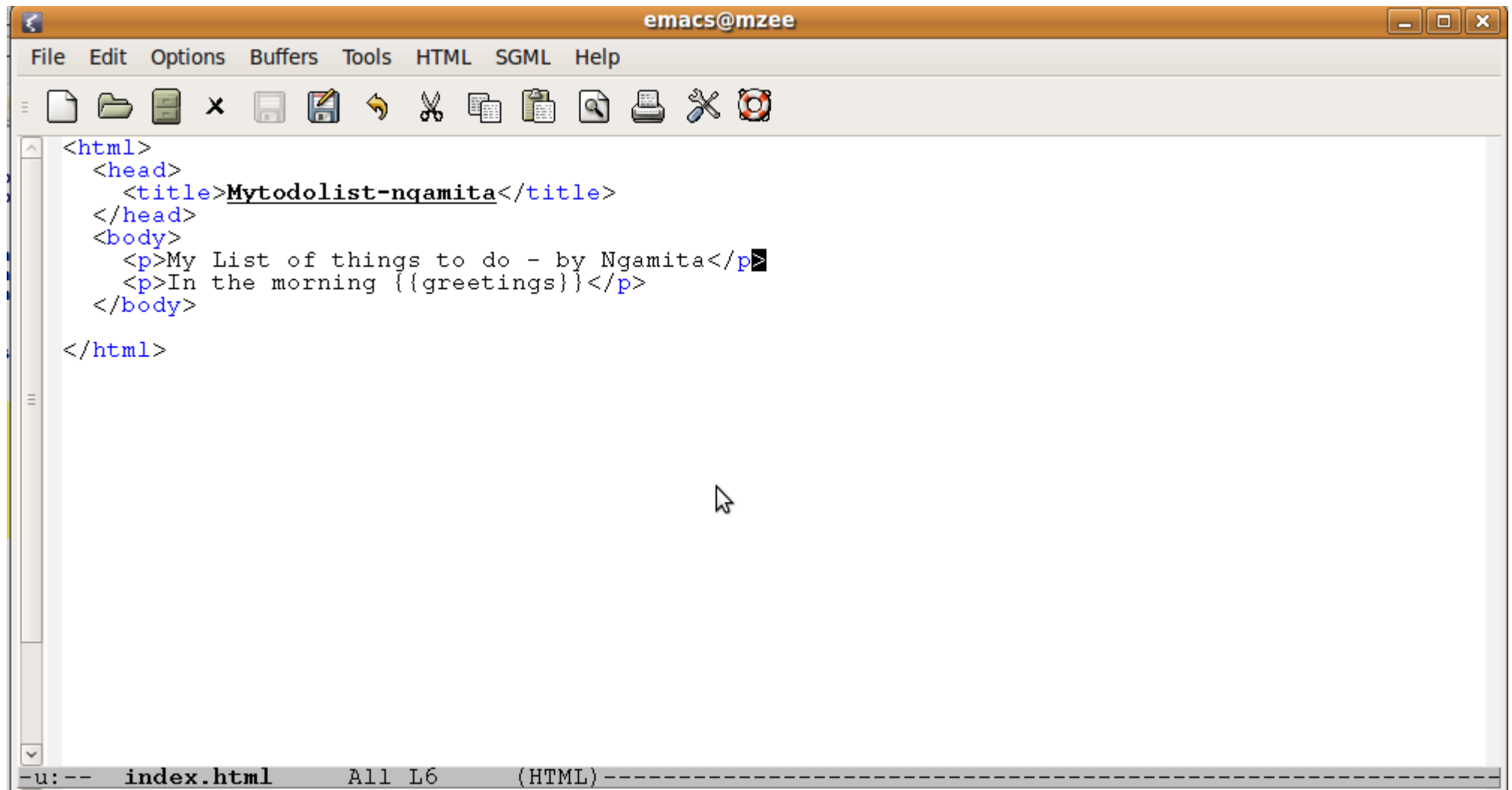
Look in: Project Files Filter: All Source Files

Search:

Commands execute without debug. Use arrow keys for history. Options

Line 29-38 - [User]

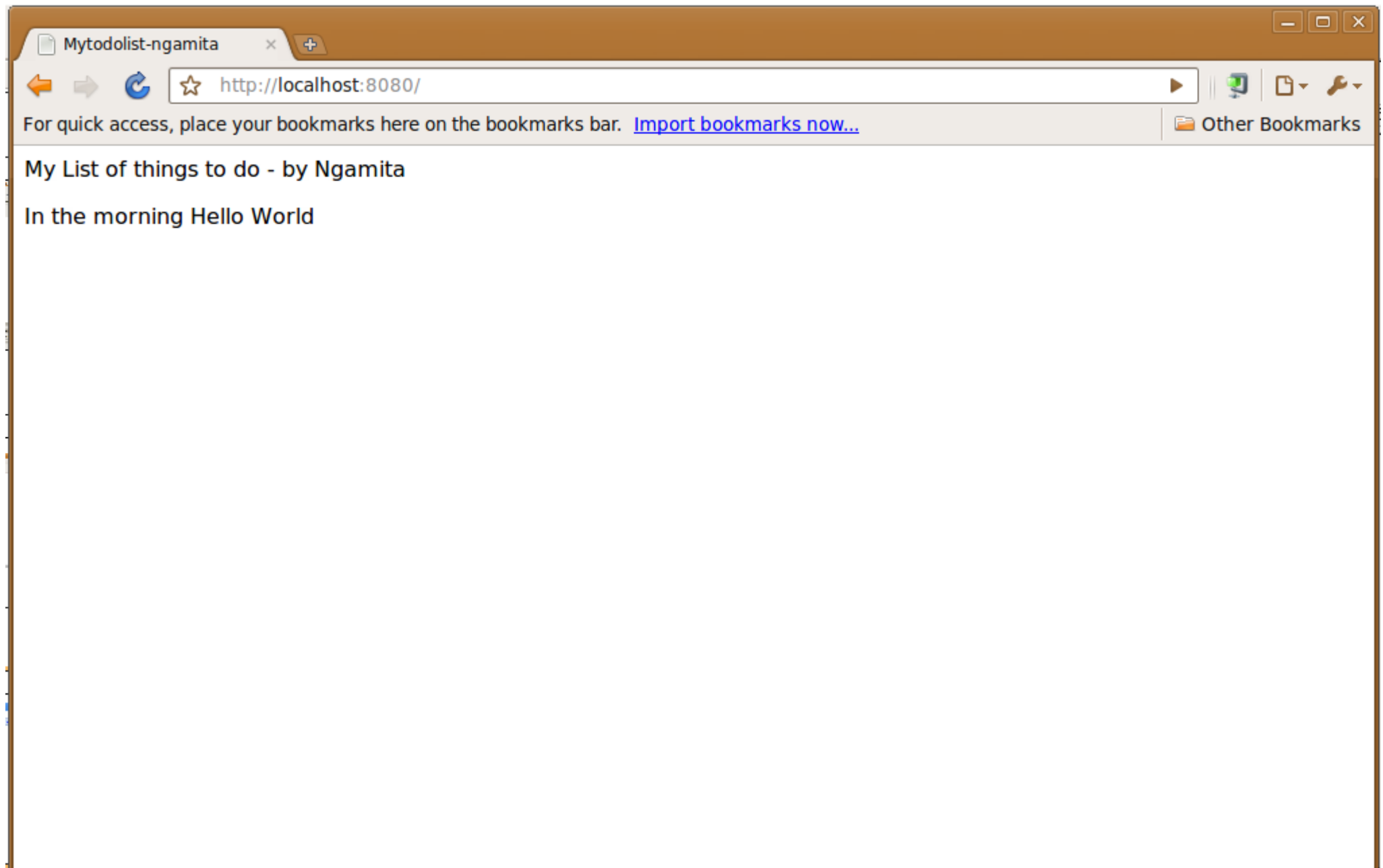
Hello World + Templates



```
<html>
<head>
  <title>Mytodolist-ngamita</title>
</head>
<body>
  <p>My List of things to do - by Ngamita</p>
  <p>In the morning {{greetings}}</p>
</body>
</html>
```

-u:-- index.html All L6 (HTML)

Hello World + Templates



Examples

My To Do List – Datastore

Google

My To Do List

Wing IDE: Default Project: main.py (/home/ngamita/Desktop/mytodolist-ngamita)

File Edit Source Project Debug Testing Tools Window Help

New Open... Save Save All Cut Copy Paste Undo Redo Goto Definition Search

Indent Dedent Match Indent Project Properties Break Debug Debug To Cursor Step Into

app.yaml main.py

(top)

```
13 # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
14 # See the License for the specific language governing permissions and
15 # limitations under the License.
16 #
17
18 import os
19 import wsgiref.handlers
20
21
22 from google.appengine.ext import webapp
23 from google.appengine.ext.webapp import util
24 from google.appengine.ext.webapp import template
25 from google.appengine.ext import db
26
27
28 class MyToDoModel(db.Model):
29     description = db.StringProperty()
30     created = db.DateTimeProperty(auto_now_add = True)
31
32
33
34
35 class MainHandler(webapp.RequestHandler):
36     def get(self):
37
38         #my_todo = MyToDoModel.all().order('-created').fetch(4)
39         my_todo = db.GqlQuery("SELECT * FROM MyToDoModel ORDER BY created DESC LIMIT 4")
40         template_values = {
41             'my_todo': my_todo
42         }
43
44
45
46
47 template_files = os.path.join(os.path.dirname(__file__), 'index.html')
48 self.response.out.write(template.render(template_files, template_values))
49
50
51
```

Project Source Browser Templates Call Stack Indentation Source Assistant

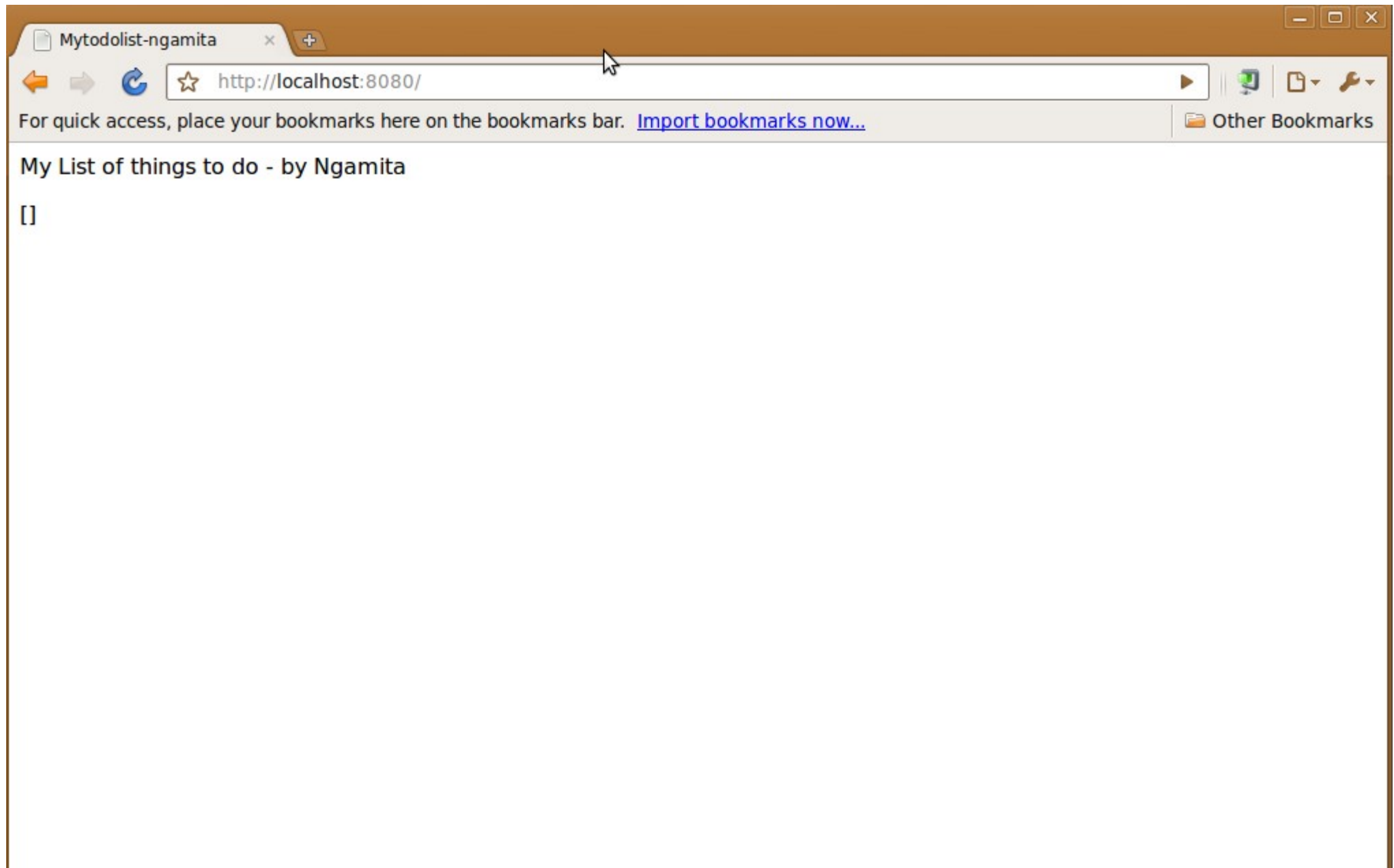
Breakpoints Exceptions Search Search in Files Stack Data Testing Debug Probe Messages Modules OS Commands Python Shell Watch

Look in: Project Files Filter: All Source Files

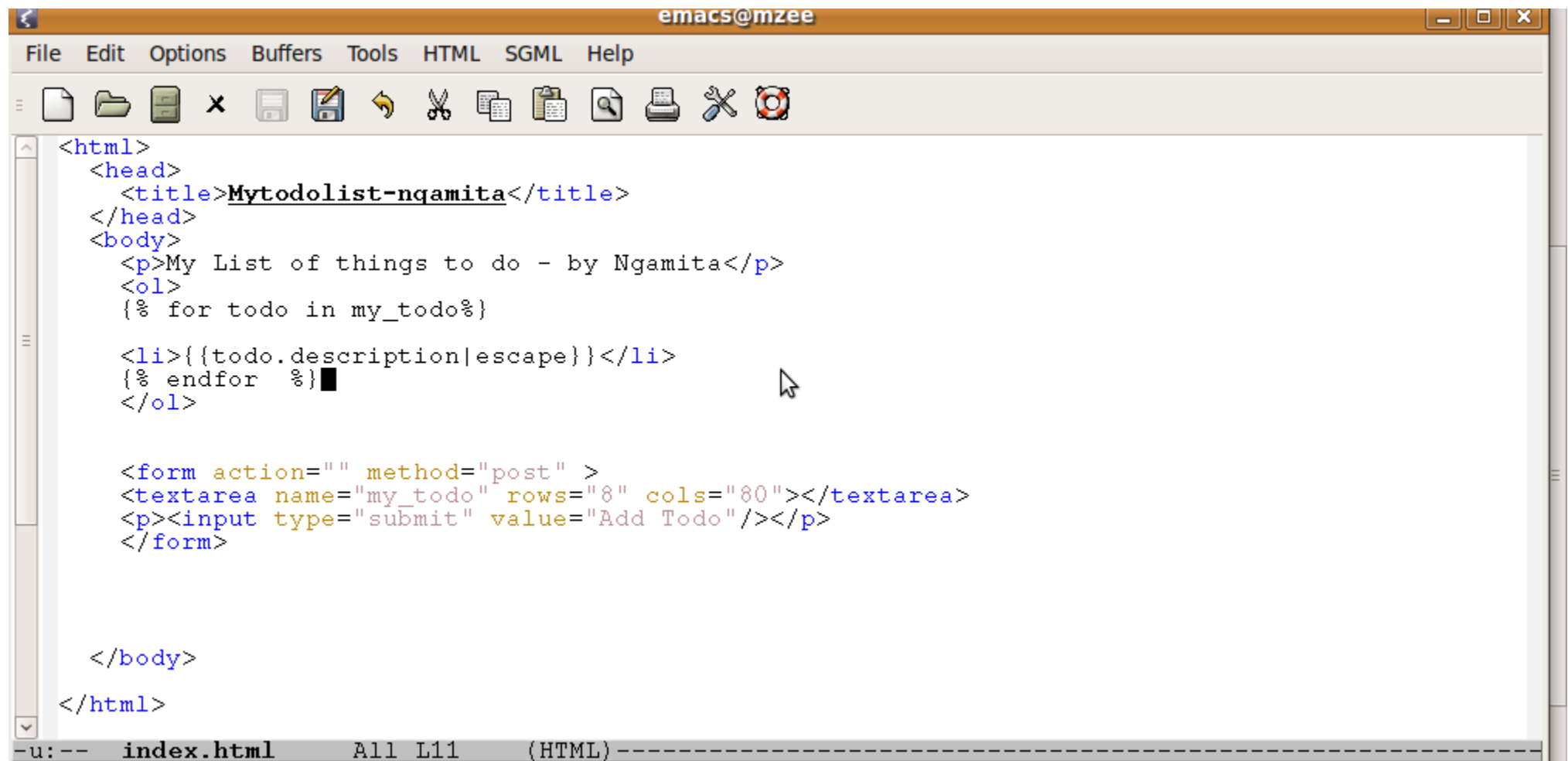
Search:

Commands execute without debug. Use arrow keys for history.

My To Do List



My To Do List



```
<html>
<head>
  <title>Mytodolist-ngamita</title>
</head>
<body>
  <p>My List of things to do - by Ngamita</p>
  <ol>
    {% for todo in my_todo%}

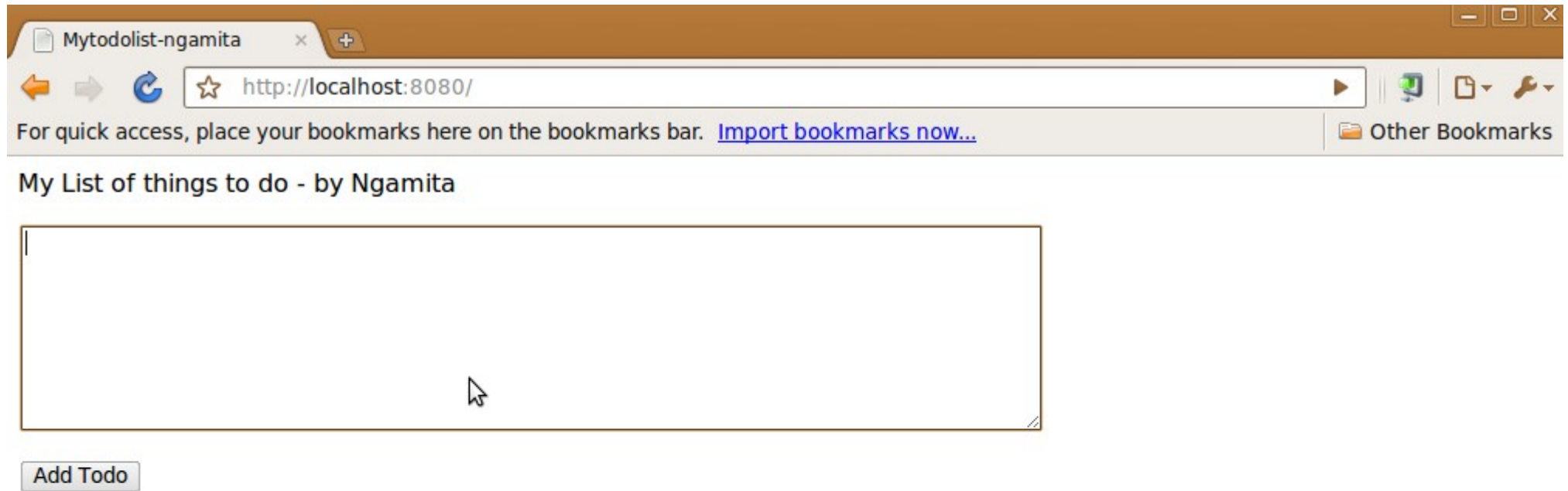
    <li>{{todo.description|escape}}</li>
    {% endfor %}
  </ol>

  <form action="" method="post" >
  <textarea name="my_todo" rows="8" cols="80"></textarea>
  <p><input type="submit" value="Add Todo"/></p>
</form>

</body>
</html>
```

-u:-- index.html All L11 (HTML) -----

My To Do List



Mytodolist-ngamita x

http://localhost:8080/

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#) Other Bookmarks

My List of things to do - by Ngamita

Add Todo

My To Do List

Wing IDE: Default Project: main.py (/home/ngamita/Desktop/mytodolist-ngamita)

File Edit Source Project Debug Testing Tools Window Help

New Open... Save Save All Cut Copy Paste Undo Redo Goto Definition Search

Indent Dedent Match Indent Project Properties Break Debug Debug To Cursor Step Into

app.yaml main.py

MainHandler post

```
33
34
35 - class MainHandler(webapp.RequestHandler):
36 -     def get(self):
37
38         #my_todo = MyTodoModel.all().order('-created').fetch(4)
39         my_todo = db.GqlQuery("SELECT * FROM MyTodoModel ORDER BY created DESC LIMIT 4")
40 -     template_values = {
41         'my_todo': my_todo
42     }
43
44
45
46
47     template_files = os.path.join(os.path.dirname(__file__), 'index.html')
48     self.response.out.write(template.render(template_files, template_values))
49
50
51 -     def post(self):
52         todo = MyTodoModel()
53         todo.description = self.request.get("my_todo")
54         todo.put()
55         self.redirect('/')
56
57
58
59
60
61
62
63
64
65
66 - def main():
67 -     application = webapp.WSGIApplication([('/', MainHandler)],
68                                         debug=True)
69     util.run_wsgi_app(application)
70
71
```

Project Source Browser Templates Call Stack Indentation Source Assistant

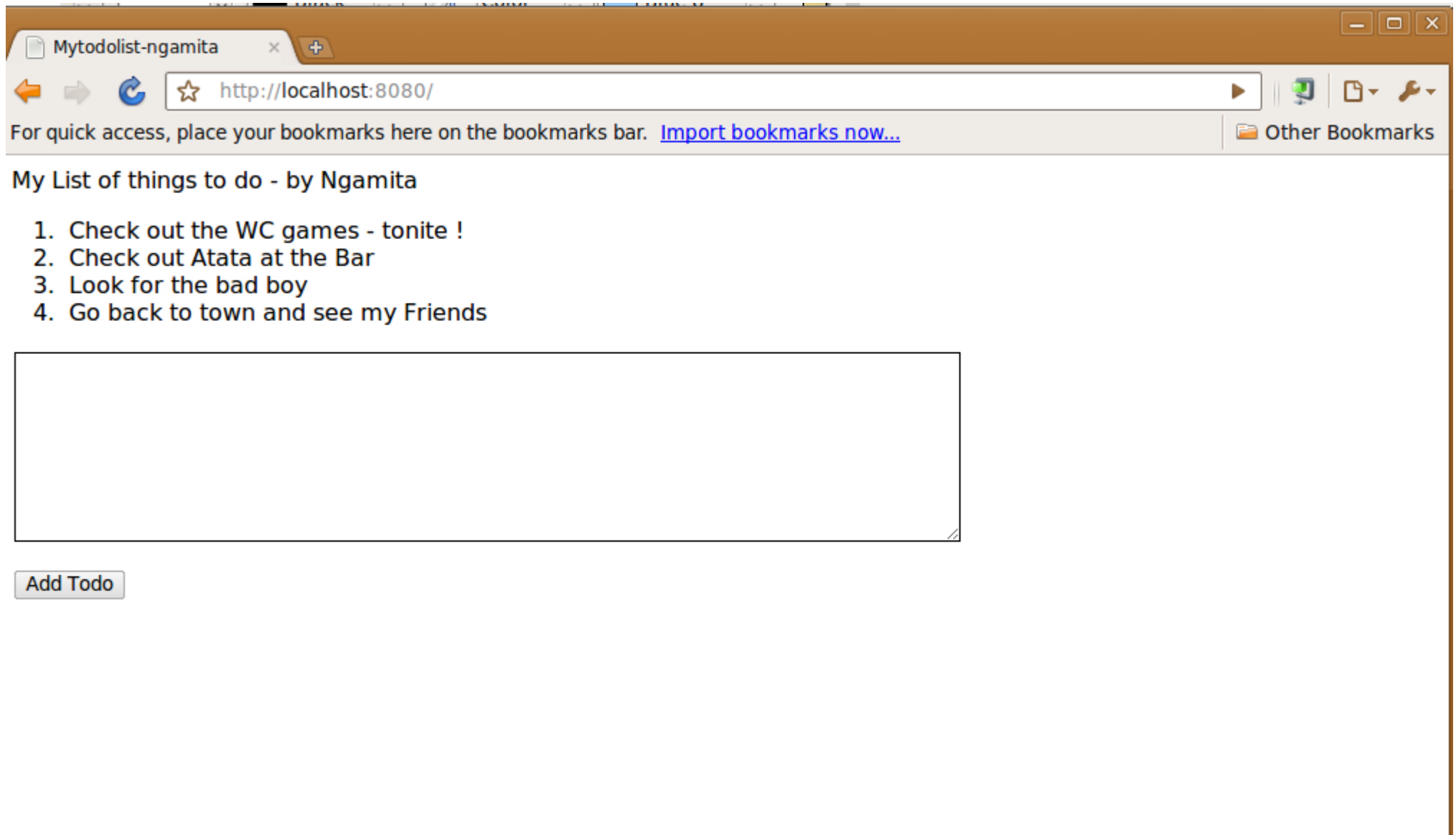
Breakpoints Exceptions Search Search in Files Stack Data Testing Debug Probe Messages Modules OS Commands Python Shell Watch

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Search:

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My To Do List



Thank You

Questions?

