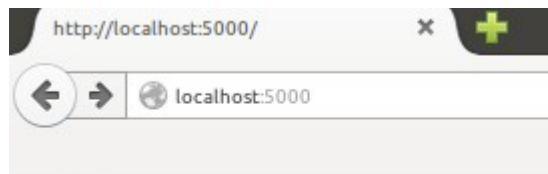
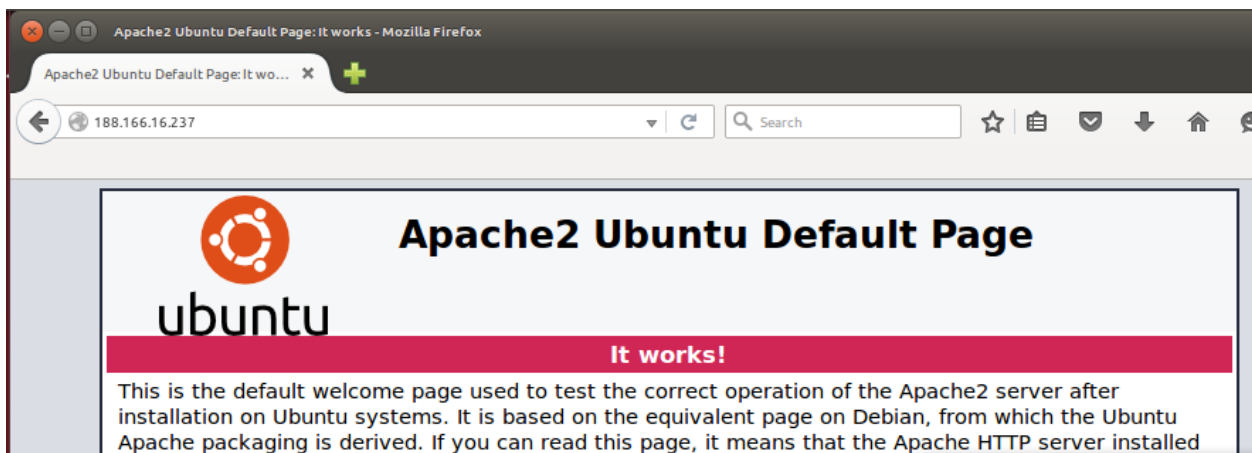
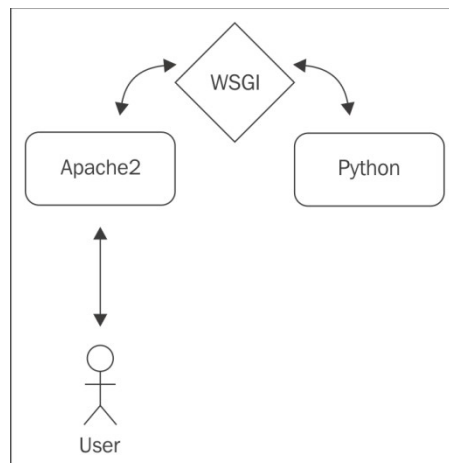


# Chapter 1: Hello, World!

```
flask@ubuntu: ~/firstapp
flask@ubuntu:~$ cd firstapp/
flask@ubuntu:~/firstapp$ python hello.py
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Restarting with stat
```

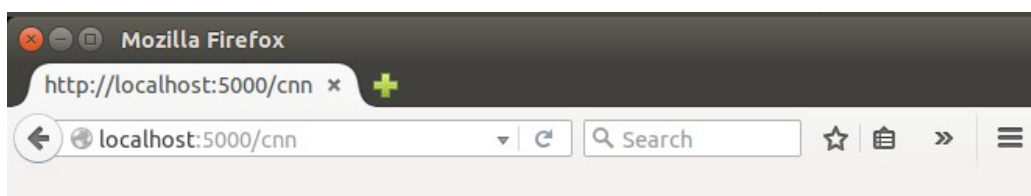
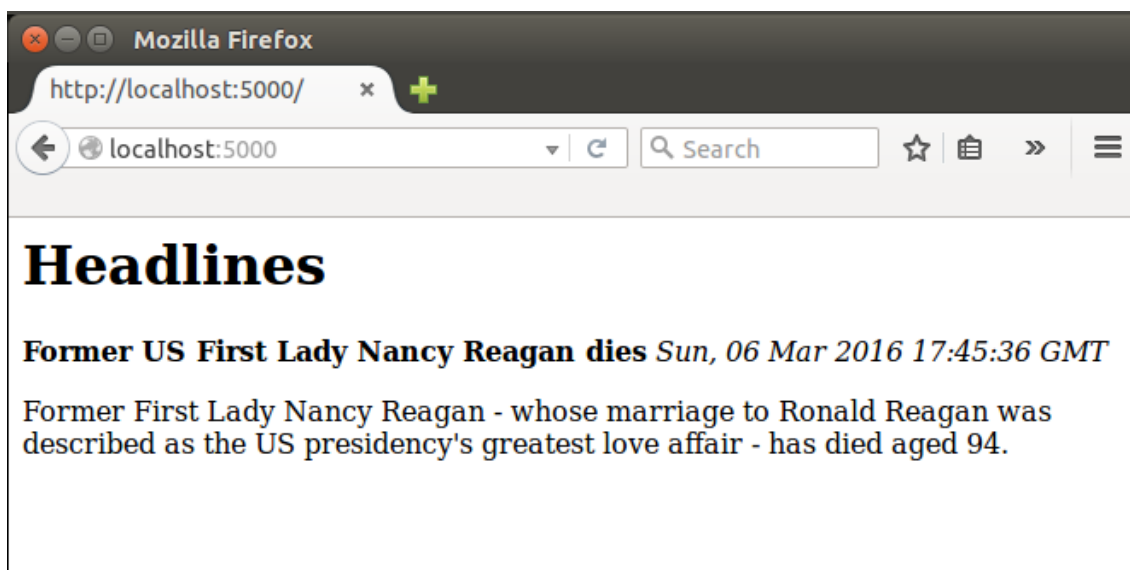


Hello, World!



```
root@blank: ~
root@blank:~# tail -f /var/log/apache2/error.log
[Wed Mar 02 13:23:49.586889 2016] [mpm_event:notice] [pid 979:tid 140715828262784] AH00489: Apache/2.4.7 (Ubuntu) mod_wsgi/3.4 Python/2.7.6 configured -- resuming normal operations
[Wed Mar 02 13:23:49.586923 2016] [core:notice] [pid 979:tid 140715828262784] AH00094: Command line: '/usr/sbin/apache2'
[Wed Mar 02 13:23:52.141654 2016] [mpm_event:notice] [pid 979:tid 140715828262784] AH00493: SIGUSR1 received. Doing graceful restart
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set the 'ServerName' directive globally to suppress this message
[Wed Mar 02 13:23:52.194574 2016] [mpm_event:notice] [pid 979:tid 140715828262784] AH00489: Apache/2.4.7 (Ubuntu) mod_wsgi/3.4 Python/2.7.6 configured -- resuming normal operations
[Wed Mar 02 13:23:52.194607 2016] [core:notice] [pid 979:tid 140715828262784] AH00094: Command line: '/usr/sbin/apache2'
[Wed Mar 02 14:20:56.644223 2016] [mpm_event:notice] [pid 979:tid 140715828262784] AH00493: SIGUSR1 received. Doing graceful restart
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set the 'ServerName' directive globally to suppress this message
[Wed Mar 02 14:20:57.059385 2016] [mpm_event:notice] [pid 979:tid 140715828262784] AH00489: Apache/2.4.7 (Ubuntu) mod_wsgi/3.4 Python/2.7.6 configured -- resuming normal operations
[Wed Mar 02 14:20:57.059449 2016] [core:notice] [pid 979:tid 140715828262784] AH00094: Command line: '/usr/sbin/apache2'
```

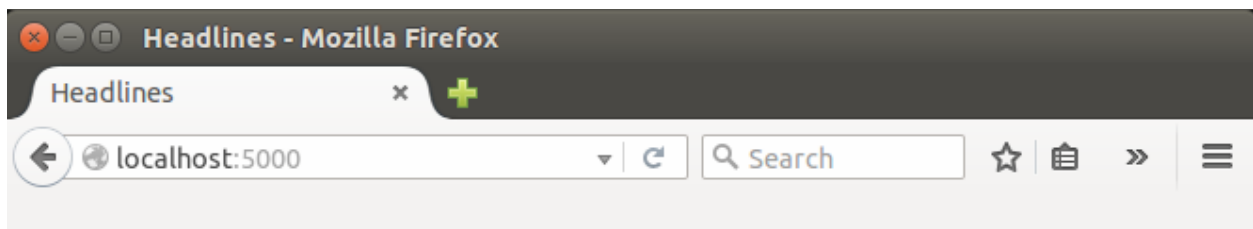
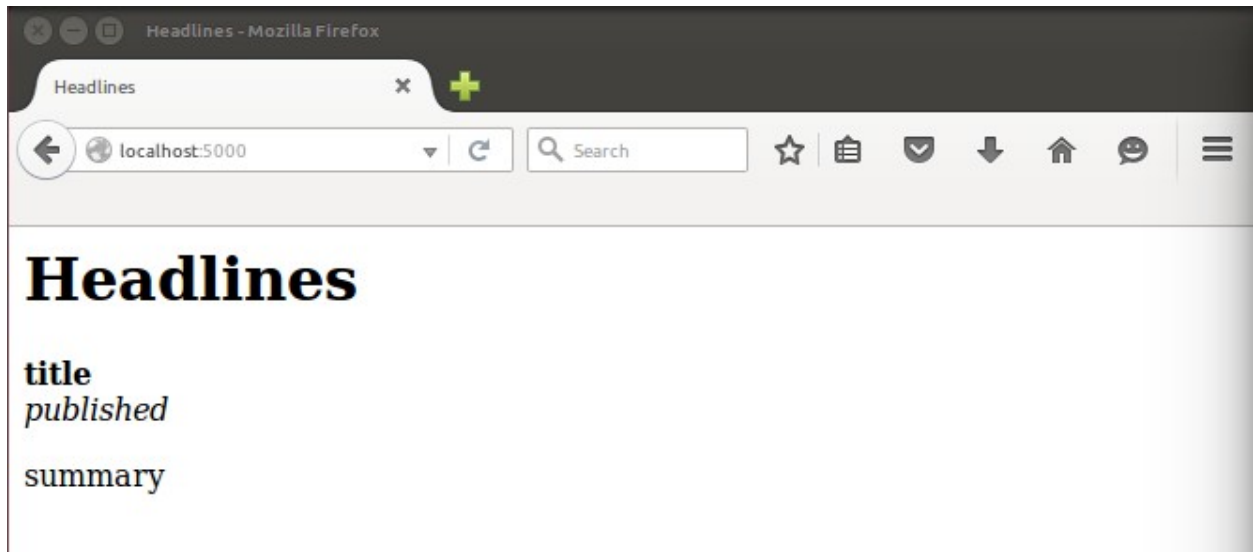
## Chapter 2: Getting Started with Our Headlines Project



## Headlines

**Former first lady died today of heart failure at the age of 94** Sun, 06 Mar 2016 17:27:53 GMT

## Chapter 3: Using Templates in Our Headlines Project



# Headlines

## **Former US First Lady Nancy Reagan dies**

*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

Headlines - Mozilla Firefox

Headlines x +

localhost:5000 Search ☆ 📁 » ☰

# Headlines

---

**Former US First Lady Nancy Reagan dies**  
*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

**Npower to cut up to 2,500 jobs in UK**  
*Sun, 06 Mar 2016 17:04:23 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

---

**Johnson attacks EU deal on sovereignty**  
*Sun, 06 Mar 2016 17:39:42 GMT*

EU reforms on the issue of UK sovereignty are "not achievable" and the government has not delivered "fundamental change", Boris Johnson says.

---

**Iranian billionaire sentenced to death**  
*Sun, 06 Mar 2016 15:47:29 GMT*

Billionaire Iranian businessman Babak Zanjani, accused by the West of sanctions-busting, has been sentenced to death for corruption, Iranian officials say.

---

Headlines - Mozilla Firefox

Headlines x +

localhost:5000 Search ☆ 📄 » ☰

# Headlines

[\*\*Former US First Lady Nancy Reagan dies\*\*](#)  
*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

[\*\*Npower to cut up to 2,500 jobs in UK\*\*](#)  
*Sun, 06 Mar 2016 17:04:23 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

---

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*Sun, 06 Mar 2016 17:39:42 GMT*

EU reforms on the issue of UK sovereignty are "not achievable" and the government has not delivered "fundamental change", Boris Johnson says.

---

[\*\*Iranian billionaire sentenced to death\*\*](#)  
*Sun, 06 Mar 2016 15:47:29 GMT*

Billionaire Iranian businessman Babak Zanjani, accused by the West of sanctions-busting, has been sentenced to death for corruption, Iranian officials say.

Headlines - Mozilla Firefox

Headlines x New Tab x +

188.166.46.59 Search

# Headlines

## [Former US First Lady Nancy Reagan dies](#)

*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

## [Npower to cut up to 2,500 jobs in UK](#)

*Sun, 06 Mar 2016 17:04:23 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

---

## [Johnson attacks EU deal on sovereignty](#)

*Sun, 06 Mar 2016 17:39:42 GMT*

EU reforms on the issue of UK sovereignty are "not achievable" and the government has not delivered "fundamental change", Boris Johnson says.

---

## [Iranian billionaire sentenced to death](#)

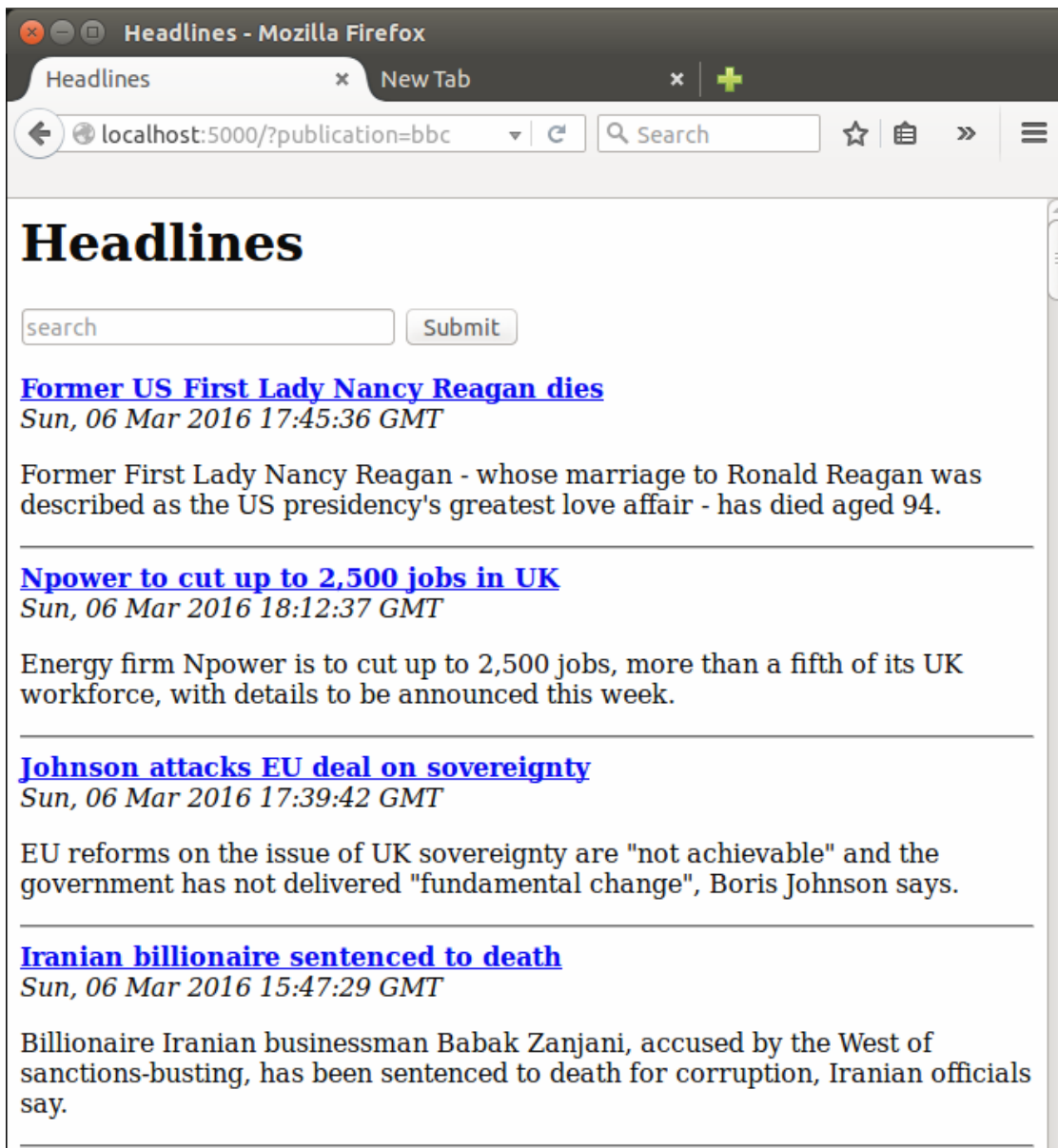
*Sun, 06 Mar 2016 15:47:29 GMT*

Billionaire Iranian businessman Babak Zanjani, accused by the West of sanctions-busting, has been sentenced to death for corruption, Iranian officials say.

---



## Chapter 4: User Input for Our Headlines Project



The screenshot shows a Mozilla Firefox browser window titled 'Headlines - Mozilla Firefox'. The address bar contains 'localhost:5000/?publication=bbc'. The page has a search bar with the text 'search' and a 'Submit' button. Below the search bar, there are four news items, each with a blue link, a timestamp, and a short paragraph of text.

# Headlines

search

[Former US First Lady Nancy Reagan dies](#)  
*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

[Npower to cut up to 2,500 jobs in UK](#)  
*Sun, 06 Mar 2016 18:12:37 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

---

[Johnson attacks EU deal on sovereignty](#)  
*Sun, 06 Mar 2016 17:39:42 GMT*

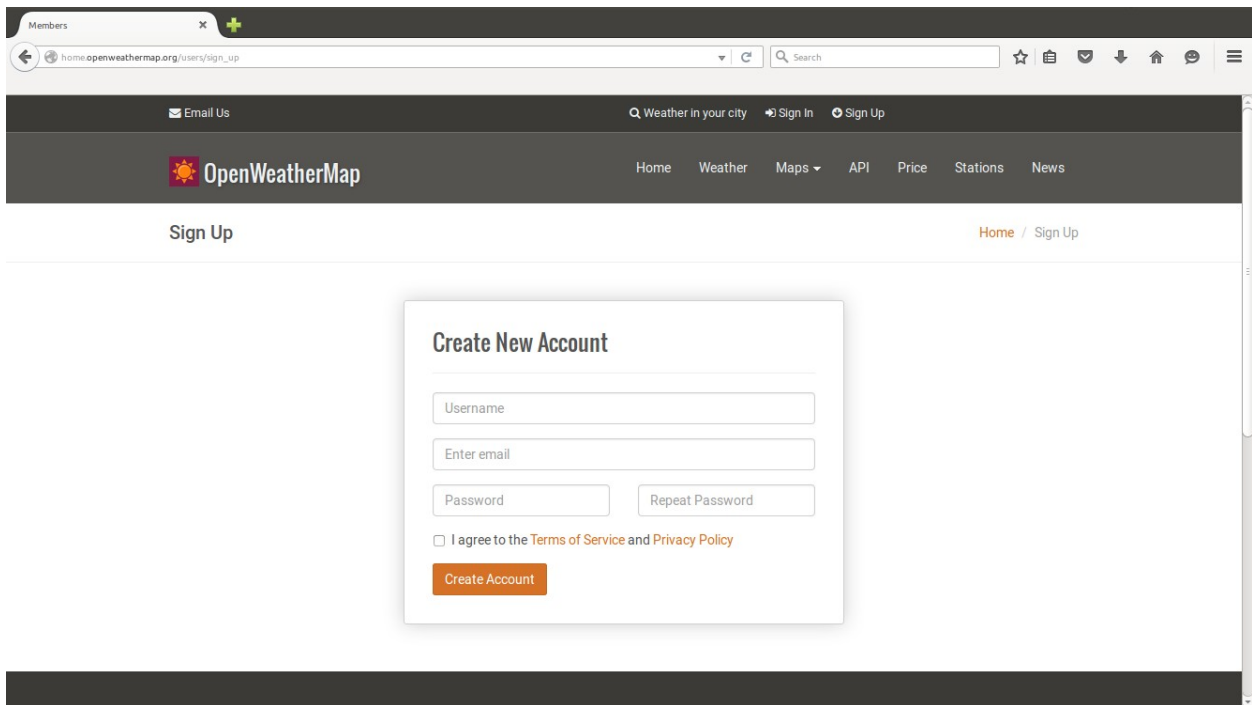
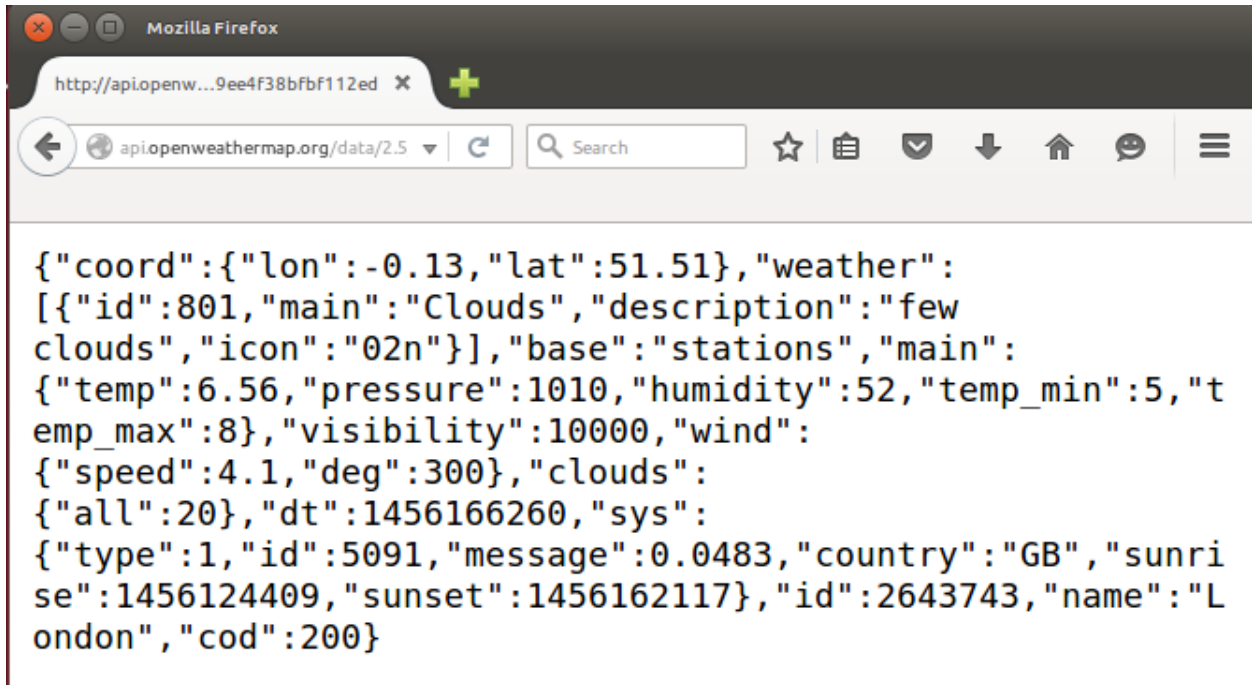
EU reforms on the issue of UK sovereignty are "not achievable" and the government has not delivered "fundamental change", Boris Johnson says.

---

[Iranian billionaire sentenced to death](#)  
*Sun, 06 Mar 2016 15:47:29 GMT*

Billionaire Iranian businessman Babak Zanjani, accused by the West of sanctions-busting, has been sentenced to death for corruption, Iranian officials say.





Members x

home.openweathermap.org

Email Us Weather in your city Hello sixhobbits

**OpenWeatherMap** Home Weather Maps API Price Stations News

### My Home Home

Setup My Weather Stations My Services My Payments Billing plans Map editor

**Username**  Logout

**Email**

**Full name**

Save

**API key**  Reset APPID

Headlines - Mozilla Firefox

Headlines x New Tab x +

localhost:5000/?city=Cape+Town Search ☆ 📄 » ☰

# Headlines

## Current weather

weather search Submit

City: **Cape Town**

light rain |19.59°C

## Headlines

search Submit

[\*\*Former US First Lady Nancy Reagan dies\*\*](#)  
*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

[\*\*Npower to cut up to 2,500 jobs in UK\*\*](#)  
*Sun, 06 Mar 2016 18:12:37 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

---

Headlines - Mozilla Firefox

Headlines x New Tab x +

localhost:5000/?city=Birmingham Search ☆ 📅 » ☰

# Headlines

## Current weather

City: **Birmingham, US**

clear sky |15.41°C

## Headlines

### [Former US First Lady Nancy Reagan dies](#)

*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

### [Npower to cut up to 2,500 jobs in UK](#)

*Sun, 06 Mar 2016 18:12:37 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

---

# App ID & Account Dashboard

YOUR ACCOUNT:

[Dashboard / App ID](#)

★ [Go Pro](#)

[Edit Account Details](#)

[Usage Statistics](#)

[Log out](#)

Have any questions or feedback?  
Please [get in touch](#). Thanks!

## Welcome to your account dashboard!

You can get started right away by reading the [Quick Start Guide](#), which explains the very basics of the API.

For a more in-depth view of things, check out the [Documentation](#).

## Your App ID

This is your **App ID**, which you can use to query the Open Exchange Rates API. If you're using third-party extensions, plugins or software, enter this key where requested:

**b23c94daab584f4580e4e2b** [REDACTED]

To use your App ID, append it to the API URL, eg:

```
http://openexchangerates.org/api/latest.json?app_id=b23c94daab584f4580e4e2b
```

Headlines - Mozilla Firefox

Headlines x New Tab x +

localhost:5000/?city=Birmingham Search ☆ 📅 » ☰

# Headlines

## Current weather

City: **Birmingham, US**  
clear sky | 15.41°C

## Currency

1 GBP = USD 1.42308847199

## Headlines

[Former US First Lady Nancy Reagan dies](#)  
*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

[Npower to cut up to 2,500 jobs in UK](#)  
*Sun, 06 Mar 2016 18:12:37 GMT*

Energy firm Npower is to cut up to 2,500 jobs, more than a fifth of its UK workforce, with details to be announced this week.

Headlines - Mozilla Firefox

Headlines x New Tab x +

localhost:5000/?city=Birmingham Search ☆ 📁 » ☰

# Headlines

## Current weather

City: **Birmingham, US**

clear sky |15.41°C

## Currency

from:  to:

1 GBP

- USD
- GBP**
- EUR
- ZAR

## Headlines

### [Former US First Lady Nancy Reagan dies](#)

Sun, 06 Mar 2016 17:45:36 GMT

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---



Headlines - Mozilla Firefox

Headlines x New Tab x +

localhost:5000/?currency\_from=EUR& Search ☆ 📅 » ☰

# Headlines

## Current weather

City: **London, GB**

few clouds | 3.26°C

## Currency

from:  to:

1 EUR = ZAR 16.8937357889

## Headlines

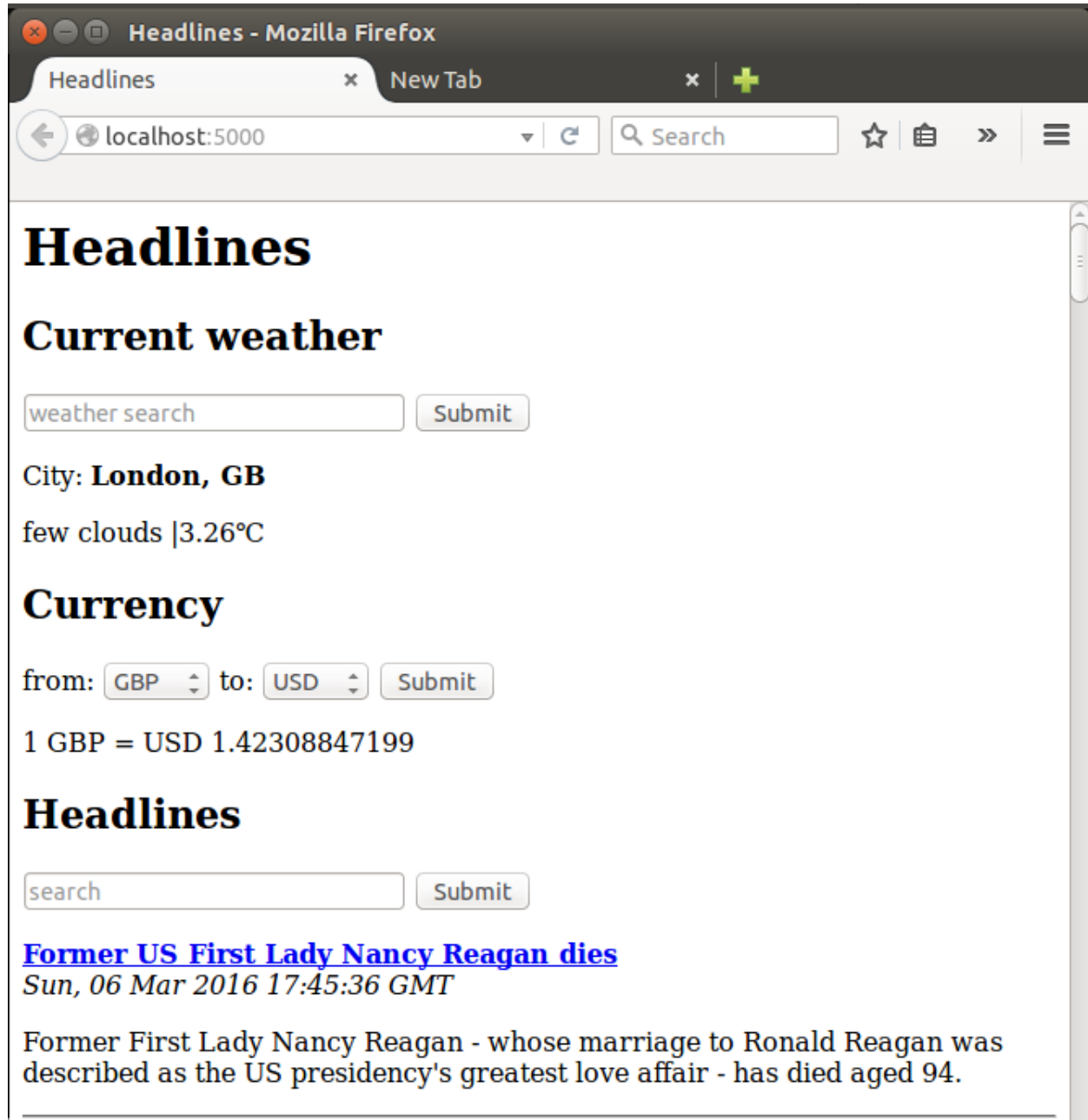
### [Former US First Lady Nancy Reagan dies](#)

*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

## Chapter 5: Improving the User Experience of Our Headlines Project



The screenshot shows a Mozilla Firefox browser window with the title 'Headlines - Mozilla Firefox'. The address bar displays 'localhost:5000'. The page content is as follows:

# Headlines

## Current weather

City: **London, GB**  
few clouds | 3.26°C

## Currency

from:  to:

1 GBP = USD 1.42308847199

## Headlines

[Former US First Lady Nancy Reagan dies](#)  
*Sun, 06 Mar 2016 17:45:36 GMT*

Former First Lady Nancy Reagan - whose marriage to Ronald Reagan was described as the US presidency's greatest love affair - has died aged 94.

---

Headlines - Mozilla Firefox

Headlines x New Tab x +

localhost:5000 Search ☆ 📁 » ☰

# Headlines

## Current weather

weather search Submit

City: **Port Elizabeth, ZA**  
broken clouds |23.09°C

## Currency

from: CNY to: SHP Submit

1 CNY = 0.11 SHP

## Headlines

search Submit

[UNFAIR SUSPENSIONS? Firefighters disciplined after taking girl to hospital](#)  
*Sun, 06 Mar 2016 13:28:52 EST*

---

[BATTLE WAGES ON Dems fight for Maine, as Puerto Rico votes on GOP](#)  
*Sun, 06 Mar 2016 13:28:52 EST*

Headlines - Mozilla Firefox

Headlines

localhost:5000

## Headlines

Headlines. Currency. Weather.

### Current weather

weather search

City: **Port Elizabeth, ZA**

broken clouds |23.09°C

### Currency

from:  to:

1 CNY = 0.11 SHP

### Headlines

search

[UNFAIR SUSPENSIONS? Firefighters disciplined after taking girl to hospital](#)  
Sun, 06 Mar 2016 13:28:52 EST

Headlines - Mozilla Firefox

Headlines

localhost:5000

## Headlines

Headlines. Currency. Weather.

### Current weather

weather search

City: **Port Elizabeth, ZA**

broken clouds |23.09°C

### Currency

from:  to:

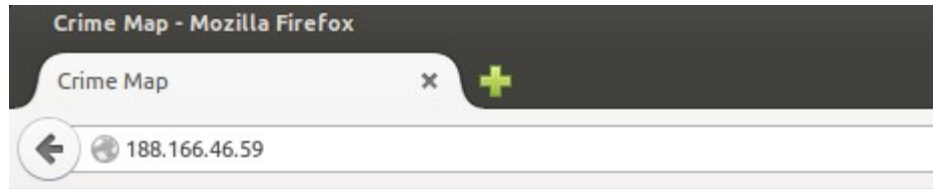
1 CNY = 0.11 SHP

### Headlines

search

[UNFAIR SUSPENSIONS? Firefighters disciplined after taking girl to hospital](#)  
Sun, 06 Mar 2016 13:28:52 EST

## Chapter 6: Building an Interactive Crime Map

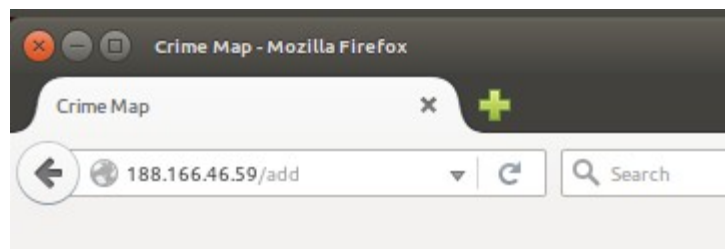


# Crime Map

[clear](#)

('test',)

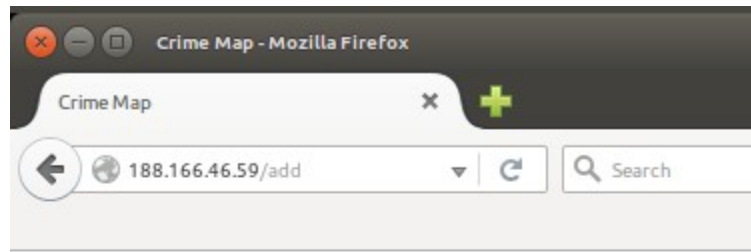
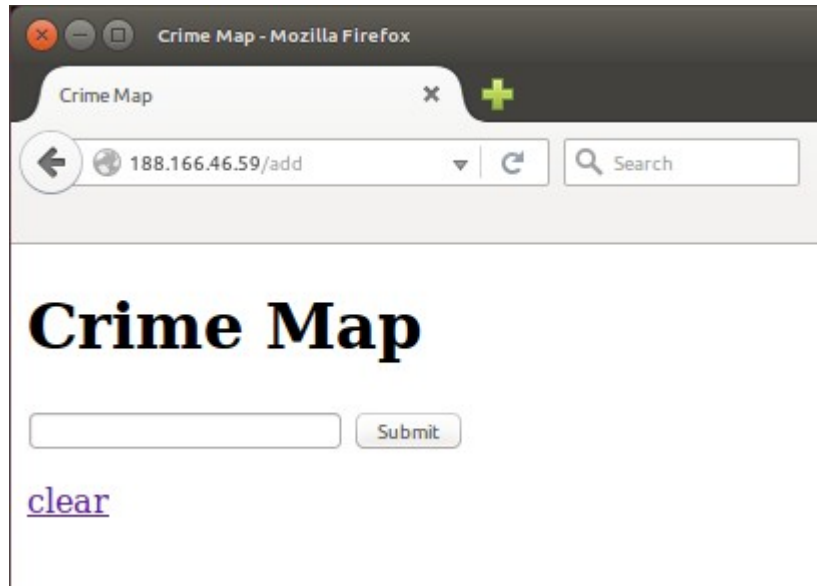
('databases are cool :'),)



# Crime Map

[clear](#)

('Bobby',)



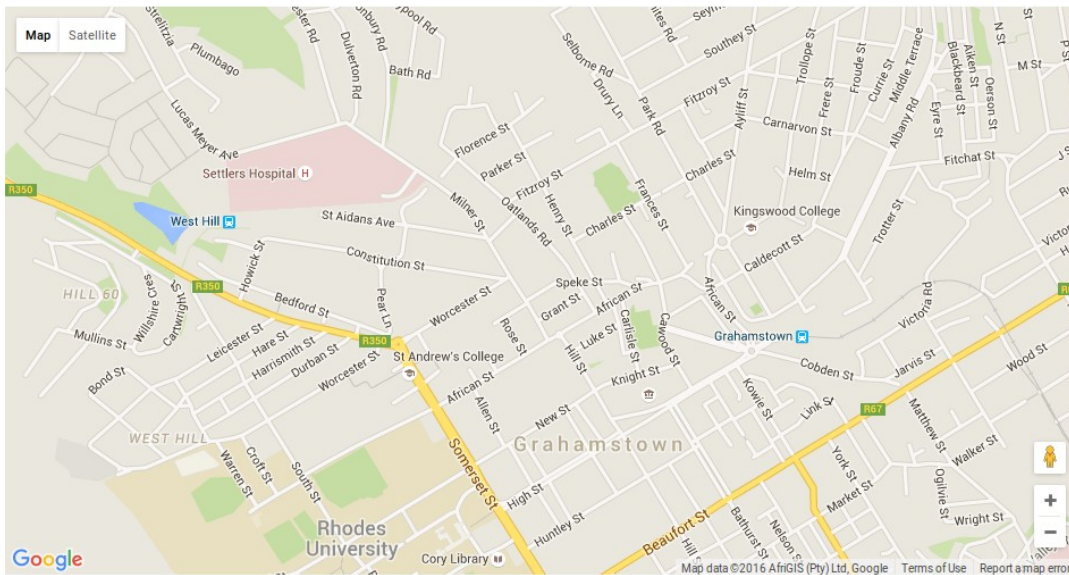
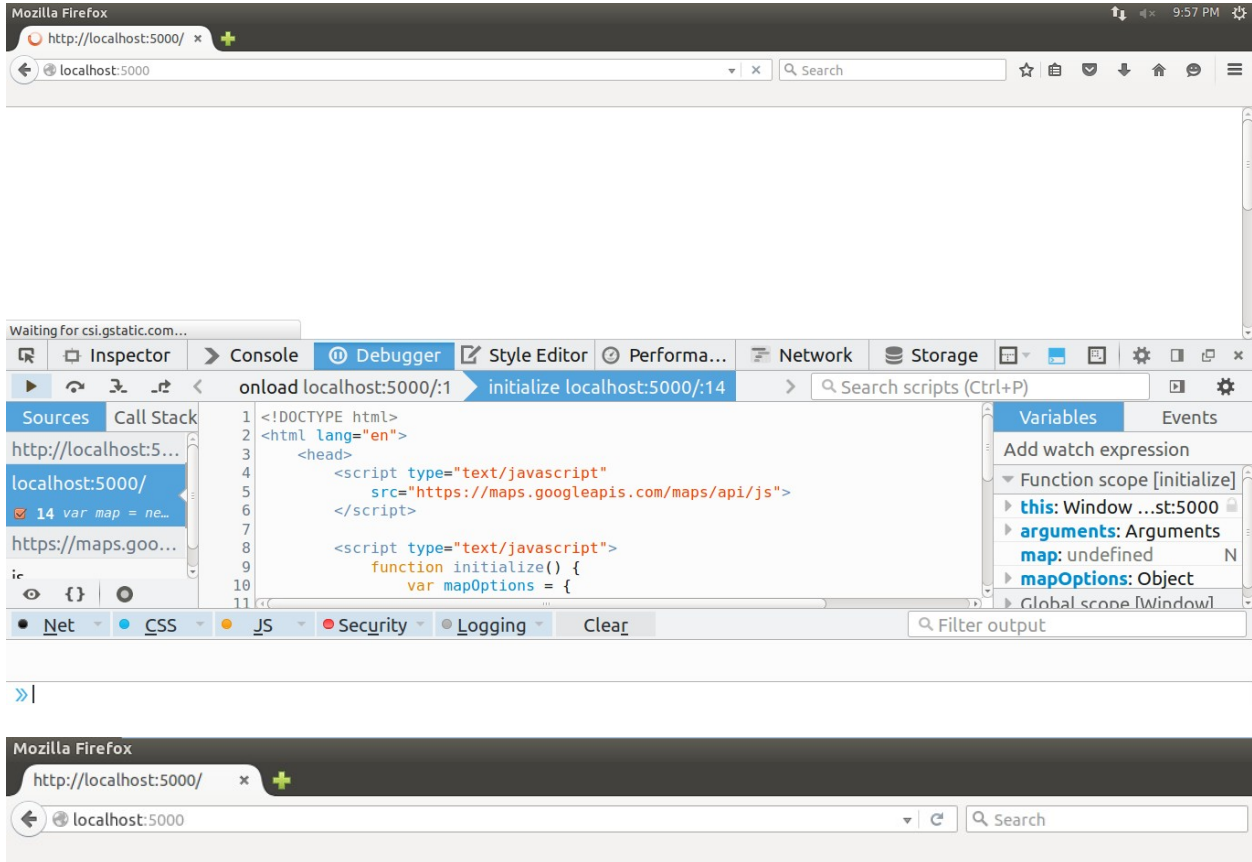
# Crime Map

[clear](#)

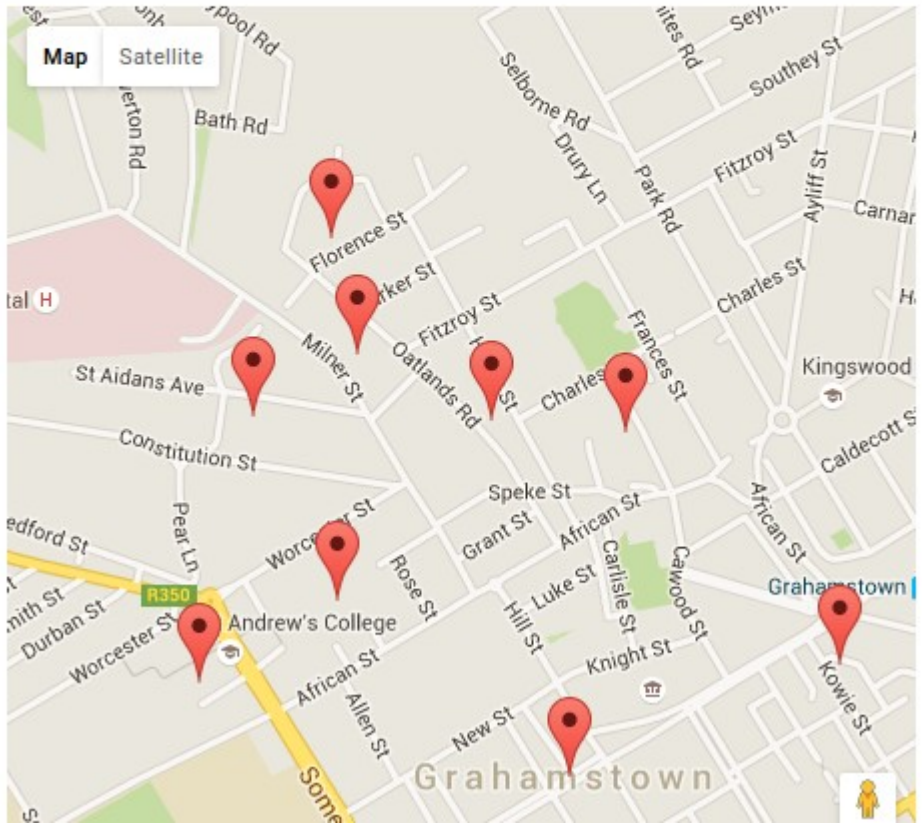
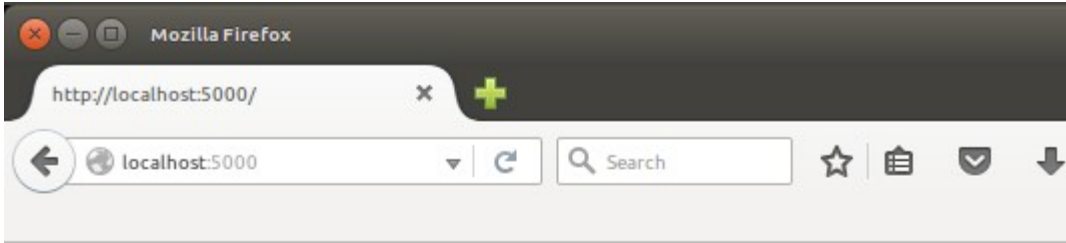
('Bobby',)

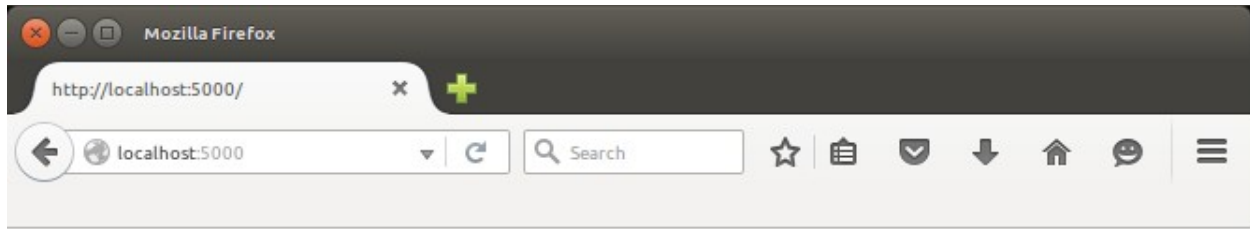
(""); DELETE FROM crimes; -- ",)

# Chapter 7: Adding Google Maps to Our Crime Map Project



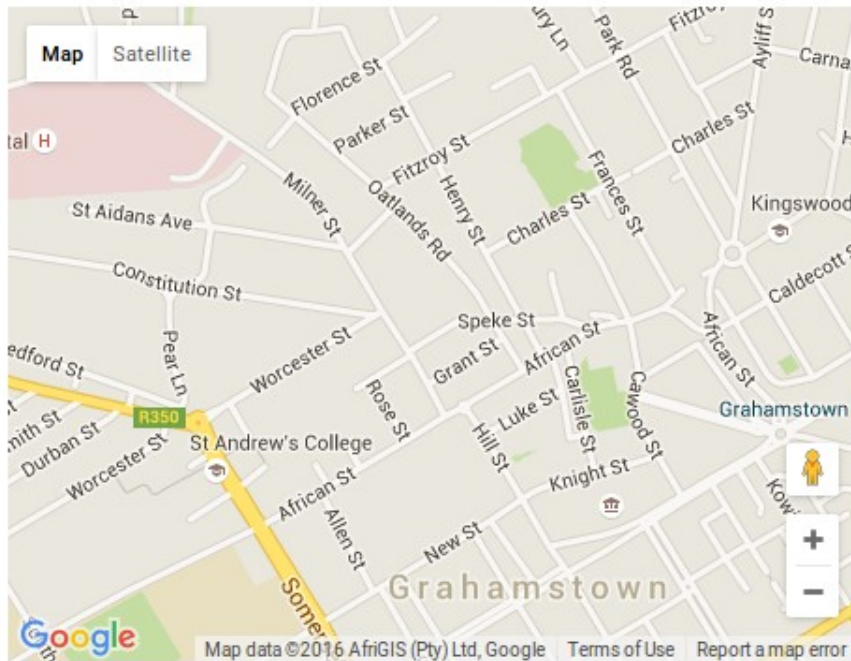






# CrimeMap

A map of recent criminal activity in the Grahamstown area.



## Submit new crime

Category  Date  Latitude

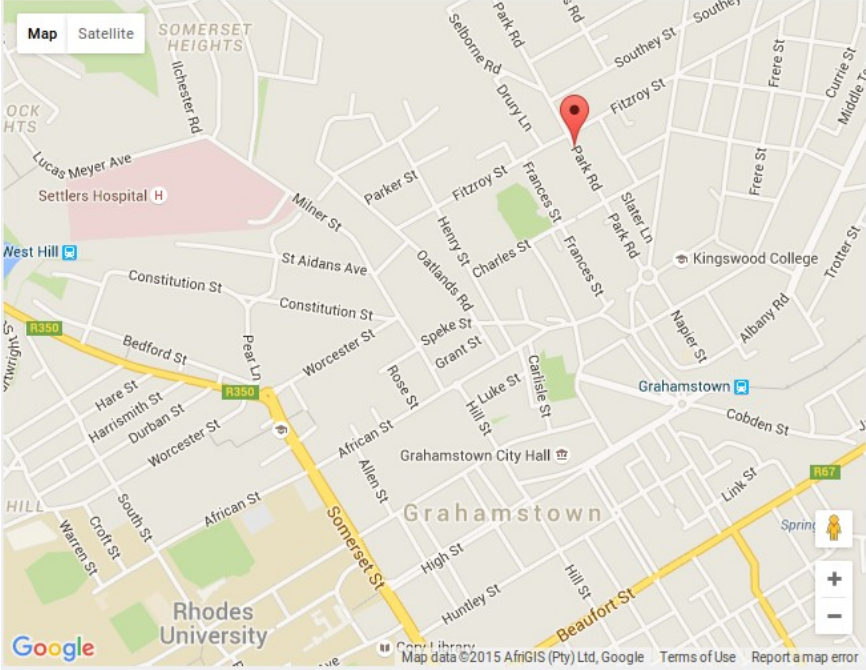
Longitude  Description

localhost:5000

Google

# CrimeMap

A map of recent criminal activity in the Grahamstown area.



## Submit new crime

Category

Date

Latitude

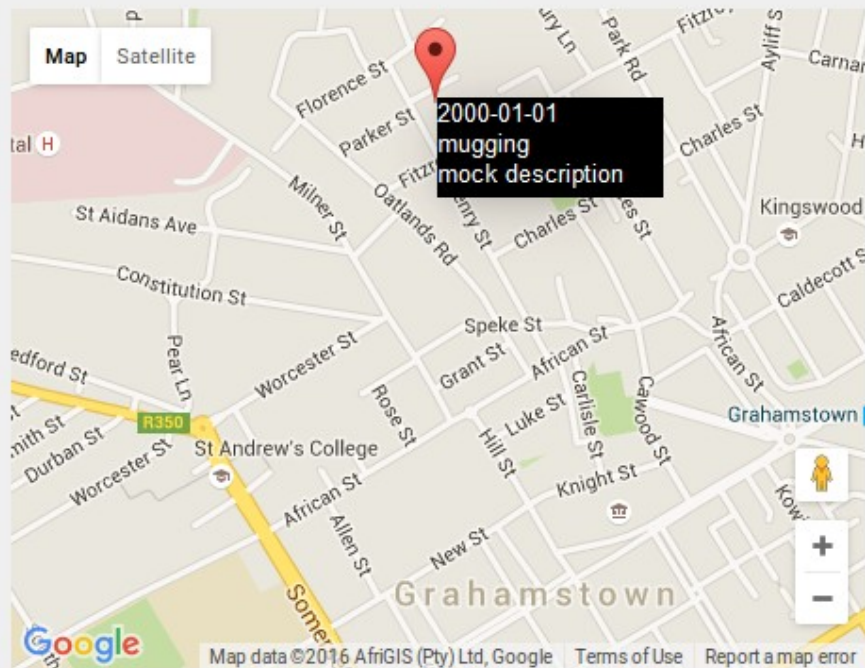
Longitude

Description

```
mysql> select * from crimes;
+----+-----+-----+-----+-----+-----+-----+
| id | latitude | longitude | date | category | description | updated_at |
+----+-----+-----+-----+-----+-----+-----+
| 19 | -33.307438 | 26.522497 | 2016-03-03 00:00:00 | mugging | test 1 | 2016-02-27 04:58:30 |
| 20 | -33.308372 | 26.523701 | 2100-01-01 00:00:00 | mugging | Thought Crime | 2016-02-27 04:58:54 |
+----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

# CrimeMap

A map of recent criminal activity in the Grahamstown area.



## Submit new crime

Category

Mugging

Date

Latitude

Longitude

Description

A brief but detailed description of the crime

Submit

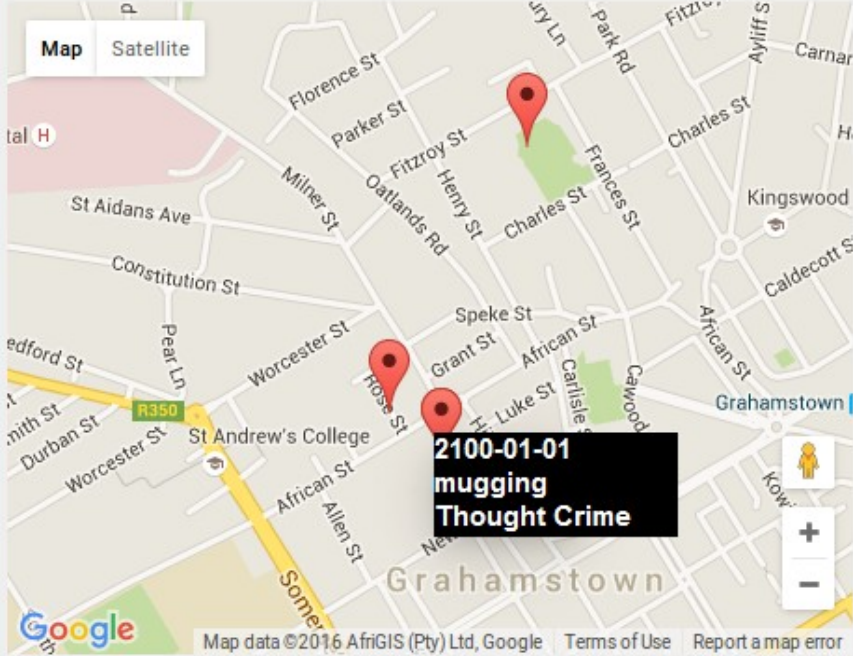


Mozilla Firefox  
http://188.166.46.59/

188.166.46.59 Search

# CrimeMap

A map of recent criminal activity in the Grahamstown area.



**Submit new crime**

Category  
Mugging

Date

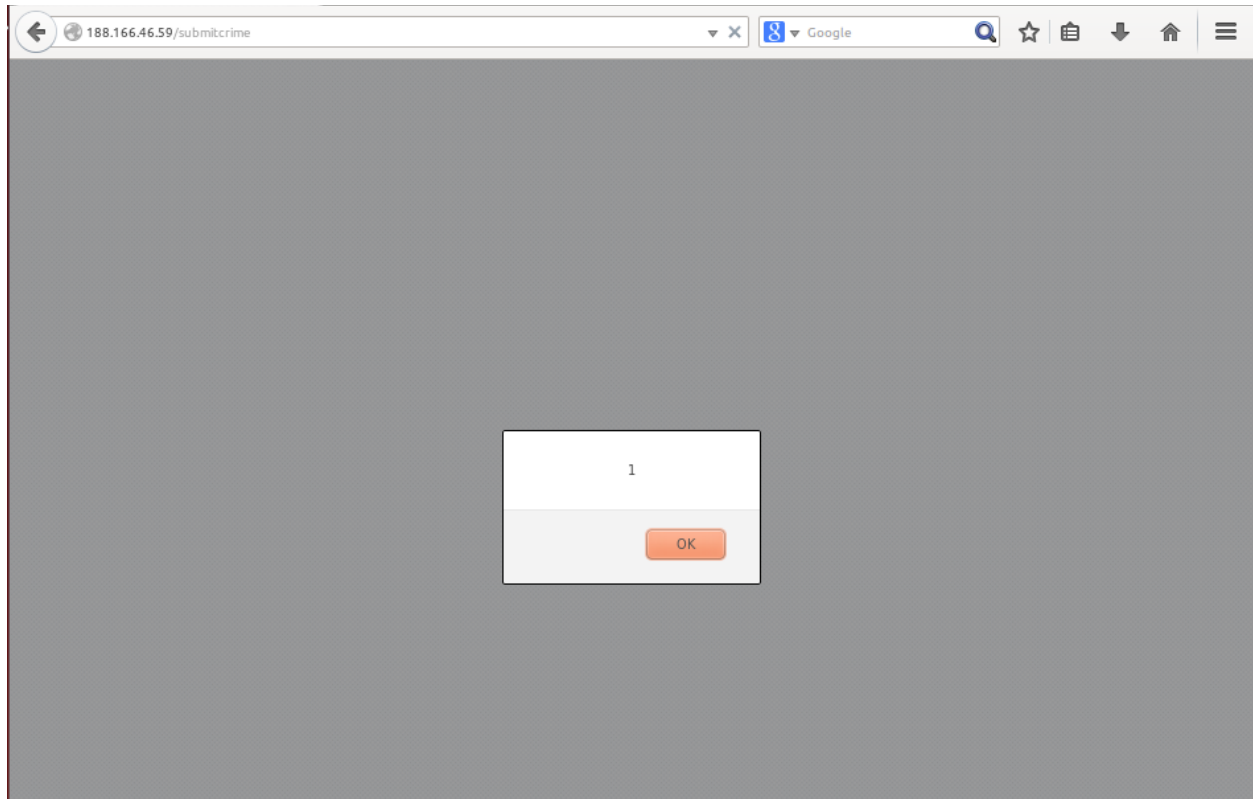
Latitude  
-33.302309473971064

Longitude  
26.525673866271973

Description  
A brief but detailed description of the crime

Submit

## Chapter 8: Validating User Input in Our Crime Map Project



```
mysql> delete from crimes;  
Query OK, 3 rows affected (0.02 sec)  
  
mysql> _
```

# CrimeMap

A map of recent criminal activity in the Grahamstown area.



## Submit new crime

Invalid date. Please use yyyy-mm-dd format

Category

Date

Latitude

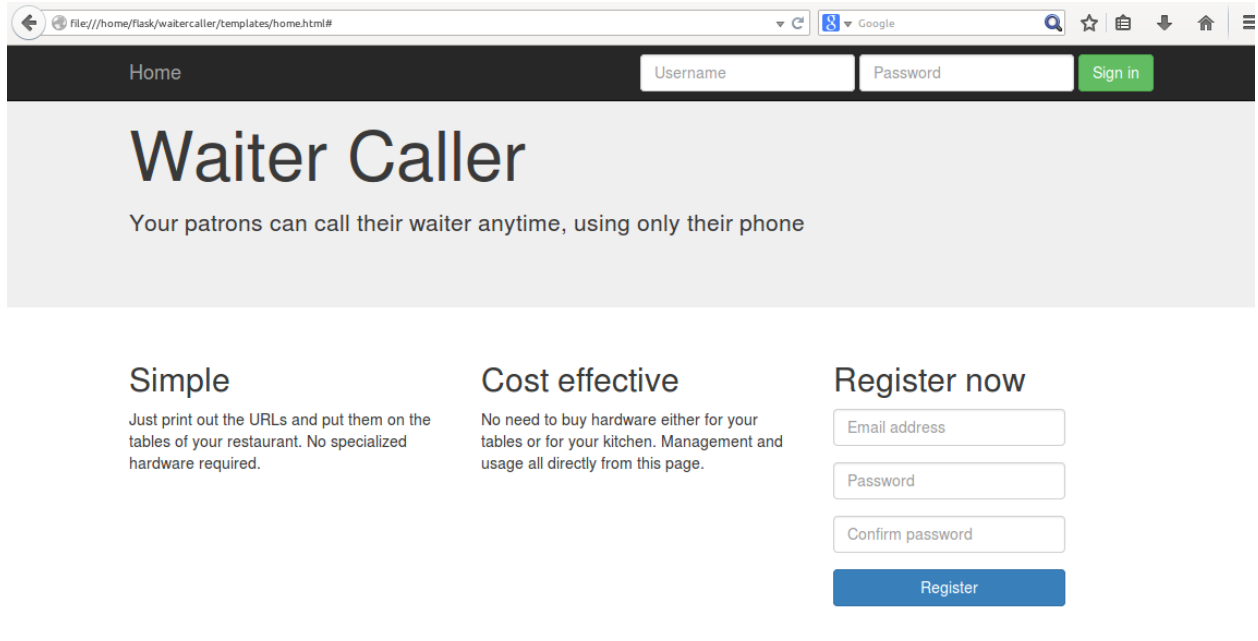
Longitude

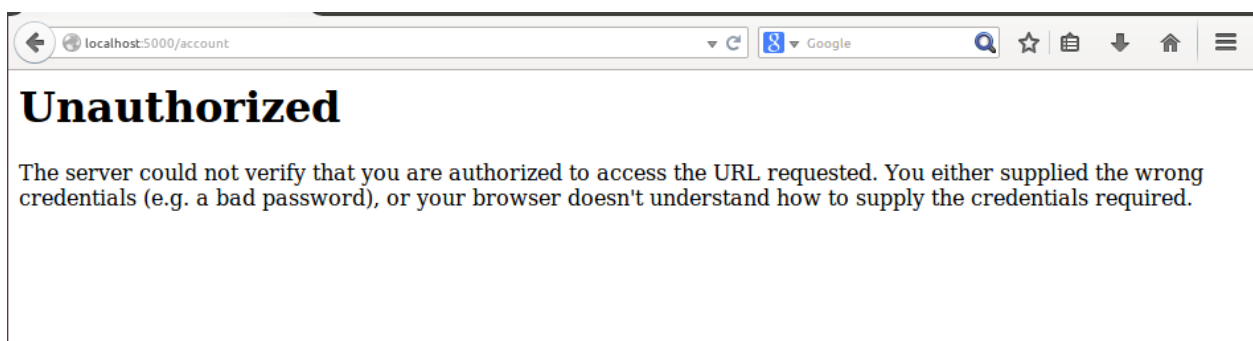
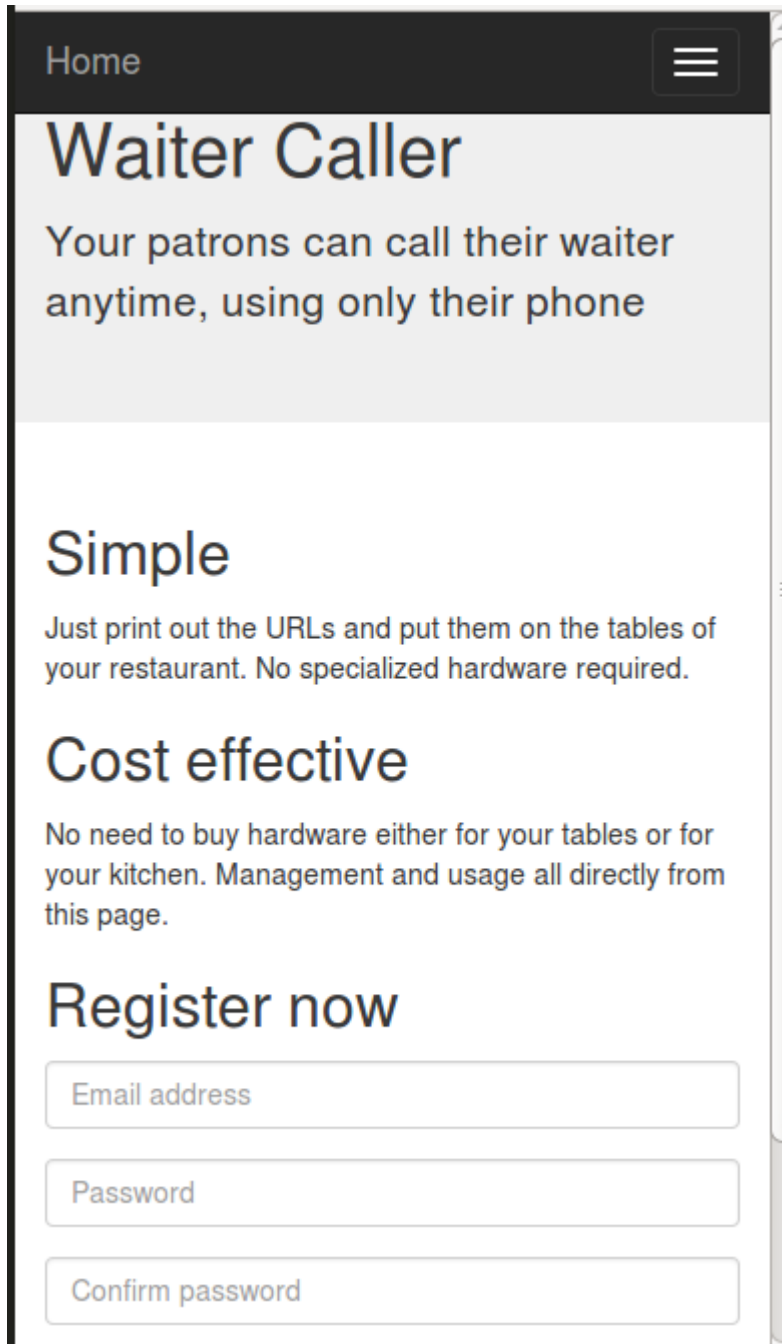
Description

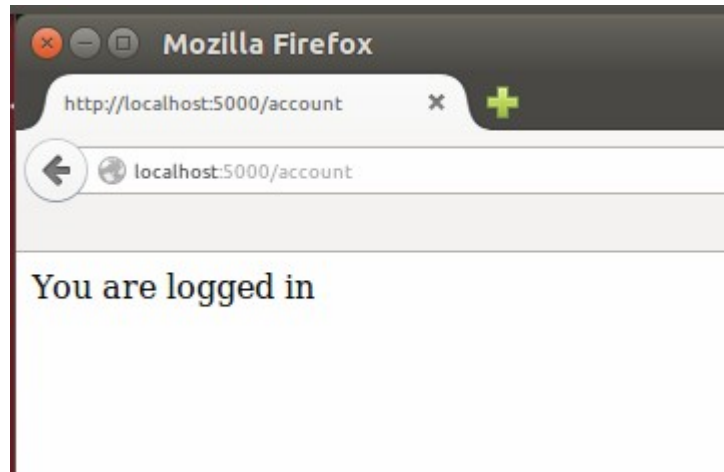
A brief but detailed description of the crime



# Chapter 9: Building a Waiter Caller App







```
Python 2.7.6 (default, Mar 22 2014, 22:59:56)
[GCC 4.8.2] on linux2
Type "help", "copyright", "credits" or "license" for more in
formation.
>>> import hashlib
>>> hashlib.sha512('123456').hexdigest()
'ba3253876aed6bc22d4a6ff53d8406c6ad864195ed144ab5c87621b6c23
3b548baeae6956df346ec8c17f5ea10f35ee3cbc514797ed7ddd3145464e
2a0bab413'
>>> _
```

Home Encrypt / Decrypt Conversion tools Ciphers Contact FR | EN

## Sha512() Encrypt & Decrypt

- You can extend the text zone and paste several hashes (up to 500). Be sure to put one by line -  
- There are 1,007,273,344 words in the database -  
[DOWNLOAD Md5decrypt's Wordlist!](#)

ba3253876aed6bc22d4a6ff53d8406c6ad864195ed144ab5c87621b6c233b548baeae6956df346ec8c17f5ea10f35ee3cbc514797ed7ddd3145464e2a0bab413  
: 123456

Found in 0.143s on <http://md5decrypt.net>

# Sha512() Encrypt & Decrypt

Encrypt

Decrypt

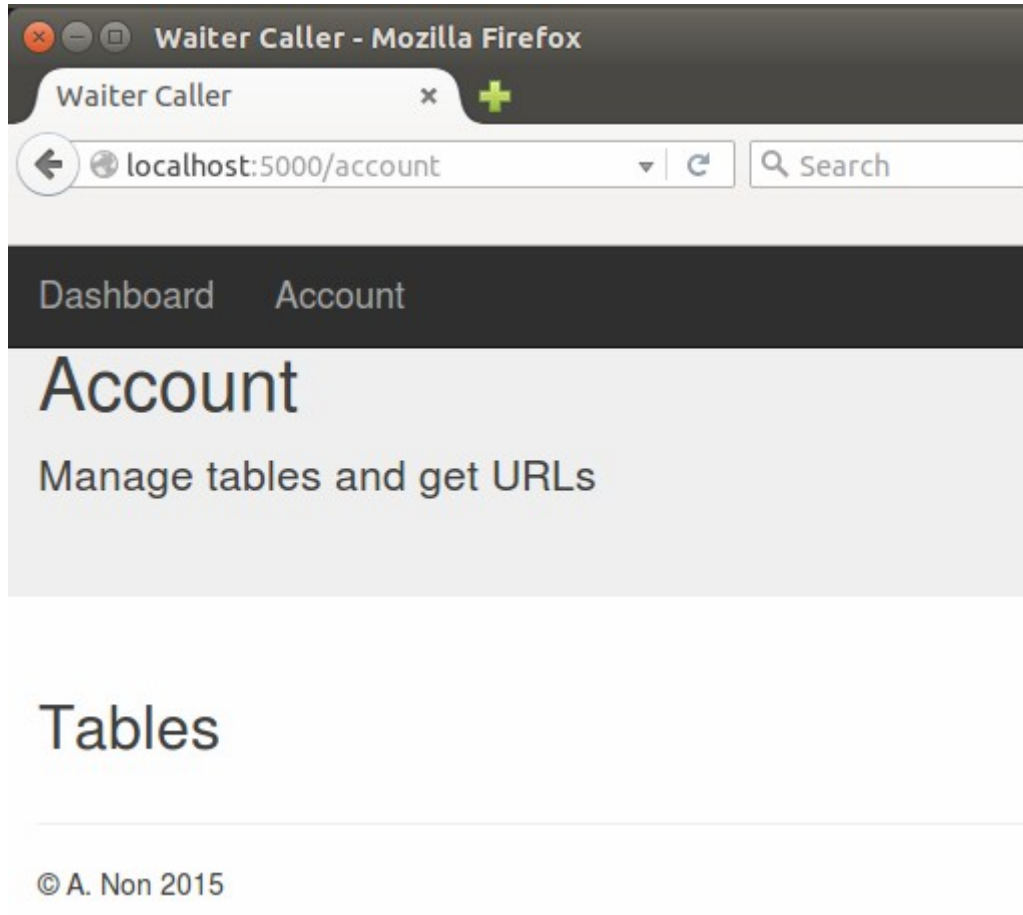
- You can extend the text zone and paste several hashes (up to 500). Be sure to put one by line -

- There are 1,007,273,344 words in the database -

[DOWNLOAD Md5decrypt's Wordlist!](#)

Sorry, this hash is not in our database

## Chapter 10: Template Inheritance and WTForms in Waiter Caller Project



Waiter Caller x +

localhost:5000/dashboard Search

Dashboard Account

# Dashboard

View all patron requests below

## Requests

All your customers are currently satisfied - no requests

---

© A. Non 2015

## Tables

### Add new table

Waiter Caller - Mozilla Firefox

Waiter Caller

localhost:5000/account

Dashboard Account

# Account

Manage tables and get URLs

## Tables

No.	URL	Delete
1	mockurl	Delete
2	http://127.0.0.1:5000/newrequest/2	Delete

## Add new table



Waiter Caller - Mozilla Firefox

Waiter Caller x +

localhost:5000/accoun

Dashboard Account

# Account

Manage tables and get URLs

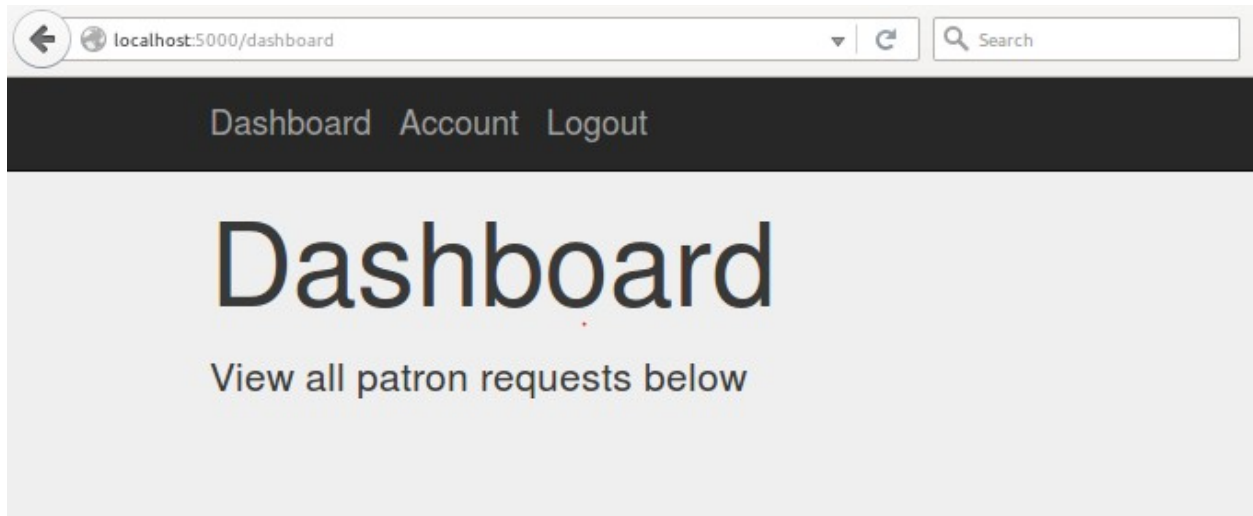
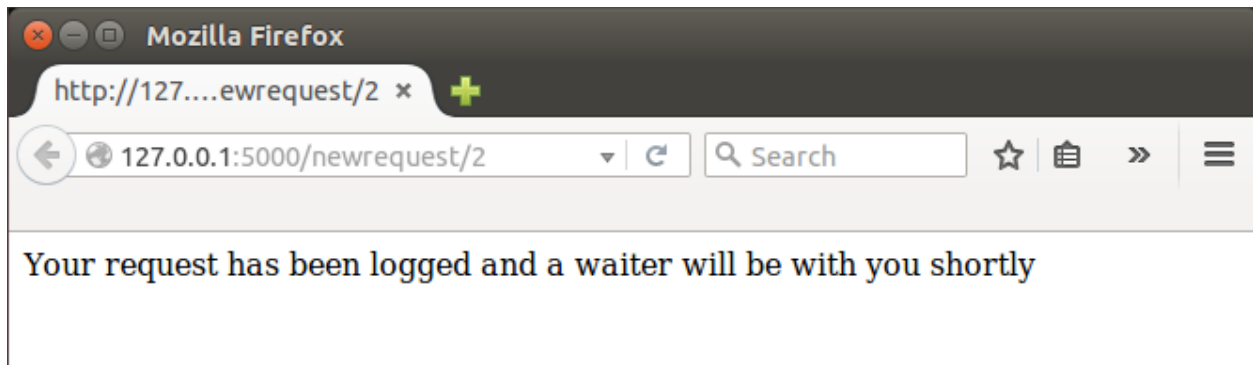
## Tables

No.	URL	Delete
1	mockurl	Delete
2	http://127.0.0.1:5000/newrequest/2	Delete

## Add new table

Table number or name

Create



## Requests

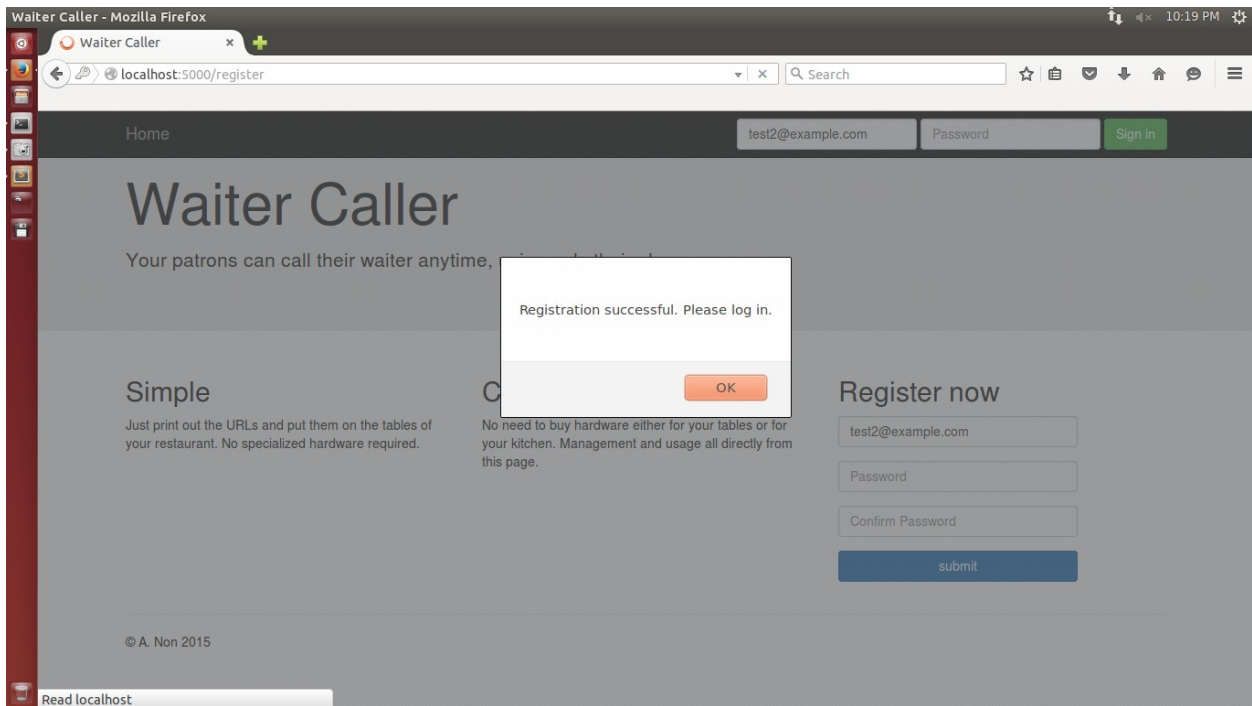
No.	Wait	Resolve
1	11.31	<a href="#">Resolve</a>
2	1.21	<a href="#">Resolve</a>

# Register now

Invalid email address.

Please choose a password of at least 8 characters

Passwords must match



# Tables

No.	URL
1	http://localhost:5000/newrequest/1

## Add new table

This field is required.

## Chapter 11: Using MongoDB with Our Waiter Caller Project

```
gareth@blank: ~  
gareth@blank:~$ mongo  
MongoDB shell version: 3.2.1  
connecting to: test  
> _
```

```
> db.people.find({"name":"John Smith"})  
{ "_id" : ObjectId("56d5e9a1bf738a9a34175181"), "name" : "John Smith", "age" : 35 }  
>
```

```
> db.people.find({"name":"John Smith"}, {"age":1})  
{ "_id" : ObjectId("56d5e9a1bf738a9a34175181"), "age" : 35 }  
> _
```

```
> db.people.remove({"name":"John Smith"})  
WriteResult({ "nRemoved" : 1 })  
> _
```

```
> db.people.find()  
{ "_id" : ObjectId("56d5ec656167126b1233848c"), "name" : "Mary Jones" }  
> _
```

```
> db.people.remove({"name":"John Smith"})
WriteResult({ "nRemoved" : 1 })
> db.people.find()
{ "_id" : ObjectId("56d5ec656167126b1233848c"), "name" : "Mary Jones" }
> db.people.remove({})
WriteResult({ "nRemoved" : 1 })
> db.people.find()
> _
```

