

1.I have used Laravel framework and Redis server in order to implement the solution for the given scenario.Laravel gives fast MVC design with secure .Redis-cache server ,i have used my personel remote server ,35.162.31.222 .redis configurations are available in database.php under config folder.

2. please refer guide.txt and db\_setup.txt

3. My approach

- Telecom gate way sends data over API ,<http://localhost/azeem-test/code/web/az/blog/index?msisdn=60123456789&operatorid=3&shortcodeid=8&text=ON+GAMES>
- We store the received data into redis cache only with starting key letter is “T”
- There is a cronjob that runs every minute to storing into DB using the data which are stored into redis-cache and it deletes the cached data once storing into DB  
<http://localhost/azeem-test/code/web/az/blog/storedb>
- 

4. Answer for your questions.

## Goal 1

I have used MVC framework business logics are separated by using lib folder(myfunctions.php)

please refer the following files.

blog/app/Http/Controller/HomeController

blog/app/Mo.php

blog/app/lib/myfunctions.php

Unit test

blog/tests/TokenTest.php

Goal2

<http://localhost/azeem-tes/code/web/az/blog/stats>

id and created\_at are indexed

note :”created\_at” is actual time that our system received from telecom gate way, “updated\_at” is inserted time into DB.

Getting “max” date and “Min” date by sorting “id descending” with last 10k records, please refer blog/app/lib/myfunctions.php.

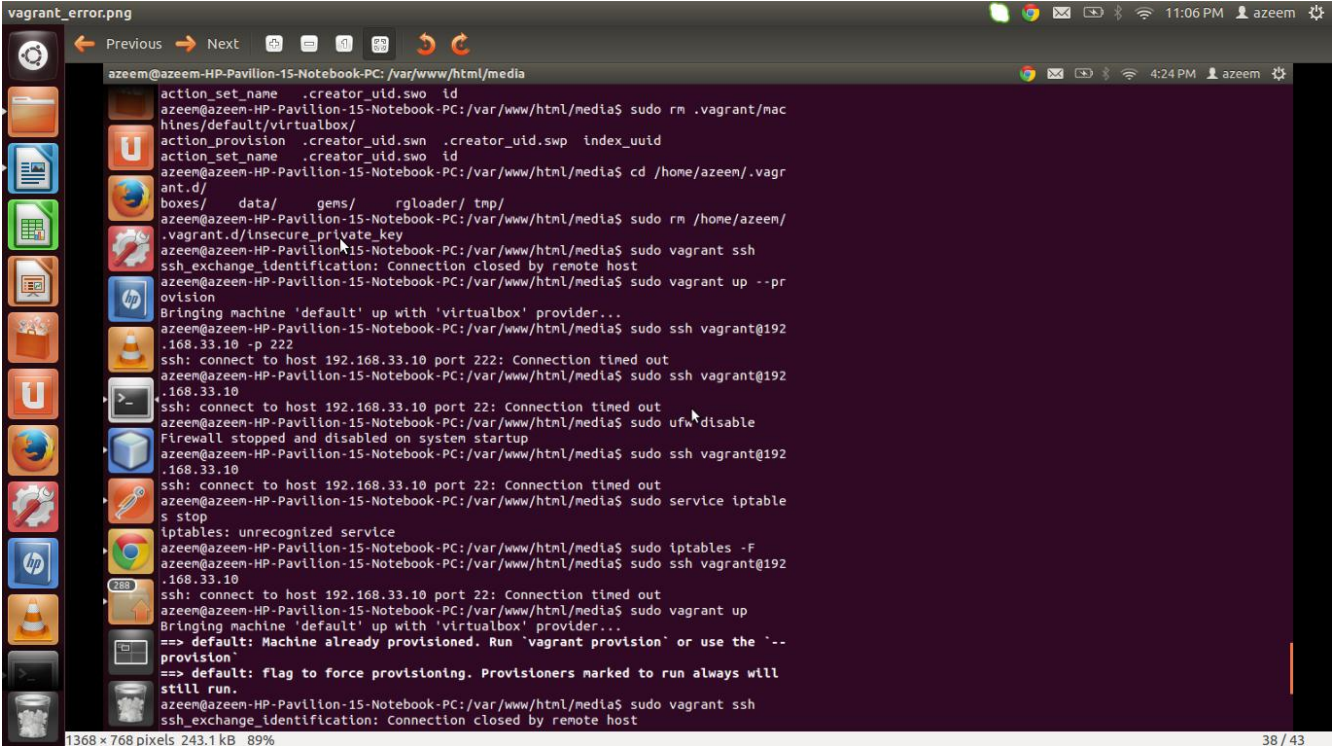
Bonus1

curl <http://localhost/object/code/web/az/blog/unprocessed-cache>

Bonus 2

curl <http://localhost/object/code/web/az/blog/delete-cache>

5. As I had problem to connect virtualBox over vagrant , I couldn't do the virtual-box configuration. The given screen shot shows the issues that I faced with vagrant.



The screenshot shows a terminal window titled 'vagrant\_error.png' with a dark background. The user is logged in as 'azeem' on a machine named 'azeem-HP-Pavilion-15-Notebook-PC'. The terminal displays a series of commands and their outputs, including file removal, directory navigation, and attempts to connect to a virtual machine via SSH. The output shows several 'Connection timed out' errors and a message indicating that the machine 'default' is already provisioned. The terminal also shows the user disabling the firewall and attempting to start the 'iptables' service, which results in an 'unrecognized service' error. The terminal window has a sidebar with application icons on the left and system status icons on the right, including the time '11:06 PM' and the user 'azeem'.

```
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo rm .vagrant/mac
hines/default/virtualbox/
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ cd /home/azeem/.vagr
ant.d/
boxes/ data/ gems/ rgloader/ tmp/
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo rm /home/azeem/
.vagrant.d/insecure_private_key
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo vagrant ssh
ssh_exchange_identification: Connection closed by remote host
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo vagrant up --pr
ovision
Bringing machine 'default' up with 'virtualbox' provider...
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo ssh vagrant@192
.168.33.10 -p 222
ssh: connect to host 192.168.33.10 port 222: Connection timed out
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo ssh vagrant@192
.168.33.10
ssh: connect to host 192.168.33.10 port 22: Connection timed out
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo ufw disable
Firewall stopped and disabled on system startup
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo ssh vagrant@192
.168.33.10
ssh: connect to host 192.168.33.10 port 22: Connection timed out
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo service iptable
s stop
iptables: unrecognized service
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo iptables -F
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo ssh vagrant@192
.168.33.10
ssh: connect to host 192.168.33.10 port 22: Connection timed out
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo vagrant up
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Machine already provisioned. Run 'vagrant provision' or use the '--
provision'
==> default: flag to force provisioning. Provisioners marked to run always will
still run.
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/media$ sudo vagrant ssh
ssh_exchange_identification: Connection closed by remote host
```

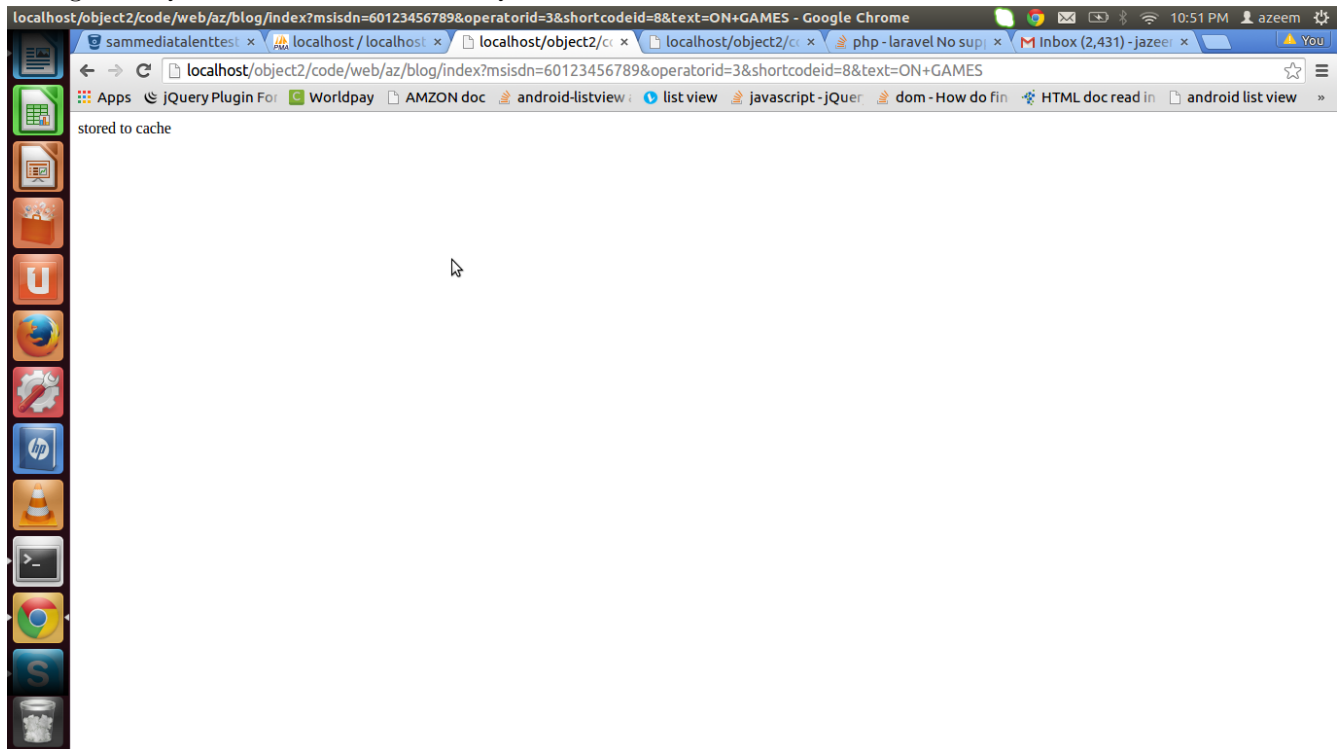
Some screens of my works are given below.

Database looks

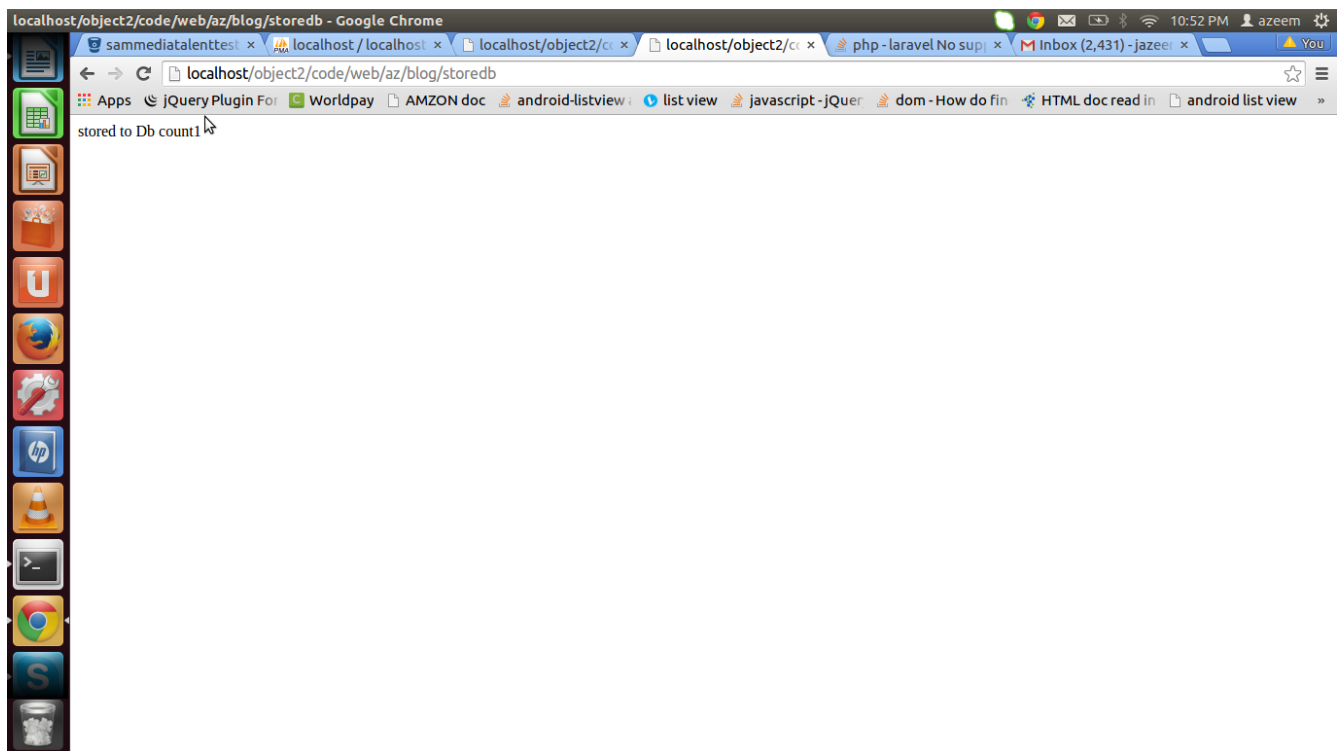
The screenshot shows the phpMyAdmin 3.4.10.1deb1 interface in Google Chrome. The browser address bar shows the URL: localhost/phpmyadmin/index.php?db=samtt2&token=00244a9236fc36038ed744f7bfb8621a. The interface includes a sidebar with navigation icons and a main content area. The main content area displays a table with 9 rows, showing columns: id, msisdn, operatorid, shortcodeid, text, auth\_token, created\_at, and updated\_at. The table data is as follows:

	id	msisdn	operatorid	shortcodeid	text	auth_token	created_at	updated_at
<input type="checkbox"/>	84	60123456789	3	8	ON GAMES	e27yb429eyzunc_imibCrcI_	2016-11-02 17:07:56	2016-11-02 17:08:02
<input type="checkbox"/>	85	60123456789	3	8	ON GAMES	y_p3c5B_pzuK4_44Ek3rkKr4	2016-11-02 17:07:31	2016-11-02 17:08:02
<input type="checkbox"/>	86	60123456789	3	8	ON GAMES	txdFpn3dFJGomKj1fncnwf	2016-11-02 17:07:54	2016-11-02 17:08:02
<input type="checkbox"/>	87	60123456789	3	8	ON GAMES	Cs-b7_Apazb7sqGth0oE8scK	2016-11-02 17:08:46	2016-11-02 17:08:48
<input type="checkbox"/>	88	60123456789	3	8	ON GAMES	omthv-kt5CCFHz-cmAoFa-a8	2016-11-02 17:13:34	2016-11-02 17:13:37
<input type="checkbox"/>	89	60123456789	3	8	ON GAMES	IAa6JvEzr8zaB2uD5zHywboh	2016-11-02 17:13:29	2016-11-02 17:13:37
<input type="checkbox"/>	90	60123456789	3	8	ON GAMES	k36_vDzKdlHczyIgJlb3pynz	2016-11-02 17:17:48	2016-11-02 17:17:55
<input type="checkbox"/>	91	60123456789	3	8	ON GAMES	sbllk6bgeckitCizdvkqQ_Dj	2016-11-02 17:17:47	2016-11-02 17:17:55
<input type="checkbox"/>	92	60123456789	3	8	ON GAMES	87bE4H45F5214rv4sR66n0_0	2016-11-02 17:17:44	2016-11-02 17:17:55

The gate way sends the data to our system



This is the cron job file that executes every minute to update the data that are stored in Cahed into DB



Showing stats ,”created\_at” is the time that Telecom sent the data and “updated\_at” is DB inserted time



```
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/object2/code/web/az
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/object2/code/web/az$ curl http://localhost/object2/code/web/az/blog/unprocessed-cache
3 --total un_processed
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/object2/code/web/az$
```

Checking un processed data

```
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/object2/code/web/az
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/object2/code/web/az$ curl http://localhost/object2/code/web/az/blog/delete-cache
azeem@azeem-HP-Pavilion-15-Notebook-PC: /var/www/html/object2/code/web/az$
```

Deleting un processed cache data.