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RedisCache and Registration Page Integration

Steps Followed:

- Downloaded Redis for windows from: https://github.com/dmajkic/redis/downloads
- Downloaded Jedis jar file and placed it in the library folder of the eclipse project.
- Started Redis server by sing redis-server.exe as below

```
C:\Users\goudamy\Desktop\64bit\redis-server.exe

[5364] 18 Apr 12:26:34 # Warning: no config file specified, using the default config. In order to specify a config file use 'redis-server /path/to/redis.conf' [5364] 18 Apr 12:26:34 * Server started, Redis version 2.4.5 [5364] 18 Apr 12:26:34 * DB loaded from disk: Ø seconds [5364] 18 Apr 12:26:34 * The server is now ready to accept connections on port 6 379 [5364] 18 Apr 12:26:35 - DB Ø: 2 keys (Ø volatile) in 4 slots HT. [5364] 18 Apr 12:26:35 - Ø clients connected (Ø slaves), 1180104 bytes in use
```

In the above screenshot, 0 clients are connected.

• Now run Redis client using redis-cli.exe

```
C:\Users\goudamy\Desktop\64bit\redis-cli.exe

redis 127.0.0.1:6379> ping

PONG

redis 127.0.0.1:6379> ping

PONG

redis 127.0.0.1:6379>
```

We can see the client connection in the server is increased to 1 in the below screenshot

```
Π,
                                                                      C:\Users\goudamy\Desktop\64bit\redis-server.exe
                                                                                                 lients connected (0 slaves), 1180104
0: 2 keys (0 volatile) in 4 slots HT
                                                                                      0 clients connected (0 slaves), 1180104
DB 0: 2 keys (0 volatile) in 4 slots HT
                                 Apr
                                Apr
Apr
Apr
Apr
                                                                                    DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
Accepted 127.0.0.1:51295
DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
                      18
18
18
18
                                 Apr
                                 Apr
                                 Apr
                                Apr
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18
                                 Apr
                                 Apr
                                 Apr
                                 Apr
                                 Apr
                                 Apr
                                                                                      DB 0: 2 keys (0 volatile) in 4 slots in 1 clients connected (0 slaves), 1188256 DB 0: 2 keys (0 volatile) in 4 slots HT 1 clients connected (0 slaves), 1188256 DB 0: 2 keys (0 volatile) in 4 slots HT
                      18
18
18
                                 Apr
Apr
                                                                                                                                                                                                                                  bytes in use
                                                12:27:41
                                 Apr
                                                                                                                                                                                                                                 bytes in use
                      18
18
18
                                 Apr
                                                12:27:46
                                               12:27:46
12:27:51
                                                                                      1 clients connected (0 slaves), 1188256
DB 0: 2 keys (0 volatile) in 4 slots HT
                                 Apr
                                 Apr
                      \overline{18}
                                Apr
                                               12:27:51
                                                                                      1 clients connected (0 slaves), 1188256
                                                                                                                                                                                                                                 bytes in use
```

Now the client is closed. In the below screenshot, We can see a message stating "client is closed" and the number of clients attached is changed to 0.

```
C:\Users\goudamy\Desktop\64bit\redis-server.exe
                                                                                                                                                                                                                           bytes in use
                                                                                DB 0: 2 keys (0 volatile) in 4 slots
                                                                              DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

1 clients connected (0 slaves), 1188256 bytes in use
                          Apr
Apr
Apr
                18
18
18
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18
18
18
                           Apr
                           Apr
                                         12:28:01
                           Apr
                           Apr
                           Apr
Apr
                          Apr
Apr
Apr
                                                                              Client closed connection
DB 0: 2 keys (0 volatile) in 4 slots HT.
0 clients connected (0 slaves), 1180104 bytes in use
                                         12:28:13
12:28:16
12:28:16
                                                                               DB 0: 2 keys (0 volatile) in 4 slots hr.

D clients connected (0 slaves), 1180104 bytes in use

DB 0: 2 keys (0 volatile) in 4 slots HT.

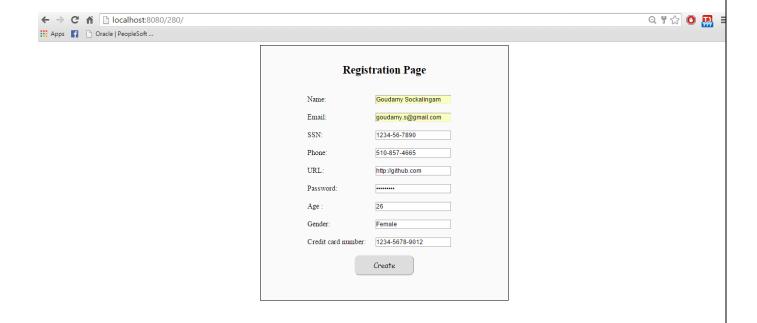
O clients connected (0 slaves), 1180104 bytes in use

DB 0: 2 keys (0 volatile) in 4 slots HT.

O clients connected (0 slaves), 1180104 bytes in use

DB 0: 2 keys (0 volatile) in 4 slots HT.
                18
18
18
18
18
18
18
                          Apr
Apr
Apr
Apr
Apr
Apr
Apr
364]
364]
                                         12:28:36
12:28:36
12:28:41
                                                                                O clients connected (O slaves), 1180104
DB O: 2 keys (O volatile) in 4 slots HT
                                         12:28:41
                           Apr
                                                                                0 clients connected (0 slaves), 1180104 bytes in use
```

Execute the registration page using Apache Tomcat7.0



The code for the program has the below set of code, to store values to Jedis.

```
Jedis jedis = new Jedis("localhost");
System.out.println("Storing values in Redis Cache");
//adding a new key
jedis.set("name", name);
jedis.set("email", email);
jedis.set("phone",phone);
jedis.set("ssn",ssn);
 jedis.set("url",url1);
jedis.set("gender", gender);
jedis.set("password",passwd);
jedis.set("credit", credit);
jedis.set("age",age);
 //getting the key value
bystem.out.println("values successfully stored in the below format");
 System.out.println("name
                           :"+jedis.get("name"));
 System.out.println("email :"+jedis.get("email"));
 System.out.println("phone :"+jedis.get("phone"));
 System.out.println("ssn
                            :"+jedis.get("ssn"));
 System.out.println("url
                           :"+jedis.get("url"));
 System.out.println("gender :"+jedis.get("gender"));
 System.out.println("password:"+jedis.get("password"));
 System.out.println("credit :"+jedis.get("credit"));
 System.out.println("age
                            :"+jedis.get("age"));
```

When the code is executed, the values are stored in Redis cache and they are displayed in the console.

```
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jdk1.8.0_40\bin\javaw.exe (Apr 18, 2015, 12:29:20 PM)
INFO: Initialization processed in 1547 ms
Apr 18, 2015 12:29:22 PM org.apache.catalina.core.StandardService startInternal
INFO: Starting service Catalina
Apr 18, 2015 12:29:22 PM org.apache.catalina.core.StandardEngine startInternal
INFO: Starting Servlet Engine: Apache Tomcat/7.0.47
Apr 18, 2015 12:29:24 PM org.apache.catalina.util.SessionIdGenerator createSecureRandom
INFO: Creation of SecureRandom instance for session ID generation using [SHA1PRNG] took [892] milliseconds.
Apr 18, 2015 12:29:25 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["http-bio-8080"]
Apr 18, 2015 12:29:25 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["ajp-bio-8009"]
Apr 18, 2015 12:29:25 PM org.apache.catalina.startup.Catalina start
INFO: Server startup in 2432 ms
Storing values in Redis Cache
values successfully stored in the below format
       :Goudamy Sockalingam
name
email
        :goudamy.s@gmail.com
phone
       :510-857-4665
ssn
        :1234-56-7890
url
       :http://github.com
gender :Female
password:Test@1234
credit :1234-5678-9012
age
```

When the registration page is being executed, the number of clients is increased to 1 as shown below.

```
×
П
                                                                                                           C:\Users\goudamy\Desktop\64bit\redis-server.exe
                                                                                                                                   O clients connected (O slaves), 1180104 bytes in use DB 0: 2 keys (O volatile) in 4 slots HT.
O clients connected (O slaves), 1180104 bytes in use
                                                Apr 12:30:02
Apr 12:30:07
Apr 12:30:07
Apr 12:30:12
Apr 12:30:17
Apr 12:30:17
Apr 12:30:22
Apr 12:30:22
Apr 12:30:22
Apr 12:30:23
Apr 12:30:31
Apr 12:30:32
                                                                                                                                   DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
DB 0: 2 keys (0 volatile) in 4 slots HT.

0 clients connected (0 slaves), 1180104 bytes in use
                                18
18
        364]
364]
                                 18
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                                                                                                                                  O clients connected (O slaves), 1180104 bytes in use DB 0: 2 keys (O volatile) in 4 slots HT.
O clients connected (O slaves), 1180104 bytes in use DB 0: 2 keys (O volatile) in 4 slots HT.
O clients connected (O slaves), 1180104 bytes in use Accepted 127.0.0.1:51303
DB 0: 11 keys (O volatile) in 16 slots HT.
1 clients connected (O slaves), 1189408 bytes in use DB 0: 11 keys (O volatile) in 16 slots HT.
1 clients connected (O slaves), 1189408 bytes in use DB 0: 11 keys (O volatile) in 16 slots HT.
1 clients connected (O slaves), 1189408 bytes in use DB 0: 11 keys (O volatile) in 16 slots HT.
1 clients connected (O slaves), 1189408 bytes in use DB 0: 11 keys (O volatile) in 16 slots HT.
1 clients connected (O slaves), 1189408 bytes in use DR 0: 11 keys (O volatile) in 16 slots HT.
                                18
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                                  18
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                                 18
18
                                   \overline{18}
                                                 Apr 12:30:42
Apr 12:30:47
Apr 12:30:47
Apr 12:30:47
                                18
18
18
                                                                      12:30:52
12:30:57
12:30:57
                                                                                                                                    1 clients connected (0 slaves), 1189408 bytes in use
DB 0: 11 keys (0 volatile) in 16 slots HT.
1 clients connected (0 slaves), 1189408 bytes in use
                                                   Apr
                                                  Apr
Apr
```