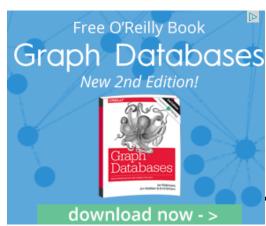
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# **Android MySQL Tutorial to Perform Basic CRUD Operation**

October 24, 2015 by Belal Khan - 97 Comments



I got mails regarding Android MySQL Connection Problems. So I am writing this tutorial. In this Android MySQL Tutorial we will cover the basic CRUD (Create, Read, Update and Delete) Operation. So that you will be able to handle MySQL Database after going through this tutorial.

# Video Demonstration of the Final Output

Before moving ahead you can check this video to know what you will be creating.

Android App to Perform CRUD Operation in MySQL Data...







# **Prerequisites - Android MySQL Tutorial**

- Android Studio (Though you can do the same with eclipse)
- Wamp / Xamp Server (You can also use a live hosting server)

# **Creating the MySQL Database**

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- As you can see I have a table named **employee** with 4 columns (id, name, designation, salary). Id is set auto increment and primary key so we do not need to insert id.
- Now we will create our php scripts.

# **Creating PHP Scripts**

• The first thing we need is to connect to the database. So create a file named **dbConnect.php** and write the following code.

```
<?php
2
3
    author: Belal Khan
    website: https://www.simplifiedcoding.net
5
    My Database is androiddb
    you need to change the database name rest the things are default if you are using wamp or xampp server
8
    You may need to change the host user name or password if you have changed the defaults in your server
9
10
11
    //Defining Constants
    define('HOST','localhost');
    define('USER','root');
define('PASS','');
13
14
15
    define('DB','androiddb');
16
17
    //Connecting to Database
    $con = mysqli connect(HOST, USER, PASS, DB) or die('Unable to Connect');
```

- Now in CRUD the first thing is to insert data (Create)
- So create a file name **addEmp.php**. This script will add an employee.

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```
//Closing the database
mysqli_close($con);
}
```

- Now after adding an employee we will fetch the name and id of all the employees. So that user can select a particular employee to see all the details of that employee.
- For this create a new file named **getAllEmp.php** and write the following code.

```
<?php
2
    //Importing Database Script
3
    require_once('dbConnect.php');
5
    //Creating sql query
    $sql = "SELECT * FROM employee";
6
7
8
    //getting result
9
    $r = mysqli_query($con,$sql);
10
11
    //creating a blank array
12
    $result = array();
13
    //looping through all the records fetched
14
15
    while($row = mysqli_fetch_array($r)){
16
17
    //Pushing name and id in the blank array created
18
    array push($result, array(
19
     "id"=>$row['id'],
    "name"=>$row['name']
20
21
    ));
22
23
24
    //Displaying the array in json format
25
    echo json_encode(array('result'=>$result));
26
    mysqli_close($con);
```

• Now we need to display a selected employee. For this create a new file named **getEmp.php** and write the following code.

```
<?php
3
    //Getting the requested id
    $id = $_GET['id'];
6
    //Importing database
7
    require_once('dbConnect.php');
9
    //Creating sql query with where clause to get an specific employee
10
    $sql = "SELECT * FROM employee WHERE id=$id";
11
12
    //aettina result
13
    $r = mysqli_query($con,$sql);
14
15
    //pushing result to an array
16
    $result = array();
17
    $row = mysqli_fetch_array($r);
18
    array_push($result,array(
19
    "id"=>$row['id'],
                                                                                            search this website
```

20| my3411 01030(40011);

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• Now in CRUD we have completed (**C**-Create (Insert) and **R**-Read(Fetch)) the next is **U**-Update. We may need to update the details of an existing employee. For this create a new file named **updateEmp.php** and write the following code.

```
<?php
    if($_SERVER['REQUEST_METHOD']=='POST'){
    //Getting values
3
    $id = $ POST['id'];
    $name = $_POST['name'];
5
    $desg = $ POST['desg'];
    $sal = $_POST['salary'];
8
9
    //importing database connection script
10
    require_once('dbConnect.php');
11
    //Creating sql query
13
    $$\text{sql} = "UPDATE employee SET name = '\$name', designation = '\$desg', salary = '\$sal' WHERE id = \$id;";
14
15
    //Updating database table
16
    if(mysqli_query($con,$sql)){
17
    echo 'Employee Updated Successfully';
18
    }else{
19
    echo 'Could Not Update Employee Try Again';
20
21
22
    //closing connection
23
    mysqli_close($con);
24
```

• Now the final thing which is **D**-Delete. We may need to delete an existing employee. For this create a new file named **deleteEmp.php** and write the following.

```
<?php
    //Getting Id
    $id = $_GET['id'];
3
5
    //Importing database
6
    require_once('dbConnect.php');
7
8
    //Creating sql query
    $sql = "DELETE FROM employee WHERE id=$id;";
9
10
    //Deleting record in database
11
12
    if(mysqli_query($con,$sql)){
    echo 'Employee Deleted Successfully';
14
    }else{
15
    echo 'Could Not Delete Employee Try Again';
16
17
18
    //closing connection
    mysqli close($con);
```

• Now thats all we have created all the scripts for CRUD operation. Now we need the address of these scripts. In my case I am using wamp server. And my server is running in my ip -> http://192.168.94.1 search this website

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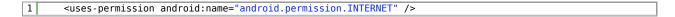
• So I am using wamp server and for wamp the root directory is www (usually c:/wamp/www). And I stored my scripts inside www/Android/CRUD. So the paths to my scripts would be

#### http://192.168.94.1/Android/CRUD/file\_name.php

• This is for my case. You have to know the correct url according to your system. Now thats all for the server side part. Lets move to **android studio**.

# **Creating an Android Studio Project**

- Create a new **Android Studio** project. For this Android MySQL Tutorial I have created my project named **MySQLCRUD**.
- In this Android MySQL Application we will be performing some network operations we need internet permission. So add internet permission to your manifest file.





• Now create a new java class inside your package named **Config.** And write the following code.

```
package net.simplifiedcoding.mysqlcrud;

/**

4 * Created by Belal on 10/24/2015.

*/
public class Config {

//Address of our scripts of the CRUD
public static final String URL_ADD="http://192.168.94.1/Android/CRUD/addEmp.pho"; search this website
```

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```
19
       public static final String KEY_EMP_SAL = "salary";
20
       //JSON Tags
21
22
       public static final String TAG_JSON_ARRAY="result";
23
       public static final String TAG_ID = "id";
24
       public static final String TAG_NAME = "name";
25
       public static final String TAG_DESG = "desg";
26
       public static final String TAG SAL = "salary";
27
       //employee id to pass with intent
28
       public static final String EMP_ID = "emp_id";
29
30
```

• We will create a separate class for handling our networking request. So create a new class inside your package named **RequestHandler**. And write the following code.

```
package net.simplifiedcoding.mysqlcrud;
   import java.io.BufferedReader;
   import java.io.BufferedWriter;
4
5
   import java.io.InputStreamReader;
    import java.io.OutputStream;
    import java.io.OutputStreamWriter;
    import java.io.UnsupportedEncodingException;
    import java.net.HttpURLConnection;
    import java.net.URL;
10
    import java.net.URLEncoder;
    import java.util.HashMap;
12
13
   import java.util.Map;
14
   import javax.net.ssl.HttpsURLConnection;
15
16
17
    * Created by Belal on 10/24/2015.
18
    */
19
20
   public class RequestHandler {
21
22
23
        //Method to send httpPostRequest
24
        //This method is taking two arguments
25
        //First argument is the URL of the script to which we will send the request
26
        //Other is an HashMap with name value pairs containing the data to be send with the request
27
        public String sendPostRequest(String requestURL,
28
                                       HashMap<String, String> postDataParams) {
29
            //Creating a URL
30
            URL url;
31
32
            //StringBuilder object to store the message retrieved from the server
            StringBuilder sb = new StringBuilder();
33
34
            try {
35
                //Initializing Url
                url = new URL(requestURL);
36
37
38
                //Creating an httmlurl connection
39
                HttpURLConnection conn = (HttpURLConnection) url.openConnection();
40
41
                //Configuring connection properties
                conn.setReadTimeout(15000);
42
43
                conn.setConnectTimeout(15000);
44
                conn.setRequestMethod("POST");
45
                conn.setDoInput(true);
                conn.setDoOutput(true);
46
                                                                                            scardii tiiis website
```

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```
witter . witte(getiostbatastitig(postbatai arams//,
56
57
                 writer.flush();
                 writer.close();
59
                 os.close():
60
                 int responseCode = conn.getResponseCode();
61
                 if (responseCode == HttpsURLConnection.HTTP_OK) {
62
63
                     BufferedReader br = new BufferedReader(new InputStreamReader(conn.getInputStream()));
64
65
                     sb = new StringBuilder();
66
                     String response;
67
                     //Reading server response
                     while ((response = br.readLine()) != null){
68
69
                         sb.append(response);
70
71
                }
72
73
             } catch (Exception e) {
74
                 e.printStackTrace();
75
76
             return sb.toString();
77
        }
78
79
        public String sendGetRequest(String requestURL){
             StringBuilder sb =new StringBuilder();
80
81
82
                 URL url = new URL(requestURL);
                 HttpURLConnection con = (HttpURLConnection) url.openConnection();
83
84
                 BufferedReader bufferedReader = new BufferedReader(new InputStreamReader(con.getInputStream()))
85
86
                 String s;
87
                 while((s=bufferedReader.readLine())!=null){
88
                     sb.append(s+"\n");
89
90
             }catch(Exception e){
91
92
             return sb.toString();
93
        }
94
95
        public String sendGetRequestParam(String requestURL, String id){
             StringBuilder sb =new StringBuilder();
96
97
98
                 URL url = new URL(requestURL+id);
99
                HttpURLConnection con = (HttpURLConnection) url.openConnection();
                 BufferedReader bufferedReader = new BufferedReader(new InputStreamReader(con.getInputStream()))
100
101
102
                 String s:
                while((s=bufferedReader.readLine())!=null){
103
104
                     sb.append(s+"\n");
105
106
             }catch(Exception e){
107
108
             return sb.toString();
109
110
        private String getPostDataString(HashMap<String, String> params) throws UnsupportedEncodingException {
111
112
             StringBuilder result = new StringBuilder();
113
             boolean first = true;
             for (Map.Entry<String, String> entry : params.entrySet()) {
114
115
                 if (first)
116
                     first = false;
117
                 else
118
                     result.append("&");
119
120
                 result.append(URLEncoder.encode(entry.getKey(), "UTF-8"));
                                                                                             search this website
```

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- For our application we will need two more activities other than our **MainActivity**. One is to show the list of all employee from where user can select a particular employee to see. And the other one is to show the details of selected employee from where we can update and delete the employee as well. And from the **MainActivity** we will add an employee. So before going further create two more activities named **ViewAllEmployee** and **ViewEmployee**.
- Now for **activity\_main.xml** create the following layout



Use the following xml code for the above layout

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
        xmlns:tools="http://schemas.android.com/tools" android:layout_width="match_parent"
        android:orientation="vertical'
3
4
       android:layout_height="match_parent" android:paddingLeft="@dimen/activity_horizontal_margin"
       android:paddingRight="@dimen/activity_horizontal_margin"
5
       android:paddingTop="@dimen/activity_vertical_margin"
6
7
       android:paddingBottom="@dimen/activity_vertical_margin" tools:context=".MainActivity">
8
9
10
           android:layout_width="wrap_content"
11
           android:layout_height="wrap_content"
12
           android:text="Employee Name" />
13
14
15
           android:layout width="match parent"
           android:layout_height="wrap_content"
16
17
           android:id="@+id/editTextName" />
18
19
20
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
21
           android:text="Designation" />
22
23
24
        <EditText
25
           android:layout_width="match_parent"
26
           android:layout height="wrap content"
27
           android:id="@+id/editTextDesg" />
28
29
           android:layout_width="wrap_content"
30
31
           android:layout_height="wrap_content"
32
           android:text="Salary" />
33
34
        <EditText
35
           android:layout_width="match_parent"
                                                                                             search this website
```

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• Write the following code in MainActivity.java

```
package net.simplifiedcoding.mysqlcrud;
   import android.app.ProgressDialog;
   import android.content.Intent;
   import android.os.AsyncTask;
   import android.support.v7.app.AppCompatActivity;
   import android.os.Bundle;
   import android.view.Menu;
   import android.view.MenuItem;
   import android.view.View;
11
   import android.widget.Button;
   import android.widget.EditText;
   import android.widget.Toast;
14
15
   import java.util.HashMap;
16
17
   public class MainActivity extends AppCompatActivity implements View.OnClickListener{
18
19
        //Defining views
20
        private EditText editTextName;
21
        private EditText editTextDesg;
22
        private EditText editTextSal;
23
24
        private Button buttonAdd;
25
        private Button buttonView;
26
27
28
        protected void onCreate(Bundle savedInstanceState) {
29
            super.onCreate(savedInstanceState);
30
            setContentView(R.layout.activity_main);
31
32
            //Initializing views
33
            editTextName = (EditText) findViewById(R.id.editTextName);
            editTextDesg = (EditText) findViewById(R.id.editTextDesg);
editTextSal = (EditText) findViewById(R.id.editTextSalary);
34
35
36
37
            buttonAdd = (Button) findViewById(R.id.buttonAdd);
38
            buttonView = (Button) findViewById(R.id.buttonView);
39
40
            //Setting listeners to button
41
            buttonAdd.setOnClickListener(this);
42
            buttonView.setOnClickListener(this);
43
        }
44
45
46
        //Adding an employee
47
        private void addEmployee(){
48
49
            final String name = editTextName.getText().toString().trim();
50
            final String desg = editTextDesg.getText().toString().trim();
51
            final String sal = editTextSal.getText().toString().trim();
52
53
            class AddEmployee extends AsyncTask<Void,Void,String>{
                                                                                                search this website
```

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```
63
                 @Override
64
                 protected void onPostExecute(String s) {
65
                     super.onPostExecute(s);
66
                     loading.dismiss();
                     Toast.makeText(MainActivity.this,s,Toast.LENGTH_LONG).show();
67
68
69
                 @Override
70
71
                 protected String doInBackground(Void... v) {
                     HashMap<String, String> params = new HashMap<>();
params.put(Config.KEY_EMP_NAME, name);
72
73
                     params.put(Config.KEY EMP DESG, desg);
75
                     params.put(Config.KEY_EMP_SAL,sal);
76
77
                     RequestHandler rh = new RequestHandler();
                     String res = rh.sendPostRequest(Config.URL_ADD, params);
78
79
                     return res;
80
                 }
81
            }
82
83
            AddEmployee ae = new AddEmployee();
84
            ae.execute();
85
86
87
        @Override
88
        public void onClick(View v) {
89
            if(v == buttonAdd){
90
                 addEmployee();
91
92
            if(v == buttonView){
93
94
                 startActivity(new Intent(this, ViewAllEmployee.class));
95
96
        }
97
```

- Now from this activity we will move to the activity **ViewAllEmployee**. So create the following layout in ViewAllEmployee's layout file which is **activity\_view\_all\_employee.xml**.
- In this activity we will create a **ListView** only.



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```
android:paddingTop="@dimen/activity_vertical_margin"
       android:paddingBottom="@dimen/activity_vertical_margin"
8
       tools:context="net.simplifiedcoding.mysqlcrud.ViewAllEmployee">
9
10
        <ListView
11
12
           android:layout_width="match_parent"
           android:layout_height="wrap_content"
13
           android:id="@+id/listView" />
14
15
16
17
   </LinearLayout>
```

• Because we are creating a **ListView**, we need one more Layout Resource File for our ListView. Inside layouts create a new xml file named **list\_item.xml** and write the following code.

```
<?xml version="1.0" encoding="utf-8"?>
    <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
        android:orientation="vertical" android:layout width="match parent"
4
       android:layout_height="match_parent">
5
6
       <TextView
7
            android:id="@+id/id"
8
            android:layout_width="wrap_content"
9
            android:layout_height="wrap_content" />
10
11
        <TextView
            android:id="@+id/name"
12
            android:layout_width="wrap_content"
13
14
            android:layout_height="wrap_content" />
15
   </LinearLayout>
```

Now write the following code in ViewAllEmployee.java

```
package net.simplifiedcoding.mysqlcrud;
3
   import android.app.ProgressDialog;
   import android.content.Intent;
5
   import android.os.AsyncTask;
    import android.support.v7.app.AppCompatActivity;
   import android os Bundle;
   import android.view.Menu;
    import android.view.MenuItem;
   import android.view.View;
10
   import android.widget.AdapterView;
11
    import android.widget.ListAdapter;
   import android.widget.ListView;
13
14
    import android.widget.SimpleAdapter;
15
    import android.widget.Toast;
16
17
   import org.json.JSONArray;
    import org.json.JSONException;
18
   import org.json.JSONObject;
19
20
21
    import java.util.ArrayList;
22
   import java.util.HashMap;
23
24
    public class ViewAllEmployee extends AppCompatActivity implements ListView.OnItemClickListener {
25
                                                                                           search this website
```

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```
35
            listView.setOnItemClickListener(this);
36
            aetJSON():
37
        }
38
39
40
        private void showEmployee(){
41
            JSONObject jsonObject = null;
            ArrayList<HashMap<String,String>> list = new ArrayList<HashMap<String, String>>();
42
43
            try {
44
                jsonObject = new JSONObject(JSON STRING);
                JSONArray result = jsonObject.getJSONArray(Config.TAG_JSON_ARRAY);
45
46
47
                for(int i = 0; i<result.length(); i++){</pre>
48
                     JSONObject jo = result.getJSONObject(i);
49
                     String id = jo.getString(Config.TAG ID);
50
                     String name = jo.getString(Config.TAG_NAME);
51
52
                     HashMap<String, String> employees = new HashMap<>();
                     employees.put(Config.TAG_ID,id);
53
54
                     employees.put(Config.TAG_NAME, name);
55
                     list.add(employees);
                }
56
57
58
            } catch (JSONException e) {
59
                e.printStackTrace();
60
61
62
            ListAdapter adapter = new SimpleAdapter(
63
                     ViewAllEmployee.this, list, R.layout.list_item,
                     new String[]{Config.TAG_ID,Config.TAG_NAME},
64
65
                     new int[]{R.id.id, R.id.name});
66
67
            listView.setAdapter(adapter);
68
        }
69
70
        private void getJSON(){
71
            class GetJSON extends AsyncTask<Void,Void,String>{
72
73
                ProgressDialog loading;
74
                @Override
75
                protected void onPreExecute() {
76
                     super.onPreExecute():
77
                     loading = ProgressDialog.show(ViewAllEmployee.this, "Fetching Data", "Wait...", false, false);
78
79
                @Override
81
                protected void onPostExecute(String s) {
82
                     super.onPostExecute(s);
83
                     loading.dismiss();
84
                     JSON STRING = s;
85
                     showEmployee();
                }
87
88
                protected String doInBackground(Void... params) {
89
                    RequestHandler rh = new RequestHandler();
90
91
                     String s = rh.sendGetRequest(Config.URL_GET_ALL);
92
                    return s;
93
94
95
            GetJSON gj = new GetJSON();
96
            gj.execute();
97
98
99
        @Override
                                                                                             search this website
```

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• Now from this screen user can select a particular employee to see the detail. And from this activity we will move to the next activity where we can delete or update employee. So create following layout for your activity ViewEmployee. For this activity I have **activity\_view\_employee.xml**. So we will create the following layout.



• Write the following code in ViewEmployee.java

```
package net.simplifiedcoding.mysqlcrud;
   import android.app.ProgressDialog;
    import android.content.DialogInterface;
   import android.content.Intent;
   import android.os.AsyncTask;
   import android.support.v7.app.AlertDialog;
   import android.support.v7.app.AppCompatActivity;
   import android.os.Bundle;
10
    import android.view.Menu;
11
   import android.view.MenuItem;
   import android.view.View;
12
13
   import android.widget.Button;
14
    import android.widget.EditText;
15
   import android.widget.Toast;
16
17
   import org.json.JSONArray;
   import org.json.JSONException;
18
19
   import org.json.JSONObject;
20
21
   import java.util.HashMap;
22
23
    public class ViewEmployee extends AppCompatActivity implements View.OnClickListener {
24
25
        private EditText editTextId;
26
        private EditText editTextName;
27
        private EditText editTextDesq;
28
        private EditText editTextSalary;
29
30
        private Button buttonUpdate:
31
        private Button buttonDelete;
32
                                                                                           search this website
```

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```
42
             id = intent.getStringExtra(Config.EMP_ID);
43
44
             editTextId = (EditText) findViewById(R.id.editTextId);
             editTextName = (EditText) findViewById(R.id.editTextName);
editTextDesg = (EditText) findViewById(R.id.editTextDesg);
45
46
47
             editTextSalary = (EditText) findViewById(R.id.editTextSalary);
48
             buttonUpdate = (Button) findViewById(R.id.buttonUpdate);
49
             buttonDelete = (Button) findViewById(R.id.buttonDelete);
51
52
             buttonUpdate.setOnClickListener(this);
53
             buttonDelete.setOnClickListener(this);
54
55
             editTextId.setText(id);
56
57
             getEmployee();
58
         }
59
         private void getEmployee(){
60
61
             class GetEmployee extends AsyncTask<Void,Void,String>{
62
                 ProgressDialog loading;
                 @Override
63
64
                 protected void onPreExecute() {
65
                      super.onPreExecute();
                      loading = ProgressDialog.show(ViewEmployee.this, "Fetching...", "Wait...", false, false);
66
67
68
69
                 @Override
70
                 protected void onPostExecute(String s) {
71
                      super.onPostExecute(s);
72
                      loading.dismiss();
73
                      showEmployee(s);
74
                 }
75
76
77
                 protected String doInBackground(Void... params) {
78
                      RequestHandler rh = new RequestHandler();
79
                      String s = rh.sendGetRequestParam(Config.URL GET EMP,id);
80
                      return s:
81
82
             GetEmployee ge = new GetEmployee();
83
84
             ge.execute();
85
         }
86
87
         private void showEmployee(String json){
88
                 JSONObject jsonObject = new JSONObject(json);
89
90
                  JSONArray result = jsonObject.getJSONArray(Config.TAG_JSON_ARRAY);
91
                 JSONObject c = result.getJSONObject(0);
92
                 String name = c.getString(Config.TAG NAME);
93
                 String desg = c.getString(Config.TAG_DESG);
94
                 String sal = c.getString(Config.TAG_SAL);
95
96
                 editTextName.setText(name);
97
                 editTextDesg.setText(desg);
98
                 editTextSalary.setText(sal);
99
100
             } catch (JSONException e) {
101
                 e.printStackTrace();
102
103
         }
104
105
106
         private void updateEmployee(){
                                                                                                search this website
```

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```
116
                     loading = ProgressDialog.show(ViewEmployee.this, "Updating...", "Wait...", false, false);
                 }
117
118
119
                 @Override
                 protected void onPostExecute(String s) {
120
121
                     super.onPostExecute(s);
122
                     loading.dismiss();
123
                     Toast.makeText(ViewEmployee.this,s,Toast.LENGTH LONG).show();
124
125
126
                 @Override
                 protected String doInBackground(Void... params) {
127
                     HashMap<String,String> hashMap = new HashMap<>();
hashMap.put(Config.KEY_EMP_ID,id);
128
129
130
                     hashMap.put(Config.KEY EMP NAME, name);
131
                     hashMap.put(Config.KEY_EMP_DESG,desg);
132
                     hashMap.put(Config.KEY_EMP_SAL, salary);
133
134
                     RequestHandler rh = new RequestHandler();
135
136
                     String s = rh.sendPostRequest(Config.URL_UPDATE_EMP, hashMap);
137
138
                     return s;
139
                 }
140
             }
141
142
             UpdateEmployee ue = new UpdateEmployee();
143
             ue.execute();
144
        }
145
         private void deleteEmployee(){
146
147
             class DeleteEmployee extends AsyncTask<Void,Void,String> {
                 ProgressDialog loading;
148
149
150
                 @Override
                 protected void onPreExecute() {
151
152
                     super.onPreExecute();
153
                     loading = ProgressDialog.show(ViewEmployee.this, "Updating...", "Wait...", false, false);
154
155
156
                 @Override
157
                 protected void onPostExecute(String s) {
158
                     super.onPostExecute(s);
159
                     loading.dismiss();
                     Toast.makeText(ViewEmployee.this, s, Toast.LENGTH_LONG).show();
160
161
162
                 @Override
163
164
                 protected String doInBackground(Void... params) {
165
                     RequestHandler rh = new RequestHandler();
166
                     String s = rh.sendGetRequestParam(Config.URL DELETE EMP, id);
167
                     return s;
168
                 }
             }
169
170
             DeleteEmployee de = new DeleteEmployee();
171
172
             de.execute();
173
        }
174
175
         private void confirmDeleteEmployee(){
             AlertDialog.Builder alertDialogBuilder = new AlertDialog.Builder(this);
176
177
             alertDialogBuilder.setMessage("Are you sure you want to delete this employee?");
178
179
             alertDialogBuilder.setPositiveButton("Yes",
180
                     new DialogInterface.OnClickListener() {
                                                                                               search this website
```

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## SIMPLIFIED CODING

NOW DIGGOGINEOU LUCCIONICITENCIA CONCUENTA 190 @Override 191 public void onClick(DialogInterface arg0, int arg1) { 192 193 }); 194 195 196 AlertDialog alertDialog = alertDialogBuilder.create(); 197 alertDialog.show(); 198 199 200 @Override public void onClick(View v) { 201 if(v == buttonUpdate){ 202 203 updateEmployee(); 204 205 if(v == buttonDelete){ 206 207 confirmDeleteEmployee(); 208 209 } 210

**ABOUT** 

**CONTACT US** 

• Now try running your application and you will see the following output.

Android App to Perform CRUD Operation in MySQL Data...





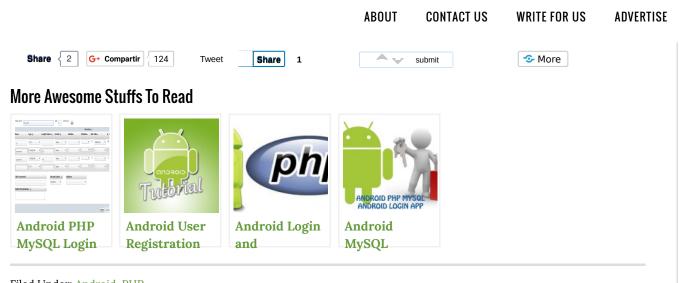


• If you need my source code then you can get it from here

Android MySQL Tutorial to Perform Basic CRUD Operation (1094 downloads)

So thats all for this Android MySQL tutorial friends. Share this Android MySQL tutorial among your friends if you found it useful and Stay tuned for more android tutorials. Thank You 🙂

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Filed Under: Android, PHP

Tagged With: android app mysql, android connect to mysql, android mysql, android mysql tutorial



### **About Belal Khan**

I am Belal Khan, I am currently pursuing my MCA. In this blog I write tutorials and articles related to coding, app development, android etc.

## **Comments**

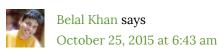


Ruddi says

October 25, 2015 at 6:39 am

How do i also retrive image from the same table if the imge is stored as a link in the table?

Reply



I have written tutorials for retrieving as well.. you can check these

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Ruddi says

October 25, 2015 at 6:46 am

thanks you're awesome

Reply



Ruddi says

October 25, 2015 at 7:34 am

If i want to create i collum in the same table called image and i store an image as a link how do i retrive that image if i want to use this tut.?

Reply



Belal Khan **says** October 25, 2015 at 7:44 am

Just add a new field in json named image url .. and get the url of image.. and then with the URL you can show the image.

Reply



Ruddi says

October 25, 2015 at 9:23 am

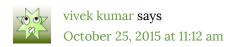
is it possible that you can show me how?



Ruddi says

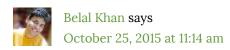
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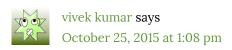
Sir,can u tell me how to create a login with sheared preference. In other word i want to say that if a user logged in then before any activity application checks wheather user is logged in or not and how to add logout.

### Reply



Ok i will post a tutorial for this asap

### Reply



Thank u sir, i am waiting for that tutorial.

Reply



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Reply



Josh says

October 26, 2015 at 8:34 am

Mr. Belal Khan.. Thank you for this tutorial. But I got a problem. When i click View Button it says "Unfortunately, MySQLCRUD has stopped". I'm sucssesfully add data to mysql. Please help me Mr. Belal Khan

Reply



Belal Khan **says** October 26, 2015 at 8:36 am

Check the logcat for the exact error

Reply



achoda says

October 26, 2015 at 10:26 pm

hey, thank you but i have tried and its not working out, it displays a small black circle at the bottom and nothing is inserted into the database. what could be the problem?

Reply

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Reply



Belal Khan **says** October 27, 2015 at 4:17 am

What server you are using? A live webserver of wamp or xampp server??

Reply



achoda says October 27, 2015 at 5:29 am

am using xampp

Reply



Belal Khan **says** October 27, 2015 at 6:10 am

Then you tell me first where you are running your app in the emulator or in your phone directly..

If you are using your phone to test the app.. Then it will not work because your phone cannot access xampp directly...

Now if you are using emulator then you have to check whether your emulator can access your local server or not...

to check this first go to your command prompt if you are using windows.. then type ipconfig.. make sure your xampp server is running while doing this..

You will see many ips there

Now open browser in your android emulator.. and in the address bar write this http://192.168.94.1/your\_scripts\_directory\_in\_htdocs

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scripts or not...

Reply



emulator is slow in my pc, it takes too long, what else can i use

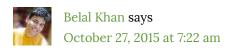


can the genymotion emulator work



can a phone access wamp, should i install wamp?. which server can a phone access?

Reply



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Use hostinger.in for a free hosting

Reply



achoda says

October 27, 2015 at 7:48 am

will it work with a phone.

Reply



achoda says

October 27, 2015 at 8:13 am

i have never used hostinger before, can you help me with some procedures

Reply



Belal Khan says

October 27, 2015 at 8:19 am

You can see the procedure of using hostinger here ->

https://www.simplifiedcoding.net/php-android-tutorial-part-1/

Hostinger will work with your phone because it is a live server and with the URL anyone can access.. You just make sure that your phone has an active internet connection..

Reply



achoda says

October 27, 2015 at 8:20 am

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achoda says October 27, 2015 at 8:03 am

let me try. thanks, your soo great

Reply



faiz says October 27, 2015 at 2:47 pm

i am doing an android application that can register, login, update, view and delete. now iam a bit confuse as i unsuccessful to get the information from db to view and update them.. how to update the profile of login user. pretty sure after login, id will be retrieve. hope u can help

Reply



Belal Khan **says** October 27, 2015 at 3:48 pm

In this tutorial I have shown the method to update mysql row .. try it

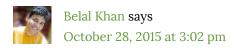
Reply



LEE CHEE PHANG says

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Your welcome keep visiting for more tutorials

Reply



### PRATHAP says

October 28, 2015 at 12:51 pm

Just blowed away bro..!! just trying for almost two days...bt you made it so simple...10 minutes job...bt it took more than a days count bt failed even...thankx bro...cheers (y)

#### Reply



Belal Khan **says** October 28, 2015 at 2:55 pm

Your welcome buddy... I am glad it helped you keep visiting for more tutorials 🙂

Reply



#### Marco says

October 28, 2015 at 9:59 pm

Hi Belal, I can't get items. I have a php which works out just fine (it works when I open it on the browser) and I finalise it with a print(json\_encode(array(\$output)));

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**ABOUT CONTACT US** WRITE FOR US **ADVERTISE** for(int i=0; i<jArray.length();i++){</pre> JSONObject json = jArray.getJSONObject(i); S = S +"Value1: "+json.getString("Value1")+"\n"+ "Value2: "+json.getString("Value2")+"\n"+ "Value3: "+json.getString("Value3")+" $\n\n$ "; } resultView.setText(s); Reply Belal Khan says October 29, 2015 at 2:05 am You just missed out this line JSONObject jsonobject = new JSONObject(your json string); //Then get array from this object JSONArray array = jsonobject.getJSONArray(your array name here); //Then run the loop Reply Marco says October 29, 2015 at 8:09 am Hi Belal, thanks but are you sure this is sufficient? try { String s = ""; search this website

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```
s = s +
"Value1: "+json.getString("Value1")+"\n"+
"Value2: "+json.getString("Value2")+"\n"+
"Value3: "+json.getString("Value3")+"\n\n";
}
resultView.setText(s);
still it does not work:/ Maybe the last statement should be "resultView.setText(result);"?
Reply
```



Marco says

October 29, 2015 at 8:14 am

edit: neither "resultView.setText(result);" does work, how incredible is it?

#### Reply



Belal Khan **says** October 29, 2015 at 8:28 am

you did the same thing again.. first you need to get the json object and then you can get the array..

See the code I have posted in the previous comment

Or you try downloading my project



Marco says

October 29, 2015 at 10:44 am

What about now?

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```
JSONObject obj1=arr.getJSONObject(i);

String Value1=obj1.getString("Value1");

String Value2=obj1.getString("Value2");

TextView.setText(Value1); //set TextView's content to the String Value1

TextView2.setText(Value2); //set TextView2's content to the String Value2

}
```



Awesome tutorial!! Thank you Belal!!

Reply



Thanks a lot.great one!!really easy to understand for beginner.

Reply

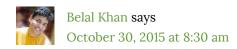


why im getting this error on your php script?

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Reply



I guess it is a problem with your database connection check dbconnect.PHP is working or not

Reply

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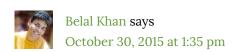
but this line of error i do not know how to fix this. and where exactly it is. can you help me

#### Reply



Can you share your PHP script (without the sensible information)?

### Reply



Download the source code from the link given you will get the php scripts as well



Hi, can i know get all employees name into spinner instead of listView? A spinner list just with employees name, how can i do that?

### Reply



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Reply



Mambo says

November 2, 2015 at 8:32 am

Hi. Thanx so much for the tutorials. it helps alot. Am kenyan developer and getting a fellow developer to ask foe help aint easy at all. I am having a problem receiving the json objects. as soon as i run the class to check data base the emulator shuts down, and real device force close. Writing to data base is ok.

Pliz help.

Reply



Belal Khan **says** November 2, 2015 at 8:34 am

I didn't get you tell me your exact problem

Reply



Nm says

November 2, 2015 at 1:24 pm

 $\mbox{H{\sc i}}$  , i got problem if you can help me with it please : ( . when i clicked on item it dose not move me to view Employee

it says "Unfortunately, MySQLCRUD has stopped"?

Reply

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#### Hello Friend,

First, thank you for the tutorial, continue on that path. second please ask something like this tutorial but using the library volley. third an important consultation. What do you use it?. for a database of over 1 million records. that database engine? What kind of library would use? this or volleyball? and why.

### Reply



If you are developing an application then use library .. i guess volley is the best I found so far.. and if you are learning use core methods shown in the tutorial

Reply



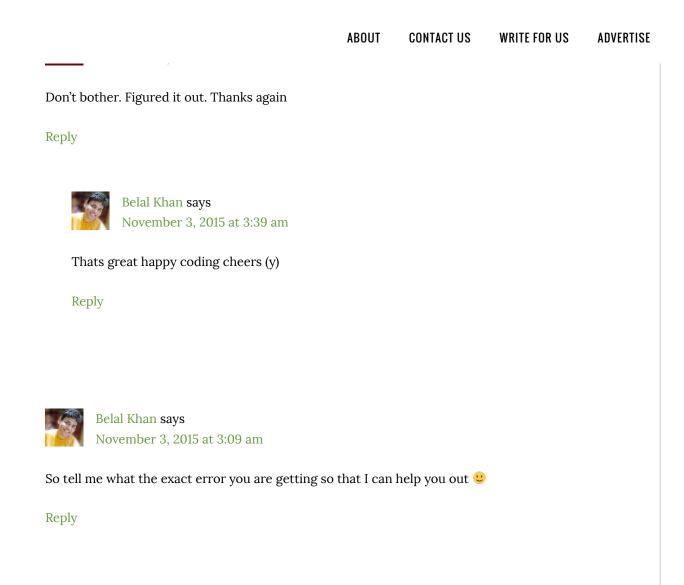
gunner says

November 3, 2015 at 2:55 am

ΗΙ

Thanks for the tute. I am able to work all the functions i.e. RUD except 'C'. Add employee is not working for me. Is it due to some permission required or something.

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following problem, it always failed when i try to fetch the datas, this also happened with your login and registration tutorial app that i downloaded before..all input were enter the database perfectly fine but seems like the app couldn't read it when i call the datas back..would you please help me..thank you so much

Reply



Shubham Yadav says November 4, 2015 at 5:18 pm

Hey thanks for the tutorial but i need ur help – see i compiled my source code as per u stated but now when i am debugging / running my app its shows the errors (somewhat 40 errors) in all the three Java Class that u told us to define –

- \* MainActivity
- \* ViewAllEmployee
- \*ViewEmployee

and for all of these classes the error is on some keywords like RequestHandler, sendGetRequestParam(Config.URL\_DELETE\_EMP, id), Config

#### Errors are:

cannot find symbol variable Config cannot find symbol variable KEY\_EMP\_SAL cannot find symbol class RequestHandler

etc....

For better info on exactly what the problem is i have uploaded a screenshot of IDE covering the errors and its suggestion .

https://drive.google.com/folderview?id=0BzPcbmh7-rcvOUQwOS16QlJqN00&usp=sharing

Please help me on this

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That is because you forgot to create the Config class.. See the tutorial carefully and create Config.java file where these constants are stored...

You have also forgot to create the RequestHandler class.. Follow the tutorial carefully

### Reply



Belal Khan **says** November 4, 2015 at 5:29 pm

You can also download my source code.

### Reply



Shubham Yadav says November 5, 2015 at 4:18 am

Thanks man .. Thanks a lot .. i found out the errors and corrected it and now it is working perfectly ... (y) keep up

Reply

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and didn't realize the project added "import com.squareup.picasso.RequestHandler" to my imports... Just an FYI if you happen to run into this issue with Request Handler.

Reply



HI, if i want input the chinese, but the DB display garbled...

How can I do? Please help me. Thanks

Reply

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insert large text like "a crazy fox jump over a lazy dog" only first letter A is getting inserted? i have set field type to LARGETEXT .can you please help me in this . thanks

#### Reply



the max size of my varchar is 100.. you can change it to 1000

#### Reply



Hi Belal

Another question:

Consider this code segment:

```
LinearLayout ll = (LinearLayout) findViewById(R.id.linear);
for (int i = 0; i < result.length(); i++) {
    JSONObject jo = result.getJSONObject(i);
    String pname = jo.getString(Config.TAG_PCKG_NAME);
    String price = rs + jo.getString(Config.TAG_PCKG_PRICE);
    String Tag= "debugger2";
    Log.i(Tag, pname);

HashMap employees = new HashMap();
    employees.put(Config.TAG_PCKG_NAME, pname);
    employees.put(Config.TAG_PCKG_PRICE, price);
    list.add(employees);
```

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If I try to do it through a R.Drawable.filename thing, it does not take the file name as a string.

Reply



Figured it out buddy, I needed to define a custom adapter in place of a simple adapter, posting the code here for the general good:

```
public class CustomAdapter extends SimpleAdapter{
private ArrayList<HashMap> results;
private final int∏ bcgImage;
public CustomAdapter(Context context,
ArrayList<HashMap> data, int resource,
String[] from, int[] to, int[] bcgImage) {
super(context, data, resource, from, to);
this.bcgImage = bcgImage;
this.results = data;
}
@Override
public View getView(int position, View view, ViewGroup parent) {
View v = view;
if (v == null) {
LayoutInflater inflater = (LayoutInflater) parent.getContext()
.getSystemService(Context.LAYOUT_INFLATER_SERVICE);
v = inflater.inflate(R.layout.list_item, null);
```

v.setBackgroundResource(bcgImage[position]);

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return v;
}
Reply



SHUBHAM YADAV says November 6, 2015 at 3:57 am

#### Hi Bilal,

There is one another doubt which i wanted to ask ... Suppose if we want to do this project on internet server instead of localhost. I know that all the php files along with database we have to create in online server and furthermore we have to modify code also but my doubt is that whether free hosting will allow this or not OR is there any restrictions while using free hosting. I have to do it for practice basis only ...

### Reply



Marco says

November 6, 2015 at 7:50 am

did you try hostinger

Reply



Shubham Yadav says November 6, 2015 at 8:15 am

yeah i tried but its not working so i am in confusion like whether free hosting allows the Direct MySQL connection or not  $\stackrel{\bigcirc}{=}$ 

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Did you set a doin or subdomain?

Reply



Ali Wajdan Ansari says November 6, 2015 at 11:25 am

I have done everything according to the tutorial and there are no errors but when I add an employee it does not show in the database and when I try to view employee data it does not show anything, any suggestions on what I am missing here. (I have filled the db with some data already but it does not show in the app)

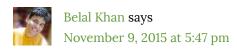
Reply



Hiren P says November 9, 2015 at 5:41 pm

Hey Belal, first off you are a genius lol! Keep up the great work and we will continue to learn from your amazing skills. Second, I am developing an application and was wondering if the source code you post on this site is open source. Can I legally use it in my application without any negative harm. Thank you once again and I am waiting on your reply!

Reply



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shana says November 10, 2015 at 2:21 am

#### AMAZING TUTORIALS!!!

I really appreciate your great work Mr. Belal.

Can I make a request??

I have a table in a live server that hosts the geolocations "name, latitude, longitude" of a number of moving objects. I would like to have a code that would fetch these values periodically from my database and then be able to plot them in a google map.

could you please help me in this?

At the very least, I am in need of the code that will fetch the values and parse the JSON objects before they are passed to a loop for plotting it with google maps markers. I would like to have the php code and the android code that deals with this particular problem...

my table is of the format:

cid: INT primary key

cname: VARCHAR "name of object"

clat: DOUBLE "latitude" clong: DOUBLE "longitude" sid: INT "for foreign key"

Thank you very much! I really appreciate your generosity and kindness!!

Shana

Reply

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Your tutorial has been a great help to a novice developer like me, Thanks for putting in the effort.

I need your advice. What do you think is the best way of implementing a Shopping cart. I have my items in a list view which on click opens a detailed page. There I have a button for add to cart. Now sould I save the information into a sqlite database or should I push it back into a mysql thing on the server or just create another list with global variables (just thinking out loud). A little help will be much appreciated.

Thanks

G

Reply



Marqus says

November 13, 2015 at 7:22 pm

I have been waiting for such tutorial so long.... but i have problem.

Pressing 'view employee' button results with blank screen.

PHP scripts on server are working corectly.

MySql database is on online server.

It seems like adapter won't display list\_item...

I'm using Gingerbread, may this be a problem?

Any ideas whats going on? Thanks.

Reply



Luis Diniz says

November 15, 2015 at 12:19 am

Hey Belal Khan, great job! But I ran into some problems, actually it's not working when I try to add a new employee and the application crashes when I try to see the employees. I think the reason for that it that I'm using MAMP (I'm also using genymotion) how do I connect my employees to the search this website

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Hiren says

November 16, 2015 at 5:54 pm

Hey Belal! How can we modify this tutorial so that when users log into an application they can retrieve certain data according to a foreign key constraint in the employee table? For example, when a user logs in he/she can only view data entries they created.

Reply



Aulia Rahmat Sagala says

November 17, 2015 at 9:16 am

Sir thank you so much for the tutorial. But there is a problem. I've followed all of the tutorial above (I use Android Studio and MySQL Database). But the form is blank (data did not displayed) when I clicked the listview of the data (want to change/update and delete). All of the php and android code are same like yours (I just change some of them because my app is Restaurant App, the difference is only in the variables). Can you tell me what is the problem? What should I do to fix this problem? Sorry for my English. Thank you sir.

Reply



Chong says

November 20, 2015 at 4:24 am

Sir.. how to insert the data that i selected from the Spinner into mysql?

Reply



Gil McGlory says

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others to do some of the work.. If you are interested, please let me know. Thanks.

Reply



Belal Khan **says** November 23, 2015 at 1:51 am

lets talk on facebook/Probelalkhan or google.com/+belalkhan to discuss further

Reply



faiz says

November 26, 2015 at 2:34 pm

hello belal. the tutorial is awesome, but i need to change a little bit of the coding. so instead of send id i send username.

Intent intent = getIntent();

user = intent.getStringExtra("user");

RequestHandler rh = new RequestHandler();

String s = rh.sendGetRequestParam(Config.URL\_GET\_USER,user);

return s;

i send session value into intend and pass here. but the info is not showing. update part is doing nice, just the retrieve problem. do you have any idea how to do it?

Reply



Chef Dennis says

November 27, 2015 at 11:19 am

Hi,

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host

If you are getting a blank toast that means your device cannot access your host.

you can also use a live web hosting server. use hostinger in to get a free hosting

Reply



Chef Dennis says

December 1, 2015 at 2:08 pm

Hi Belal thanks very much I have been able to access it. Now everything is working fine. Now to my real project, how do i get this to work when the database is on my collegue's server(mssql server). I have been able to run a php script that can communicate with his server and even do insertion, now i want my android app to do the insertion. tnx very much..

#### Reply



Chef Dennis says

December 1, 2015 at 4:41 pm

Hello it is me again just want to let u know i have been able to accomplish it. I just used an emulator which is on the same network. Thanks a lot. Hoping to get more tutorials from you.

Reply



Veer says

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please help me sir..

Reply



Aviral Bharadwaj says December 9, 2015 at 5:34 am

The project is crashing at start.

What may be the common problems related to crashing in this [ https://www.simplifiedcoding.net /android-mysql-tutorial-to-perform-basic-crud-operation/? ]

Kindly help me out I am near to my deadline.

Reply



Chef Dennis says

December 10, 2015 at 1:56 am

Hi, please i have been following this tuts and everything works fine. But i just want retrieve only one record into a text view not a listview. My php script is working fine but when i want to display on the android that particular textview is still empty

Reply



siid says

December 16, 2015 at 5:26 am

hi bilal ...my all code works fine but when i insert or add employee it cannot save in wamp server ,,,,plz tell me about this issue

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wauc says

December 19, 2015 at 11:30 am

HI Bilal, how can I add this code: mysql\_query("SET NAMES utf8;", \$db\_link); in dbConnect.php?

Reply



Belal Khan says

December 19, 2015 at 12:19 pm

It is deprecated you should not use this

Reply



wade says

December 19, 2015 at 5:39 pm

But I'm insert chinese, display garbled on MySQL....

like this è<¦å'³é;諤諤

Reply

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Your email address will not be published. Required fields are marked \*

Comment

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Hello I am Belal Khan, founder and owner of Simplified Coding. I am currently pursuing MCA from St. Xavier's College, Ranchi. I love to share my knowledge over Internet.

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