Android Upload Image using Android Upload Service

June 10, 2016 by Belal Khan -79 Comments

Hello guys, in this post I came up with an easy solution for uploading files from android to server. So today we will see an example of **Android Upload Image to Server**. I have already posted some example of **Android Upload Image** to Server previously. But in this post we will use **android upload service** for our Android Upload Image App. You can also check the previous tutorials I posted about uploading images from android to server from the given links.

- Android Volley Tutorial to Upload Image to Server
- Android Upload Image From Gallery With Text
- Android Upload Image to Server Using PHP MySQL

In this tutorial I will store the image file inside servers directory and in database I will store the URL of the image. For this I will use Android Upload Service library and it makes uploading files super easy. So lets see how we can do it. First we will create our server side codes.

Android Upload Image to Server Video Tutorial

• You can also go through this video tutorial to learn how to upload image from android to server.



Creating Server Side Codes for Android Upload Image

The first thing we need is to create our server side web services. For server side I am using PHP and MySQL. And for this I am using Wamp server. You can still use xampp or any other application. Now follow the steps to create your web service to handle the file upload.

SIMPLIFIED CODING



- Now inside your server's root directory (c:/wamp/www) and create a new folder. I created
 AndroidUploadImage.
- Inside the folder create a folder named **uploads**, in this folder we will save all the uploaded images.
- Create a file named **dbDetails.php** and write the following code.

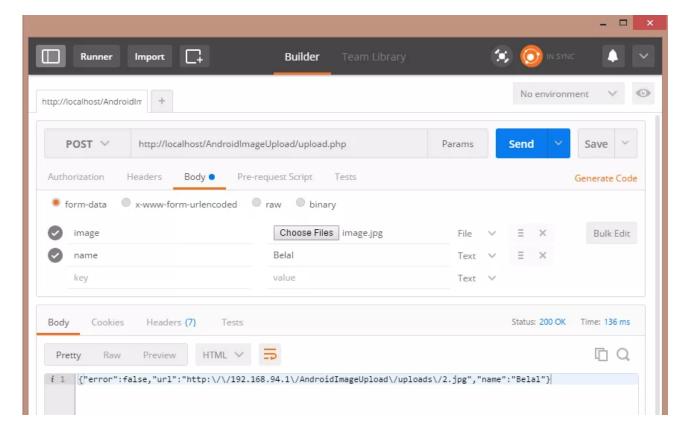
```
dbDetails.php

1 <?php
2 define('HOST','localhost');
3 define('USER','root');
4 define('PASS','');
5 define('DB','db_images');</pre>
```

• Now create a file named **upload.php** and write the following code.

```
upload.php
                                                                                                       PHP
 1 <?php
 2
 3
    //importing dbDetails file
 4
    require_once 'dbDetails.php';
 5
 6
    //this is our upload folder
 7
    $upload_path = 'uploads/';
 8
 9
    //Getting the server ip
    $server_ip = gethostbyname(gethostname());
10
11
12
    //creating the upload url
    $upload_url = 'http://'.$server_ip.'/AndroidImageUpload/'.$upload_path;
13
14
15
    //response array
16
    $response = array();
17
18
19
    if($_SERVER['REQUEST_METHOD']=='POST'){
20
21
    //checking the required parameters from the request
    if(isset($_POST['name']) and isset($_FILES['image']['name'])){
22
23
24
    //connecting to the database
    $con = mysqli_connect(HOST, USER, PASS, DB) or die('Unable to Connect...');
25
26
27
    //getting name from the request
    $name = $_POST['name'];
28
29
```

```
36
   //file url to store in the database
37
    $file_url = $upload_url . getFileName() . '.' . $extension;
38
39
   //file path to upload in the server
40
   $file_path = $upload_path . getFileName() . '.'. $extension;
41
42
   //trying to save the file in the directory
43 try{
44
   //saving the file
45
   move_uploaded_file($_FILES['image']['tmp_name'],$file_path);
46
   $sql = "INSERT INTO `db_images`.`images` (`id`, `url`, `name`) VALUES (NULL, '$file_url', '$name')
47
   //adding the path and name to database
48
   if(mysqli_query($con,$sql)){
49
50
51
  //filling response array with values
52 | $response['error'] = false;
53 $response['url'] = $file_url;
54 \response['name'] = \response;
55 }
56 //if some error occurred
57 }catch(Exception $e){
58 \response['error']=true;
59
   $response['message']=$e->getMessage();
60 }
61
   //displaying the response
62
   echo json_encode($response);
63
64 //closing the connection
65
   mysqli_close($con);
66 }else{
    $response['error']=true;
69
70 }
71
72
73
   We are generating the file name
74
    so this method will return a file name for the image to be upload
75
76
   function getFileName(){
77
    $con = mysqli_connect(HOST, USER, PASS, DB) or die('Unable to Connect...');
78
   $sql = "SELECT max(id) as id FROM images";
    $result = mysqli_fetch_array(mysqli_query($con,$sql));
79
80
81 mysqli_close($con);
82 if($result['id']==null)
83
   return 1;
   else
84
```



• If you are seeing the above response then. Your script is working fine. You can check the database and upload folder which you have created.



• So its working absolutely fine. Now lets move ahead and create a android project.

- Create a Android Studio Project.
- Create a class named **Constants.java** and write the following code. The following class contains the path to our php file which we created. You are seeing two strings. The second it the path to the file we will create at the end of this post.

```
Constants.java

1  package net.simplifiedcoding.androidimageupload;

2  /**

4  * Created by Belal on 6/10/2016.

5  */
6  public class Constants {

7   public static final String UPLOAD_URL = "http://192.168.94.1/AndroidImageUpload/upload.php";

8   public static final String IMAGES_URL = "http://192.168.94.1/AndroidImageUpload/getImages.php";

9 }
```

- You need to change the IP according to your system. To know the IP you can use IPCONFIG command
 in command prompt (windows user).
- Now we need to add android upload service to our project.

Adding Android Upload Service

 Go to your app level build.gradle file and add the following line inside dependencies block and sync your project.

```
dependencies {
   compile fileTree(dir: 'libs', include: ['*.jar'])
   testCompile 'junit:junit:4.12'
   compile 'com.android.support:appcompat-v7:23.4.0'

//Add this line
   compile 'net.gotev:uploadservice:2.1'
}
```

• Come to activity_main.xml and write the following xml code.

```
15
           android:gravity="center_horizontal"
16
           android:layout_width="match_parent"
17
           android:layout_height="wrap_content"
18
           android:orientation="horizontal">
19
20
           <Button
               android:id="@+id/buttonChoose"
21
                android:layout_width="wrap_content"
22
                android:layout_height="wrap_content"
23
                android:text="Select" />
24
25
26
           <EditText
27
               android:id="@+id/editTextName"
28
                android:hint="Name For Image"
29
               android:layout_weight="1"
30
                android:layout_width="wrap_content"
31
                android:layout_height="wrap_content" />
32
33
           <Button
34
               android:id="@+id/buttonUpload"
35
                android:layout_width="wrap_content"
36
                android:layout_height="wrap_content"
37
                android:text="Upload" />
38
39
       </LinearLayout>
40
41
       <ImageView
42
           android:id="@+id/imageView"
43
           android:layout_width="match_parent"
44
           android:layout_height="match_parent" />
45
46
47 </LinearLayout>
```

• The above code will generate the following layout.



- As you can see we have two buttons, one to select image and other to upload image. We also have an EditText to enter the name for the image.
- Now come to MainActivity.java and write the following code.

```
MainActivity.java
    package net.simplifiedcoding.androidimageupload;
  1
  2
  3 import android.Manifest;
  4 import android.content.Intent;
  5 import android.content.pm.PackageManager;
  6 import android.database.Cursor;
  7 import android.graphics.Bitmap;
  8 import android.net.Uri;
  9 import android.os.Bundle;
 10 import android.provider.MediaStore;
 11 import android.support.annotation.NonNull;
 12 import android.support.v4.app.ActivityCompat;
 13 import android.support.v4.content.ContextCompat;
    import android.support.v7.app.AppCompatActivity;
 14
 15 import android.view.View;
 16 import android.widget.Button;
    import android.widget.EditText;
    import android.widget.ImageView;
 18
    import android.widget.Toast;
 19
 20
    import net.gotev.uploadservice.MultipartUploadRequest;
 21
 22
    import net.gotev.uploadservice.UploadNotificationConfig;
 23
    import java.io.IOException;
    import java.util.UUID;
 25
 26
 27
    public class MainActivity extends AppCompatActivity implements View.OnClickListener {
```

```
34
35
       //Image request code
36
       private int PICK_IMAGE_REQUEST = 1;
37
38
       //storage permission code
39
       private static final int STORAGE_PERMISSION_CODE = 123;
40
       //Bitmap to get image from gallery
41
       private Bitmap bitmap;
42
43
44
       //Uri to store the image uri
       private Uri filePath;
45
46
       @Override
47
48
       protected void onCreate(Bundle savedInstanceState) {
49
           super.onCreate(savedInstanceState);
50
           setContentView(R.layout.activity_main);
51
52
           //Requesting storage permission
           requestStoragePermission();
53
54
           //Initializing views
55
56
           buttonChoose = (Button) findViewById(R.id.buttonChoose);
           buttonUpload = (Button) findViewById(R.id.buttonUpload);
57
58
           imageView = (ImageView) findViewById(R.id.imageView);
59
           editText = (EditText) findViewById(R.id.editTextName);
60
           //Setting clicklistener
61
62
           buttonChoose.setOnClickListener(this);
           buttonUpload.setOnClickListener(this);
63
64
       }
65
66
67
68
       * This is the method responsible for image upload
        * We need the full image path and the name for the image in this method
69
70
       public void uploadMultipart() {
71
72
           //getting name for the image
           String name = editText.getText().toString().trim();
73
74
           //getting the actual path of the image
75
           String path = getPath(filePath);
76
77
           //Uploading code
78
           try {
79
               String uploadId = UUID.randomUUID().toString();
80
81
82
               //Creating a multi part request
```

```
89
90
            } catch (Exception exc) {
91
                Toast.makeText(this, exc.getMessage(), Toast.LENGTH_SHORT).show();
92
            }
        }
93
94
95
        //method to show file chooser
96
97
        private void showFileChooser() {
98
            Intent intent = new Intent();
99
            intent.setType("image/*");
100
            intent.setAction(Intent.ACTION_GET_CONTENT);
            startActivityForResult(Intent.createChooser(intent, "Select Picture"), PICK_IMAGE_REQUEST)
101
102
        }
103
104
        //handling the image chooser activity result
105
        @Override
        protected void onActivityResult(int requestCode, int resultCode, Intent data) {
106
107
            super.onActivityResult(requestCode, resultCode, data);
108
109
            if (requestCode == PICK_IMAGE_REQUEST && resultCode == RESULT_OK && data != null && data.ge
                filePath = data.getData();
110
111
                try {
                    bitmap = MediaStore.Images.Media.getBitmap(getContentResolver(), filePath);
112
113
                     imageView.setImageBitmap(bitmap);
114
115
                } catch (IOException e) {
                    e.printStackTrace();
116
117
                }
118
            }
119
        }
120
121
        //method to get the file path from uri
122
        public String getPath(Uri uri) {
123
            Cursor cursor = getContentResolver().query(uri, null, null, null, null);
124
            cursor.moveToFirst();
125
            String document_id = cursor.getString(0);
            document_id = document_id.substring(document_id.lastIndexOf(":") + 1);
126
127
            cursor.close();
128
129
            cursor = getContentResolver().query(
                    android.provider.MediaStore.Images.Media.EXTERNAL_CONTENT_URI,
130
                    null, MediaStore.Images.Media._ID + " = ? ", new String[]{document_id}, null);
131
            cursor.moveToFirst();
132
            String path = cursor.getString(cursor.getColumnIndex(MediaStore.Images.Media.DATA));
133
            cursor.close();
134
135
136
            return path;
137
        }
```

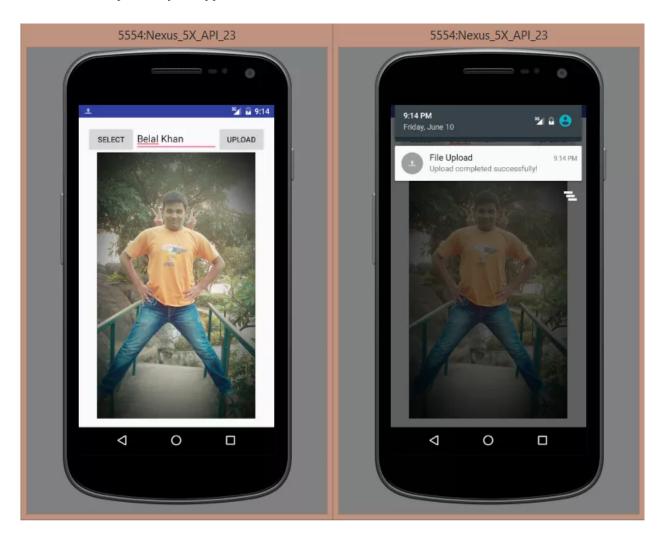
```
144
145
            if (ActivityCompat.shouldShowRequestPermissionRationale(this, Manifest.permission.READ_EXT
                //If the user has denied the permission previously your code will come to this block
146
                //Here you can explain why you need this permission
147
                //Explain here why you need this permission
148
149
            }
150
            //And finally ask for the permission
151
            ActivityCompat.requestPermissions(this, new String[]{Manifest.permission.READ_EXTERNAL_STON
152
        }
153
154
        //This method will be called when the user will tap on allow or deny
155
156
        public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions, @NonNul
157
158
159
            //Checking the request code of our request
            if (requestCode == STORAGE_PERMISSION_CODE) {
160
161
162
                //If permission is granted
                if (grantResults.length > 0 && grantResults[0] == PackageManager.PERMISSION_GRANTED) {
163
164
                     //Displaying a toast
                    Toast.makeText(this, "Permission granted now you can read the storage", Toast.LENG
165
166
                } else {
                    //Displaying another toast if permission is not granted
167
168
                    Toast.makeText(this, "Oops you just denied the permission", Toast.LENGTH_LONG).show
169
                }
170
            }
        }
171
172
173
174
        @Override
175
        public void onClick(View v) {
176
            if (v == buttonChoose) {
177
                showFileChooser();
178
            if (v == buttonUpload) {
179
180
                uploadMultipart();
181
182
        }
183
184
185 }
```

Finally add the storage and internet permission on your manifest.

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
```

```
9
       <application
10
           android:allowBackup="true"
           android:icon="@mipmap/ic_launcher"
11
           android:label="@string/app_name"
12
           android:supportsRtl="true"
13
14
           android:theme="@style/AppTheme">
15
           <activity android:name=".MainActivity">
               <intent-filter>
16
17
                    <action android:name="android.intent.action.MAIN" />
18
19
                   <category android:name="android.intent.category.LAUNCHER" />
20
               </intent-filter>
21
           </activity>
22
       </application>
23
24 </manifest>
```

• Thats it now just run your app.



write the following code.

```
PHP
getImages.php
1 <?php
2
3
    //Importing dbdetails file
    require_once 'dbDetails.php';
4
5
6
    //connection to database
7
    $con = mysqli_connect(HOST,USER,PASS,DB) or die('Unable to Connect...');
8
9
    //sql query to fetch all images
    $sql = "SELECT * FROM images";
10
11
12
    //getting images
13
    $result = mysqli_query($con,$sql);
14
15
   //response array
   $response = array();
16
17
    $response['error'] = false;
18
    $response['images'] = array();
19
20
   //traversing through all the rows
21
   while($row = mysqli_fetch_array($result)){
22
   $temp = array();
23
   $temp['id']=$row['id'];
24  $temp['name']=$row['name'];
25
    $temp['url']=$row['url'];
26
   array_push($response['images'],$temp);
27
   //displaying the response
28
29
    echo json_encode($response);
```

• This code will give you the following JSON.

```
1 | {
2
     "error": false,
3
     "images":[
4
5
         "id":"1",
6
         "name": "Belal Khan",
7
         8
       },
9
         "id":"2",
10
         "name": "Belal",
11
         "url": "http:\/\192.168.94.1\/\AndroidImageUpload\/\uploads\/\2.jpg"
12
```

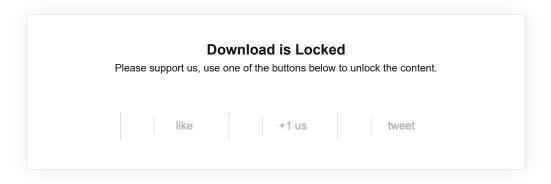
SIMPLIFIED CODING

```
19
20
             "id":"4",
21
             "name": "Belal Khan",
22
             "url": "http:\/\192.168.94.1\/AndroidImageUpload\/uploads\/4.jpg"
23
         }
24
      ]
25 }
```

• Now you can use the following tutorial to display the images using the above JSON.

Android Custom GridView with Images and Texts using Volley

• You can also get my source code from the link given below.



So thats it for this Android Upload Image tutorial friends. You can also use this method to upload video and any type of file to your server. Leave your comments if having any doubts or feedbacks. Thank You 🔾



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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



Mahmudur Rahman says June 11, 2016 at 4:51 am

Assala-mualikum, This is a best tutorial for upload image(base64) to server using volley library. Its done well. Now I want to upload pdf to use base64—— I want know is that possible to upload pdf base64?? If possible I request you to upload a tutorial for pdf upload. Thank you for your great tutorial. Happy Ramadan...