1.Google App Script Part

Step 1: Create new app script project. Click here to create App Script.

Step 2: Copy and paste the below script which recieves scanned data and inserts in Google Sheet.

```
function doGet(e){

  var ss =
SpreadsheetApp.openByUrl("https://docs.google.com/spreadsheets/d/1OkS1NUmvjlG4keZSQXdLB5ZB
4ZY27Ae0mYfgThIPr6c/edit#gid=0");
  var sheet = ss.getSheetByName("Sheet1");
  return insert(e,sheet);

}

function doPost(e){

  var ss =
SpreadsheetApp.openByUrl("https://docs.google.com/spreadsheets/d/1OkS1NUmvjlG4keZSQXdLB5ZB
4ZY27Ae0mYfgThIPr6c/edit#gid=0");
  var sheet = ss.getSheetByName("Sheet1");
  return insert(e,sheet);

}

function insert(e,sheet) {

  var scannedData = e.parameter.sdata;
 var d = new Date();
  var ctime =  d.toLocaleString();

  sheet.appendRow([scannedData,ctime]);

  return ContentService
  .createTextOutput("Success")
  .setMimeType(ContentService.MimeType.JAVASCRIPT);



}
```

Step 3: Change the url of the spread sheet. Make sure sheet is shared .[anyone with the link can view]

Step 4: Go to Publish -> Deploy as web app. A window pop up, here ->Who has access to the app: -> Anyone, even Anonymous

Publish/Update. Copy the published URL and store it.

2. Android Part

Step 1: Create new Android App from Android Studio

Step 2: Go to build.gradle[module: app] and add following dependencies.

note: If you are downloading the source code and modifying. Please make sure build tool version and compileSdk Version in build.gradle[module: dependancyapp] are compatible with your phone. If you are developing from the scratch then no issues, just dependency,

```
compile 'com.google.zxing:core:3.3.0'
compile 'com.journeyapps:zxing-android-embedded:3.4.0'
```

Step 3: Let's add all layout files.

activity_main.xml This adds a button to Scan

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
```

```
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="QR SCAN TO GSHEET"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:id="@+id/textView" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="SCAN"
        android:id="@+id/scan_btn"
        android:layout_below="@+id/textView"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="80dp" />

</RelativeLayout>
```

Step 4: add the following code to MainActivity.java which scans and calls web service

```
package com.example.icha.scanqrcode;

import android.app.Activity;
import android.content.Intent;
import android.os.AsyncTask;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;

import com.google.zxing.integration.android.IntentIntegrator;
import com.google.zxing.integration.android.IntentResult;

import org.json.JSONObject;

import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.InputStreamReader;
import java.io.OutputStream;
import java.io.OutputStreamWriter;
import java.net.HttpURLConnection;
import java.net.URL;
import java.net.URLEncoder;
import java.util.Iterator;
```

```
import javax.net.ssl.HttpsURLConnection;

public class MainActivity extends AppCompatActivity {

    String scannedData;


    Button scanBtn;
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        final Activity activity =this;
        scanBtn = (Button)findViewById(R.id.scan_btn);

        scanBtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                IntentIntegrator integrator = new IntentIntegrator(activity);
                integrator.setDesiredBarcodeFormats(IntentIntegrator.QR_CODE_TYPES);
                integrator.setPrompt("Scan");
                integrator.setBeepEnabled(false);
                integrator.setCameraId(0);
                integrator.setBarcodeImageEnabled(false);
                integrator.initiateScan();
            }
```

```
    });



}

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent data) {
    IntentResult result = IntentIntegrator.parseActivityResult(requestCode,resultCode,data);
    if(result!=null) {
        scannedData = result.getContents();
        if (scannedData != null) {
            // Here we need to handle scanned data...
            new SendRequest().execute();



        }else {
        }
    }
    super.onActivityResult(requestCode, resultCode, data);
}



public class SendRequest extends AsyncTask<String, Void, String> {
```

```
    protected void onPreExecute(){}

    protected String doInBackground(String... arg0) {

        try{

            //Enter script URL Here
            URL url = new URL("https://script.google.com/macros/s/AKfycbygE7-
jB0SUNaAVdWKk1hJLUEGO5l8LiELQflSAFufO5hXRoh8/exec");

            JSONObject postDataParams = new JSONObject();

            //int i;
            //for(i=1;i<=70;i++)


            //    String usn = Integer.toString(i);

            //Passing scanned code as parameter

            postDataParams.put("sdata",scannedData);


            Log.e("params",postDataParams.toString());

            HttpURLConnection conn = (HttpURLConnection) url.openConnection();
            conn.setReadTimeout(15000 /* milliseconds */);
```

```
conn.setConnectTimeout(15000 /* milliseconds */);
conn.setRequestMethod("GET");
conn.setDoInput(true);
conn.setDoOutput(true);

OutputStream os = conn.getOutputStream();
BufferedWriter writer = new BufferedWriter(
        new OutputStreamWriter(os, "UTF-8"));
writer.write(getPostDataString(postDataParams));

writer.flush();
writer.close();
os.close();

int responseCode=conn.getResponseCode();

if (responseCode == HttpsURLConnection.HTTP_OK) {

    BufferedReader in=new BufferedReader(new InputStreamReader(conn.getInputStream()));
    StringBuffer sb = new StringBuffer("");
    String line="";

    while((line = in.readLine()) != null) {

        sb.append(line);
        break;
```

```
            }

            in.close();
            return sb.toString();

        }
        else {
            return new String("false : "+responseCode);
        }
      }
      catch(Exception e){
          return new String("Exception: " + e.getMessage());
      }
    }

    @Override
    protected void onPostExecute(String result) {
      Toast.makeText(getApplicationContext(), result,
            Toast.LENGTH_LONG).show();

    }
}

public String getPostDataString(JSONObject params) throws Exception {

    StringBuilder result = new StringBuilder();
```

```
        boolean first = true;

        Iterator<String> itr = params.keys();

        while(itr.hasNext()){

            String key= itr.next();
            Object value = params.get(key);

            if (first)
                first = false;
            else
                result.append("&");

            result.append(URLEncoder.encode(key, "UTF-8"));
            result.append("=");
            result.append(URLEncoder.encode(value.toString(), "UTF-8"));

        }
        return result.toString();

    }
}
```

Step 5: Add web App URL from script and pass the parameter as defined in script in above MainActivity.java

```
 protected String doInBackground(String... arg0) {

          try{

             //Enter script URL Here
             URL url = new URL("Your Script web app URL");

             JSONObject postDataParams = new JSONObject();

             //Passing scanned code as parameter

            postDataParams.put("sdata",scannedData);
```

Step 6: Add **Internet Permission** in manifest file

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.example.icha.scanqrcode">

<uses-permission android:name="android.permission.INTERNET"></uses-permission>
<application
   android:allowBackup="true"
   android:icon="@mipmap/ic_launcher"
   android:label="@string/app_name"
   android:supportsRtl="true"
   android:theme="@style/AppTheme">
   <activity android:name=".MainActivity">
      <intent-filter>
         <action android:name="android.intent.action.MAIN" />

         <category android:name="android.intent.category.LAUNCHER" />
      </intent-filter>
```

```
    </activity>
</application>

</manifest>
```