

How to Add Geo Code to Google Forms

Add Info on Latitude, Longitude and Address (Street Name and Number, City, State, ZIP Code, Country) of a Device submitting Google Forms

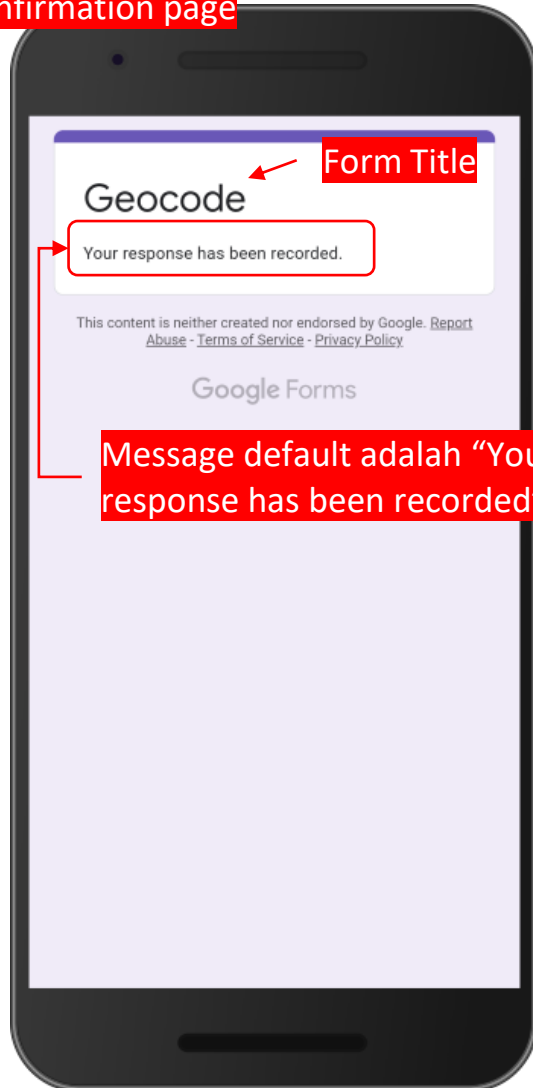
Bahasa Indonesia

April 2024

maxi

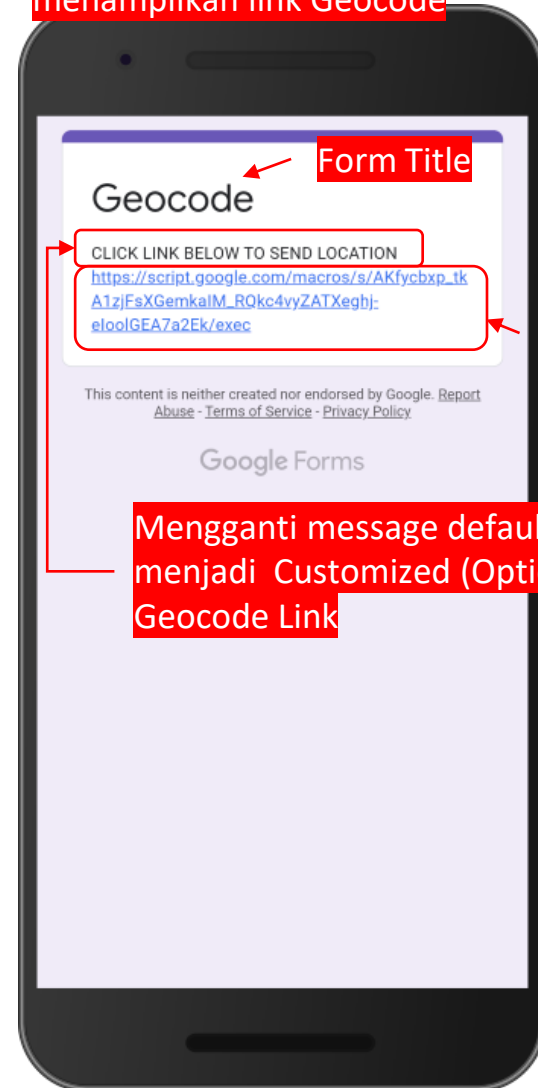
Google Form Submit Confirmation Message

Setelah kita kirim form akan muncul Confirmation page



Message default adalah "Your response has been recorded"

Message di Confirmation Page menampilkan link Geocode



Klik link untuk menambahkan Geocode

Mengganti message default menjadi Customized (Optional) + Geocode Link

Geocode untuk Google Forms

- Informasi Geocode dari device yang mengirim Google Forms dapat ditambahkan ke Google Forms response data spreadsheet. Sebagaimana Google Form, informasi tambahan Geocode ini tidak berbiaya, gratis.
- Dengan meng-klik link Geocode, response data form yang terdapat di spreadsheet akan memiliki 3 tambahan kolom

3 kolom akan ditambahkan ke original response sheet data form Anda

	A	B	C	D	E
1	Timestamp	Location	GeoStamp	GeoCode	GeoAddress
2	5/17/2018 23:11:44	Yes	05/17/2018 23:11:49	-6.2576675999999996,106.8533283	Jl. Rawajati Barat III No.7A, Rawajati, Pancoran, Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12750, Indonesia
3	5/17/2018 23:18:32	Yes	05/17/2018 23:18:37	37.747464105958976,-122.4184396093321	3119 Mission St, San Francisco, CA 94110, USA
4	5/17/2018 23:21:02	Yes	05/17/2018 23:21:07	-6.8971377,107.6165972	Jl. H. Wasid No.23, Lebakgede, Coblong, Kota Bandung, Jawa Barat 40132, Indonesia
5					
6					
7					
8					
9					
10					

1. GeoStamp = Waktu dimana link Geocode di klik

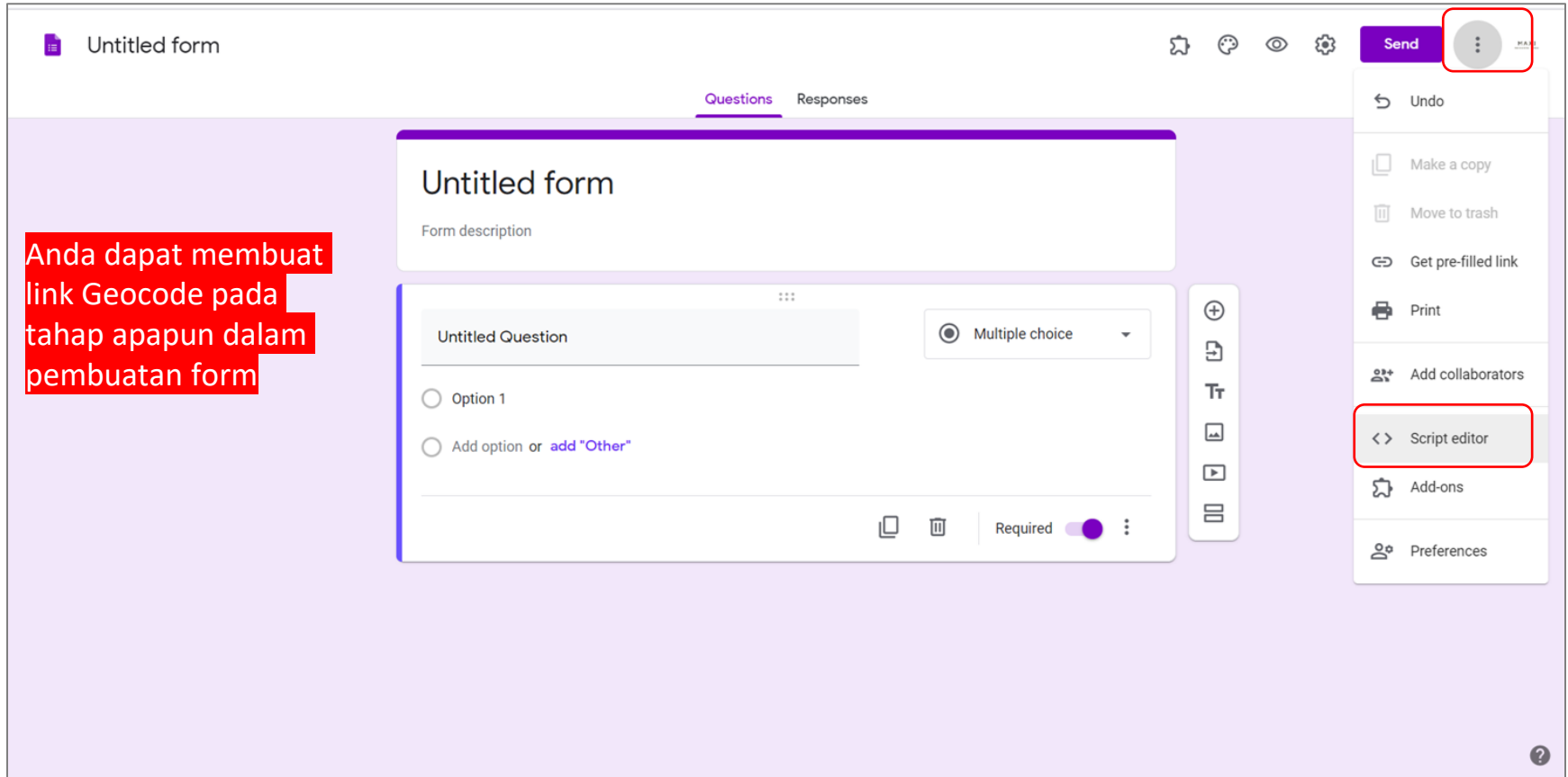
2. Latitude dan Longitude

3. Alamat : Nama Jalan dan Nomer, Kota, Provinsi, Kode Pos, Negara

Cara Membuat Link Geocode

1. Ke Script Editor

- Di form Google Form Anda, ke Script editor
- Script editor hanya tersedia ketika membuka file Google Form dari Laptop/PC



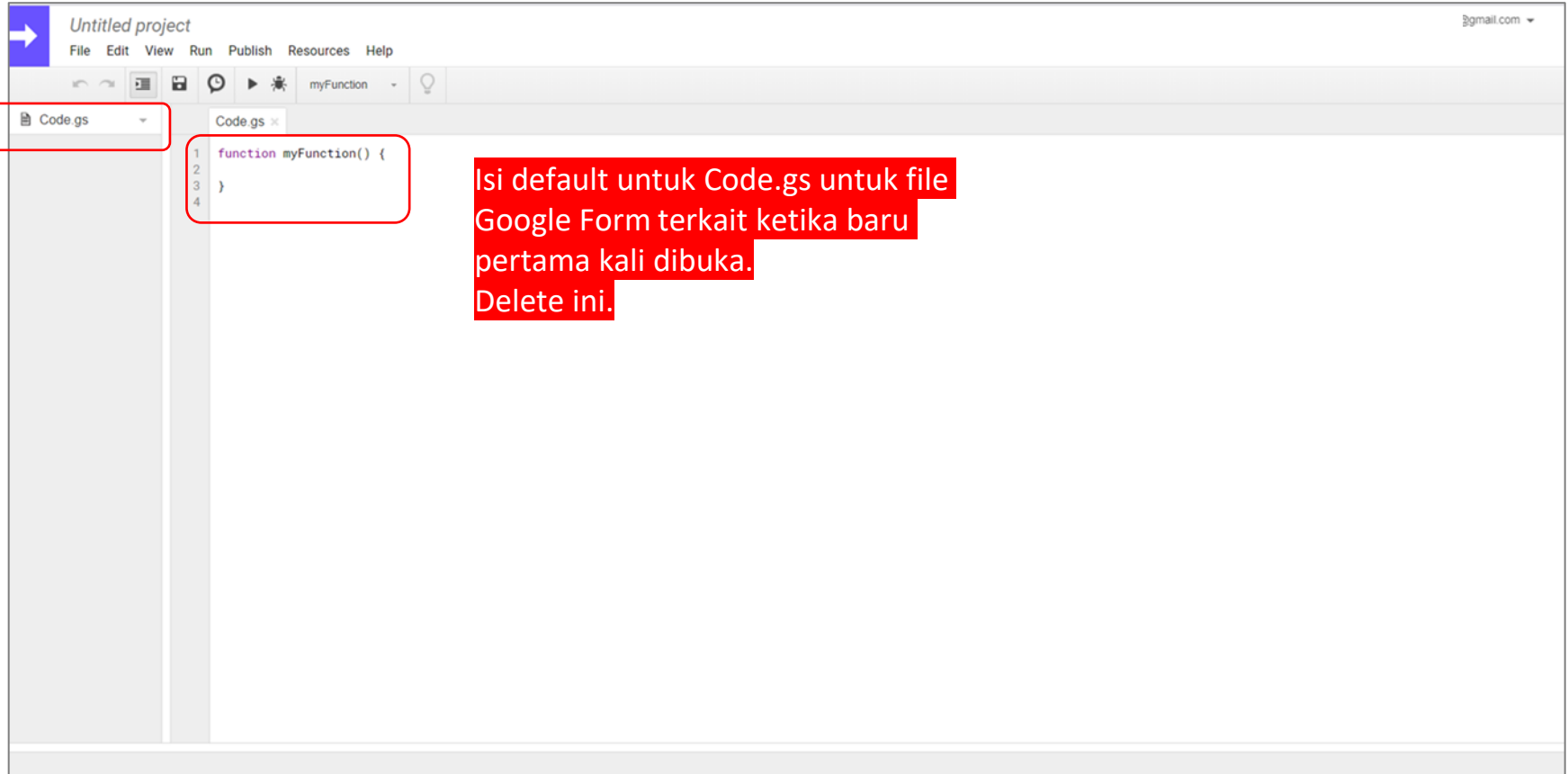
The screenshot shows the Google Forms interface. At the top right, there is a 'Send' button with a three-dot menu icon next to it. A red box highlights this menu icon. A dropdown menu is open, showing various options. The 'Script editor' option, represented by a code icon, is highlighted with a red box. Other options in the menu include Undo, Make a copy, Move to trash, Get pre-filled link, Print, Add collaborators, Add-ons, and Preferences. The main form area shows an 'Untitled form' with a 'Form description' field and a 'Multiple choice' question with two options: 'Option 1' and 'Add option or add "Other"'. A red text box on the left side of the screenshot contains the text: 'Anda dapat membuat link Geocode pada tahap apapun dalam pembuatan form'.

Anda dapat membuat link Geocode pada tahap apapun dalam pembuatan form

Cara Membuat Link Geocode

2. Script editor terbuka

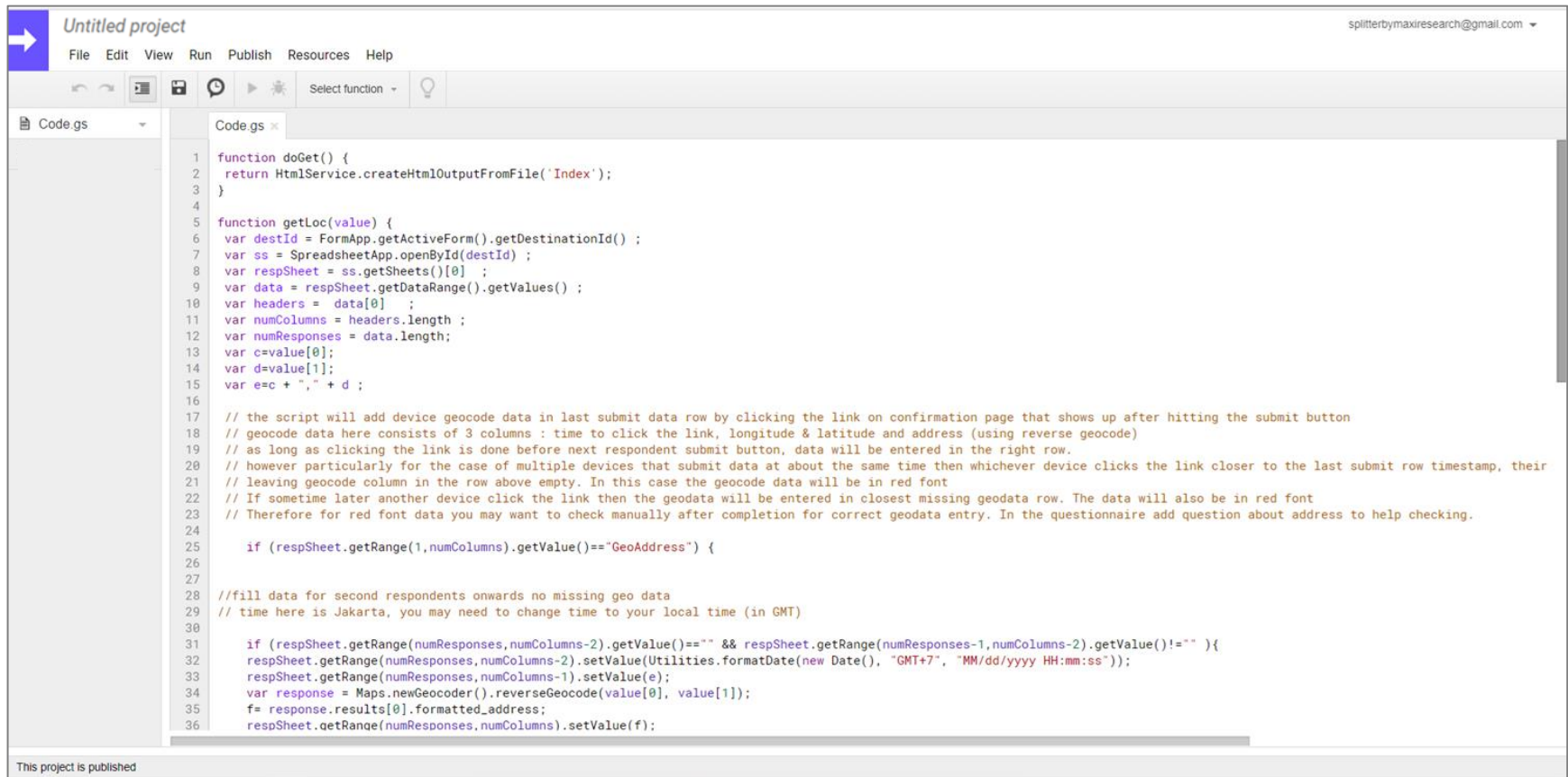
- Setelah terbuka, script editor sudah memiliki Code.gs



Cara Membuat Link Geocode

3. Copy dan Paste script ke Code.gs

- Geocode script lengkap terdapat di Appendix
- Copy script bagian Code.gs di Appendix dan paste in Code.gs Anda.



```
1 function doGet() {
2   return HtmlService.createHtmlOutputFromFile('Index');
3 }
4
5 function getLoc(value) {
6   var destId = FormApp.getActiveForm().getDestinationId();
7   var ss = SpreadsheetApp.openById(destId);
8   var respSheet = ss.getSheets()[0];
9   var data = respSheet.getDataRange().getValues();
10  var headers = data[0];
11  var numColumns = headers.length;
12  var numResponses = data.length;
13  var c=value[0];
14  var d=value[1];
15  var e=c + "," + d;
16
17  // the script will add device geocode data in last submit data row by clicking the link on confirmation page that shows up after hitting the submit button
18  // geocode data here consists of 3 columns : time to click the link, longitude & latitude and address (using reverse geocode)
19  // as long as clicking the link is done before next respondent submit button, data will be entered in the right row.
20  // however particularly for the case of multiple devices that submit data at about the same time then whichever device clicks the link closer to the last submit row timestamp, their
21  // leaving geocode column in the row above empty. In this case the geocode data will be in red font
22  // If sometime later another device click the link then the geodata will be entered in closest missing geodata row. The data will also be in red font
23  // Therefore for red font data you may want to check manually after completion for correct geodata entry. In the questionnaire add question about address to help checking.
24
25  if (respSheet.getRange(1,numColumns).getValue()=="GeoAddress") {
26
27
28
29  //fill data for second respondents onwards no missing geo data
30  // time here is Jakarta, you may need to change time to your local time (in GMT)
31
32  if (respSheet.getRange(numResponses,numColumns-2).getValue()==" && respSheet.getRange(numResponses-1,numColumns-2).getValue()!="") {
33    respSheet.getRange(numResponses,numColumns-2).setValue(Utilities.formatDate(new Date(), "GMT+7", "MM/dd/yyyy HH:mm:ss"));
34    respSheet.getRange(numResponses,numColumns-1).setValue(e);
35    var response = Maps.newGeocoder().reverseGeocode(value[0], value[1]);
36    f= response.results[0].formatted_address;
37    respSheet.getRange(numResponses,numColumns).setValue(f);
38  }
```

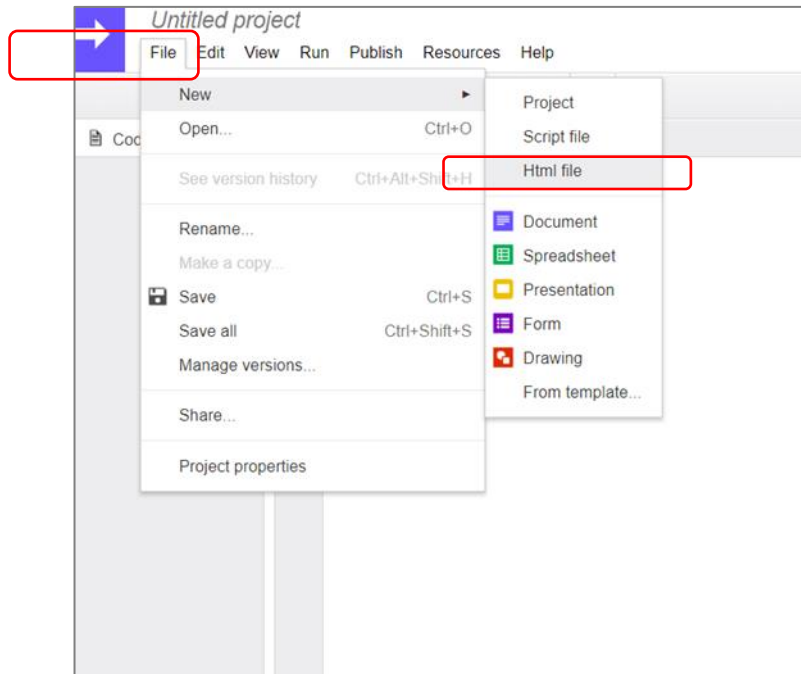
This project is published

Cara Membuat Link Geocode

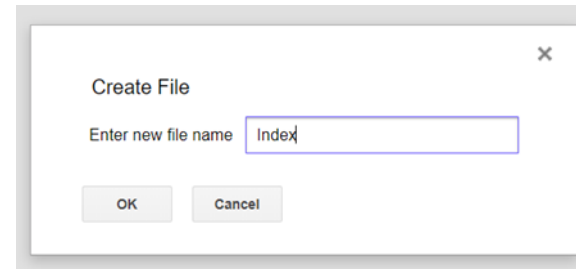
4. Buat Index.html

- Buat html file dan beri nama Index

Di File > New > Html file



Create File > Enter new file name [?] Index



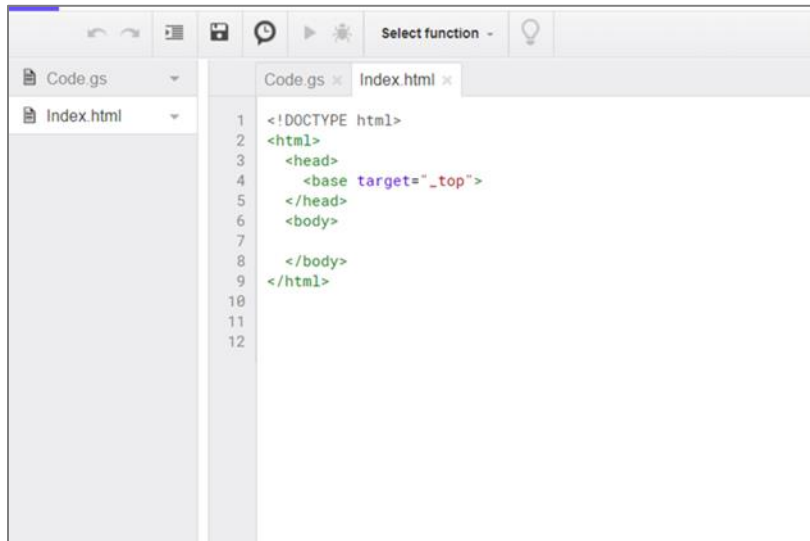
Cara Membuat Link Geocode

5. Copy dan Paste script ke Index.html

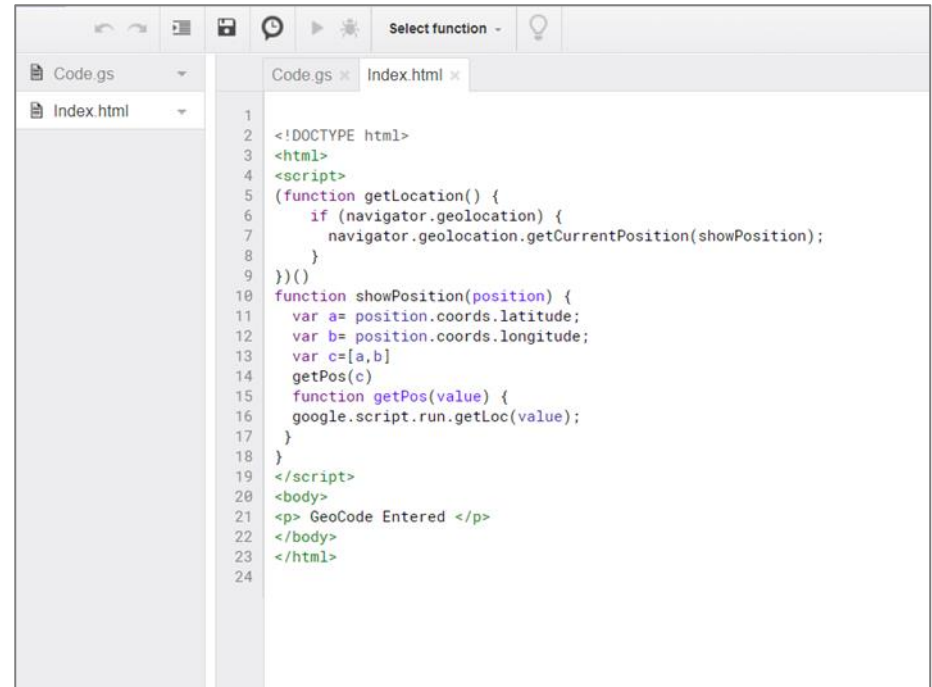
- Copy script yang ada di Index.html Google Form kami
- Paste scriptnya dan Index.html Anda akan terlihat seperti berikut.

Copy script Index.html dari file Google Form kami. Lalu Paste. Sekarang Index.html Anda akan terlihat seperti berikut

Pertama hapus default script di Index.html Anda



```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <base target="_top">
5 </head>
6 <body>
7
8 </body>
9 </html>
10
11
12
```

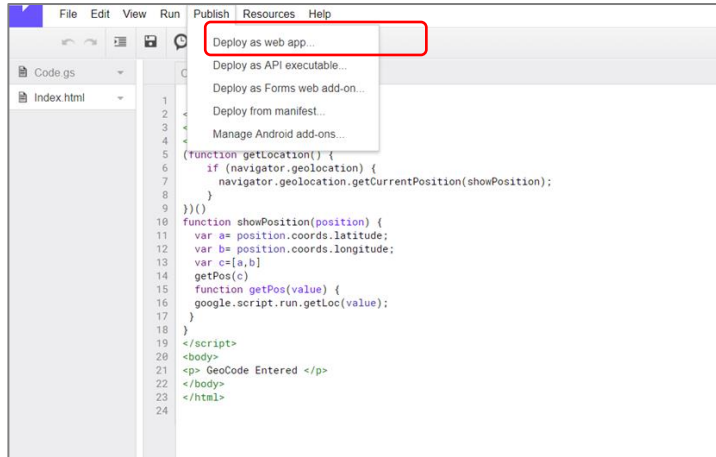


```
1
2 <!DOCTYPE html>
3 <html>
4 <script>
5 (function getLocation() {
6   if (navigator.geolocation) {
7     navigator.geolocation.getCurrentPosition(showPosition);
8   }
9 })()
10 function showPosition(position) {
11   var a= position.coords.latitude;
12   var b= position.coords.longitude;
13   var c=[a,b]
14   getPos(c)
15   function getPos(value) {
16     google.script.run.getLoc(value);
17   }
18 }
19 </script>
20 <body>
21 <p> GeoCode Entered </p>
22 </body>
23 </html>
24
```

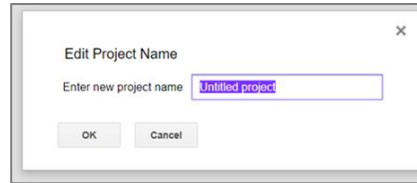

Cara Membuat Link Geocode

6. Ke Publish > Deploy as web app

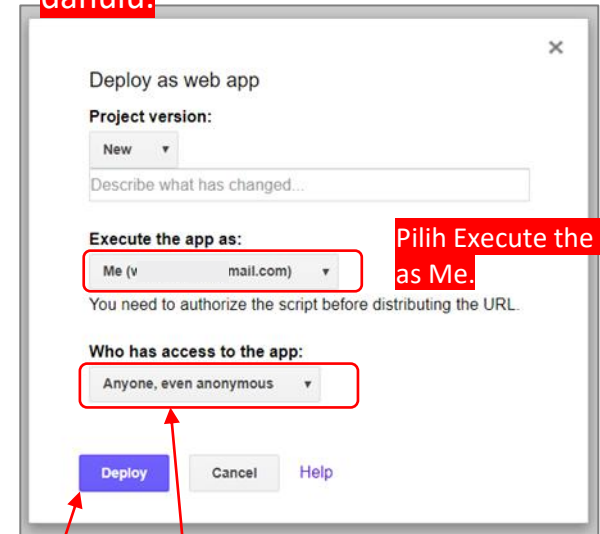
Ke Publish > Deploy as web app



Silakan beri nama project atau nama default "Untitled"



Pada "Who has access to the", pilih Anyone, even anonymous sehingga setiap orang yang memiliki link dapat menggunakan app tanpa harus log in ke Google account lebih dahulu.



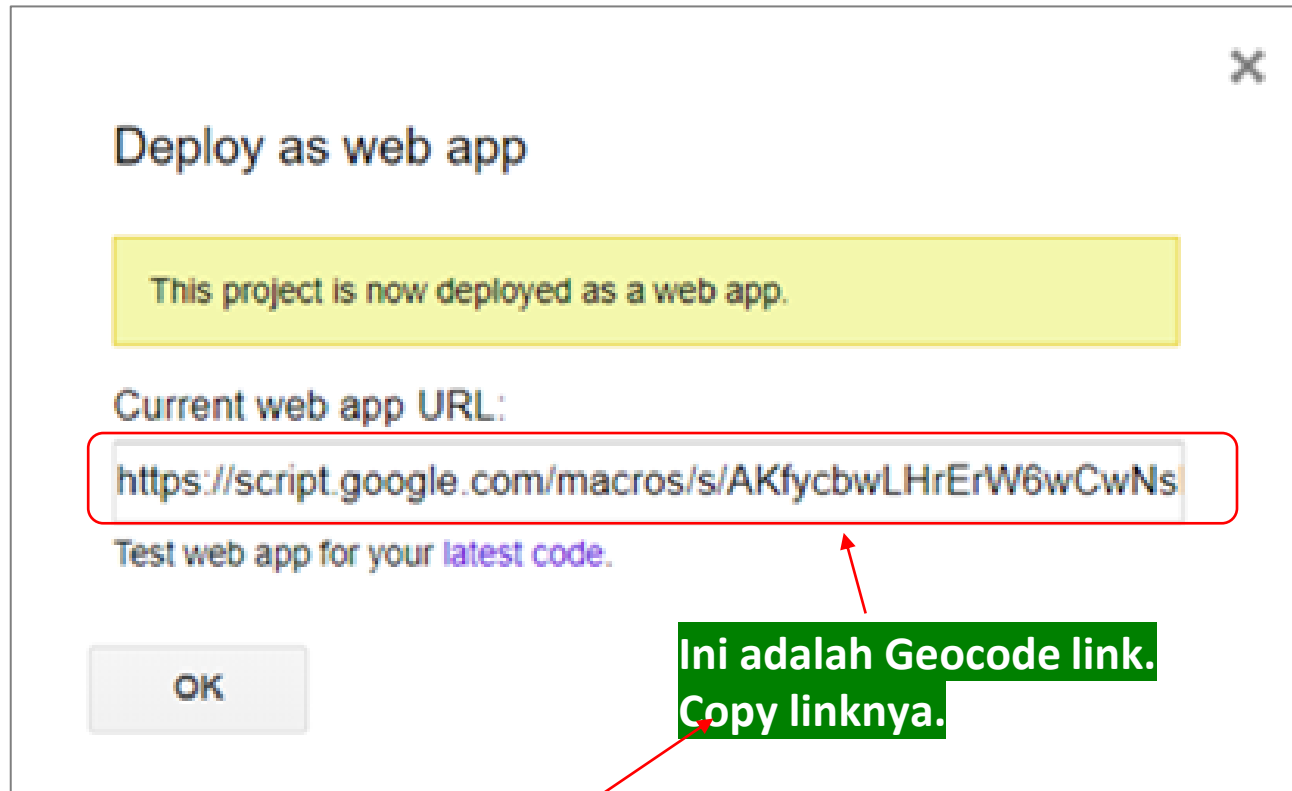
Pilih Execute the app as Me.

Penting : Access to anyone even anonymous, sehingga setiap orang yang memiliki link bisa akses.

Lalu Klik Deploy.

Cara Membuat Link Geocode

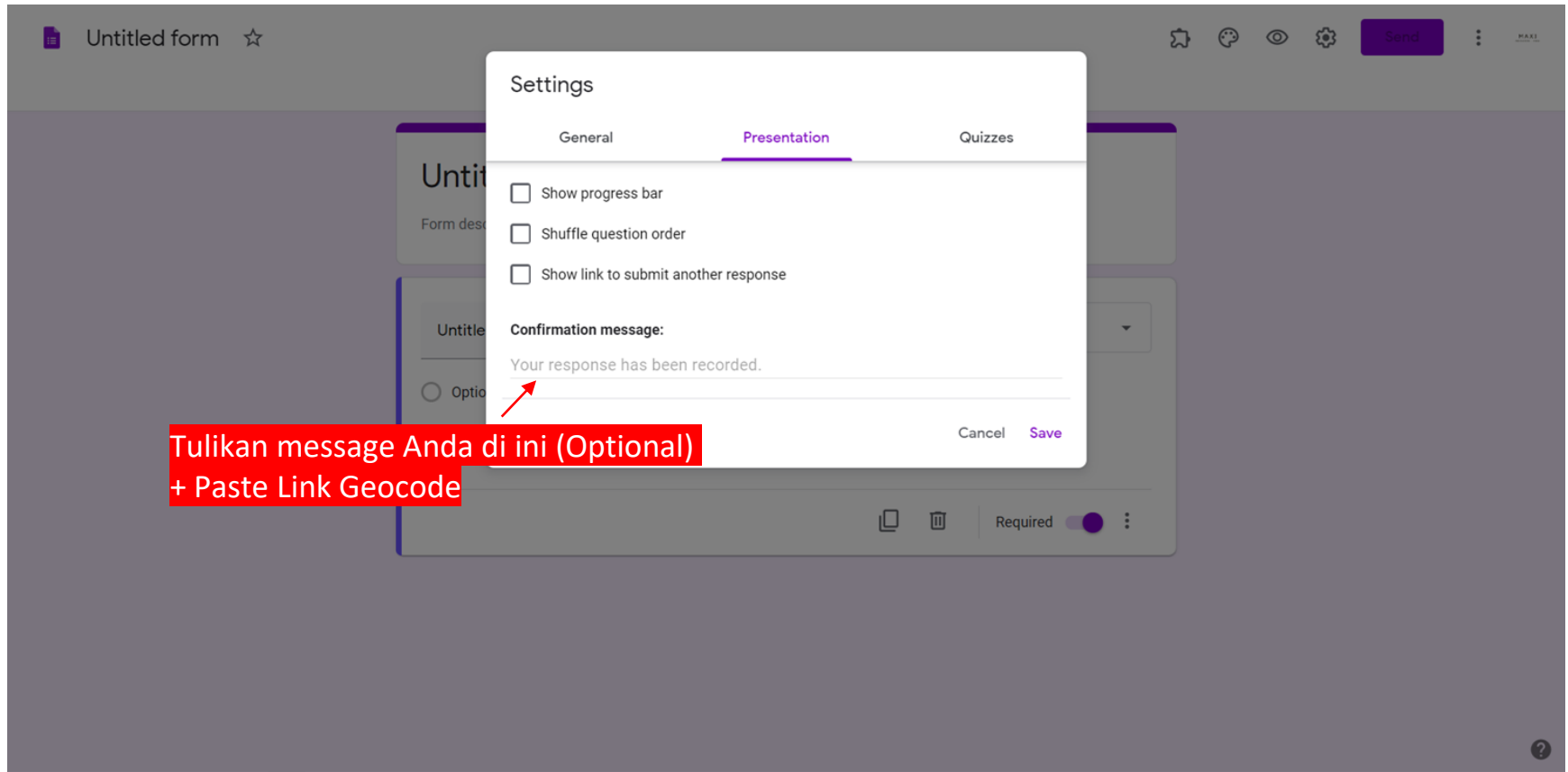
7. Sekarang Anda sudah memiliki Link Geocode. Copy Link-nya



Link ini 'file bound' artinya setiap link bersifat unik hanya bisa digunakan untuk form terkait. Tidak bisa digunakan untuk form lain. Jadi untuk form baru atau berbeda kita membutuhkan link baru. Ulangi proses dari awal untuk mendapatkan link

Cara Membuat Link Geocode

8. Paste ke Confirmation Message di Form Anda



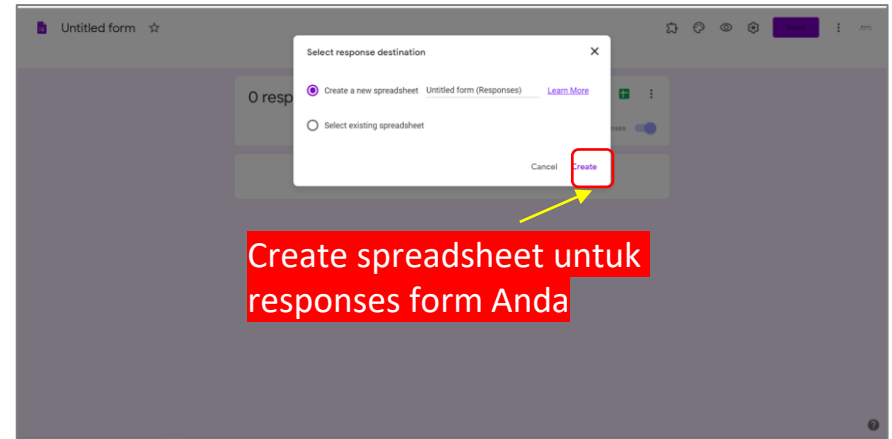
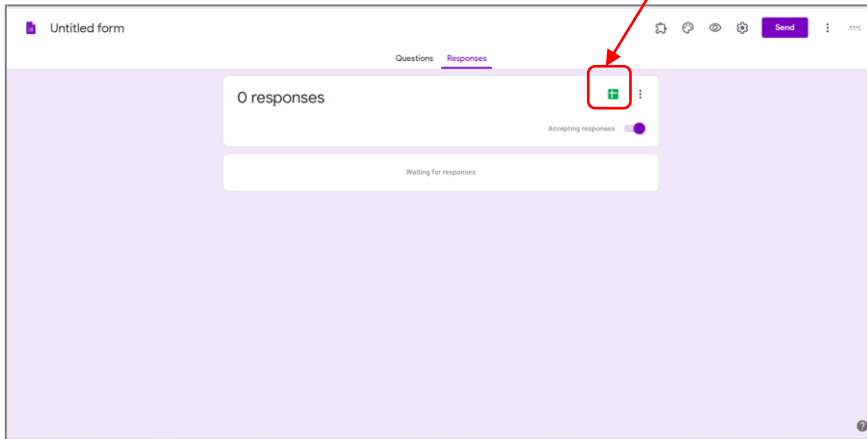
The screenshot shows a form builder interface with a 'Settings' dialog box open. The dialog box has three tabs: 'General', 'Presentation', and 'Quizzes'. The 'Presentation' tab is selected. Under the 'Confirmation message' section, there is a text input field containing the default message 'Your response has been recorded.'. A red arrow points to this field. A red text box is overlaid on the image, containing the text: 'Tuliskan message Anda di ini (Optional) + Paste Link Geocode'. The background shows a form titled 'Untitled form' with various settings and a 'Send' button.

**Tuliskan message Anda di ini (Optional)
+ Paste Link Geocode**

Cara Membuat Link Geocode

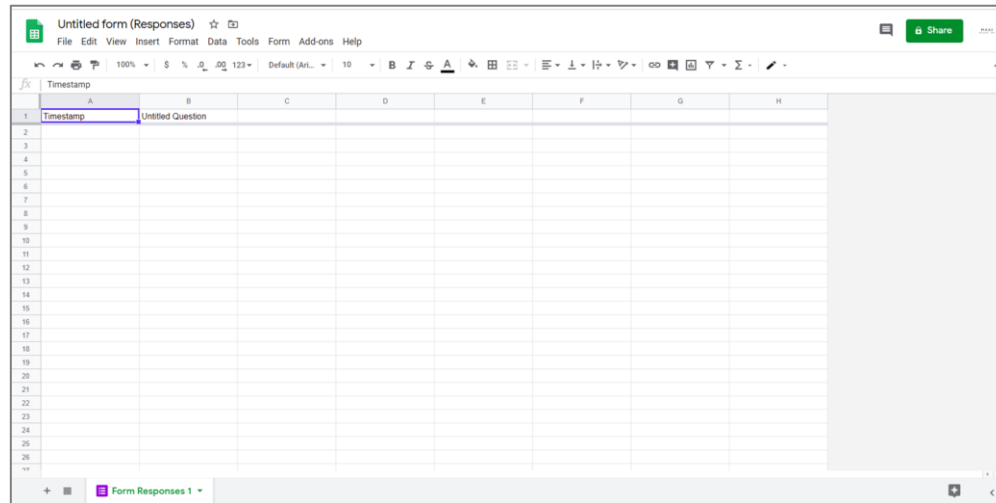
9. Connect ke Spreadsheet Form Anda

Link ke Responses Spreadsheet



Create spreadsheet untuk responses form Anda

Spreadsheet untuk form Anda sudah terhubung



Geocode untuk Google Forms untuk Form Anda Siap Digunakan



*Geocode siap digunakan.
Ingat bahwa link yang Anda buat hanya bisa digunakan untuk form dimana link itu terhubung.
Untuk form lain Anda harus membuat link baru.
Ulangi proses dari awal.*



APPENDIX

Geocode Script – Code. Gs

Halaman 1 dari 2

```
function doGet() {
  return HtmlService.createHtmlOutputFromFile('Index');
}
function getLoc(value) {
  var destId = FormApp.getActiveForm().getDestinationId();
  var ss = SpreadsheetApp.openById(destId);
  var respSheet = ss.getSheets()[0];
  var data = respSheet.getDataRange().getValues();
  var headers = data[0];
  var numColumns = headers.length;
  var numResponses = data.length;
  var c=value[0];
  var d=value[1];
  var e=c + "," + d;

  // the script will add device geocode data in last submit data row by clicking the link on confirmation page that shows up after hitting the submit button
  // geocode data here consists of 3 columns : time to click the link, longitude & latitude and address (using reverse geocode)
  // as long as clicking the link is done before next respondent submit button, data will be entered in the right row.
  // however particularly for the case of multiple devices that submit data at about the same time
  // then whichever device clicks the link closer to the last submit row timestamp,
  //their geodata will be entered in the last submit data row.
  // leaving geocode column in the row above empty. In this case the geocode data will be in red font
  // If sometime later another device click the link then the geodata will be entered in closest missing geodata row. The data will also be in red font
  // Therefore for red font data you may want to check manually after completion for correct geodata entry. In the questionnaire add question about address to
  //help checking.

  if (respSheet.getRange(1,numColumns).getValue()=="GeoAddress") {

//fill data for second respondents onwards no missing geo data
// time here is Jakarta, you may need to change time to your local time (in GMT)

  if (respSheet.getRange(numResponses,numColumns-2).getValue()==" && respSheet.getRange(numResponses-1,numColumns-2).getValue()!=""){
    respSheet.getRange(numResponses,numColumns-2).setValue(Utilities.formatDate(new Date(), "GMT+7", "MM/dd/yyyy HH:mm:ss"));
    respSheet.getRange(numResponses,numColumns-1).setValue(e);
    var response = Maps.newGeocoder().reverseGeocode(value[0], value[1]);
    f= response.results[0].formatted_address;
    respSheet.getRange(numResponses,numColumns).setValue(f);
  }

//fill data with previous geo data missing. red font

  else if (respSheet.getRange(numResponses,numColumns-2).getValue()==" && respSheet.getRange(numResponses-1,numColumns-2).getValue()==""){
    respSheet.getRange(numResponses,numColumns-2).setValue(Utilities.formatDate(new Date(), "GMT+7", "MM/dd/yyyy HH:mm:ss")).setFontColor("red");
    respSheet.getRange(numResponses,numColumns-1).setValue(e).setFontColor("red");
    var response = Maps.newGeocoder().reverseGeocode(value[0], value[1]);
    f= response.results[0].formatted_address;
    respSheet.getRange(numResponses,numColumns).setValue(f).setFontColor("red");
  }
}
```

Geocode Script – Code. Gs

Halaman 2 dari 2

```
//to fill missing previous data. red font
else if (respSheet.getRange(numResponses,numColumns-2).getValue()!=""){
    for (i = 0; i < numResponses; i++) {
        if (respSheet.getRange(numResponses-i,numColumns-2).getValue()=="") {

            respSheet.getRange(numResponses-i,numColumns-2).setValue(Utilities.formatDate(new Date(), "GMT+7", "MM/dd/yyyy HH:mm:ss")).setFontColor("red");
            respSheet.getRange(numResponses-i,numColumns-1).setValue(e).setFontColor("red");
            var response = Maps.newGeocoder().reverseGeocode(value[0], value[1]);
            f= response.results[0].formatted_address;
            respSheet.getRange(numResponses-i,numColumns).setValue(f).setFontColor("red");
            break; }
        }
    }

    else if (respSheet.getRange(1,numColumns).getValue()!="GeoAddress") {
//create labels in first row
        respSheet.getRange(1,numColumns+1).setValue("GeoStamp GMT+7");
        respSheet.getRange(1,numColumns+2).setValue("GeoCode (Lat,Long)");
        respSheet.getRange(1,numColumns+3).setValue("GeoAddress");
//fill data for first respondent
        if (numResponses==2) {
            respSheet.getRange(numResponses,numColumns+1).setValue(Utilities.formatDate(new Date(), "GMT+7", "MM/dd/yyyy HH:mm:ss"));
            respSheet.getRange(numResponses,numColumns+2).setValue(e);
            var response = Maps.newGeocoder().reverseGeocode(value[0], value[1]);
            f= response.results[0].formatted_address;
            respSheet.getRange(numResponses,numColumns+3).setValue(f);
        }
        else if (numResponses > 2){
            respSheet.getRange(numResponses,numColumns+1).setValue(Utilities.formatDate(new Date(), "GMT+7", "MM/dd/yyyy HH:mm:ss")).setFontColor("red");
            respSheet.getRange(numResponses,numColumns+2).setValue(e).setFontColor("red");
            var response = Maps.newGeocoder().reverseGeocode(value[0], value[1]);
            f= response.results[0].formatted_address;
            respSheet.getRange(numResponses,numColumns+3).setValue(f).setFontColor("red");
        }
    }
}
```

Geocode Script – Index.html

Halaman 1 dari 1

```
<!DOCTYPE html>
<html>
<script>
(function getLocation() {
    if (navigator.geolocation) {
        navigator.geolocation.getCurrentPosition(showPosition);
    }
})();
function showPosition(position) {
    var a= position.coords.latitude;
    var b= position.coords.longitude;
    var c=[a,b]
    getPos(c)
    function getPos(value) {
        google.script.run.getLoc(value);
    }
}
</script>
<body>
<p> GeoCode Entered </p>
</body>
</html>
```


Materi Google Forms Lainnya

- GOOGLE FORMS TUTORIAL PART 1: CREATE ONLINE SURVEYS
 - [Download pdf di sini.](#)
- GOOGLE FORMS TUTORIAL PART 2: CREATE ONLINE QUIZ/TEST
 - [Download pdf di sini.](#)



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