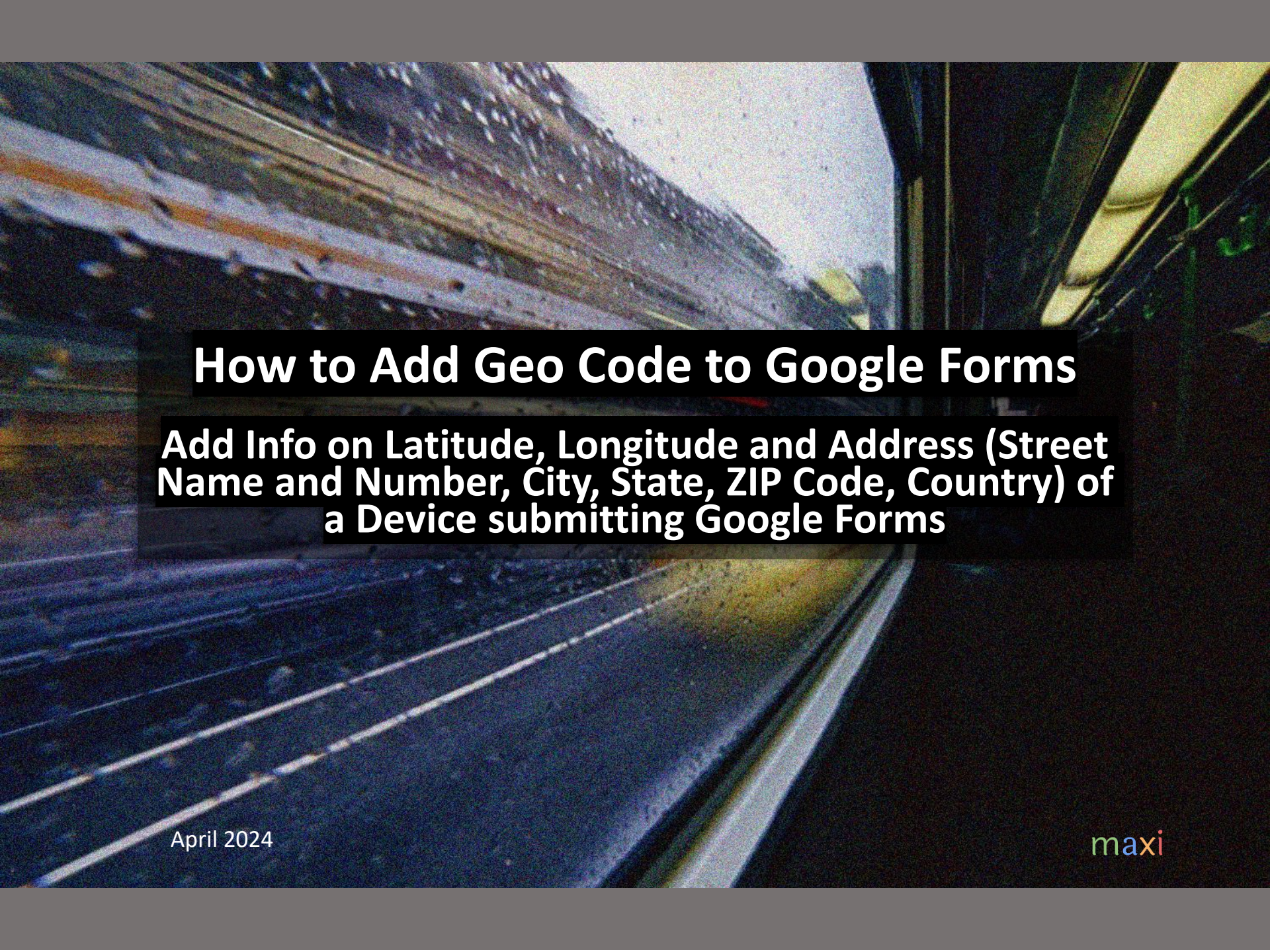




How to Add Geo Code to Google Forms

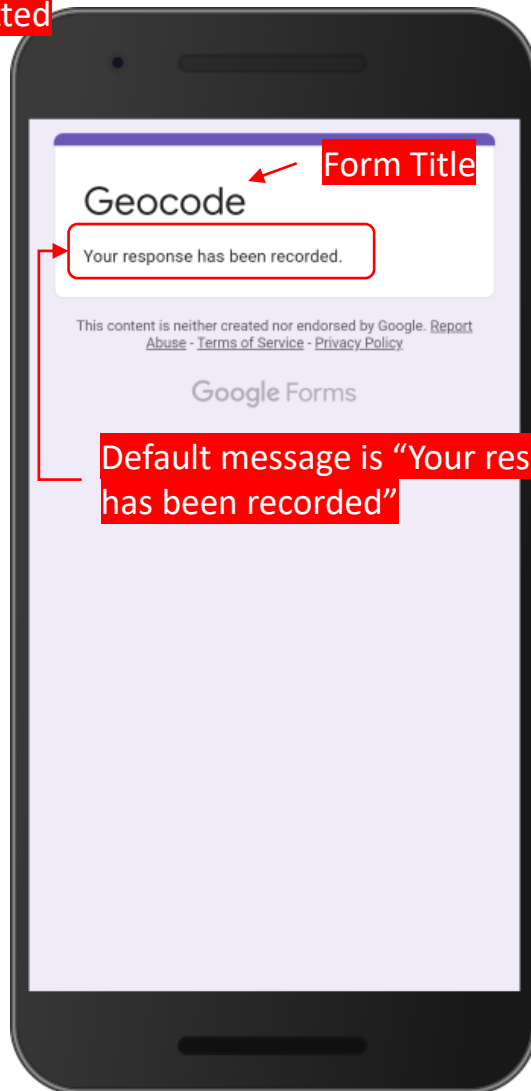
Add Info on Latitude, Longitude and Address (Street Name and Number, City, State, ZIP Code, Country) of a Device submitting Google Forms

April 2024

maxi

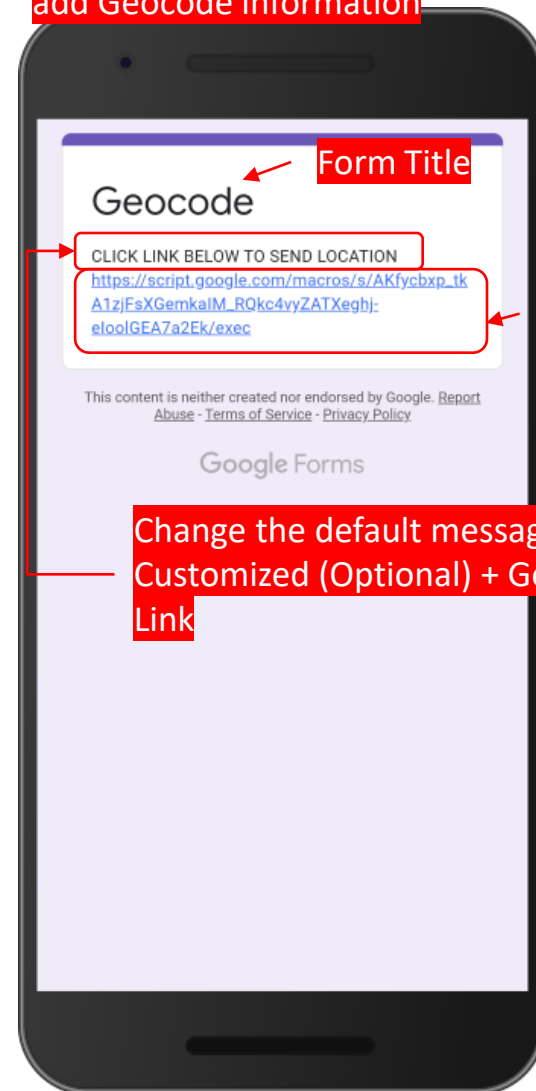
Google Form Submit Confirmation Message

Confirmation page is displayed after form is submitted



Default message is "Your response has been recorded"

Link in Confirmation Message to add Geocode information



Click the link to add Geocode

Change the default message to Customized (Optional) + Geocode Link

Geocode for Google Forms

- Geocode information of the device submitting Google Forms can be added to your Google Forms response data spreadsheet. As is Google Form, the Geocode information is free.
- By clicking the Geocode link, the response data spreadsheet will have the following three additional columns

File Home Insert Page Layout Formulas Data Review View Developer Add-ins Help Tell me what you want to do						
Clipboard Font Alignment Number Styles Cells						
A1 Timestamp 3 Columns will be added to original form responses data columns						
A	B	C	D	E		
1	Timestamp	Location	GeoStamp	GeoCode	GeoAddress	F
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 = Time when Geocode link is clicked

2. Latitude and Longitude

3. Address : Street name and number, city, state, zip code and country

How to Create Geocode Link

1. Go to Script Editor

- In your Google Form form, go to Script editor
- Script editor is only available when you open Google Form from Laptop/PC

The screenshot shows the Google Forms interface for an 'Untitled form'. The 'Questions' tab is active, showing a 'Multiple choice' question. On the right side, the 'Send' button is highlighted with a red box, and its dropdown menu is open. In this menu, the 'Script editor' option 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. A red text box on the left side of the form states: 'You can create Geocode link at any point during form development'.

Untitled form

Questions Responses

Form description

Untitled Question

Multiple choice

Option 1

Add option or [add "Other"](#)

Required

Send

Undo

Make a copy

Move to trash

Get pre-filled link

Print

Add collaborators

< > Script editor

Add-ons

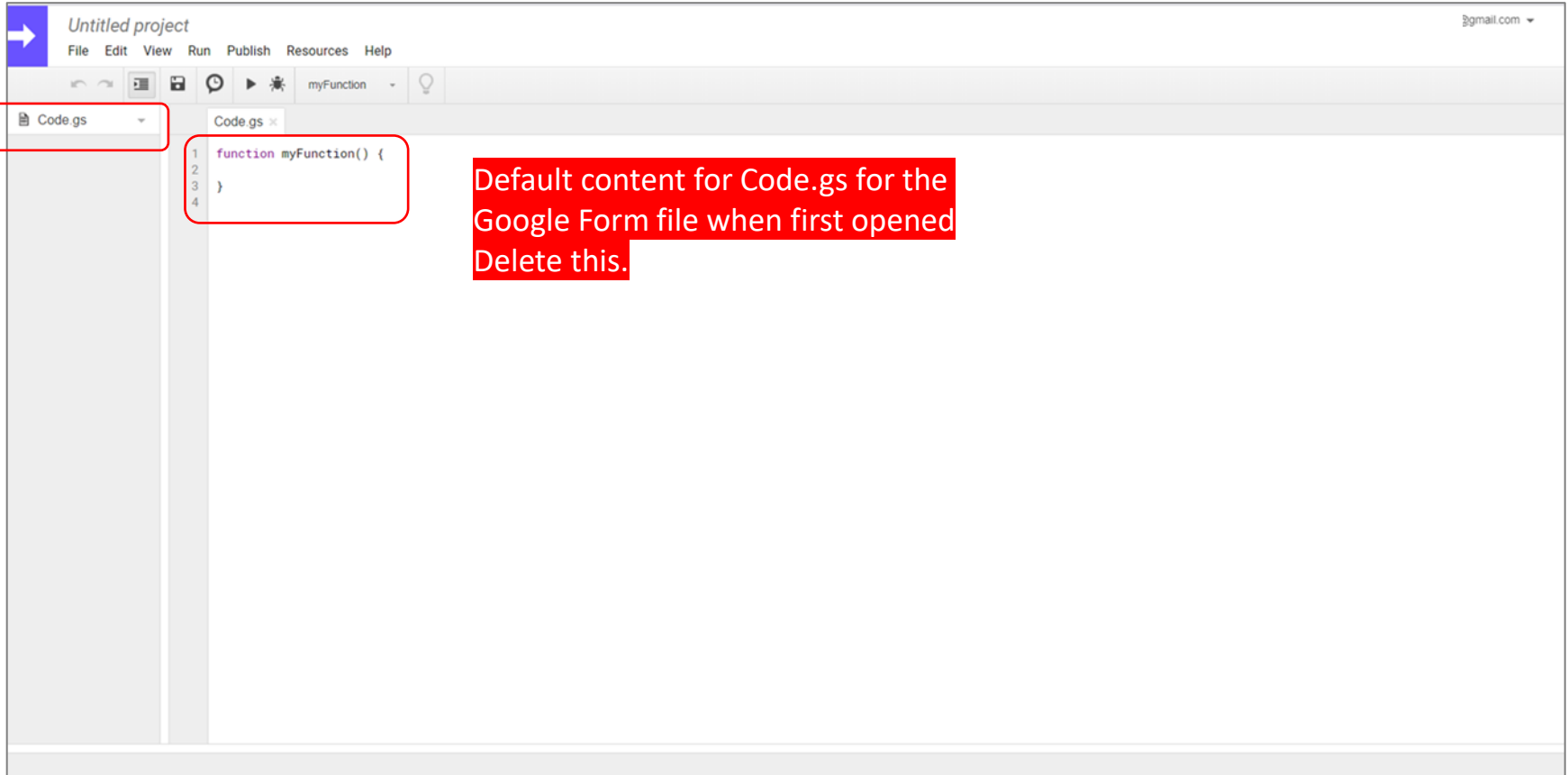
Preferences

You can create Geocode link at any point during form development

How to Create Geocode Link

2. Script editor opened

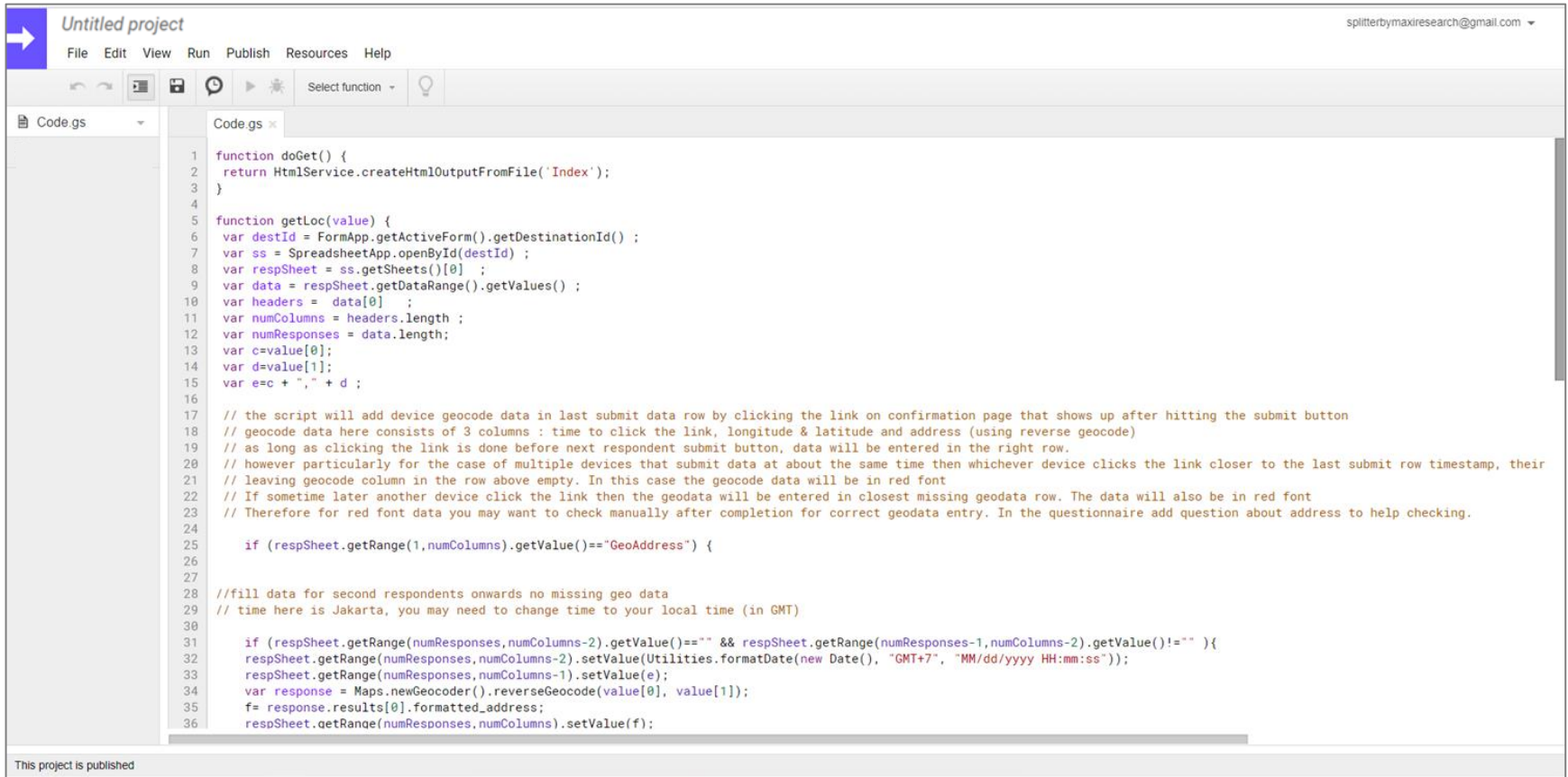
- Once opened, the script editor already has Code.gs



How to Create Geocode Link

3. Copy and Paste script to Code.gs

- Geocode full script available in Appendix
- Copy the script on Code.gs part in the Appendix and paste them to your Code.gs.



```
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  }
```

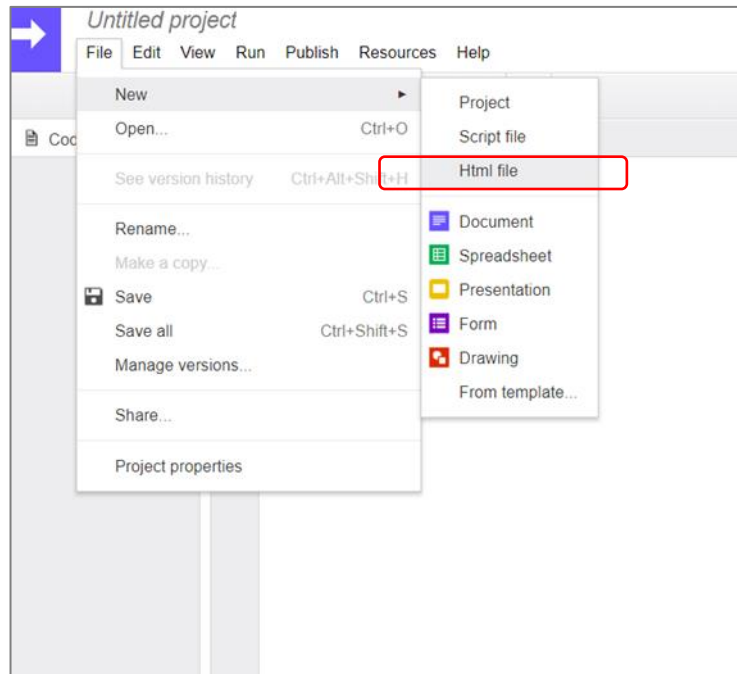
This project is published

How to Create Geocode Link

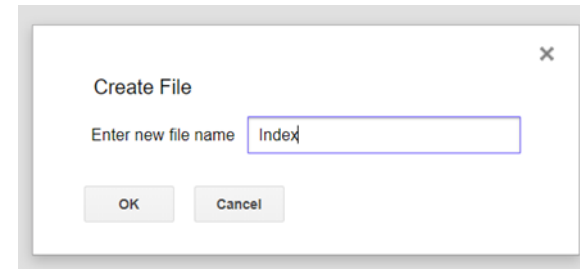
4. Create Index.html

- Create html file and name it Index

In File > New > Html file



Create File > Enter new file name → Index



How to Create Geocode Link

5. Copy and Paste script to Index.html

- Copy script for Index.html from Appendix

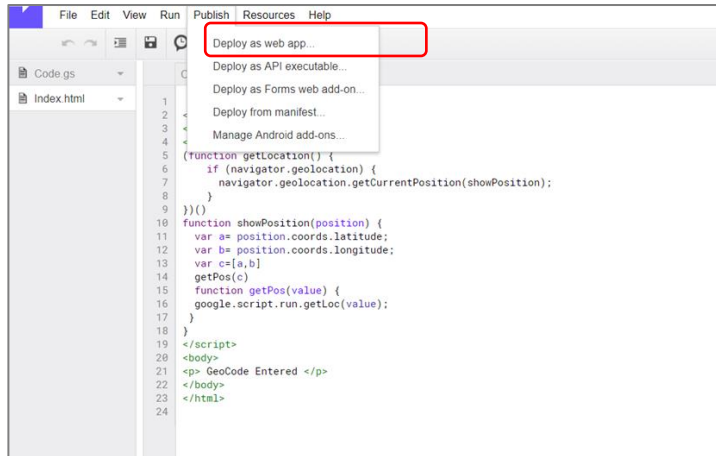
First delete default script in Index.html

Copy the script. Paste it.
Now Index.html will look like this

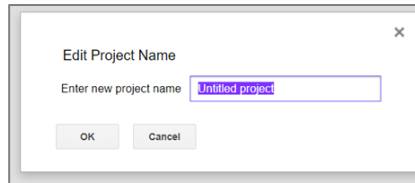
How to Create Geocode Link

6. Go to Publish > Deploy as web app

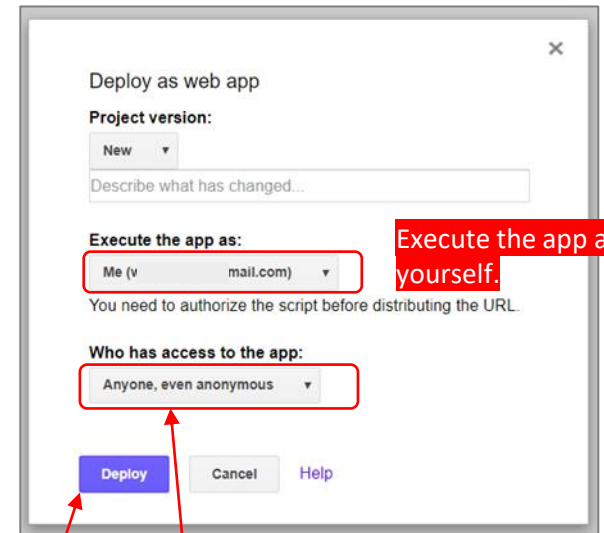
Go to Publish > Deploy as web app



If you prefer give it a project name otherwise keep it Untitled



Set Who has access to Anyone, even anonymous so everyone that has the link can use the app without log in to google first.



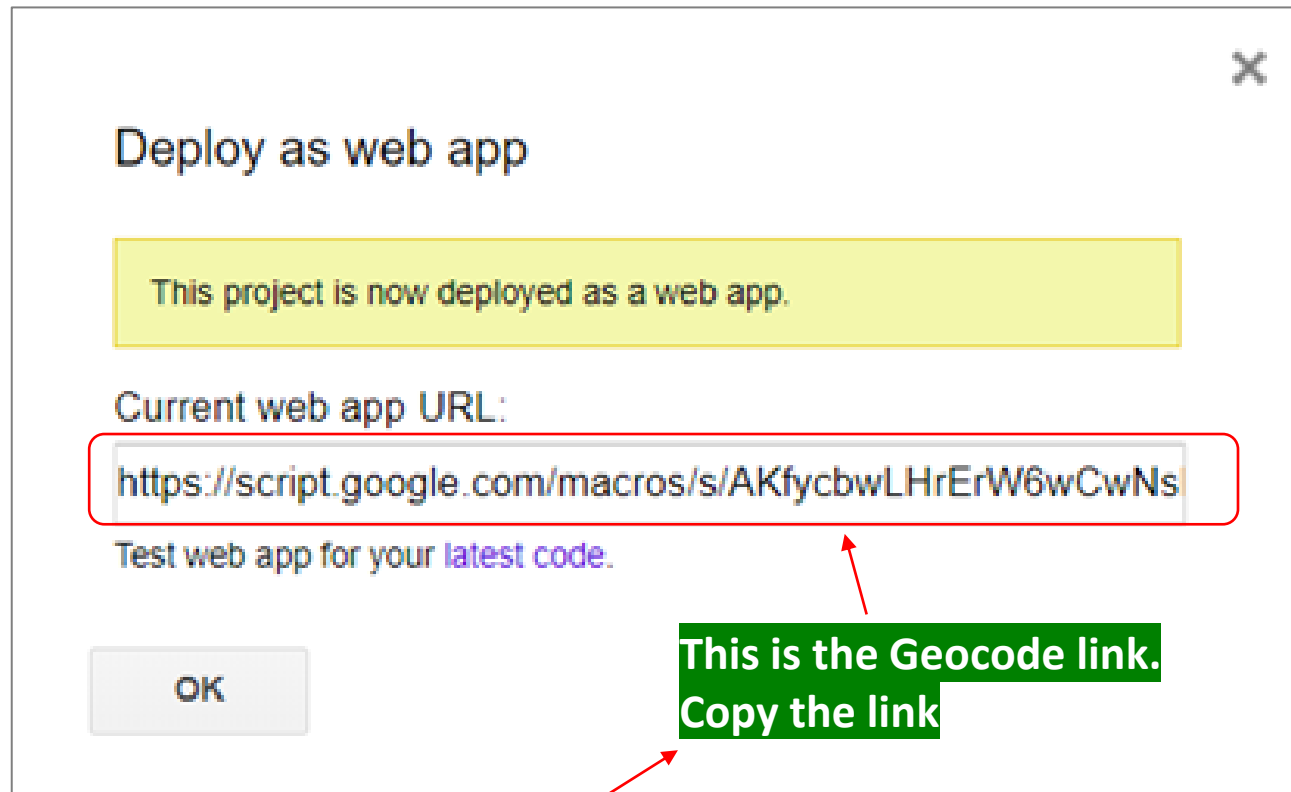
Execute the app as yourself.

Important : Access to anyone, so that everyone who has the link can use the app.

Then click Deploy.

How to Create Geocode Link

7. Now you have the Geocode link. Copy the link



The link is 'file bound' meaning that the link is unique to this form. It will not work for other form
So for new form you will need a new link for the form, just repeat the process

How to Create Geocode Link

8. Paste it on Confirmation Message

Untitled form ☆

Settings

General **Presentation** Quizzes

- ☐ Show progress bar
- ☐ Shuffle question order
- ☐ Show link to submit another response

Confirmation message:

Your response has been recorded.

Cancel Save

Write your message here (Optional) +
Paste the Geocode Link

9. Connect to Responses Spreadsheet

Untitled form

Questions Responses

0 responses

Accepting responses ☒

Waiting for responses

0 resp

Select response destination

☒ Create a new spreadsheet Untitled form (Responses) [Learn More](#)

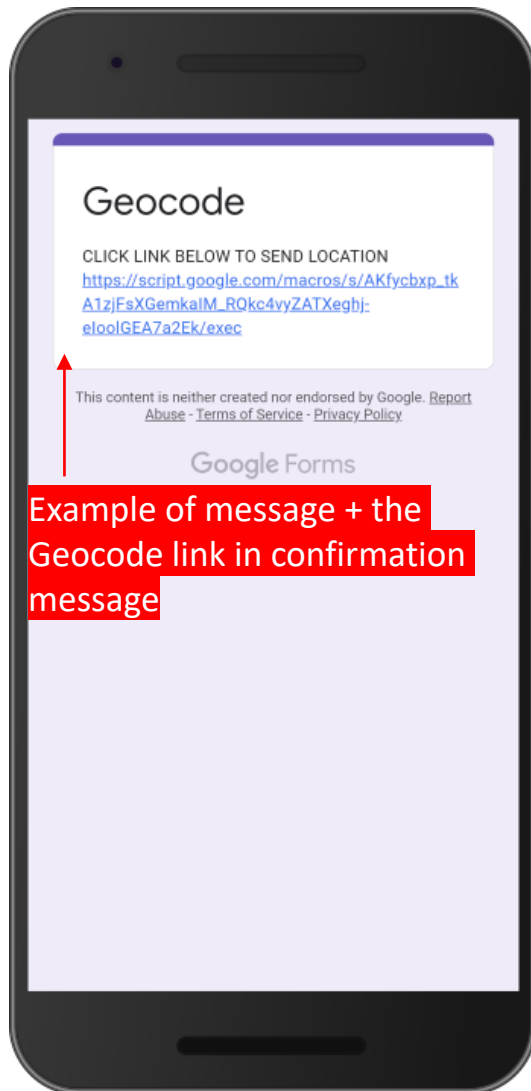
☐ Select existing spreadsheet

Cancel Create

Create spreadsheet for responses

[illegible]

Geocode for Google Forms is now Ready



Geocode is now ready

Remember that the link is only applicable for the form where the link is created.

For other form you have to create a new different link, just repeat the process.



APPENDIX

Geocode Script – Code. Gs

Page 1 of 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

Page 2 of 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

Page 1 of 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>
```

More Google Forms Materials

- GOOGLE FORMS TUTORIAL PART 1: CREATE ONLINE SURVEYS
 - [Download pdf here.](#)
- GOOGLE FORMS TUTORIAL PART 2: CREATE ONLINE QUIZ/TEST
 - [Download pdf here.](#)
- Collection of Google Forms questionnaires that you can copy to your Gdrive for free.
 - [Click here.](#)



THANK YOU

maxi

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