

June 2020

maxi

## About Google Forms

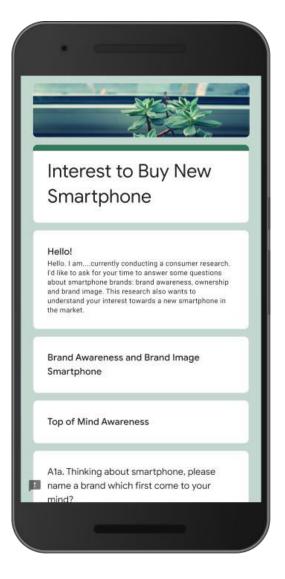
- Google Forms, another product from Google, is an app to create web based forms/questionnaire and collect answers online in real-time. Can be used in any device: smartphone, laptop/PC and tablet.
- As a platform, Google Forms can be used for practically any online data gathering activities, from using a simple form to complex questionnaire. Google Forms is as useful for students doing school projects as for professionals for company projects.
  - Teachers/educators would love the scoring feature for each question based on its answer that enables Google Forms to be a quiz/test tool.
- Our years of experience using Google Forms as survey tool shows that Google Forms is solid; reliable and secure app, during questionnaire development and data collection. The forms/questionnaire also looks professional.
- Google Forms is Free.
- This tutorial is for Google Forms to create online questionnaire. Google Forms for quiz is in separate tutorial.
- This tutorial is developed by <u>adhi.wikantyoso@maxiresearch.com</u> at <u>www.maxiresearch.com</u>

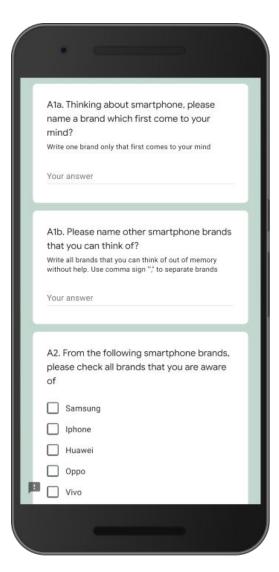
## Interest to Buy a New Smartphone

- For this tutorial, we have developed questionnaire titled "Interest to Buy a New Smartphone"
- The objective of the questionnaire is to understand consumer interest to buy for a new smartphone
  - For respondents to have better knowledge of the product, we need to show picture of the phone, video and its specification in the questionnaire.
- We measure the interest to buy at the price at which it is going to be sold
  - Understand the changes in interest to buy when price is increased/lowered
- As background to the finding, we want to understand smartphone brand awareness, brand image and ownership.
- First we will show how final questionnaire looks in smartphone, followed by the questionnaire viewed in laptop/PC along with description for each question item, then followed on how to make the questionnaire in laptop/PC.
  - Based on our experience, developing questionnaire is much easier and faster using laptop/PC



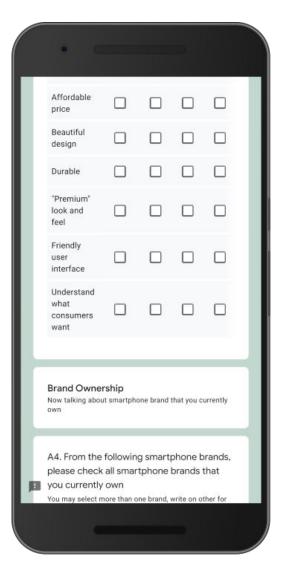
# Google Form Questionnaire (1)



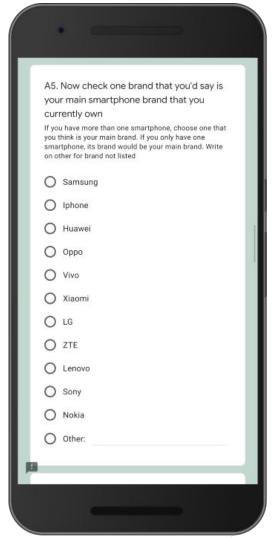


г	Vivo					٦
	Xiaomi					
	LG					
	ZTE					
	Lenovo					
	Now I'd like to kr brands.					
	From the following what brands fit you can check of like that you thin check none if the statement.  A.3 Which brother following the following	with each sta ne brand onl ak fit with the ere is no bran rand(s) tha	atement. ly, or as m e stateme nd that yo	nt. Or you ou think fit	can with the	
	what brands fit v You can check o like that you thin check none if the statement.	with each sta ne brand onl ak fit with the ere is no bran rand(s) tha	atement. ly, or as me e statement and that you at you the	nt. Or you ou think fit hink fits	can with the with	
	what brands fit v You can check o like that you thin check none if the statement.	with each sta ne brand onl ok fit with the ere is no bran rand(s) tha	atement. ly, or as me e statement and that you at you the	nt. Or you ou think fit hink fits	can with the with	
	what brands fit v You can check o like that you thin check none if the statement.  A.3 Which br the following	with each sta ne brand onl ok fit with the ere is no bran rand(s) tha	atement. ly, or as me e statement and that you at you the	nt. Or you ou think fit hink fits	can with the with	

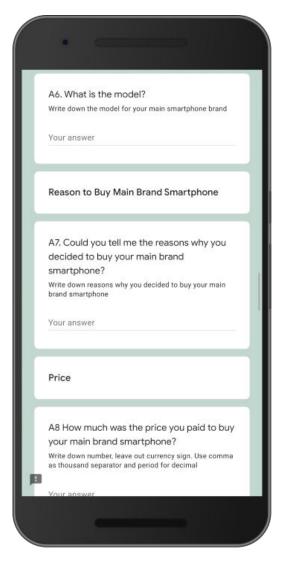
## Google Form Questionnaire (2)

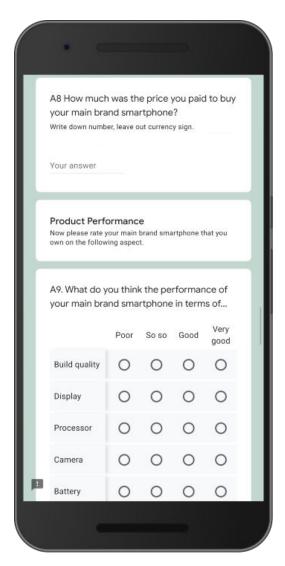


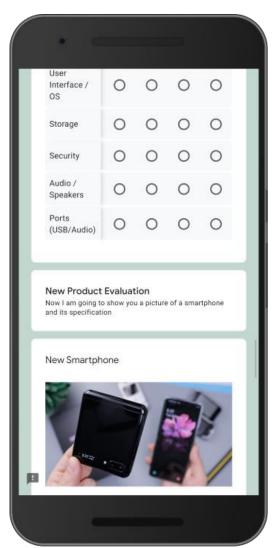




## Google Form Questionnaire (3)

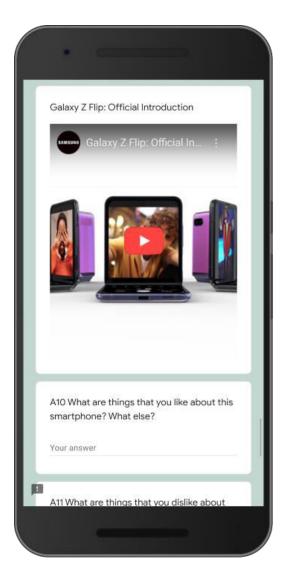


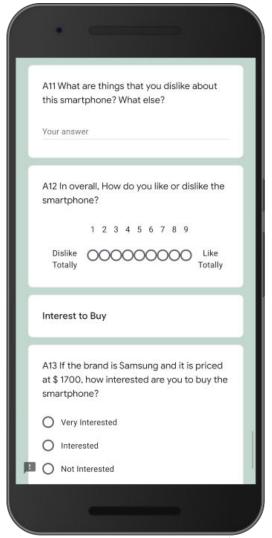




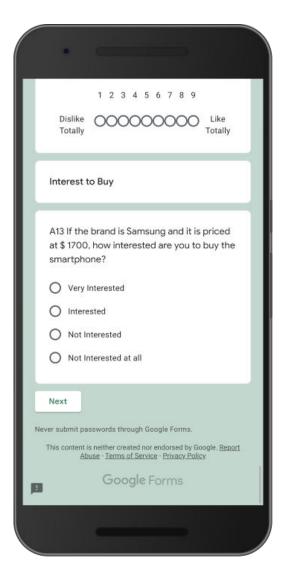
## Google Form Questionnaire (4)

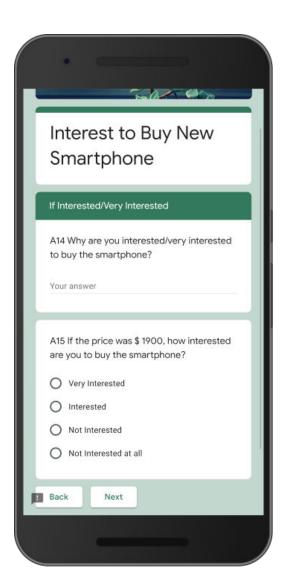


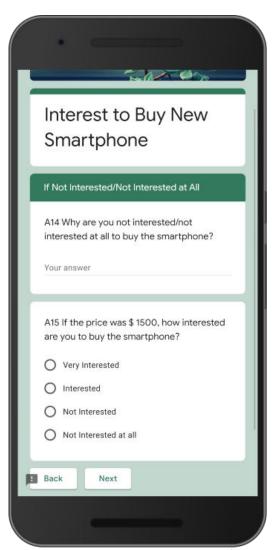




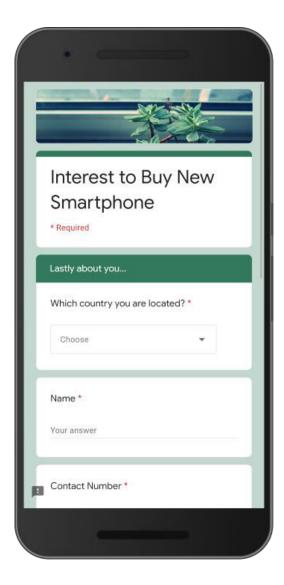
## Google Form Questionnaire (5)

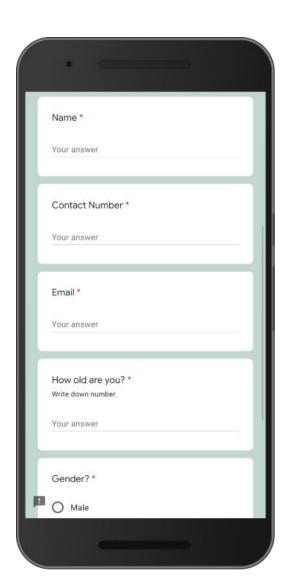


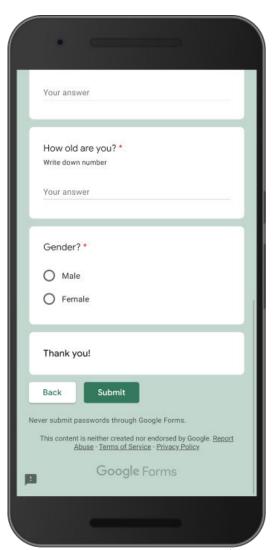




# Google Form Questionnaire (6)



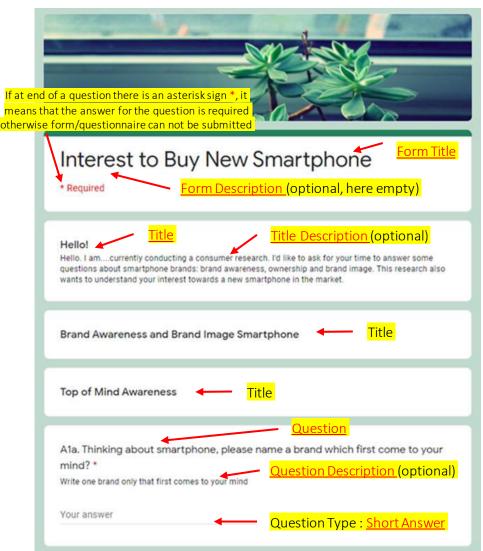






## Google Forms Questionnaire Description (1)

Now viewed on Laptop/PC



Your answer	Question Type: Paragraph
A2. From the followaware of *  Samsung Iphone Huawei Oppo Vivo Xiaomi LG ZTE Lenovo	Question Type: Checkbox Meaning that respondent can select 1 or more than 1 answers. Look at the boxes for answers compared to circle for Multiple Choice question type

Despite the apparently limited space for Paragraph, actually we can write as long as we want. The space will expand if necessary.

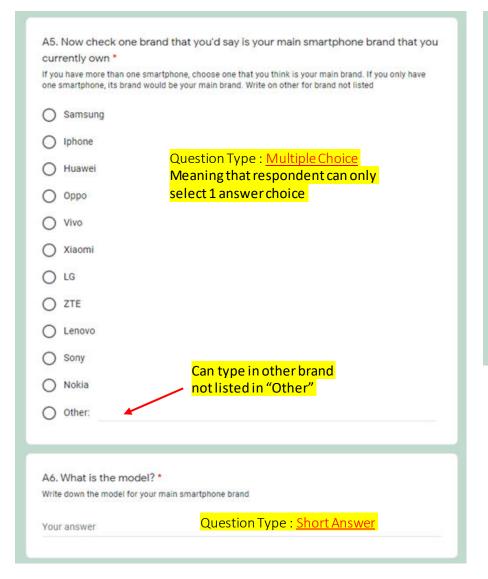
# Google Forms Questionnaire Description (2)

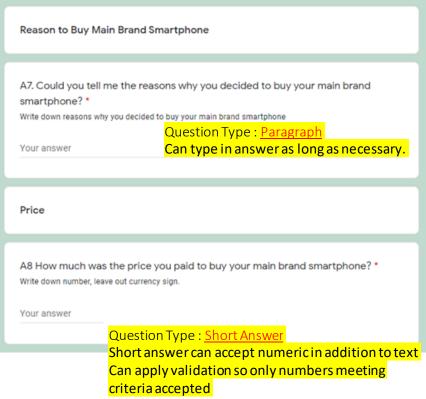
Now viewed on Laptop/PC

						Descri	ption	(for T	itle or
Brand Image Now I'd like to ke From the followi You can check to can check none	now your op ing list of sta one brand on	tements ly, or as r	, you just co many brand	heck what is you like	nds. t brands fi	Quest as ned It with each think fit wit	ion) c essar	an bea	as long
A.3 Which br	rand(s) th	at you	think fits	with th	e follow	ving state			
	Samsung	Iphone	Huawei	Орро	Vivo	Xiaomi	LG	ZTE	Lenov
Advanced echnology									
High quality									
A brand for	_	_	_	_	_	_	_	_	
ne									
Affordable orice									
Beautiful design									0
Ourable									
Premium*									
ook and eel									
Friendly									
user nterface									
Understand what consumers want									0
4									

## Google Forms Questionnaire Description (3)

Now viewed on Laptop/PC

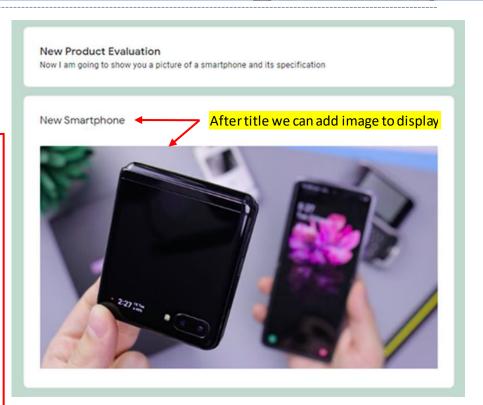




# Google Forms Questionnaire Description (4)

Now viewed on Laptop/PC

#### **Product Performance** Now please rate your main brand smartphone that you own on the following aspect. A9. What do you think the performance of your main brand smartphone in terms of... \* Very Poor Poor So so Good **Build quality** Display Processor Camera Battery User Interface / OS Storage Security Audio / Speakers Ports (USB/Audio)



Question Type: <u>Multiple Choice Grid</u>
Meaning that respondent can only
select 1 answer for each row

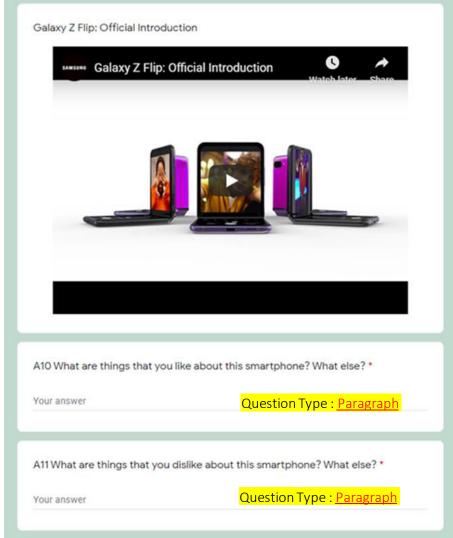
## Google Forms Questionnaire Description (5)

Now viewed on Laptop/PC

Added Title with another image containing table to display. Image is particularly helpful in case of showing forms/shape unsupported by Google Forms such as tables

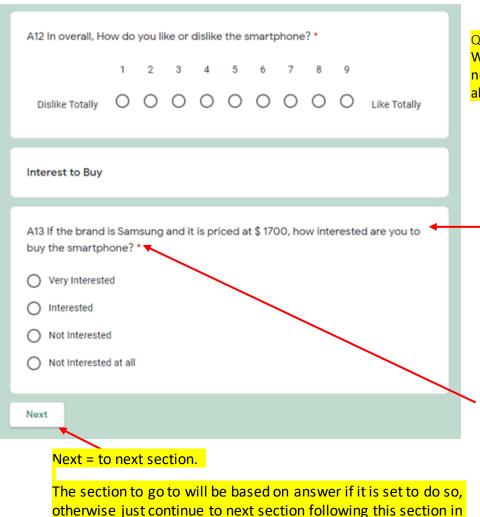
NETWORK	Technology	GSM / HSPA / LTE EXHAD
LAUNCH	Announced Status	2020, February 11 Available, Released 2020, February 14
BODY	Dimensions	Unfolded: 167.3 x 73.6 x 7.2 mm Folded: 87.4 x 73.6 x 17.3 mm
	Weight	183 g (6.46 gz)
	Build	Plastic front, glass back (Gorilla Glass 6), aluminum frame
	SIM	Nano-SIM, eSIM
		Samsung Pay (Visa, MasterCard certified)
DISPLAY	Type	Foldable Dynamic AMOLED capacitive touchscreen, 16M colors
	Size	6.7 inches, 101.6 cm <sup>2</sup> (~82.5% screen-to-body ratio)
	Resolution	1080 x 2636 pixels (~425 ppi density)
		HDR10+
		Cover display: 1.1", Super AMOLED, 112 x 300 pixels
PLATFORM	OS	Android 10.0; One UI 2
PLAIFORM	Chipset	Qualcomm SM8150 Snapdragon 855+ (7 nm)
	CPU	Octa-core (1x2 95 GHz Kryo 485 & 3x2 41 GHz Kryo 485 & 4x1 78 GHz Kryo 485
	GPU	Adreno 640 (700 MHz)
MEMORY	Card slot	No
mermon.	Internal	256GB 8GB RAM
		UFS 3.0
MAIN	Dual	12 MP, t/1.8, 27mm (wide), 1/2.55", 1.4µm, Duai Pixel PDAF, OIS
CAMERA		12 MP, f/2.2, 12mm (ultravide), 1.12µm
	Features	LED flash, HDR, panorama
	Video	2160p@30/60fps, 1080p@60/240fps, 720p@960fps, HDR10+
SELFIE	Single	10 MP, f/2.4, 26mm (wide), 1.22µm, PDAF
CAMERA	Features	HDR
	Video	2160p@30fps
SOUND	Loudspeaker	Yes
	3.5mm jack	No .
		32-bit/384kHz audio
		Tuned by AKG
COMMS	WLAN	Wi-Fi 802.11 a/b/g/n/ac, dual-band, Wi-Fi Direct, hotspot
	Bluetooth	5.0, A2DP, LE
	GPS	Yes, with A-GPS, GLONASS, GALILEO, BDS
	NFC	Yes
	USB Sensors	3.1, Type-C 1.0 reversible connector, USB On-The-Go
FEATURES	Sensors	Fingerprint (side-mounted), accelerometer, gyro, proximity, compass, barometer
BATTERY		Non-removable Li-Po 3300 mAh battery
	Charging	Fast battery charging 15W
		Wireless charging
MISC	Colors	Mirror Black, Mirror Purple, Mirror Gold, Thom Browne Edition
	Models	SM-F700, SM-F700F, SM-F700F/DS, SM-F700U/DS, SM-F700U1/DS, SM-F700N M-F7000
	SAR	0.54 W/kg (head) 0.96 W/kg (body)
	SAREU	0.37 W/kg (head) 1.55 W/kg (body)
	Price	\$1559.00/€1.480.00/£1.511.97
	1000	AN ADDRESS OF THE PARTY OF THE

Added Title now with video to display. Can only play video hosted on Youtube, so you may need to upload your video to Youtube first.



## Google Forms Questionnaire Description (6)

Now viewed on Laptop/PC



the questionnaire for any answer

Question Type: Linear Scale

We show scale from lowest to highest assigned numbers (choices available from 0 to 10). We can also set our own labels for lowest-highest scale.

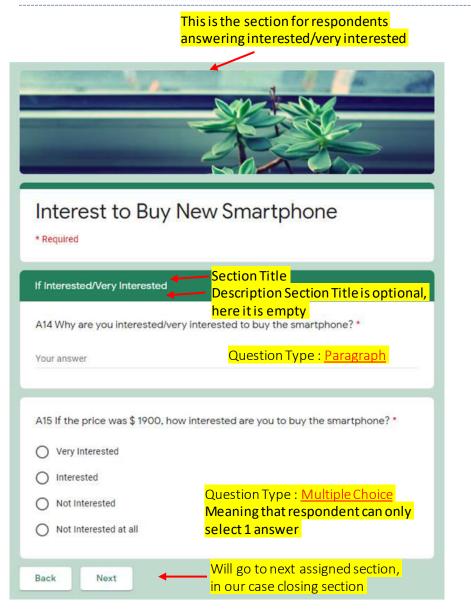
In this question we created question logic branching/skip logic. Those answering Interested/Very will go to a particular section while Not Interested/Not Interested At All go to another section.

Will not able to move to next section if any required answer question (with \* asterisk) is empty. This is to make sure that all necessary questions are answered.

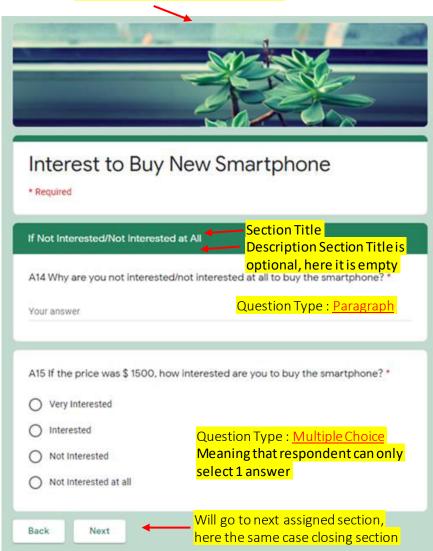
In this questionnaire all questions are marked as required.

# Google Forms Questionnaire Description (7)

Now viewed on Laptop/PC

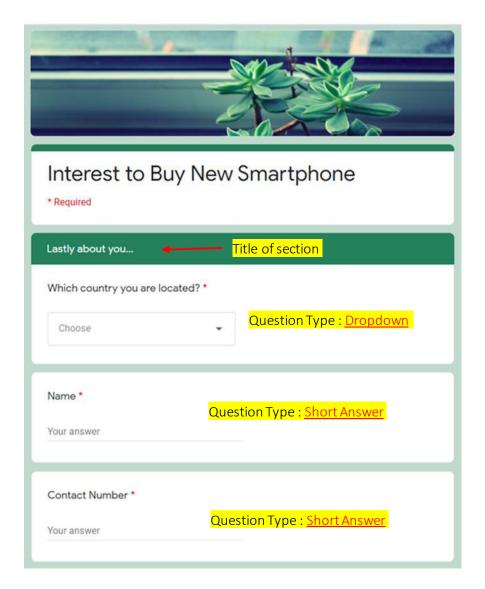


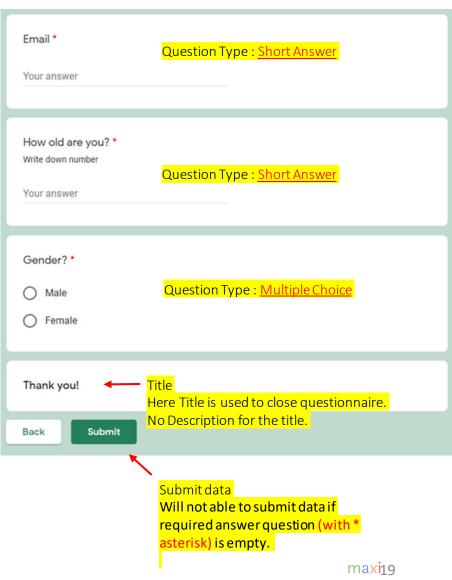
This is the section for respondents answering not interested/not at all



# Google Forms Questionnaire Description (8)

Now viewed on Laptop/PC



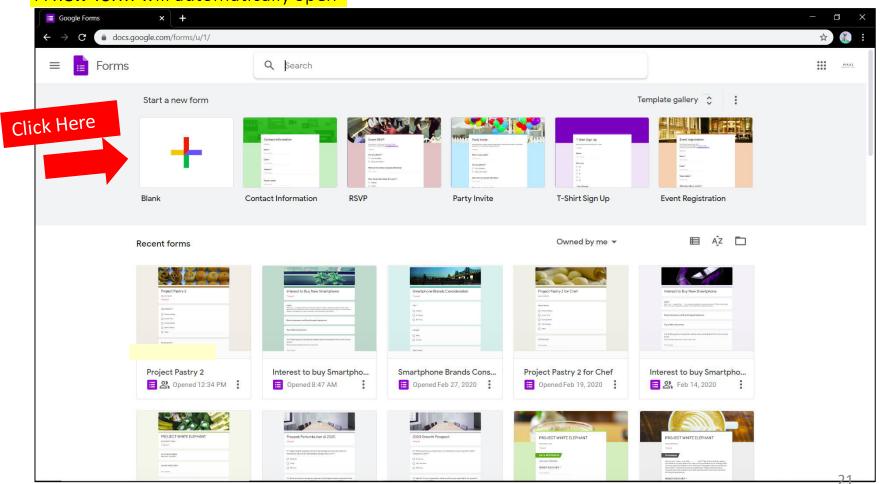




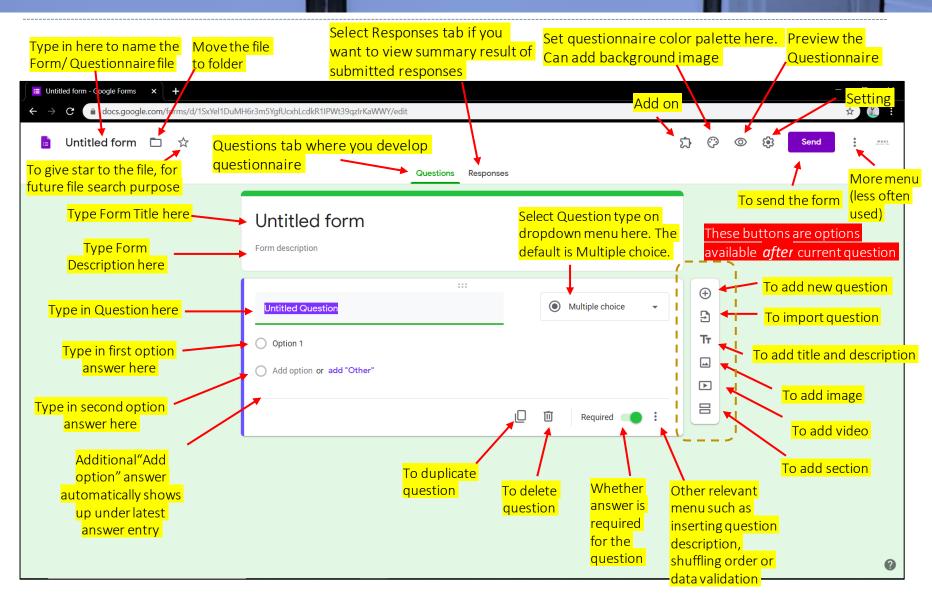
#### Start A New Questionnaire

In Google Forms, Form = Questionnaire

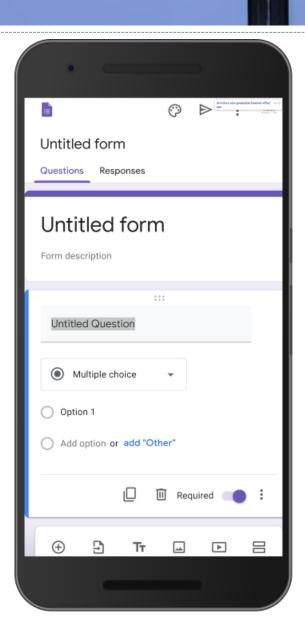
- Sign up or Sign in to your Google account
- Go to docs.google.com/forms or to your Gdrive click New> More > Google Forms
- In the top left, click the plus button +.
- A new form will automatically open



## Complete Menu to Develop Questionnaire



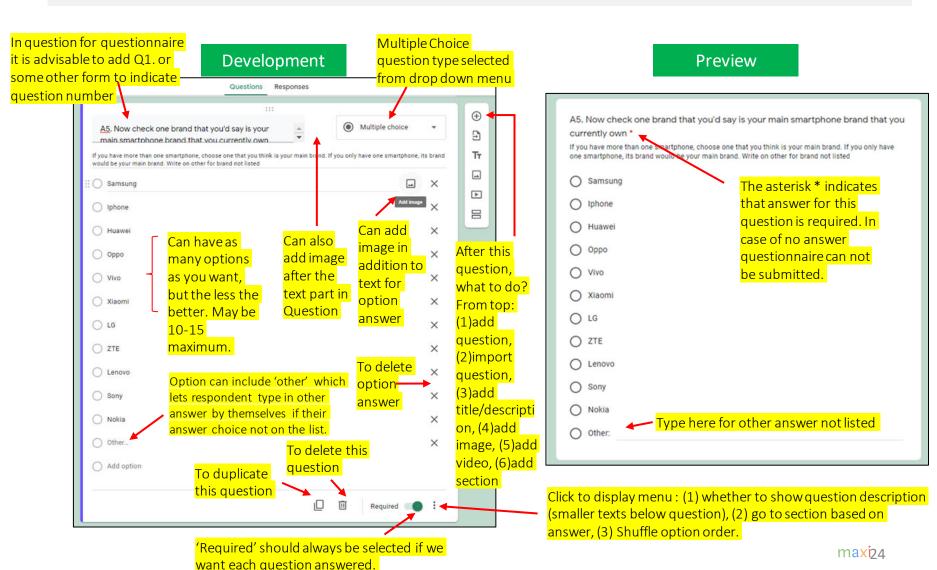
## Smartphone for Developing Questionnaire



- The same menu can be found in Smartphone
- However laptop/PC is much preferable for questionnaire development particularly for long or complex questionnaire since in development:
  - Needs a lot of typing and done correctly/no typo
  - Lots of drag and drop process, needs mouse/trackpad
  - Copy from other sources (documents in laptop/PC)
     and paste to questionnaire
  - Larger screen view for checking each question and whole questionnaire
  - Next we are back to laptop/PC

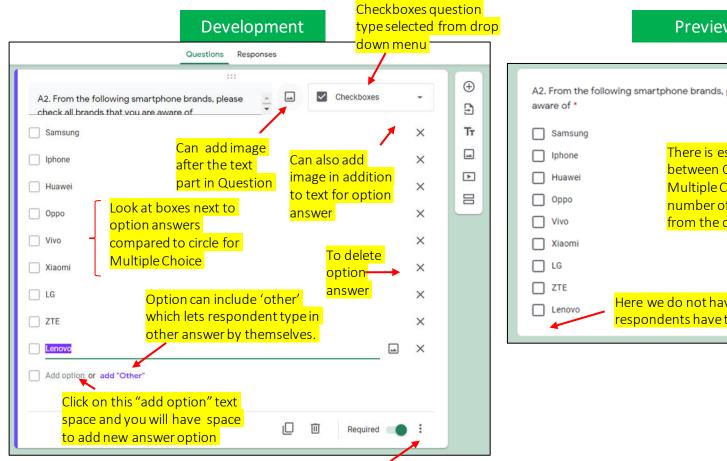
#### Multiple Choice

• We select Multiple choice when we expect only one answer from the question asked.



#### Checkboxes

• We select Checkboxes choice when we allow one or more than one answers from the question.



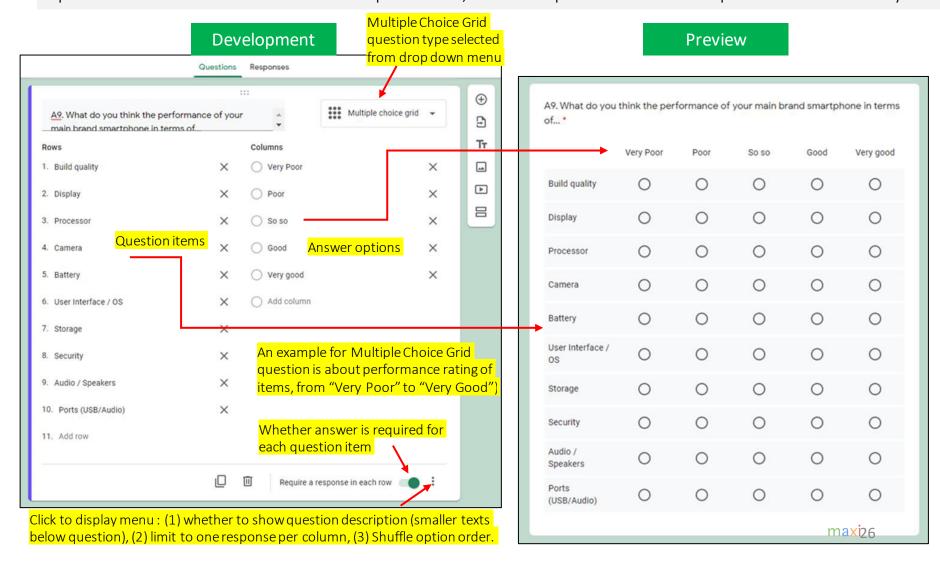
**Preview** 

A2. From the following smartphone brands, please check all brands that you are There is essentially no difference between Checkboxes and Multiple Choice except on number of answers expected from the question Here we do not have option "Other", so respondents have to stick with available options

Click to display menu: (1) whether to show question description (smaller texts below question), (2) response validation-here on checkboxes number of answers considered valid, (3) Shuffle option order.

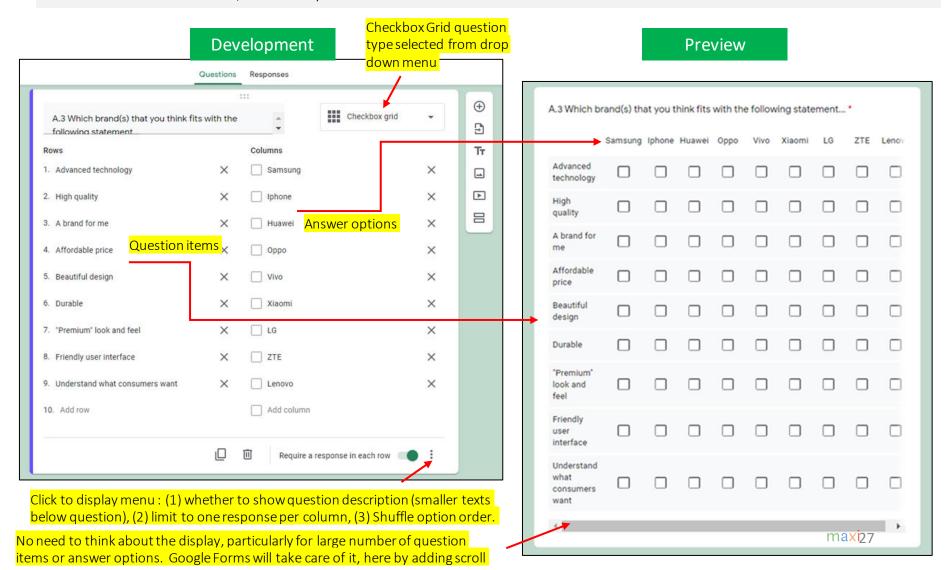
#### Multiple Choice Grid

We select Multiple Choice Grid when we have a number of question items with same repetitive answer options. And the same case with Multiple Choice, for each question item we expect one answer only.



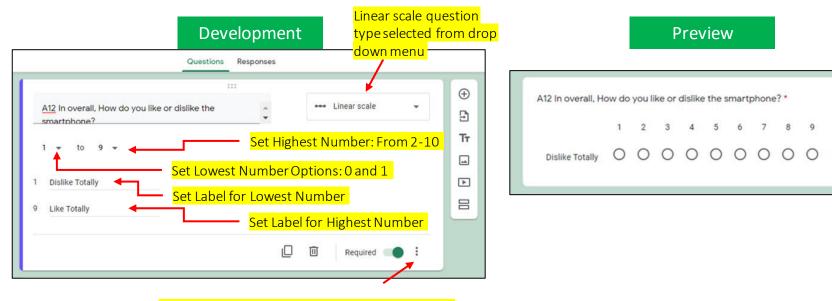
#### Checkbox Grid

We select Checkbox Grid when we have a number of question items with same repetitive answer options. And the same case with Checkbox, for each question item it is allowed to have one answer or more than one answers.



#### Linear Scale

We select Linear Scale because we want respondent to give a score, a number between assigned range. It is usually used for evaluation about product or service. The lowest and highest number in the range can have labels to help respondent in giving score.



Click to display menu: whether to show question description (smaller texts below question)

#### Paragraph

- When we ask question and expect the answer to be in long text, select Paragraph. In questionnaire usually the paragraph question type is related to why/reasoning questions where answer can be quite long and unstructured.
  Another example of question that answers in long text is for writing list of items.
- Paragraph question type selected from drop down menu

  Questions Responses

  A7. Could you tell me the reasons why you decided to buy your main brand smartphone?

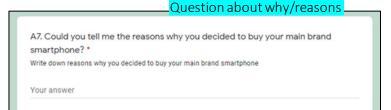
  Write down reasons why you decided to buy your main brand smartphone

  Long answer text

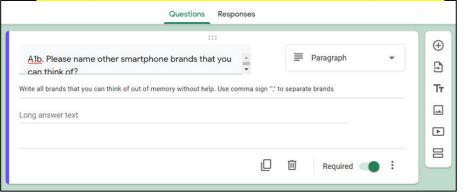
  Required

Development

Preview



Click to display menu: whether to show question description, apply validation, for example minimum or maximum character to be accepted answer



Question about list of items

A1b. Please name other smartphone brands that you can think of? \*

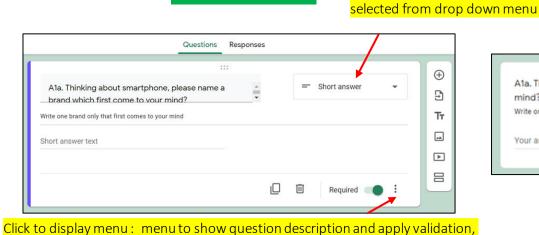
Write all brands that you can think of out of memory without help. Use comma sign "," to separate brands

Your answer

#### **Short Answer**

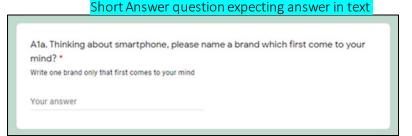
• Short Answer is question type that expects answer in short text or number

Short Answer question type



**Development** 

Preview



what criteria would be applied puestions Responses

:::

A8 How much was the price you paid to buy your main brand smartphone?

Write down number, leave out currency sign. Use comma as thousand separator and period for decimal

Required :

Short Answer question expecting answer in number

A8 How much was the price you paid to buy your main brand smartphone?

Write down number, leave out currency sign. Use comma as thousand separator and period for decimal

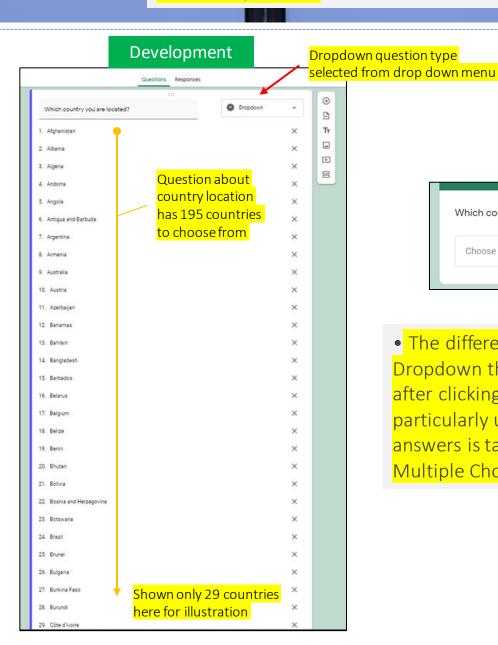
Your answer

#### Dropdown

• Dropdown is similar to Multiple Choice, where we expect only one answer from the question.

Choose

Which country you are located? \*

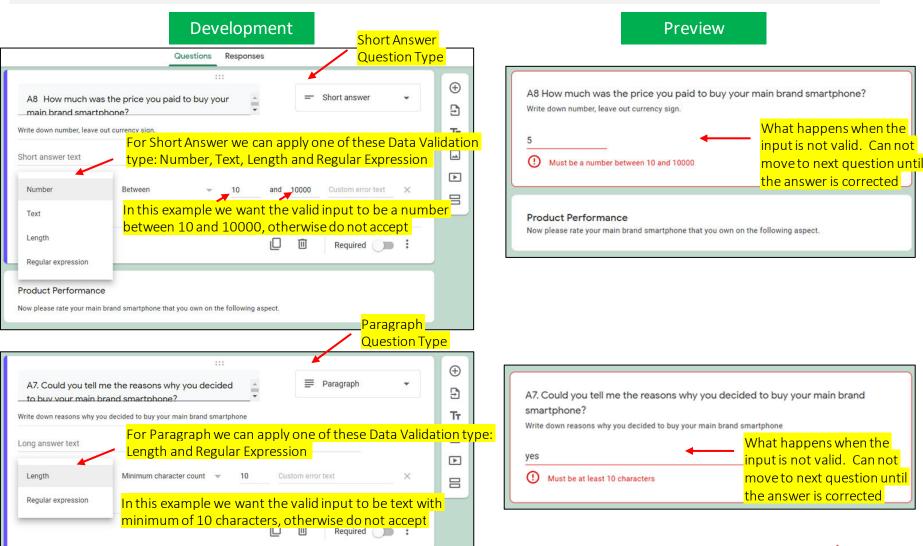


**Preview** 

• The difference with Multiple Choice is that for Dropdown the option answers will only be shown after clicking dropdown button. Dropdown is particularly useful when the number of option answers is taking up much space if shown as Multiple Choice.

#### Data Validation

Answer to question only valid/accepted when meeting certain criteria set by us.



## Conditional Branching / Skip Logic (1)

• Conditional branching or skip logic means that respondents will

have different follow up questions based on their answer at

question where branching is made.

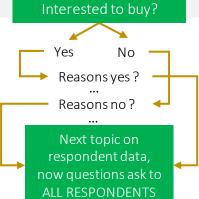
In our example questionnaire follow up question about reasons for being interested to buy will be asked ONLY to those who ANSWER INTERESTED to buy.

On the other hand, follow up questions on reasons for

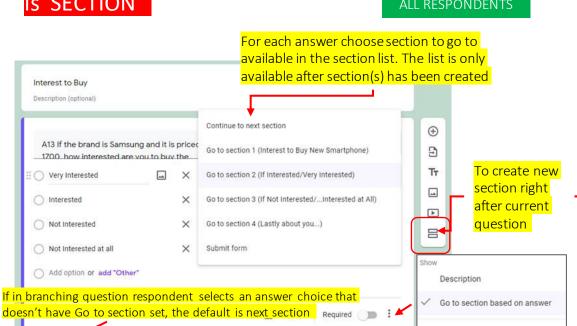
On the other hand, follow up questions on <u>reasons for</u> <u>not being interested will be asked ONLY to those who</u> ANSWER NOT INTERESTED to buy.

# Key in Conditional Branching is 'SECTION'

After section 1 Continue to next section



Shuffle option order

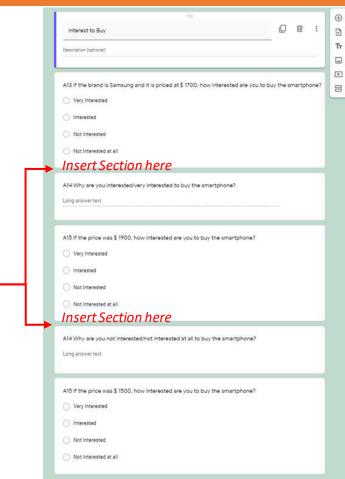


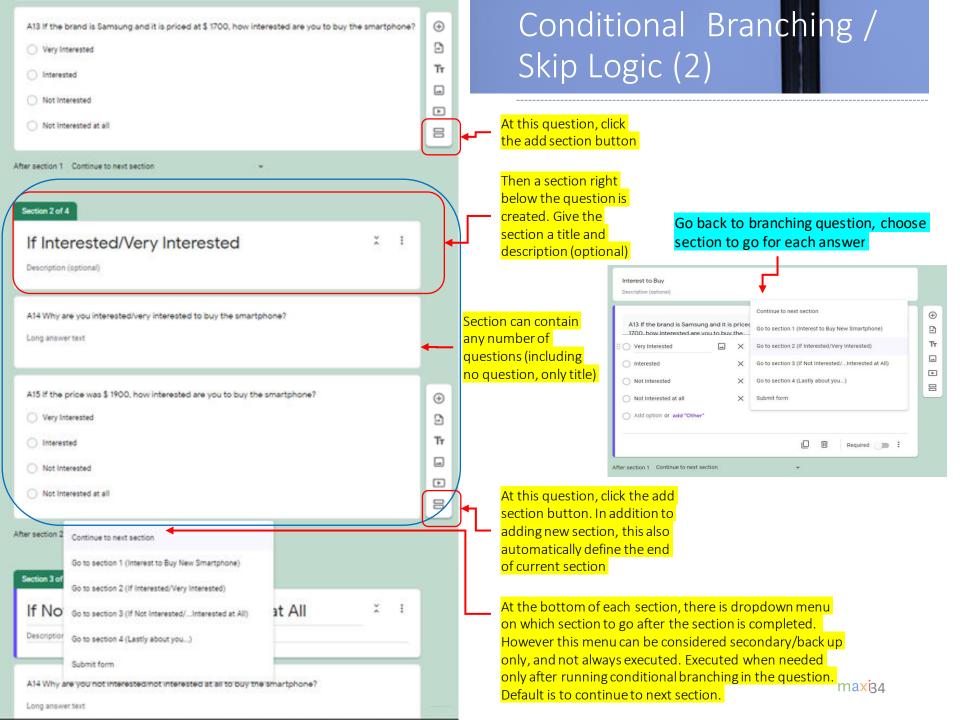
Click this to show Go to section based on answer as branching

menu (only on Multiple Choice/Dropdown question type).

#### STEPS TO CREATE CONDITIONAL BRANCHING

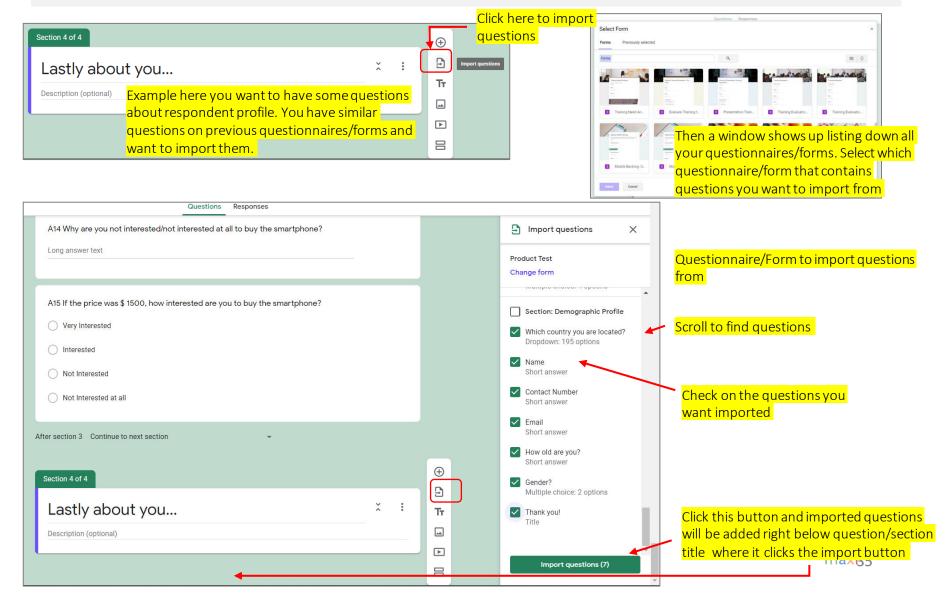
- 1. Complete all questions for the questionnaire
- 2. Create Section(s) for your questionnaire, give title for each of the section
- 3. Go to branching question(s), show menu Go to section based on answer, for each answer from the available section list choose your to go section.





#### Importing Questions

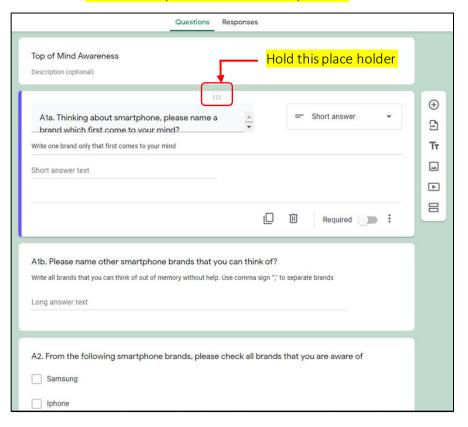
• Instead of creating questions from scratch, you can import questions from previous questionnaires/forms.

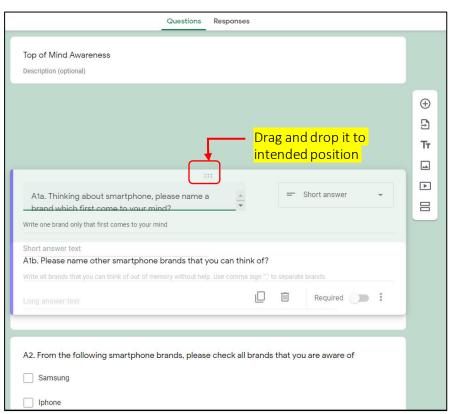


## Reordering Question

Reordering question position by drag and drop.

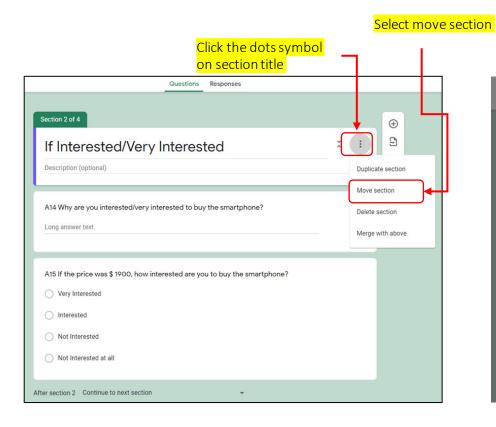
#### Focus to the question to reorder its position

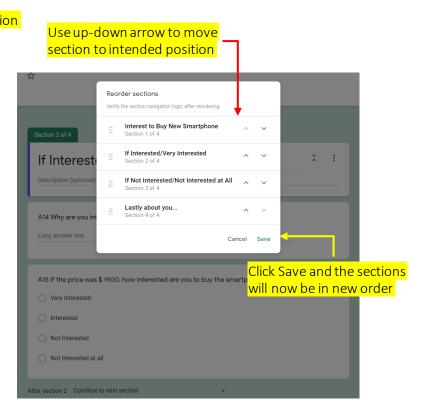




### Reordering Section

• How to reorder a section in relation to other sections.

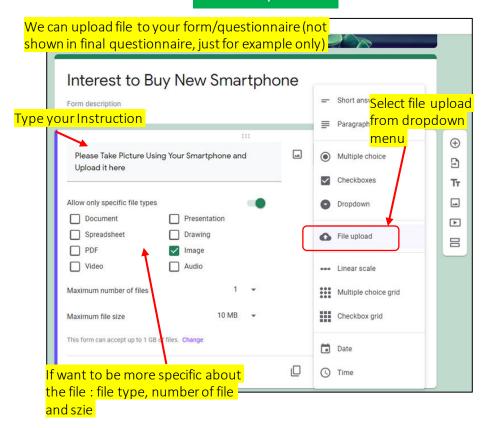




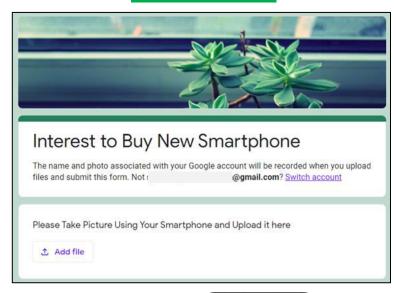
# Upload File to Form/Questionnaire

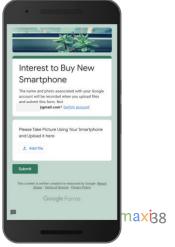
• You can upload file to your form/questionnaire.

#### Development



#### Preview

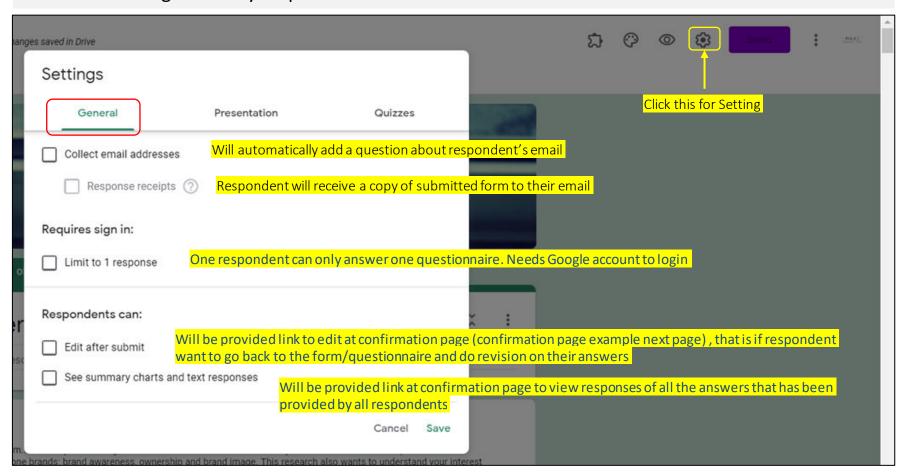






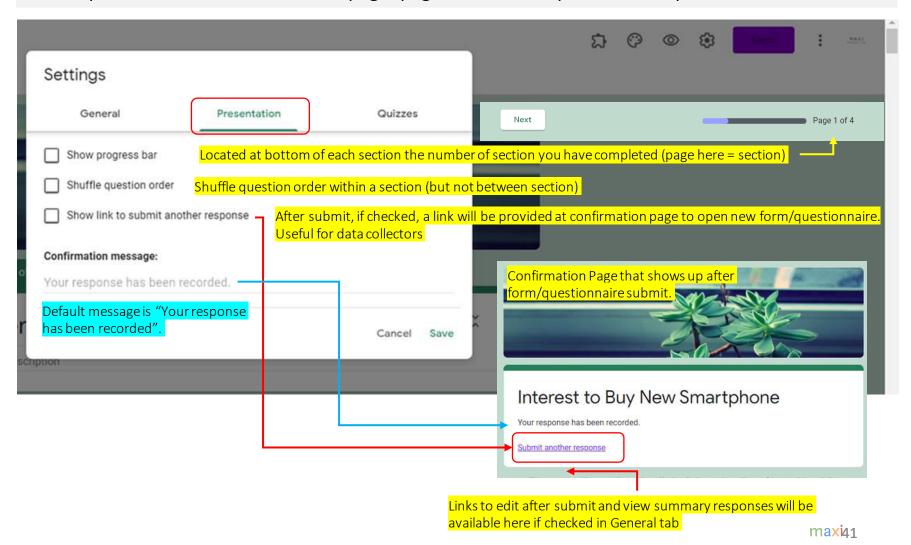
#### Settings General

• Settings General tab: Menus regarding respondents email, sign-in, editing answers in submitted form and viewing summary responses



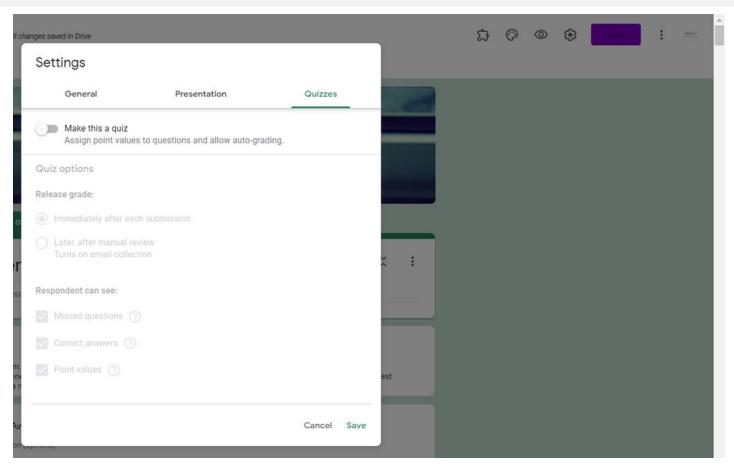
# Setting Presentation

• Setting Presentation tab: Menus regarding additional information that appears on forms/questionnaire or confirmation page, page that shows up after form/questionnaire submit.

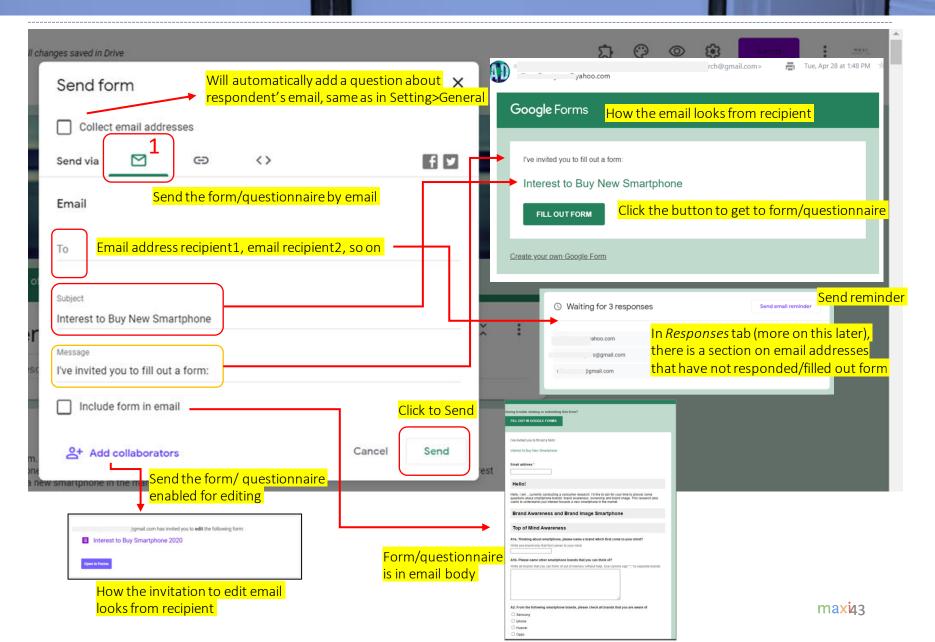


# Setting Quizzes

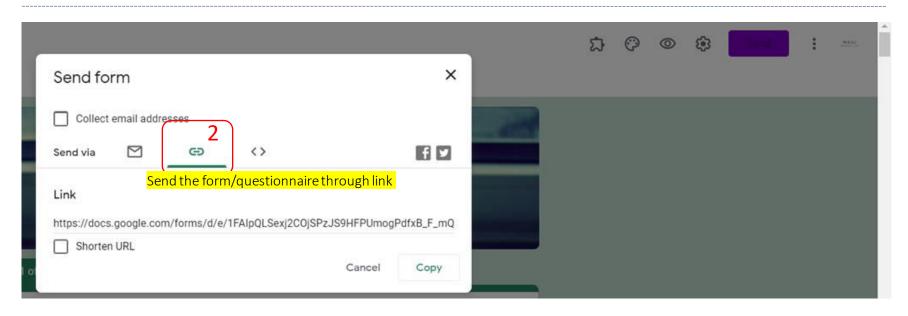
- Setting Quiz tab: Menus that only relevant if the form/questionnaire is used as quiz / test, in which case for each question there is right/wrong answer and then their scores.
- More on Google Forms as Quiz in Part 2 of this Tutorial.

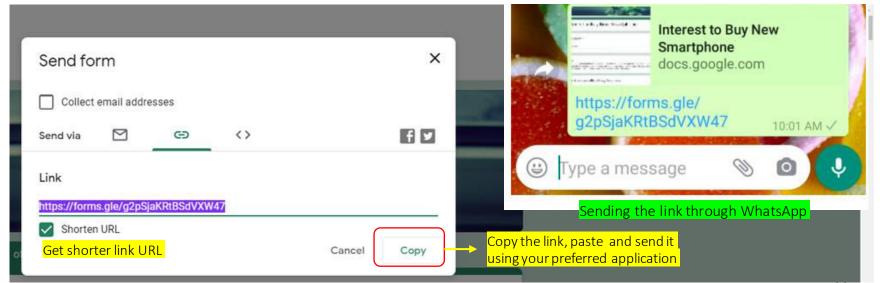


#### Sending Out the Form/Questionnaire -1. By Email



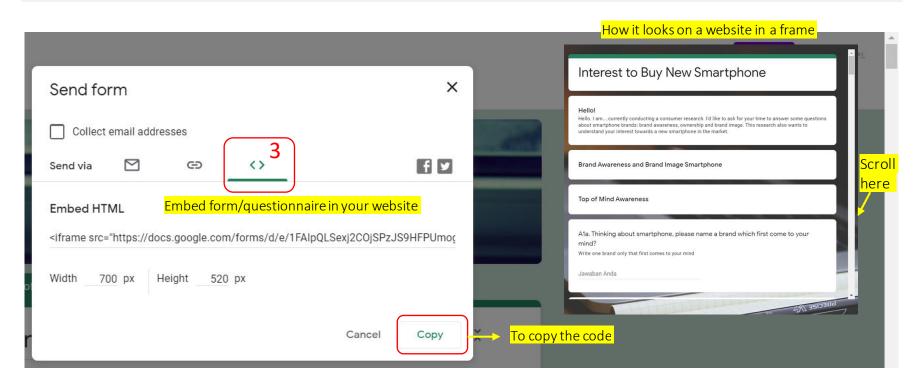
#### Sending Out the Form/Questionnaire – 2. Through Link





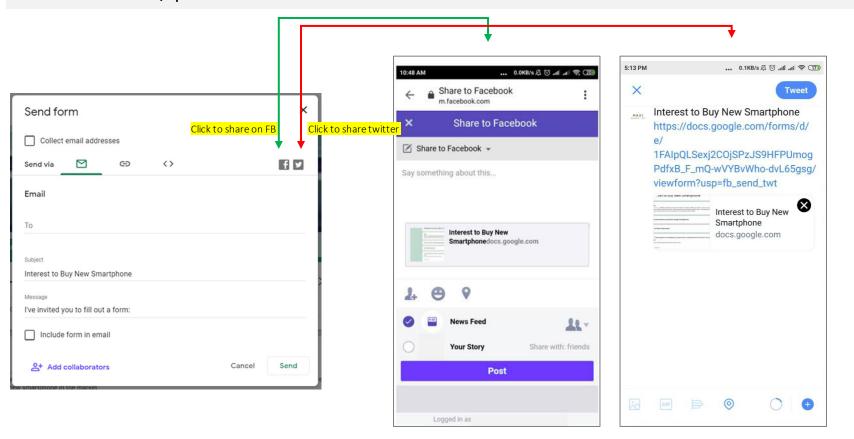
#### Sending Out the Form/Questionnaire – 3. Embed HTML

•To have the form/questionnaire appear on your website in a frame



#### Share it on Social Media

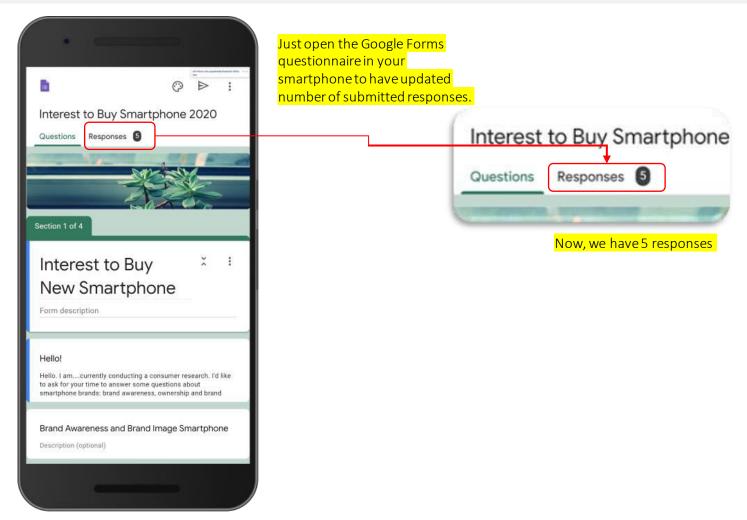
• Share the form/questionnaire in Facebook or Twitter





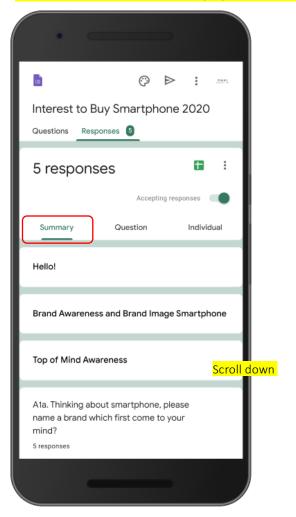
#### Responses Tab

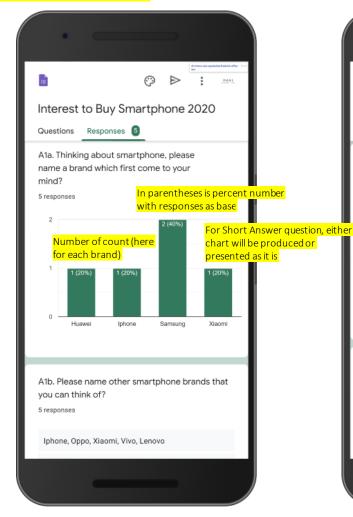
• In addition to Question tab to develop questionnaire, Form maker/editor can have access to Response tab. The number in responses shows number of submitted responses in real time.

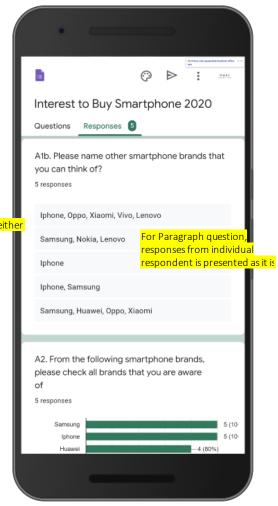


### Responses – Summary (1)

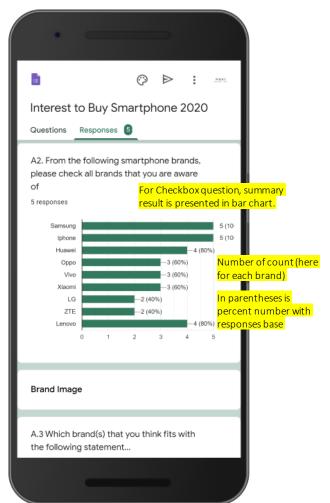
In Responses – Summary we can find summary result from all responses submitted so far. Continuously updated every time new data comes in.

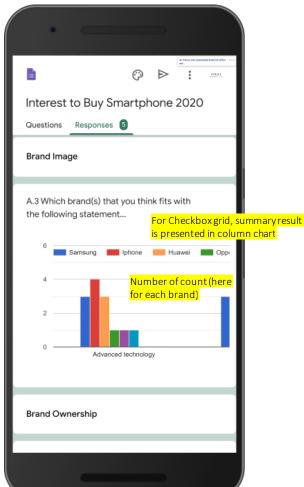


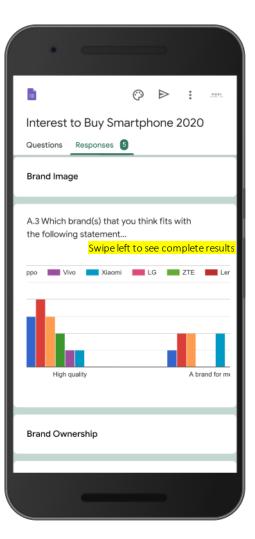




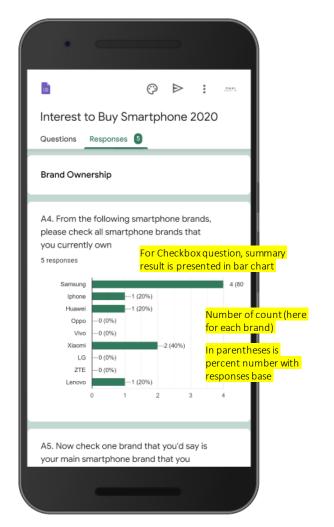
## Responses – Summary (2)

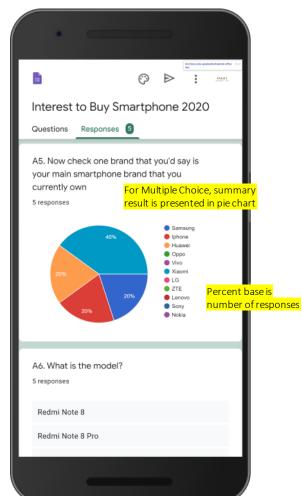


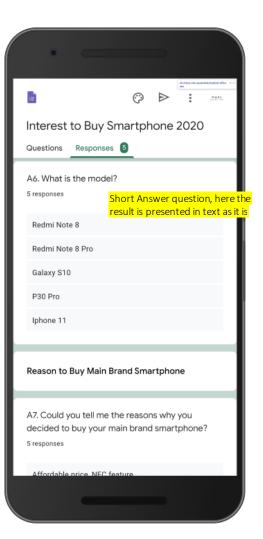




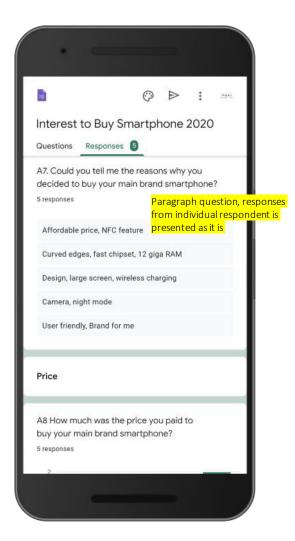
## Responses – Summary (3)

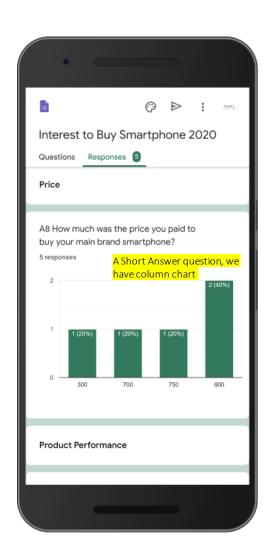


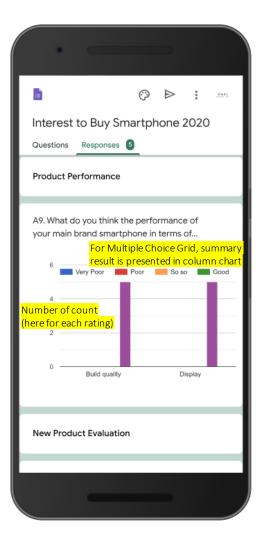




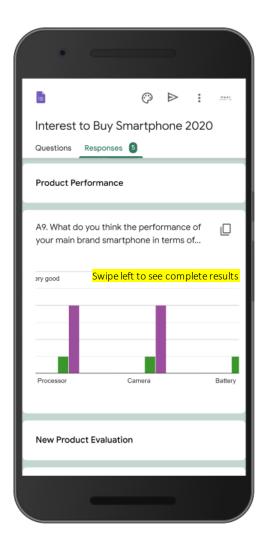
## Responses – Summary (4)

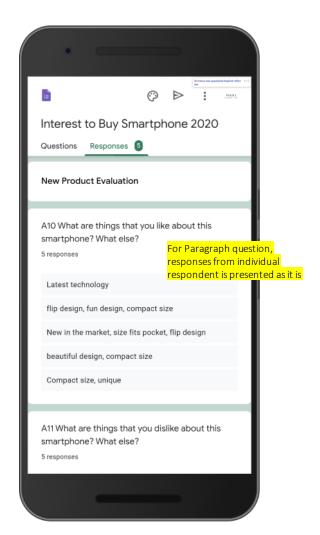


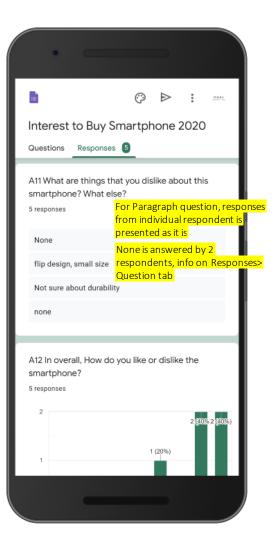




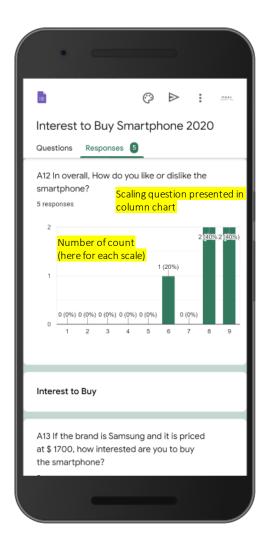
# Responses – Summary (5)

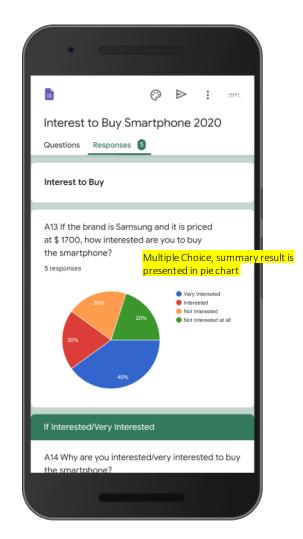


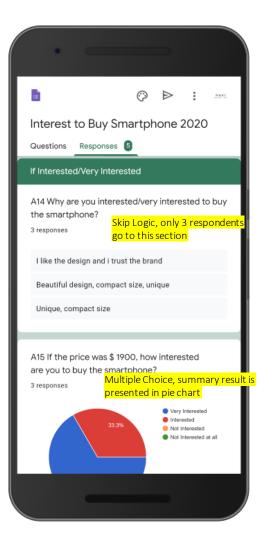




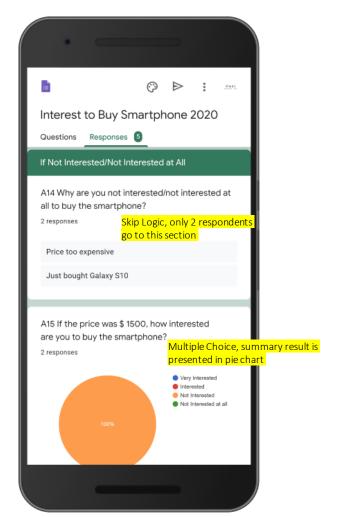
### Responses – Summary (6)

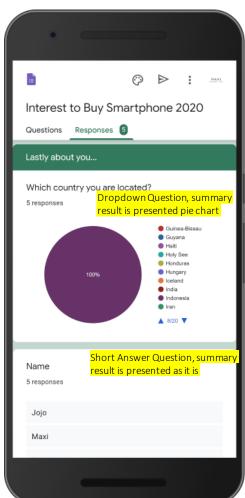


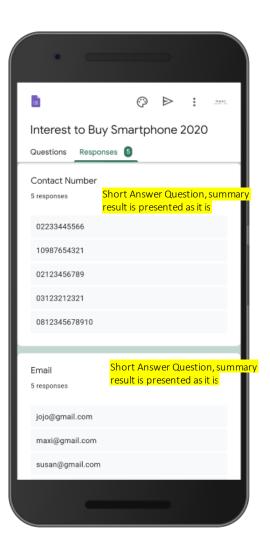




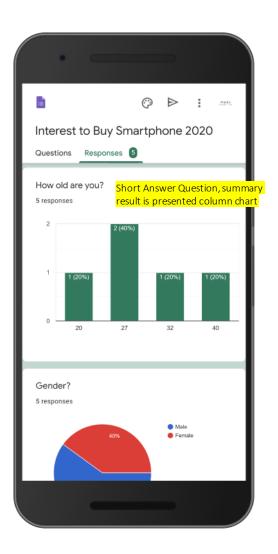
# Responses – Summary (7)

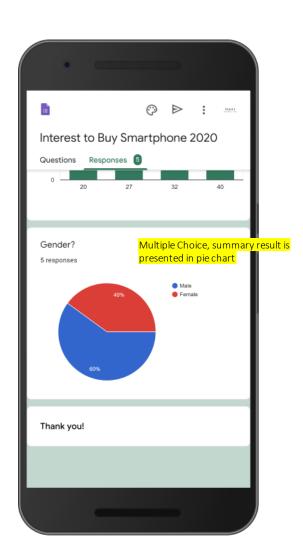






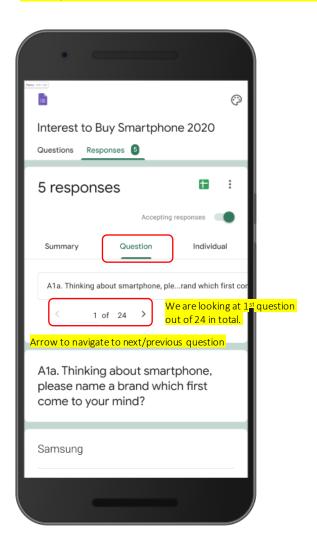
# Responses – Summary (8)

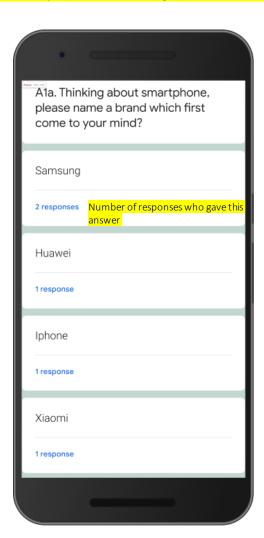


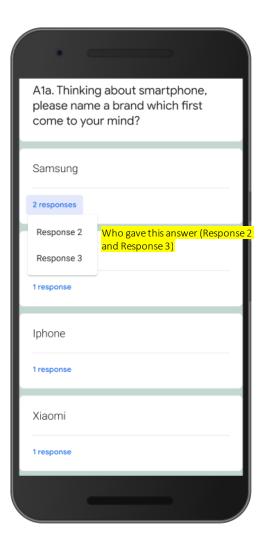


#### Responses – Question

In Responses – Question we can find answers for each question and who gave the answer

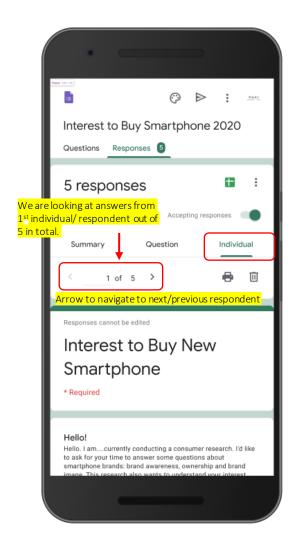


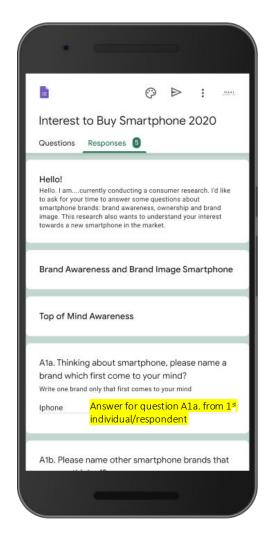


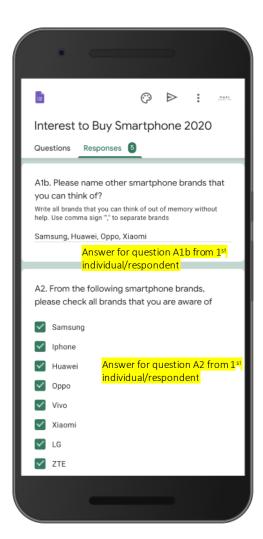


### Responses – Individual

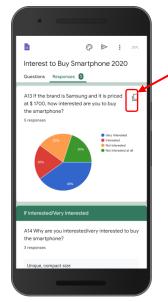
In Responses – Individual we are looking at answers to each question for each individual/respondent



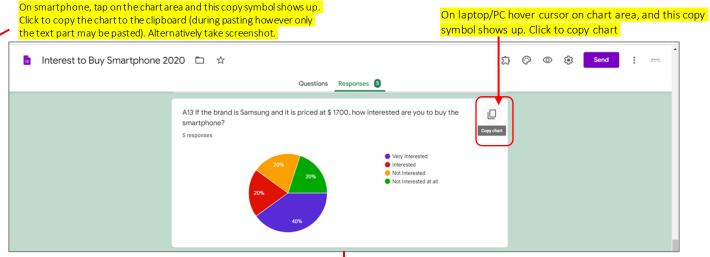




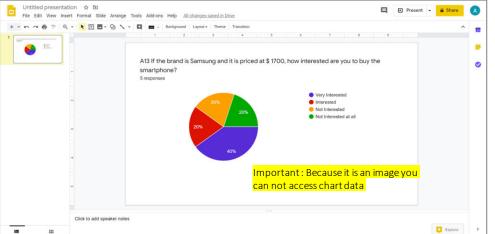
#### Copying Chart



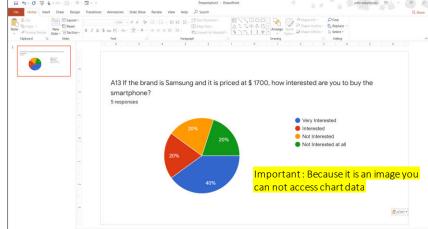
#### The chart part on the Response Summary can be copied as image.

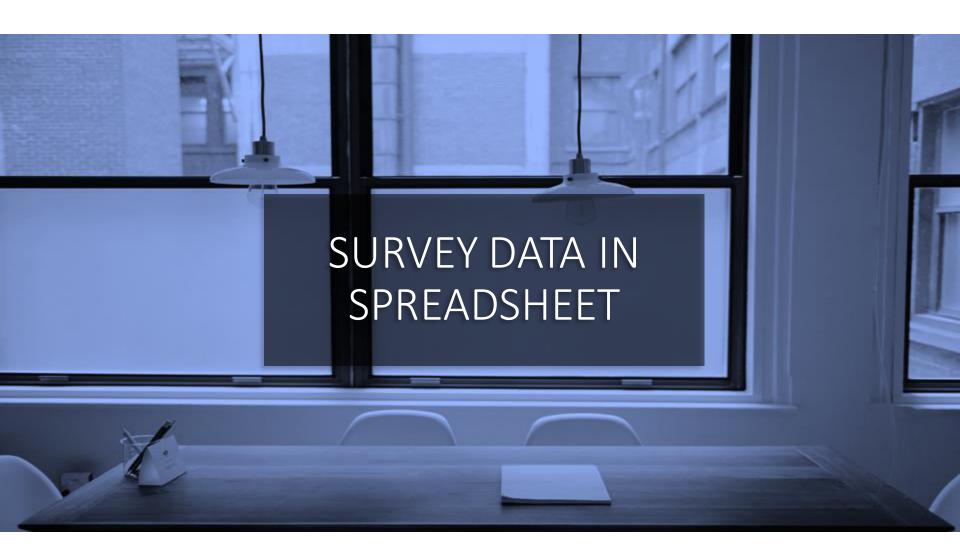


#### Paste the chart image to Google Slide



#### Paste the chart image to Power Point



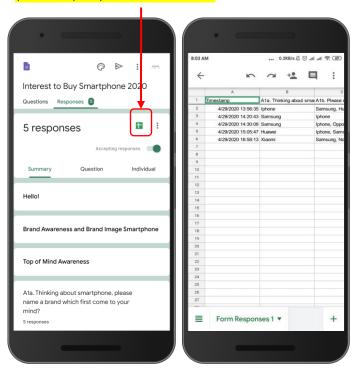


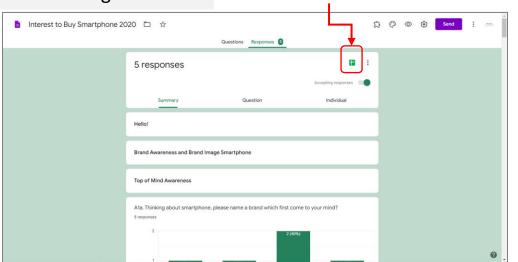
### Google Forms Survey Data is Available in Spreadsheet

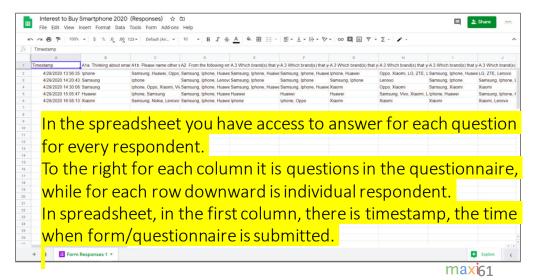
• Major advantage of using Google Forms is that we can readily access responses original data in spreadsheet in Google Sheet.

Link to responses data in spreadsheet format using Laptop/PC

Link to responses data, answers for each question from each individual respondent (raw data) in spreadsheet format

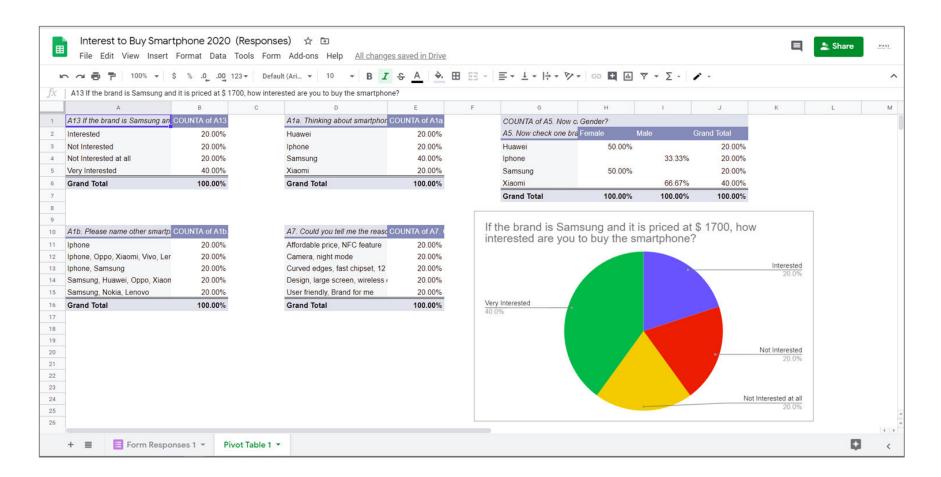






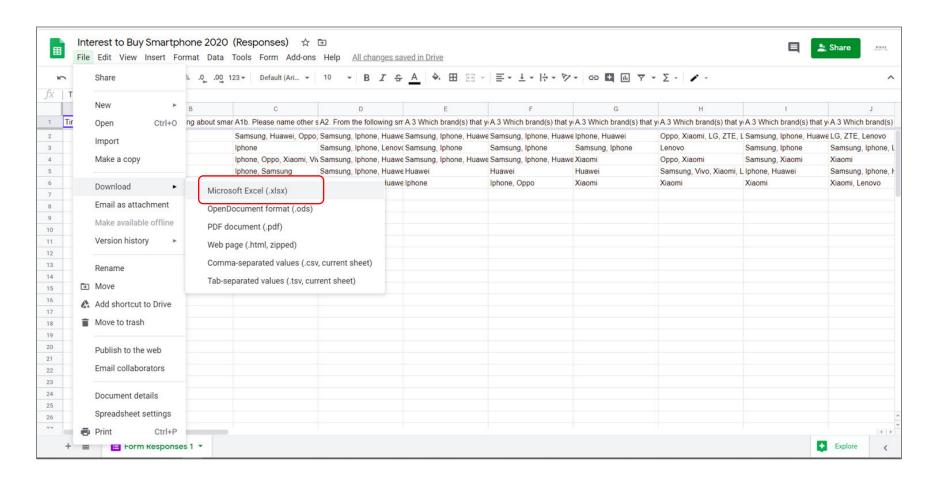
### Pivot Table in Google Sheet

• In Google Sheet, by using Pivot Table, we can produce tables and charts for each question



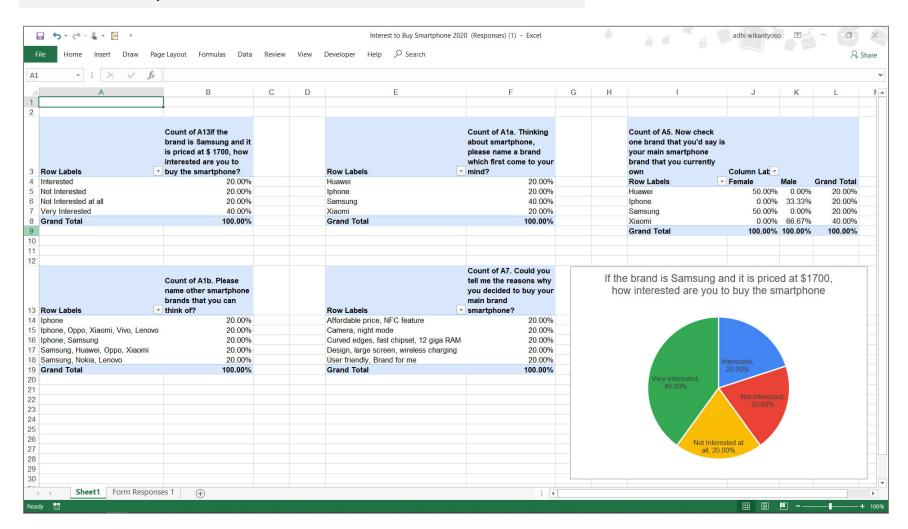
# Download Survey Spreadsheet as Microsoft Excel

Survey data from Google Sheet can be downloaded to Excel



#### Pivot Table in Microsoft Excel

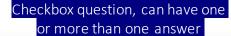
And in Excel you can run Pivot Table to create Tables/Charts





## Multiple Data in a Single Cell Problem

Hypothetical data from example questionnaire.
One cell contains answer from particular question and respondent. Please note that answers for some questions almost all cells contain multiple data



A1b. Please name other smartphone bra	ands 1/
Samsung, Huawei, Oppo, Xiaomi	5
Iphone	5
Iphone, Oppo, Xiaomi, Vivo, Lenovo	5
Iphone, Samsung	5
Samsung, Nokia, Lenovo	5

### Paragraph question, respondents can answer as they wish

A7. Could you tell me the reasons why you de A
User friendly, Brand for me
Design, large screen, wireless charging
Affordable price, NFC feature
Camera, night mode
Curved edges, fast chipset, 12 giga RAM

Pivot Table in Google Sheet



<mark>Dat</mark>	<mark>a in a cell is treated as one si</mark>	<mark>ngle data</mark> —
10	A1b. Please name other smartp	COUNTA of A1b
11	Iphone	20.00%
12	Iphone, Oppo, Xiaomi, Vivo, Ler	20.00%
13	Iphone, Samsung	20.00%
14	Samsung, Huawei, Oppo, Xiaon	20.00%
15	Samsung, Nokia, Lenovo	20.00%
16	Grand Total	100.00%
17		

Grand Total	100.00%
User friendly, Brand for me	20.00%
Design, large screen, wireless of	20.00%
Curved edges, fast chipset, 12	20.00%
Camera, night mode	20.00%
Affordable price, NFC feature	20.00%

Pivot Table in Microsoft Excel

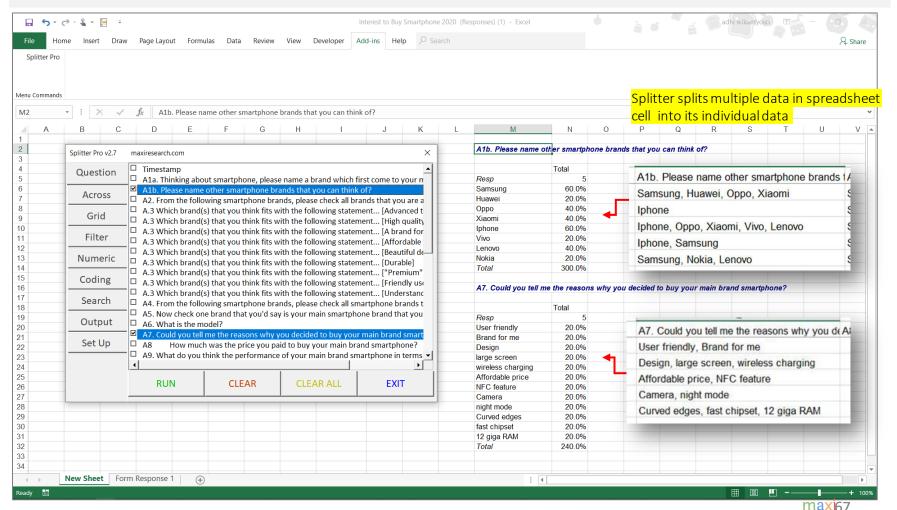


11	Data in a cell is treated	as one single data		
	Row Labels	Count of A1b. Please name other smartphone brands that you can think of?	Row Labels	Count of A7. Could you tell me the reasons why you decided to buy your main brand smartphone?
14	Iphone	20.00%	Affordable price, NFC feature	20.00%
15	Iphone, Oppo, Xiaomi, Vivo, Lenovo	20.00%	Camera, night mode	20.00%
16	Iphone, Samsung	20.00%	Curved edges, fast chipset, 12 giga RAM	20.00%
17	Samsung, Huawei, Oppo, Xiaomi	20.00%	Design, large screen, wireless charging	20.00%
18	Samsung, Nokia, Lenovo	20.00%	User friendly, Brand for me	20.00%
19	Grand Total	100.00%	Grand Total	100.00%
20				
21				
20				

# Splitter: Solution to Multiple Data in Spreadsheet Cell

- Microsoft Excel allows Excel-Add In, that is customized solution added to regular Excel.
- We have developed Splitter Add-In\* to address multiple data in a cell so that it can analyze survey data in Excel downloaded from Google Forms.

  \* For Excel for Windows only



# Splitter: Excel Add-In for Google Form Survey Data Analytics

- Splitter is Excel Add-In for Google Forms Survey Data Analytics. It is specially designed for Google Forms survey data downloaded as Excel.
  - Splitter makes your Excel a *powerful* survey analytics tool.
- Splitter solves key issue for Google Forms survey data format downloaded in spreadsheet which otherwise Pivot Table would suffice: how to handle multiple data in a single cell.
- We have three Splitter versions:
  - 1. Student version: For Google Forms Questionnaire with Closed End questions only
    - Closed End: Multiple Choice (question with single answer) and Checkboxes (question with multiple answers allowed multiple data in a cell in a cell format)
    - Analysis: Crosstabulations and Filter. Download Tutorial
  - 2. Pro version: For Google Forms Questionnaire that has Open End Questions
    - Open End: Instead of choosing available option, respondent write their own answer whether in **Short Answer** (question with answer in short text or numeric) or **Paragraph** (question with answer in long text or essay). Answers for open end question especially **Paragraph** often contains multiple data in a cell.
    - Analysis: Cross tabulations, Filter and Coding for Open End Questions. Download Tutorial
  - 3. Pro X version: Data Entry Diagnostic and Editor
    - Mainly for Paper Questionnaire with manual data entry in Excel. Closed End and Open End Questions. Download Tutorial



### More Google Forms Materials

- GOOGLE FORMS TUTORIAL PART 2: CREATE ONLINE QUIZ/TEST
  - Download pdf <u>here</u>.
- Link to the Google Forms questionnaire used in this tutorial
  - Click <u>here</u> to view, Click <u>here</u> to copy to your Gdrive
- How to add Geocode information of a device submitting Google Forms
  - Geocode = Latitude, Longitude and Address (Street Name and Number, City, State, ZIP Code, Country) of a Device submitting Google Forms
  - Download pdf <u>here</u>.
- Collection of Google Forms questionnaires that you can copy to your Gdrive for free.
  - Click here.

