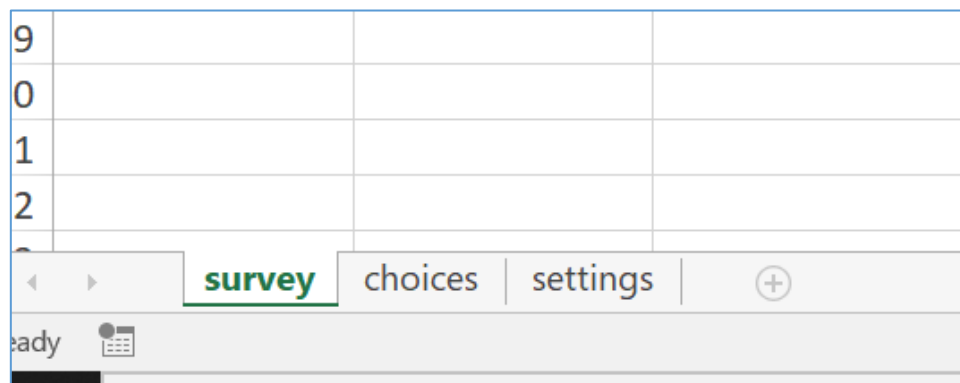


A Guide to Create an ODK Data Collection Form using Microsoft Excel

In this guide, you will learn the basic steps needed to design an ODK Excel form that will later be uploaded into the KoBo Toolbox website (<https://www.kobotoolbox.org/>) for survey generation. For this guide, it is recommended that you have a basic understanding of excel as well as a good understanding of designing a survey questionnaire.

The first step in designing an ODK form is to create three separate sheets as follow:

- Survey-This sheet is comprised of all the survey questions together with their corresponding type, label, restrictions, coding and other instructions that will later be interpreted by the KoBo server once uploaded
- Choices- This sheet will list all of the choices that related to any select one and select multiple questions written on sheet survey
- Settings- This sheet is necessary for form naming and to determine how the forms will be viewed on both mobile devices (KoBo Collect) and the KoBo web page (Enketo)



Picture 1: Overview of compulsory sheets in ODK Excel form

Survey Sheet

Moving to the next step which is filling the survey sheet with the questions. To start with, type in the column headers, the following keywords:

Header	Explanation
Type*	All questions need to be categorized in their respective type so that ODK can recognize them. These types include free text questions, single/ multiple options and even photos and geographical locations. You can also group questions or introduce repeat questions which always appear as a table in a paper-based survey. For more detailed information, you can refer to these question types . ODK has also listed a data entry widgets that you can easily access and use.
Name*	Elements in this column are the headers for the responses. The names should be related to the questions. All elements under this column must be unique. It should not contain any spaces. The names can only be in letters, numbers with and without underscore. For example 'A102', 'population_sample', 'location'.
Label*	All elements under this column will be shown in the survey. Basically, this is how the survey questions will appear once the form is successfully deployed. There is no specific format on how you should type in the questions here. You are free to type in your intended questions. For example, What is your name?, Date today?, Which of the following is/ are true?
Hint	Any additional comments that help to explain how the questions should be answered can be added here. It will appear below the questions in a smaller size.

*Compulsory headers

	A	B	C	D
1	type	name	label::English	hint::English
2	text	Name	Name of respondent	
3	note	Welcome	Hello \${Name}. This questionnaire is just a test. Feel free to answer it!	
4	integer	year_born	In what year you were born	(xxxx)
5	calculate	Age		
6	note	Age_2	The respondent age is \${Age} years old.	
7	select_one Gender	Gender	Gender of respondent	
8	select_multiple Education	Education	Qualification of respondent	Educational level
9	geopoint	location	Current location	GPS coordinate
10	image	selfie	Please take a selfie!	Tips: Use the best resolution you have
11	select_multiple informatior	information	How do you know about this program	
12	text	social_media	Which social media are you referring to: Facebook, Twitter or Instagram?	
13				

Picture 2: Type, name, label and hint column in survey sheet

Header	Explanation
Calculation	<p>If any questions require any mathematical operations, ODK provides a chance for you to do a calculation. Under this column, you can type any calculation that is available within ODK. As an example, see the screenshot below. In row 5 a question type calculate was introduced. Under column calculation, you can see a simple command instructed any number (in this case year) inputted in row 4 will be subtracted with 2020. The subtraction value will be stored and then appear under the column label in row 6. For more information, refer to this Form Operators and Functions to get more understanding of the command available in ODK.</p>
Appearance	<p>This column enables you to determine how your questions will appear on mobile devices. There are multiple commands available on how to visualize the questions. Browse through this link to see some of the options.</p>

1	type	name	label::English	hint::English	relevant	calculation
2	text	Name	Name of respondent			
3	note	Welcome	Hello \${Name}. This questionnaire is just a test. Feel free to answer it!			
4	integer	year_born	In what year you were born	(xxxx)		
5	calculate	Age				2020-\${year_born}
6	note	Age_2	The respondent age is \${Age} years old.			
7	select_one Gender	Gender	Gender of respondent			

Constraint	If you want to set any restrictions for certain questions, this column is where you type in that constraints. For example, the number of days in a month should never exceed 31 and should not be lower than 0. The command will be $. \geq 0$ and $. \leq 31$. If any values outside this range are put, a constraint message will be popped out. You can specify what error messages you want to show under the Constraint_message column.
Required	Under this column, if you put Yes or True for any questions, those questions need to be answered and you cannot skip them.

Choices sheet

While filling up the survey sheet with the questions, you will need to simultaneously fill in the choices sheet too. Under the choices sheet, there are three compulsory column headers; list name, name and label.

Header	Explanation
List_name	The elements in this column should be referred to the name you type in the select one/ multiple of the survey sheet. It will be repeated as much of the options you provide for that question. For example, when referring back to Picture 1, you can see in row 8, column A it is written as <i>select_multiple Education</i> . It means respondents can choose to tick multiple options related to education. These options as listed in Picture 3 are Primary, Secondary, Diploma, Undergraduate and Postgraduate
Name	This is similar to your <i>Name</i> column from the survey sheet. This must be unique and is related to your choices Labels. You can use letters, numbers and/or underscore for the names of the choices.
Label	Same like in the survey sheet, all elements typed in this column will be appeared on the devices

	A	B	C	D
1	list name	name	label::English	
2	Gender	1	Male	
3	Gender	2	Female	
4	Education	1	Primary	
5	Education	2	Secondary	
6	Education	3	Diploma	
7	Education	4	Undergraduate	
8	Education	5	Postgraduate	
9	information	1	Family	
10	information	2	Friend	
11	information	3	Social media	
12	information	4	Radio	
13	information	5	Television	
14	information	99	Other	
15				
16				

Picture 3: Screenshot of choices sheet

Setting sheet

For this sheet, the usual headers are as follow:

- form_title – this will save the name of your form and will be automatically written as to the form title at the top of your survey.
- form_id – ODK creates an ID for each of the forms that you create. Make sure that your form_id is unique.
- You can also specify the instant ID name saved for each of the responses you received by specifying it under the instance name column

	A	B	C	D
1	form_title	form_id	instance_name	
2	Sample 01	build_Sample-01_1569812104	sample \${Name}	
3				
4				
5				
6				
7				

Picture 4: Screenshot of settings sheet

Once you are done filling and specifying all of the questions, you can save the Excel form in 'xlsx' format. You may now upload and test the form in Kobo Toolbox. If no coding errors appear, your form will be deployed and you can start the survey. For any case of coding errors, an error box will be shown to guide you.

Get in touch with [Saadiyah Ghazali](#) for more information on the coding and overall process of mobile data collection using KoBo Toolbox.