

Training planning

- 👤 Day 1:
 - Understand the interest of the MDC
 - Know different uses of MDC by Tdh
 - Know how to set up a simple survey (from collection to analysis)
- 👤 Day 2:
 - Know how to adapt an existing survey frame in Excel for a new context

Coding in Excel (XLS form)

- Fastest way to code for those who often use & well-known Excel software
- However it requires training



ACU_DYNAMO_116_EN_AR_formhub - Excel

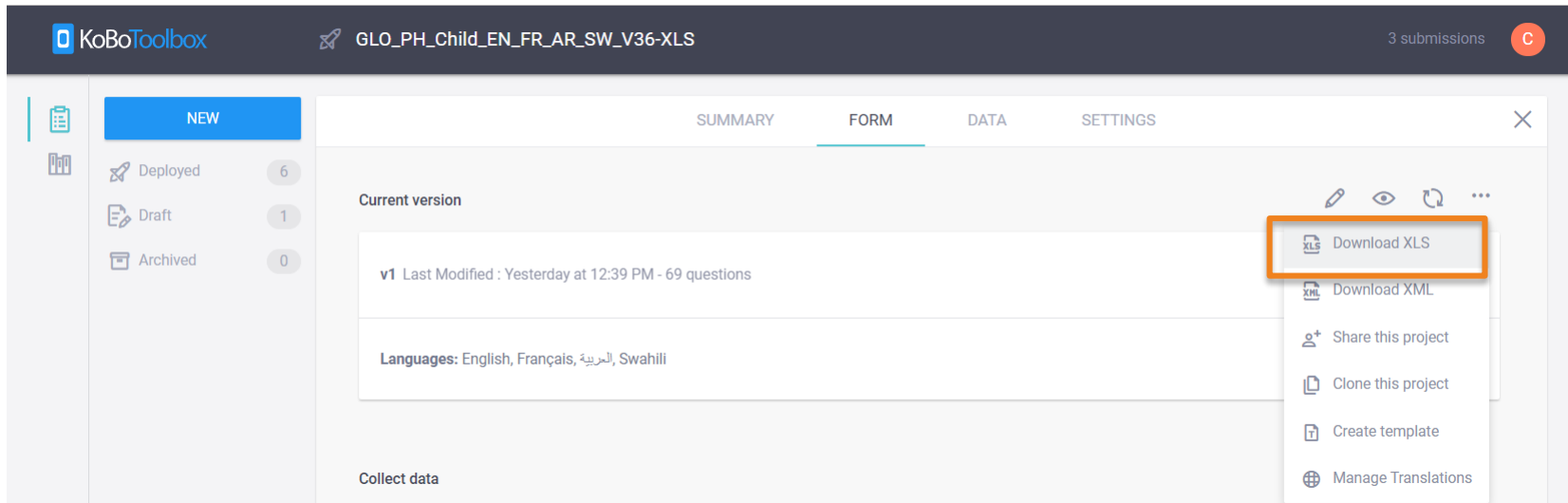
	A	B	C	D	E	F	G	H	
1	type	name	label::English	label::Arabic	hint::English	hint::Arabic	constraint	constraint_message	calculati
2	deviceid	DeviceID							
3	start	TimeStartRecorded							
4	end	TimeEndRecorded							
5	begin group	Demograph	Demography	الإحصائيات السكانية					
6	integer	DemographInformNumb	How many key informants for this section?	كم عدد مصادر المعلومات في هذه الفقرة			>0	You must have at least one informant to fill this section!	
7	begin repeat	DemographInform	Informants	مصادر المعلومات					
8	select_multiple status	DemographInformStatus	Status/name of the informant	فئة/جميع مصادر المعلومات المستخدمة في هذه الفقرة مثال : المنظمات غير الحكومية الدولية , لجان محلية , وكادر وطني					
9	text	DemographInformStatusOther	If other, please specify:	حدد في حال وجود مصادر أخرى					
10	end repeat								
11	select_one evidence	DemographEvidence	Evidence rating	تقييم مصادر المعلومات	Please check the details of the evidence levels on your memo sheet	يرجى مراجعة مستويات التقييم المرفقة			
12	integer	Left	Estimated number of population who have fled the sub-district since the beginning of the conflict	عدد الأشخاص التقريبي الذين نزحوا (من) هذه الناحية منذ بداية الأحداث					
	integer	Arrived	Estimated number of population who have arrived and are staying now in the sub-district	عدد الأشخاص التقريبي للنازحين (إلى) هذه الناحية والمقيمين					

survey choices settings

READY COUNT: 2 100%

Exercise

Download the frame of the form encoded in XLS



The screenshot shows the KoBoToolbox interface for a project named 'GLO_PH_Child_EN_FR_AR_SW_V36-XLS'. The interface has a dark header with the KoBoToolbox logo, the project name, and '3 submissions'. Below the header, there are four tabs: 'SUMMARY', 'FORM', 'DATA', and 'SETTINGS'. The 'FORM' tab is selected. On the left, there is a sidebar with a 'NEW' button and a list of project statuses: 'Deployed' (6), 'Draft' (1), and 'Archived' (0). The main content area shows the 'Current version' section with a 'v1' version, last modified yesterday at 12:39 PM, containing 69 questions. Below this, it lists the languages: English, Français, العربية, and Swahili. At the bottom, there is a 'Collect data' button. A dropdown menu is open on the right side of the 'Current version' section, with the 'Download XLS' option highlighted in a red box. Other options in the menu include 'Download XML', 'Share this project', 'Clone this project', 'Create template', and 'Manage Translations'.

- ## Analyze its structure and its different tabs
- What does each column name correspond to?
 - What do you not understand in the syntax?

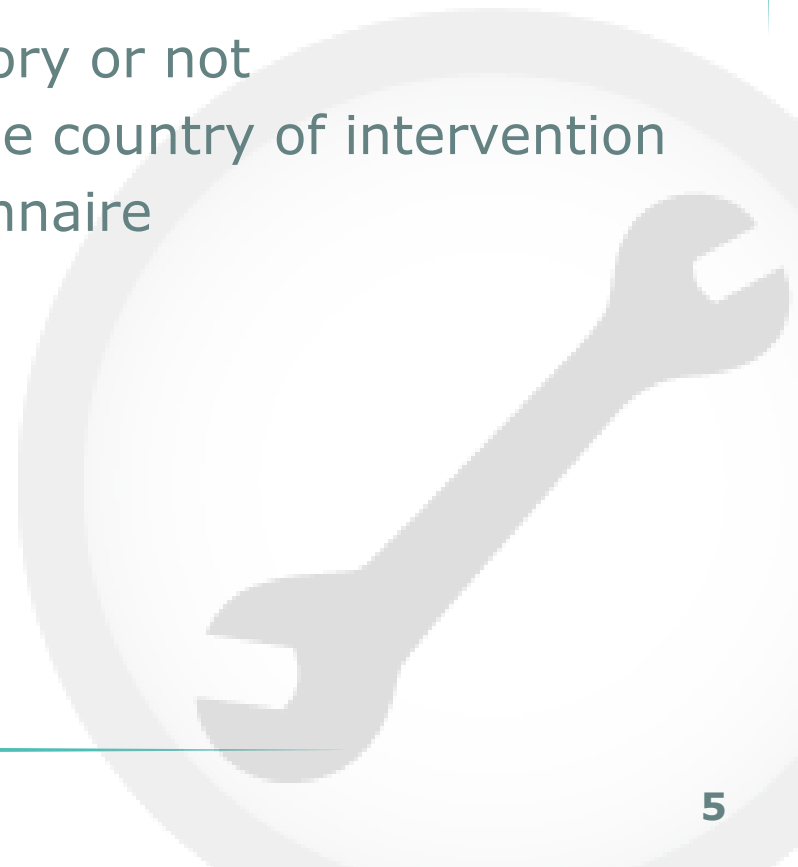
Why use the XLS form

- ❗ When is it not necessary to use the XLS form (when the Kobo interface can be sufficient)?
 - When we don't do more than one or two surveys
 - Simple and short survey, which will not need to be replicated
 - Not requiring advanced settings: adding multiple languages, advanced constraints, cascading lists....
- ❗ In all other cases, it is better to use the XLS format to date.



The objectives are

- 👤 We're going to learn today:
 - To understand the structure and general form
 - To update the content:
 - Question wording
 - Whether a question is mandatory or not
 - Adapt administrative lists to the country of intervention
 - Add a language to the questionnaire
 - Adapt choice lists
 - Add/Modify/Delete questions



Structure of XLS forms

Columns: question type, ID, label (and translation), tips, and various options

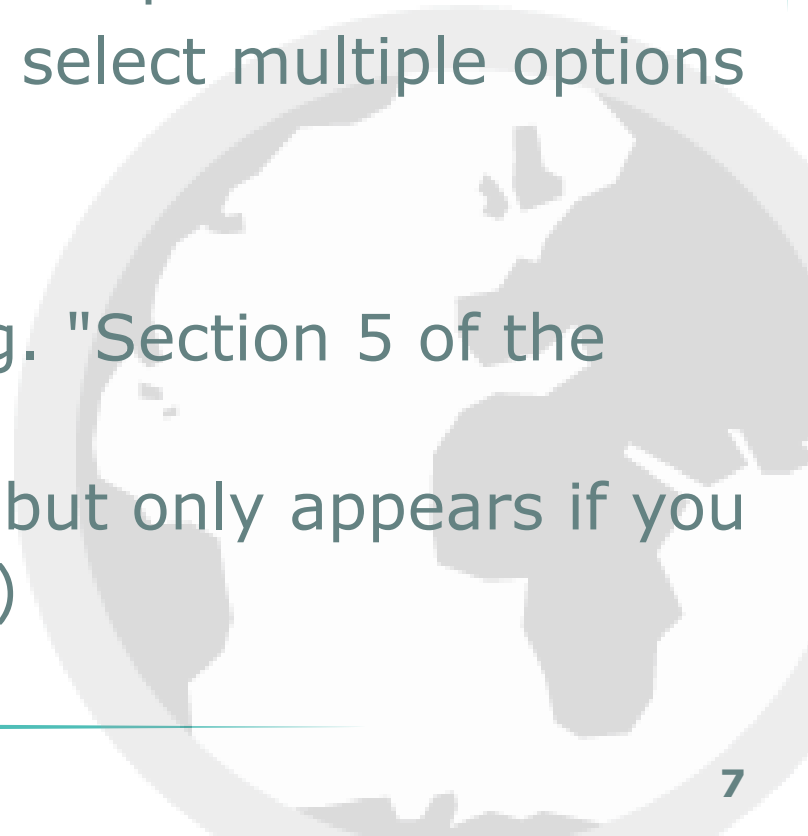
Possible answers, settings and cascading options stored in different tabs

	A	B	C	D
1	type	name	label::English	label::Arabic
2	deviceid	DeviceID		
3	start	TimeStartRecorded		
4	end	TimeEndRecorded		
5	begin_group	Demograph	Demography	الإحصائيات السكانية
6	integer	DemographInformNumb	How many key informants for this section?	كم عدد مصادر المعلومات في هذه الفترة
7	begin repeat	DemographInform	Informants	
8	select_multiple status	DemographInformStatus	Status/name of the informant	قائمة بجميع مصادر المعلومات المستخدمة في هذه الفترة مثال : المنظمات غير الحكومية الدولية , لجان محلية , كادر وطني
9	text	DemographInformStatusOther	If other, please specify:	حدد في حال وجود مصادر أخرى
10	end repeat			
11	select_one evidence	DemographEvidence	Evidence rating	تقييم مصادر المعلومات
12	integer	Left	Estimated number of population who have fled the sub-district since the beginning of the conflict	عدد الأشخاص الذين نزحوا (من) هذه الناحية منذ بداية الأحداث
13	integer	Arrived	Estimated number of population who have arrived and are staying now in the sub-district since the beginning of the conflict	عدد الأشخاص النازحين (إلى) هذه الناحية حالياً
14	integer	Population	Total population in the subdistrict at this moment	عدد الأشخاص الكلي الحالي في هذه الناحية
15	select_one flee	Flee	If people have fled the sub-district of the last two weeks, to where did they flee?	في حال وجود أشخاص نزحوا من هذه الناحية خلال الشهرين الماضيين, أين كانت وجهتهم
16	text	FleeSpecify	Please specify sub-district/district/governorate:	حدد
17	select_one arrive	ArrivedFrom	If new people arrived during the last two months in this sub-district, where did the majority come from?	في حال وصول أشخاص جدد إلى هذه الناحية خلال الشهرين الماضيين, من أين جاءت الأغلبية العظمى منهم :
18	text	ArrivedSpecify	Please specify sub-district/district/governorate:	حدد
19	integer	DisplacedShelter	How many displaced persons live in collective shelters at this moment?	عدد النازحين في مراكز سكن جماعي
20	integer	DisplacedLocalFam	How many displaced persons are hosted by local families at this moment?	عدد النازحين في مراكز سكن جماعي
		DisplacedVacatedBuild	How many displaced persons live in vacated buildings at this moment?	عدد النازحين في المباني الخالية
			How many displaced persons live in open spaces	

Type of questions

- 👤 text: question simple text
- 👤 integer: integer number
- 👤 decimal: decimal number
- 👤 select_one NomList: select an option
- 👤 select_multiple NameList: select multiple options
- 👤 geopoint: GPS point
- 👤 image: Photo
- 👤 note: Gives an indication (e.g. "Section 5 of the questionnaire")
- 👤 calculate: do a calculation (but only appears if you call it from another question!)

NomList will be defined in the "options" tab!



Options

- ❶ In the options tab, we see the possible answers to the questions

list name	name	label::English	label::Arabic
yesno	1	Yes	
yesno	2	No	

Name of the list

Name of the answer

Label of the answer (with possible translation)

- ❷ A list can be reused as much as you like, for basic Yes/No questions but also some more complex ones
- ❸ For names, use numbers (especially when you want to do calculations) or simple text
- ❹ If you have similar answers, use the same labels (e.g. "Other" or "Don't know") - this makes it easier to understand the form

Tips & Advice

- Always check the "Settings" tab and customize the form ID: otherwise, it will be taken from the file name and can generate errors (spaces etc)

form_title	form_id	public_key	submission_url	default_language	version
ACU Dynamic Situation Monitoring Report V1.15	ACU-DYNAMO-115			English	115

- Check if all the important columns for this form are present
- Formatting (color, font, bold/italic...), comments and editing restrictions do not impact the XML produced, so they can be used to facilitate collaborative work or highlight elements
- The order of the columns is not important but can keep the table clean and make simple copy and paste operations.

Constraints



"Constraint" allows to limit the range of possible answers on a field (for example, the specified age must be between 0 and 18 years old)




- Can be linked to a number ".>0" or a variable previously used ".<=\${NumberTotal Children}" .
- "Constraint message": The message that appears to explain the constraint to the enumerator
- count-selected() pour une selection multiple: ex. count-selected(.) <=3



The "." in front of the operator is a shortcut to the variable (we could have put "\${Variable}" instead

Operators:

>
<
>=
<=
=
!=

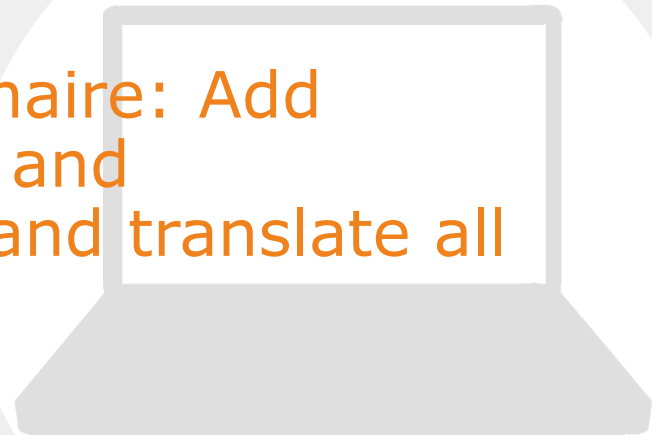
Relevant / required

- 
relevant "Relevant" specifies the potential conditions for displaying a question (skip patterns)
 -  Can build on previous answers
 -  Can be based on:
 - a selected option
`selected({MatrimonialStatus}, '02')`
 - A numerical value entered `{NumberTotalChildren}>0`
 - See even 2 values `{SchoolPub}>{SchoolPubFunc}`
- Operators:*

`selected({VariableID}, OptionID)`
`{VariableID}> number or {VariableID}`
 We can use "and" or "or" to have several of them
- required
 "Required" defines when a question is mandatory. Answer: "yes" or otherwise leave blank
 -  Tip: add that after testing

Exercise 2: Adapt an existing form!

- 👤 Open the form
- 👤 Remember to give it a new name and wording each time.
- 👤 In terms of content:
 - Change the wording of a question: Rename "Title" to "Title of the interviewee".
 - Change the mandatory aspect of a question: Make the "Title" mandatory
 - Add a language to the questionnaire: Add "label::English", "hint::English" and "constraint_message::English" and translate all the questions in section A
- 👤 Import it into Kobo and test it!



Selection filters

- ❶ "Choice filters": defines the options that appear according to the answers to a previous question
- ❷ For example, allows to filter the **Primary Units (urban/rural environment)** by communes, then by villages or sector
- ❸ Adding a column in the "survey" tab choice_filter
- ❹ Syntax: `Level1=${Level1}` for Level 2, `Level1=${Level1}` and `Level2=${Level2}` for Level 3, etc.
- ❺ Ex `Common=${Common name}` for CSPS, `CSPS=${CSPS name}` for Health Case
- ❻ Add a column for each upper level in the "choices" tab (level1, level2 for example)

Appearance

Use the column `appearance`

Useful options:

- allows you to have a list of drop-down instead of radio pipples
- `no-calendar` allows you not to show a complete calendar for a date question
- `field-list` to display several questions on a page: you have to create a group and put this option on the `begin-group` line (be careful, don't work with a choice filter!)
- `table-list` to display a number of questions without the question label

F1 Build back better and safer training offered to

- Yes
 No
 Planned

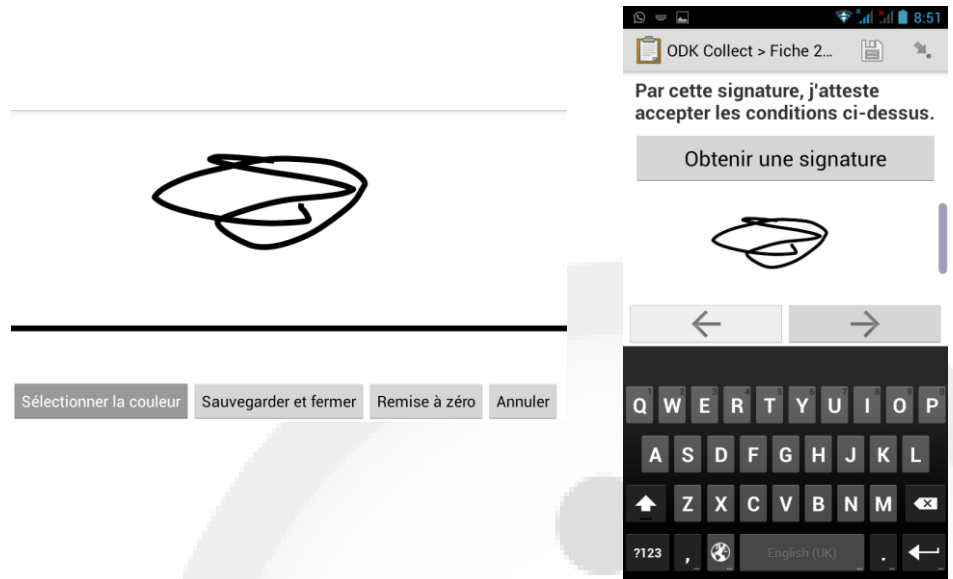
» » F - DISASTER REDUCTION & PREPARADNESS

F2.A Tie down the house

none selected ▼

Electronic signature

- You have the option of integrating an electronic signature into your form by this field:

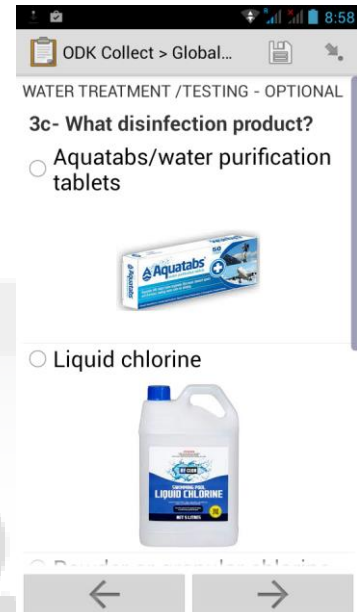


type	name	label::Français	appearance
image	Signature	Par cette signature, j'atteste accepter les conditions ci-dessus.	signature

View images instead of modalities

👤 If you wish to view photos corresponding to your terms, simply create a single or multiple choice question and add a "media::image" column with the reference of this photo in the "choices" tab as below. Make sure you compress them as much as possible.

👤 In the parameters of your survey ("projects" part), do "add document" by selecting the file in question



list name	name	label::English	media::image
typedisinfectant		1 Aquatabs/water purification tablets	aquatab.jpg
typedisinfectant		2 Liquid chlorine	liquidchlorine.jpg
typedisinfectant		3 Powder or granular chlorine	powderchlorine.jpg
typedisinfectant		4 PuR or Watermaker sachets	PUR.jpg
typefilter		1 Biosand Filter	biosand.jpg
typefilter		2 Ceramic Pot Filter	ceramicpot.jpg
typefilter		3 Candle Filter/Bucket Filter	candlefilter.jpg

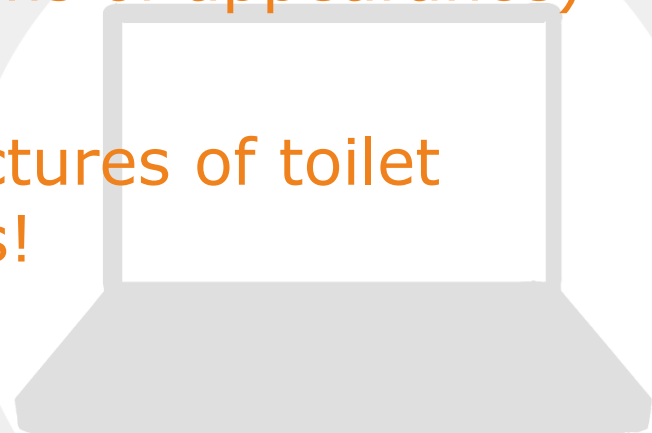
Add the Tdh logo to the form

- As an option, you can include a custom logo at the beginning of your form once it has been deployed as a new survey project.
 - Save an image of your logo in the following form: 'form_logo.png'. Make sure the file size is small (a few kilobytes) so as not to lose performance
 - In the parameters of your survey ("projects" part), do "add document" by selecting the file in question



Exercise 3: Adapt an existing form!

- 👤 Continue to make changes to the content:
 - Replace the list of districts by the list of one of your intervention areas
 - Adapt the list of toilet types (question "D.2._ToiletsNumType_TYPE")
 - Add a question with the wording "Date of the day" (specifying "no-calendar" in terms of appearance)
 - Add the Tdh logo
 - For the most motivated, add pictures of toilet types to the question modalities!
- 👤 Import it into Kobo and test it!





Additional advice


- ❶ Typical column: make sure that the types are correctly spelled and in lower case
- ❷ Name column:
 - Use a short, meaningful name
 - Check that the names do not contain special characters, accents or spaces
 - Have an *informed* coding standard: Suggestion: start with a lowercase letter and put a capital letter at the beginning of each new word, have groups to facilitate the organization of data
- ❸ Label column: Feel free to number the questions and parts to facilitate reading the questionnaire and subsequent analysis (once the form is frozen)

Advanced coding

Calculations

- 
calculation Allows you to perform a numerical calculation (taking into account the answers to other questions for example)
- 
 Reminder: The result is invisible to the enumerator, but you can display it with a "note".

119	calculate	BuildTotal			.=100		$\$(BuildNoDamage) +$ $\$(BuildSlightDamage) +$ $\$(BuildModerDamage) +$ $\$(BuildHeavyDamage) +$ $\$(BuildDestroy)$
120	note	XBuildTotal	المجموع	Total		Total must be equal to 100%!	$\$(BuildTotal)$

- 
 E.g.: $\${VariableA} + \${VariableB}$
 $\${VariableA} \text{ div } 2$
 $\text{sum}(\{VariableA\})$ *total of the values of a repeated variable*
 $\text{position}(\{VariableA\})$ *position in a group*
 $\text{round}(\text{Calculation_formula}, 0)$ *0 is the number of decimals for rounding*

Operators:

+

-

*

div

sum()

position()

round()

yew

Logic "If" (=si)

- ❶ Possibility to build a more complex logic thanks to the "if".
- ❷ Logic: if(condition, 1, 2) If the condition is true, display 1 and if not 2 (remove", 2" if not necessary)
- ❸ Example of associated calculation for Variable A :
`if({VariableB}= 1,2,3)` If VariableB has the value 1, then VariableA=2, if not, VariableA=3
- ❹ Possibility to include the following operators/expressions: < >= <= <= selected() etc.
- ❺ Example of advanced coding:
`if({TOILSHR}= 2.2, if({TOILSHR}=96.4, if({TOILSHR} >=3.3.0)))`
- ❻ All operators and examples here:
<http://opendatakit.org/help/form-design/binding>

Groups & rehearsals

- ❶ A group allows you to group questions together if you want to ask them several times for different members of a family for example
- ❷ `begin group / end group / end group`
For appearance/coding only: `begin group` with the name that will appear at the top of the page (leave `end group` empty)
- ❸ `begin repeat / end repeat`
To code loops (repeated group of questions)

28	<code>begin repeat</code>	AccessInform	مصادر المعلومات	Informants
29	<code>select_multiple status</code>	AccessInformStatus	قائمة بجميع مصادر المعلومات المستخدمة في هذه الفترة مثال : المنظمات غير الحكومية الدولية , لجان محلية , كادر طبي	Status of the informant
30	<code>text</code>	AccessInformStatusOther	حدد في حال وجود مصادر أخرى	If other, please specify:
31	<code>end repeat</code>			

Repeated without limitation (default) or based on a fixed number or answer to a question

repeat_count ▾

ⓘ Add New Group?




Add a new "Informants" group?

Do Not Add

Add Group

Barcode type ("Barcode")

- ❶ To avoid input errors and reduce the information to be entered during the follow-up visit, it is possible to have a barcode selected
- ❷ It is therefore necessary to have a barcode file that will be print so that they can be selected
- ❸ This file may require updates depending on the number of visits required

	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1		CASE DE SANTE:	SANE		Date et poids de suivi											
2	code	Code bar à scanner	nom enfant	prénom enfant	Date 1	Poids 1	Date 2	Poids 2	Date 3	Poids 3	Date 4	Poids 4	Date 5	Poids 5	Date 6	Poids 6
3	*SANE1*															
4	*SANE2*															
5	*SANE3*															

Importing external data

- ❗ It is possible, if you have a list of households or beneficiaries, for example, to import characteristics so that they are visible or integrated but hidden in the form. E.g.: the name of the beneficiary and his contact information.
- ❗ All you have to do is prepare a CSV file under a specific shape, call him in the form with a particular syntax and to load it into Kobo
- ❗ NB: not compatible with the entry in the interface online

