XLSForm Cheat Sheet

Getting started

Create an Excel workbook with three sheets

survey	where questions are defined
choices	where choice lists for select_one & select_multiple are defined
settings	where project options are defined

Survey sheet columns

type	sets the question type
name	sets the question unique id (variable name)
label	sets question/goup display text if using 1 language
label::*language*	sets question/goup display text in defined language
hint	sets question hint text iif using 1 language
hint::*language*	sets question hint text in defined language
constraint	define responses to be allowed
constraint_message	
	message shown to user when response is not valid (if using 1 language)
constraint_message::*language*	
	message shown to user when response is not valid (in defined language)
required	whether a question is mandatory for the form to continue
	TRUE | FALSE | true() | false() | yes | no | a function that evaluates to TRUE or FALSE
required_message	
	message displayed when required field was not answered (if using 1 language)
required_message::*language*	
	message displayed (in defined language) when required field was not answered
default	default response to be prefilled before user answers question
relevant	condition to be fulfilled for the question to be displayed
read_only	whether a question's response can be edited
	TRUE | FALSE | true() | false() | yes | no | a function that evaluates to TRUE or FALSE
calculation	A mathematical expression whose result will be stored in the current variable
	Only for calculate question type
repeat_count	Number of repeats for a repeated group
	Only for begin repeat
image	path to an image to be shown with a question (if 1 language)
image::*language*	path to an image to be shown with a question in the defined language
audio	path to audio to be included with a question (if 1 language)
audio::*language*	path to audio to be included with a question in the defined language
video	path to a video to be included with a question (if 1 language)
video::*language*	path to a video to be included with a question in the defined language
appearance	defines the way questions wil be displayed on the form
instance::*attribute*	include custom XML content for the data instance
bind::*attribute*	include custom XML content for the bind attribute
body::*attribute*	include custom XML content in the body
instance::accuracyThreshold	
	sets the minimum GPS accuracy level required to capture the coordinates automtically
parameters	available options for some question types

Question types

Go into the type column of the survey sheet

select_one *choices*	question with a list of choices where user can only pick 1
	choices -> name of choice list (defined in choices sheet)
select_multiple *choices*	question with a list of choices where user can only pick 1 or more choices

(middle column)

select_one_from_file *file*	
	User can choose one of several choices from an external file
select_multiple_from_file *file*	
	User can choose one or more of several choices from an external file
text	response will be typed as text
integer	response will be whole numbers without decimals
decimal	response will be numbers with decimals allowed
date	response will be date
time	response will be time of day (hours and minutes)
dateTime	response qill be date and time together
geopoint	for capturing GS coordinates
geotrace	for capturing line or polyline using GPS coordinates
geoshape	for capturing a polygon using GPS coordinates
image	for capturing or attaching a picture
audio	for capturing or attaching an audio file
video	for capturing or attaching a video file
note	for displaying a note (text on the screen). Does not take input
barcode	for capturing a barcode or qr code by scanning it
acknowledge	displays 1 checkmark for confirming or acknowledging something
calculate	mathematical expression of existing values
range	displays range slider. Values saved as integer/decimal state start, end and step in parameters column e.g. start=1;end=10;step=1

Question groups and repeats

Go into the type column of the survey sheet

begin_group	marks the beginning of a group of questions
end_group	marks where group o questions ends
begin_repeat	marks the beginning of a repeat group
end_repeat	marks where the repeat group ends

Question referencing

Values entered on preceding questions can be used on another question when defining skip logic, validation criteria, calculations or displayed on question labels and hints. Use the following format:

${*variable_name*}

Question appearance

Go in the appearance column in the survey sheet

Applies to *begin-group*

field-list	puts multiple questions of a group on a screen
table-list	shows multiple select_one questions with shared label in a field-list

Applies to *select_one* or *select_multiple*

minimal	shows choices as a drop-down list
label	shows only a table of choices without controls
list-nolabel	shows only controls (radio buttons) without the labels
autocomplete	shows list of options with a search box for filtering choices
likert	shows options as a likert widget
horizontal	shows choices as a horizontal list
compact	displays choices horizontally as compact as possible
compact-*n*	shows choices in a grid with n columns where n is a number between 1 and 10
quick	automatically moves to the next queston when answered
quickcompact	displays choices horizontally in a compact manner and auto-advances to next question qhen option selected
image-map	When used in conjunction with an SVG media label, the select question will be presented as a clickable image.

(fourth column)

Applies to *text*

numbers	shows number keyboard on screen. Values stored as text
multiline	displays a larger text field on web forms
url	shows button to launch a website to stored URL
printer	for interfacing with an external (Zebra barcode) printer
thousands-sep	adds thousands separator (comma or dot). Not saved on submission

Applies to *integer*

thousand-sep	adds thousands separator (comma or dot). Not saved on submission

Applies to *decimal*

bearing	shows compass/bearing widget
thousands-sep	adds thousands separator (comma or dot). Not saved on submission

Applies to *range*

vertical	displays vertical range slider instead of deault horizontal
no-ticks	hides tick-marks on the range slider
rating	displays the range as a star rating
picker	displays range in a pop-up picker instead of sider
distress	displays thermometer around range slider

Applies to *date*

month-year	only displays month and year on date picker
year	only displays year on date picker

Applies to *date and dateTime*

no-calendar	disables calendar-type date picker for old a spinner type
ethiopian	displays Ethiopian calendar
islamic	displays Islamic calendar
coptic	displays coptic calendar

Applies to *image*

new	forces capturing of new photo using deault camera (disables select photo feature)
new-front	forces capturing of new photo using front (selfie) camera
new-rear	forces capturing of new photo using rear camera
annotate	allows drawing on top of image after capturing it
draw	allows drawing anything on the screen instead of capturing an image
signature	allows drawing signaure ona line instead of capturing an image

Applies to *audio, video*

new	forces capturing of new audio or video with default mic/ camera (disables select video/audio feature)

Applies to *geopoint, geotrace, geoshape*

maps	captures GPS while showing the point on a Google map
hide-input	shows map and hides geo input buttons
streets	switches map layer to street mode
terrain	switches map layer to terrain mode
satellite	switches map layer to satellite mode
placement_map	allows user to record location by pointing it on the map

Choices sheet columns

Go in the choices sheet

list_name	unique name for each set of choices. All choices in the same list will have the same list_name
name	ID (name) of the specific choice
label	display text of the choice
label::*language*	display text of the choice in the defined language
media	path to image to be associated with choice (if 1 language)
media::language	path to image to be associated with choice in defined language
filter-category-name	
	defined by user. allowaa setting parent category for choice filters in cascading questions

(fifth column)

Settings sheet columns

Go in the settings sheet

form_title	Title displayed at the top of the form
form_id	unique ID of the form
public_key	key required for encrypted forms
submission_url	Specific URL for uploading data, overrides default
default_language	language to be loaded by default (f multiple lanuages were defined
style	switch to a different form display theme
	pages | theme-grid | theme-formhub
version	form version ID
instance_name	Allows user to create a dynamic naming convention for each submitted instance

Mathematical operators

Use in calculate, constraint and relevant columns

+	performs ddtion
-	performs subtraction
*	performs multiplication
div	performs division
mod	calculates remainder after division

Logical operators and booleans

Use in calculate, constraint and relevant columns

=	equal to
!=	not equal to
>	greater than
>=	greater than or equal to
<	less than
<=	less than or equal to
and	evauates TRUE if both expressions are TRUE
or	evauates TRUE if either one of the expressions are TRUE

Path operators

Use in calculate, constraint and relevant columns

.	refers to the current question's value
..	refers to current question's parent group

Matching values in select_one and select_multiple

In constraints or relevant, you can easily match a value from a select one as follows:

${*variable_name*}=*value*

When matching *select_multiple* however, use the *selected()* function

selected(${*variable_name*}, 'value')