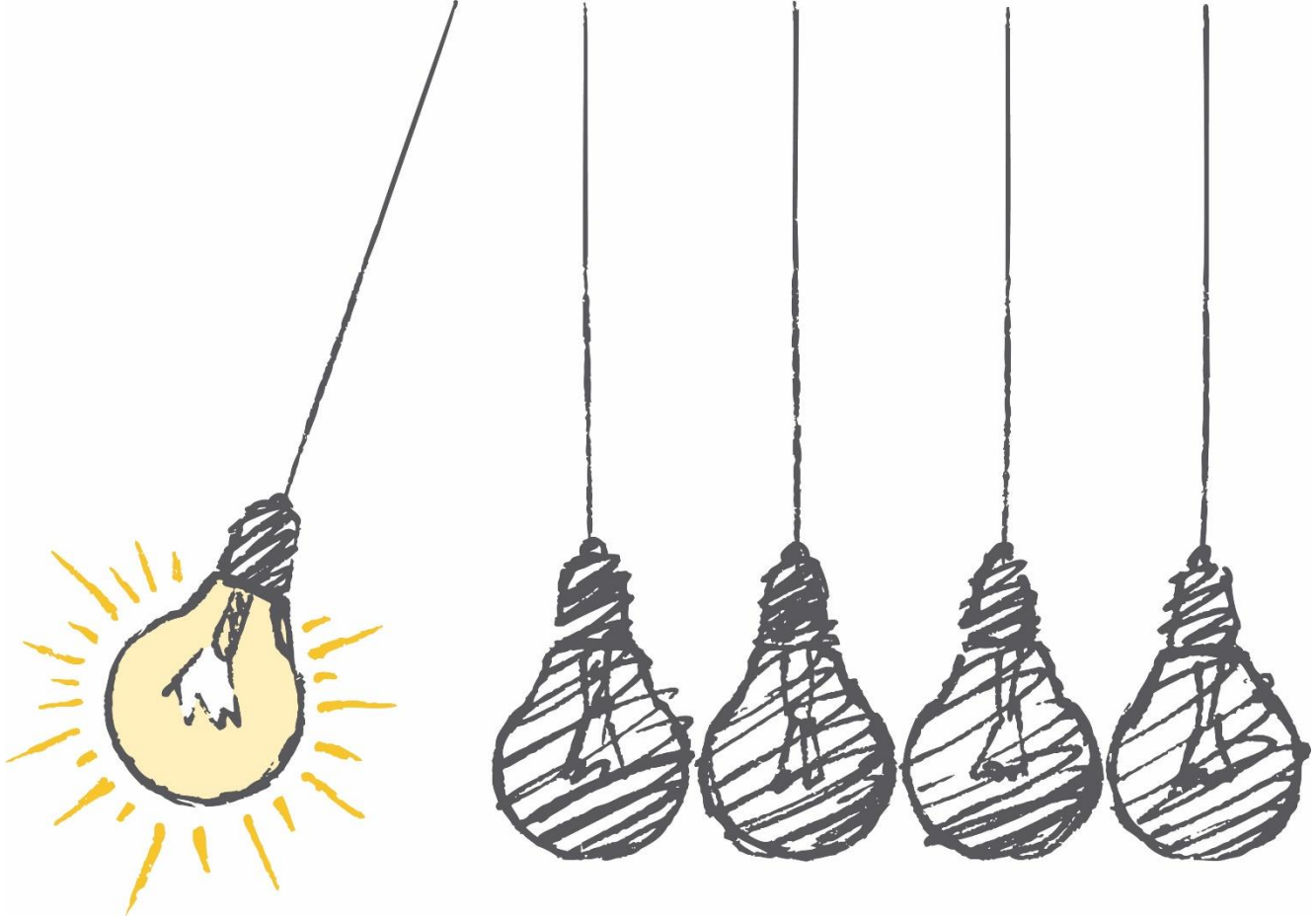
FC Continuing Education Series

SurveyCTO Basics

Programming a Survey



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WORLD BANK GROUP

UKaid from the British people

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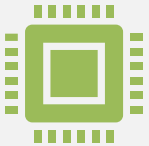
Objectives

By the end of this session you should…

HAVE A BASIC UNDERSTANDING OF SURVEYCTO



BA FAMILIAR WITH THE COMPONENTS OF SURVEYCTO (THE SERVER, COLLECT APP, DESKTOP APP)

BE FAMILIAR WITH THE LAYOUT OF AN XLS FORM USED TO DESIGN SURVEY FORMS

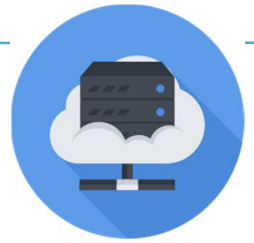
BE ABLE TO DESIGN A SIMPLE FORM

About SurveyCTO

SurveyCTO is a powerful, field-tested platform that allows you to collect high-quality data using mobile phones, tablets, or computers—even when you're offline.

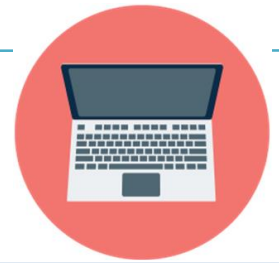
- World Bank has an enterprise solution for SurveyCTO – survey.wb.surveycto.com
  - Any data on this server is secure and encrypted
  - Internal server is cheaper than the commercial server
  - Quick(er) responses from the SurveyCTO support team
  - Managed by DIME Analytics
  - Upgraded to a new and improved version (v2.6) in early January

SurveyCTO Components

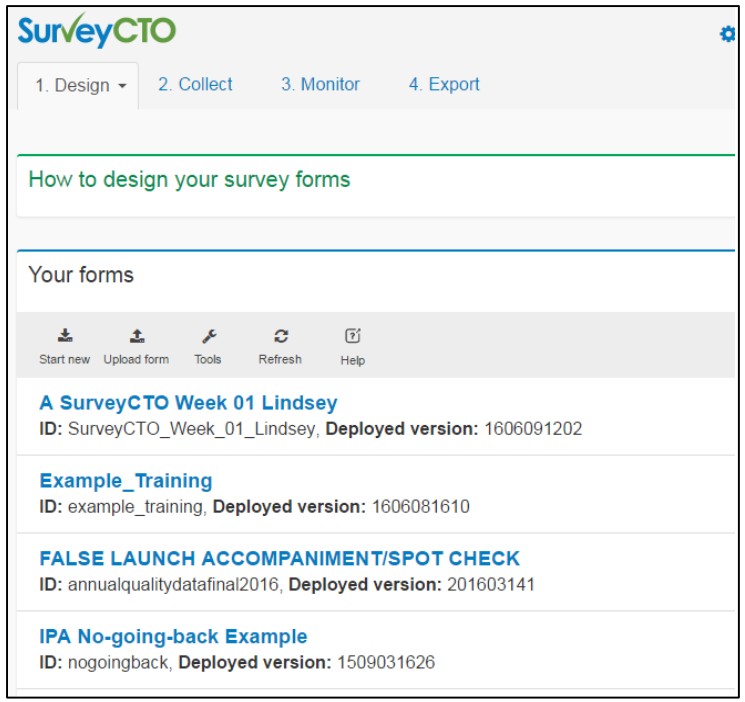


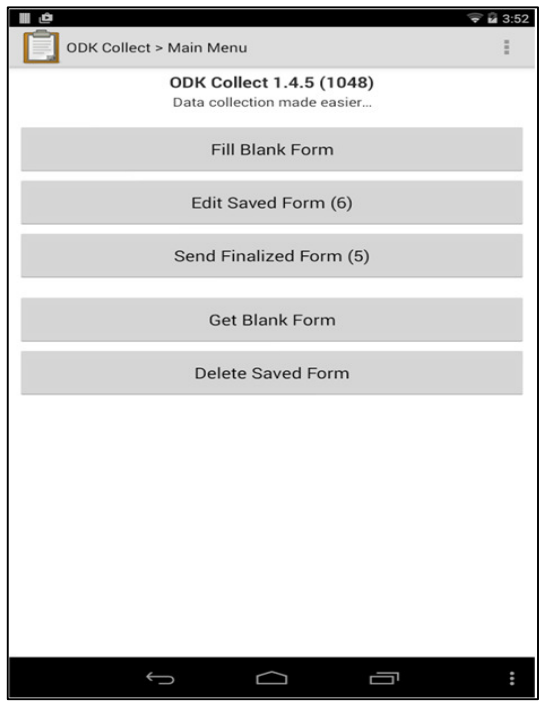
Server

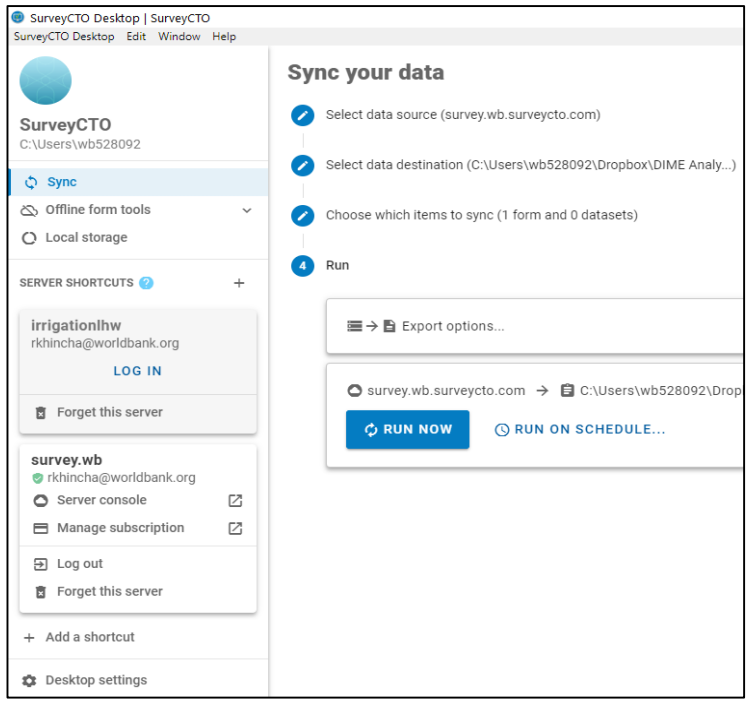
SurveyCTO Collect



SurveyCTO Desktop







The Server

- The central repository where all questionnaires and data associated with a project sits
- Main purpose: Allows project team to communicate with the data and the field team to collect and upload that data
- Not as technical as it sounds
  - For our purposes it is a just like a web page on the internet
- Features include
  - Designing and managing forms
  - Collecting data using a web browser (vs SurveyCTO Collect app)
  - Downloads (printable version, form files, do-files, data, Explorer files)
  - Documentation and administrator access

SurveyCTO Collect

- The app that is used for offline data collection
- After data has been collected, it's uploaded to the SurveyCTO server, or for more advanced offline set-ups, synchronized over local WiFi networks

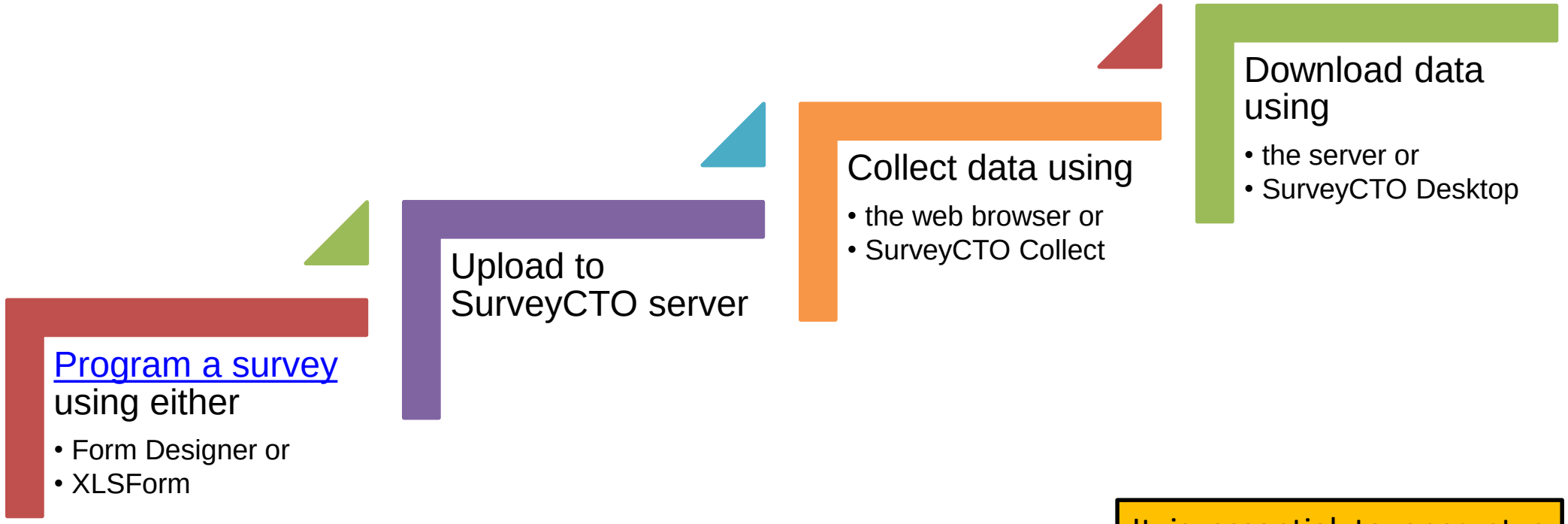
- Features
  - Seamless Data Collection and Submission
  - Available on Android and iOS

SurveyCTO Desktop

- Desktop application to centralize workflows and export data

- Features covered in detail on previous FC Continuing Education on SurveyCTO within the World Bank

Data Collection Steps

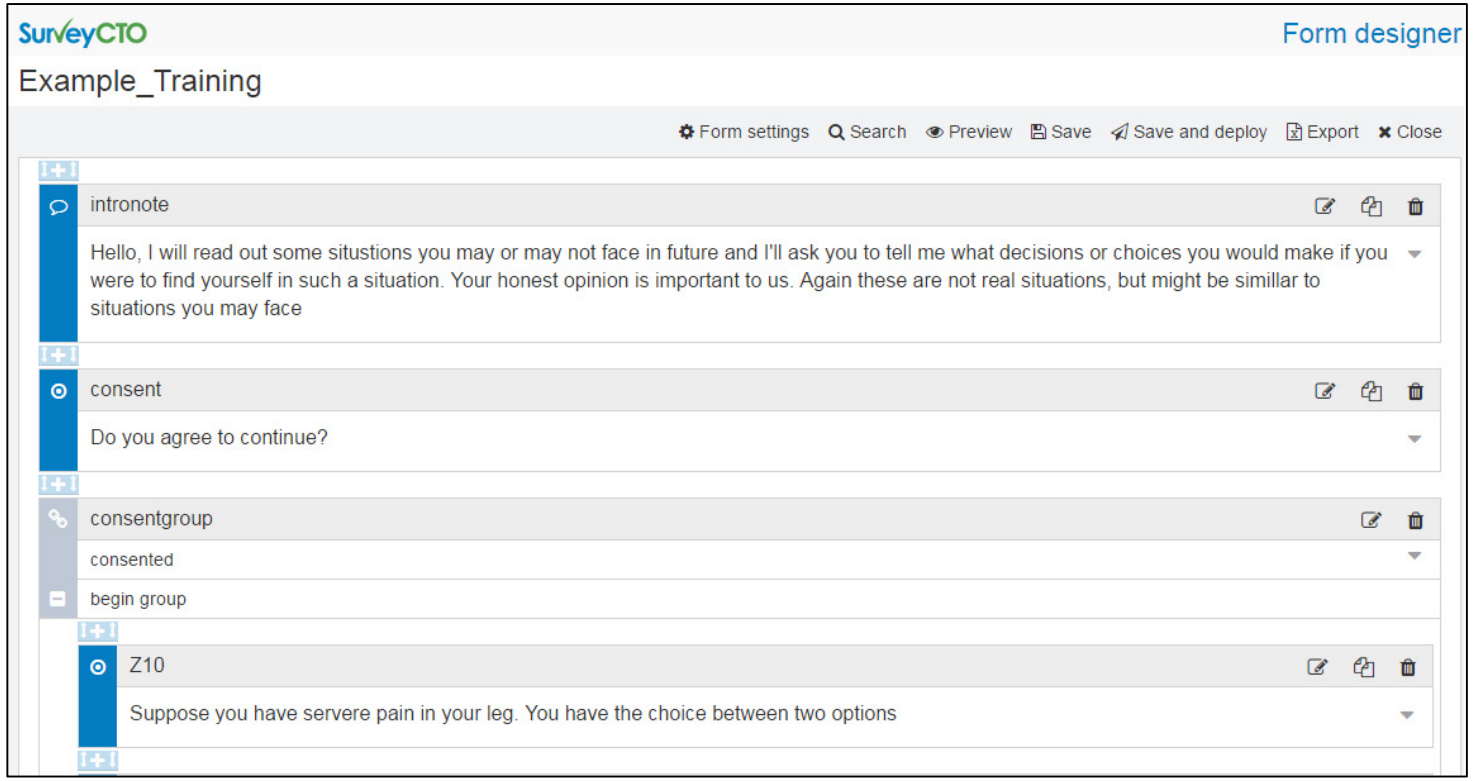


It is essential to encrypt a survey form. We will not cover this in today's session.

Program a survey: *using Form Designer*

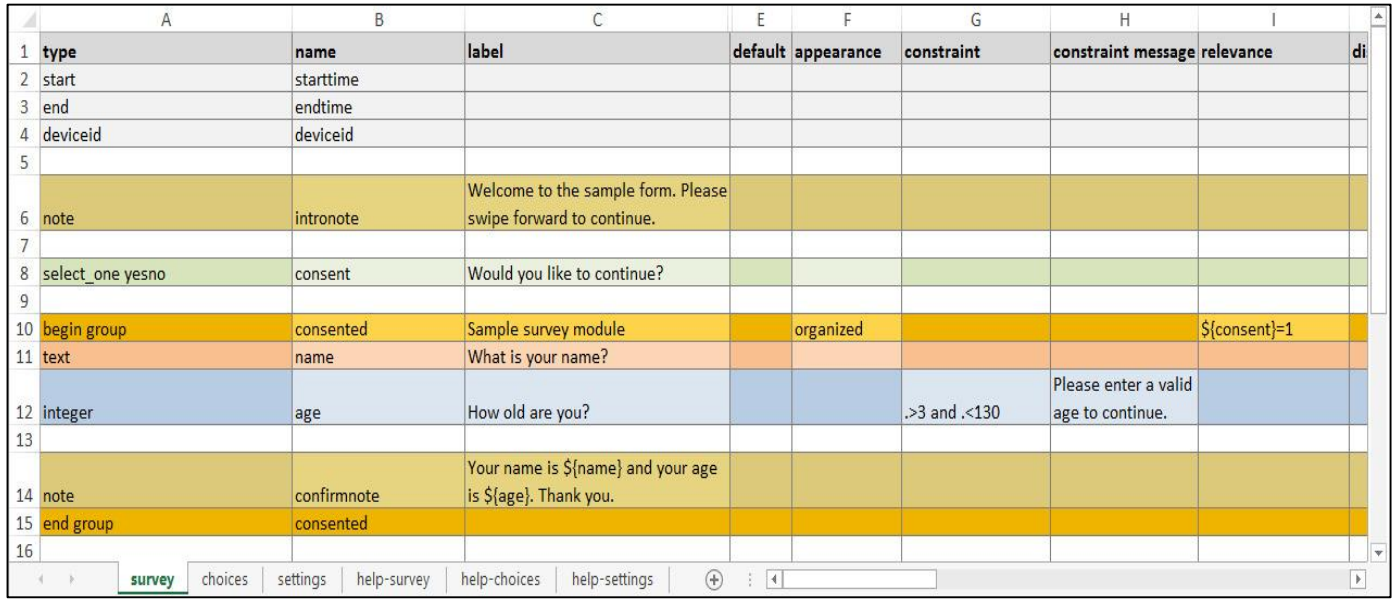
- Found on the server
- Click & point mechanism of programing a survey
- Useful when new to SurveyCTO and still getting the hang of it
- Can be time consuming as a process

- More insights can be found on the [SurveyCTO Form Builder page]



Program a survey: *using XLSForm*

- Excel file where the survey can be programmed
- Efficient compared to Form Designer
- Easier to read than code
- Basic template can be found here
- Tip: Create a basic form using the Form Designer and download to XLSForm



	A	B	C	E	F	G	H	I	
1	**type**	**name**	**label**	**default**	**appearance**	**constraint**	**constraint message**	**relevance**	**di**
2	start	starttime							
3	end	endtime							
4	deviceid	deviceid							
5									
6	note	intronote	Welcome to the sample form. Please swipe forward to continue.						
7									
8	select_one yesno	consent	Would you like to continue?						
9									
10	begin group	consented	Sample survey module		organized			${consent}=1	
11	text	name	What is your name?						
12	integer	age	How old are you?			.>3 and .<130	Please enter a valid age to continue.		
13									
14	note	confirmnote	Your name is ${name} and your age is ${age}. Thank you.						
15	end group	consented							
16									

survey | choices | settings | help-survey | help-choices | help-settings

Program a survey: using XLSForm

- We will spend the rest of the session programming a simple a survey using the XLS form
- **Download materials here: https://bit.ly/dime-fc-ce-surveycto**
- Folder contains
  - Paper version of survey: *Survey Instrument (paper).pdf*
  - XLSForm template: *empty_instrument.xlsx*

Layout of the XLSForm

- Open the XLSForm template *empty_instrument.xlsx*
- The XLSForm template has multiple tabs
  - survey
  - choices
  - settings
  - *some help tabs*
- Each tab is required and plays it's own role
- We will go through these in detail as we program the paper survey
- Let us review the paper survey *Survey Instrument (paper).pdf* before getting started

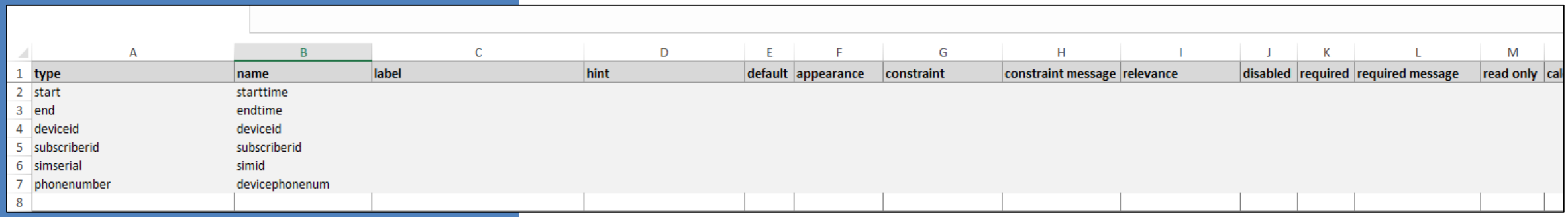
XLSForm: Setting tab

- In the settings tab we will update
  - form_title
    - the name of the survey form
  - form_id
    - the name of the survey form for the machine to read
    - can only contain words, numbers, and underscores
  - version

A	B	C	D	E	F
form_title	**form_id**	**version**	**public_key**	**submission_url**	**default_language**
		2004012224			english

XLSForm: Survey tab

- Has multiple variables defined
- Each row corresponds to a question
- *help-survey* tab provides details of each column
- Important columns for this session
  - type: question type
  - name: variable name
  - label: variable label
  - hint: additional information about question
  - required: indicates if a question
  - constraint: validate response/ensure it's in a given range
  - relevance: skip patterns



	A	B	C	D	E	F	G	H	I	J	K	L	M	
1	type	name	label	hint	default	appearance	constraint	constraint message	relevance	disabled	required	required message	read only	cal
2	start	starttime												
3	end	endtime												
4	deviceid	deviceid												
5	subscriberid	subscriberid												
6	simserial	simid												
7	phonenumber	devicephonenum												
8														

XLSForm: Question types

Question Type	Description
text	Text input
integer	Integer (i.e., whole number) input
decimal	Decimal input
select_one [options]	Multiple choice question; only one answer can be selected
select_multiple [options]	Multiple choice question; multiple answers can be selected
note	Display a note on the screen, takes no input
geopoint	Collect GPS coordinates
date	Date input
datetime	Date and a time input
calculate	Perform a calculation
begin group	Start a group of questions
end group	End a group of questions
begin repeat	Start a group of repeated questions (eg: roster)
end repeat	End a group of repeated questions

XLSForm: Choices tab

- Include options for select_one and select_multiple question types
  - E.g.: yes no

- Important columns
  - list_name: name to match with the option list on survey tab
  - value: coded value of each category
  - label: value label of each category

	A	B	C	D
1	**list_name**	**value**	**label**	**image**
2	yesno	1	Yes	
3	yesno	0	No	
4				
5				

Program a survey

- Let us now program the paper survey

- Useful to remember:
  - Refer value from previous question using *${varname}*
  - Follow good variable naming conventions
  - Add hints where possible
  - Standardize values for common responses such as Don’t know and Refuse to Answer

Some tips

Test survey by uploading to a server (Survey will not upload if there are errors)

Use ietestform to test the form for best practices

We have covered the very basic features of a SurveyCTO survey. SurveyCTO has the ability to code complex elements in a survey including

- Adding calculations audio, video, gps, barcodes
- Including audio audits
- Randomizing survey elements
- Pre-loading data into a form Using server

Resources

DIME WIKI

SURVEYCTO DOCUMENTATION

SURVEYCTO WEBINARS

Thank you!