

2017 Survey Solutions

Nadi, Fiji

Survey Solutions: Basic Designer

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Designer Tool

- designer tool works online;
- user has to have an account;
- anyone can create an account;
- registration is simple, requires an email;

Questionnaire designer:

<http://solutions.worldbank.org>


Login screen


The screenshot shows a web browser window titled "Designer" with the URL "https://solutions.worldbank.org". The page features the World Bank Group logo and the text "WORLD BANK GROUP". The main heading is "Survey Solutions Designer", accompanied by a stylized pen icon. Below this, it states: "This is a tool for creating surveys for The World Bank's CAPI platform with collaboration capabilities and export to PDF." On the right side, there is a login section with the text "Welcome to Survey Solutions Questionnaire Designer" and "Please log in or Register". It includes input fields for "Login" and "Password", a checkbox for "Stay logged in for a day", a green "LOG IN" button, and a "FORGOT PASSWORD?" link. At the bottom left, there is a copyright notice "© 2016 The World Bank Group. All Rights Reserved. Legal" and a "Google Play" logo with the text "ANDROID APP ON".

Designer

World Bank Group [US] https://solutions.worldbank.org

HELP REGISTER LOG IN

 **WORLD BANK GROUP**



**Survey Solutions
Designer**

This is a tool for creating surveys for
The World Bank's CAPI platform with
collaboration capabilities and export to PDF.

Welcome to Survey Solutions
Questionnaire Designer

Please log in or Register


Login

Password

Stay logged in for a day

LOG IN FORGOT PASSWORD?

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ANDROID APP ON
 **Google Play**

Questionnaires privacy and collaboration

A questionnaire can be one of the following:

- **my questionnaire (private)** - only user that created the questionnaire can see it;
- **public questionnaire** - any user of Survey Solutions can see the questionnaire (not data);
- **shared questionnaire** - private questionnaire that can be seen by some other designated users for collaboration;

Any questionnaire has an owner, that created the questionnaire. (S)he can share the questionnaire with others if desired.

A private questionnaire can be made public by the administrator on the request of the questionnaire owner.

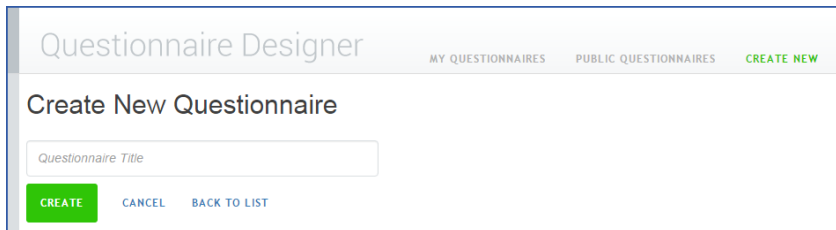
Copied questionnaires become owned by the person who copied them.

Create a new questionnaire

There are two ways to create a new questionnaire:

- **create new**: creates a completely new blank questionnaire;
- **copy**: an existing questionnaire (your own or a public one) can be copied; a new questionnaire will be created with the content that was in the original questionnaire.
- Note: after you copy a questionnaire, changes to the original questionnaire do not affect the copy.

Create new questionnaire



The screenshot shows the 'Questionnaire Designer' interface. At the top, there are three tabs: 'MY QUESTIONNAIRES', 'PUBLIC QUESTIONNAIRES', and 'CREATE NEW' (which is highlighted in green). Below the tabs, the main heading is 'Create New Questionnaire'. There is a text input field labeled 'Questionnaire Title'. Below the input field, there are three buttons: 'CREATE' (a green button), 'CANCEL', and 'BACK TO LIST'.

- click 'create new' button to create new questionnaire;
- provide a mandatory title (keep it short);
- questionnaire will be created as your private questionnaire, you can share it with your collaborators later;

Questionnaire structure

- **Questionnaire** consists of sections, subsections, rosters, questions, and static text elements.
- **Sections** are similar to schedules (modules) of the traditional paper questionnaires. They are displayed in the table of contents and interviewers can easily jump to any section. Sections may include additional subsections.
- **Subsections** grouping of questions, typically related.
- **Questions** text and entry field to capture the answer of the respondent.
- **Roster** a special group of questions that is replicated multiple times, for example for every household member.
- **Static text** can be added to the questionnaire (in addition to question **instructions**). Static text is not a kind of question.

Questionnaire structure

In addition, questionnaires allow defining the following advanced elements:

- macros;
- lookup tables;
- translations, and
- attachments.

Composing questionnaire

- In the left panel of the screen you see the questionnaire index: all chapters, groups, rosters and questions.
- The properties of the selected object are reflected in the panel to the right.
- Different objects have different properties. Save them when you change them.

The screenshot displays the 'Languages' roster in the Designer Tool. The left panel shows the roster structure:

- Roster: LANGUAGES (K4)
- Question: Do you speak any foreign language? (foreign)
- Question: Which foreign language do you speak? (whichlang)

Below the roster are buttons: ADD QUESTION, ADD SUBGROUP, ADD ROSTER, and ADD STATIC TEXT.

The right panel shows the properties for the selected question:

- Title: Languages
- Condition expression (?):

At the bottom of the interface are buttons: SAVE (green), CANCEL, DELETE, and CLONE.

Common question properties

- **Type** : every question has a type that determines how the response is collected by the application.
- **Title** : question text that interviewer reads to a respondent during interview. Title can be in any language.
- **Variable name** : captured data will be saved to variables. Variable names are subject to certain naming restrictions.
- **Variable label** : (optional) variable label in exported dataset. Question title will be used as label if label is not specified here. Compare:
"How old were you when you got married for the first time?" with
"Age at first marriage"
- **Instruction** : any question may contain instructions that clarify (to interviewer) how the question must be asked, etc. Instructions are different from *static text*. Instructions are shown in a popup window when the instructions button is clicked.

Further common question properties

- **Condition expression** : an expression that defines when this question must be asked depending on the answers to other questions of this questionnaire. If no expression is specified, the question will be asked.
- **Validation rule** : a combination of a validation expression and a corresponding message.
- **Validation expression** : an expression that determines whether the answer to the question is valid, depending on the answers to other questions of this questionnaire. If no expression is specified, any value that can be entered for this question type will be considered valid.
- **Message** : an informational message for the interviewer that explains the nature of the error, such as *“Educational level too advanced for such age”*. Such message is mandatory if validation expression is specified in the designer.

Question scope

- Question's **scope** determines, who provides the answer to this question;
- Possible values for scope are: *interviewer*, *supervisor*, *prefilled*, *hidden*..

● Validation condition (?)

Error message (?)

Question scope

Interviewer
Supervisor
Hidden
Prefilled

Interviewer

- By default, the question's scope is: interviewer.

Question scope

- If the scope is “**interviewer**” the answer to this question is expected to be collected by the interviewer from the respondent during the interview; supervisors can't directly change answers to such questions;
- If the scope is “**supervisor**”, the interviewers will not see these questions; and the answer will be filled out by the supervisor; (for example when coding requires certain special knowledge);
- If the scope is “**prefilled**”, the answer is going to be used as part of the assignment to locate the household; answers to the prefilled questions will be displayed on interviewer's and supervisor's dashboard; neither interviewer, nor supervisor can change prefilled questions.
- “**Hidden**” questions are used to store values that take part in the validation. The values must be uploaded during the sample creation process.

Question types

- different question types exist to capture different types of information;
- choosing the right type of question is crucial to help minimize data entry mistakes;
- if the question type is selected incorrectly, interviewer may not be able to capture the response;
- in this presentation we will discuss basic question types: text, numeric, date, single-answer and multi-answer categorical, and a list question;
- in subsequent presentations we will explain how to define novel question types (geolocation, image, etc) and discuss how the data is exported for different types of questions.

Text question



- most universal type of question: anything that respondent can tell us during an interview can be captured as text;
- because of that the information may not be structured and suitable for further processing;



Numeric question

 Numeric 

- use numeric questions to capture numerical information: quantities, volumes, prices, etc.
- can limit the values to be integer;
- can specify the number of digits after comma;
- interviewer will see a numeric-only keyboard on tablet when answering this type of question;
- interviewer will not be able to enter text into such a field;



Date question

☑ Date ▼

- question of this type is helpful to capture the date when a certain event occurred: birthday, marriage, etc.
- to answer this question interviewer will pick a particular date in a calendar:

Date of the interview

Set date

August 2014

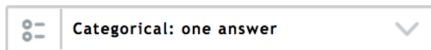
	S	M	T	W	T	F	S
Jul 24 2013	31	27	28	29	30	31	1 2
Aug 25 2014	32	3	4	5	6	7	8 9
Sep 26 2015	33	10	11	12	13	14	15 16
	34	17	18	19	20	21	22 23
	35	24	25	26	27	28	29 30
	36	31	1	2	3	4	5 6

Done

Date question

- Because for date question the date must be pointed in the calendar, it is not possible to capture incomplete dates here, (such as only year and month).
- One can probe first (*“Do you know your exact birthday?”*) and branch the interview depending on the answer.

Categorical one-answer question



- question of this type is to be used when the possible answers are known or restricted to a certain list and one and only one option may be applicable to every case.
- for example: gender is male or female, location is urban or rural.
- note that the application expects an item to be chosen for this type of question and the question will be considered unanswered if no selection is made. in some cases you may need to include “*none of the above*” or a similar item to the list.

Categorical one-answer question

- categories are defined as pairs of codes and corresponding labels, such as *1 Urban, 2 Rural*.
- selection is made by pressing the corresponding option;

Area of residence

Urban

Rural

- interviewers don't need to see the codes, or memorize them;

Categorical questions: other, specify

- Commonly “other, specify” item is included in paper questionnaires and the same space on paper is reused to record other item instead of the code;
- In Survey Solutions, introduce a new (typically text) question to hold “other” answers.
- For example, you may design a questionnaire where question *s2q11* is capturing the code, but if code for *s2q11* corresponds to “other”, then question *s2q11a* (of type text) becomes activated and the interviewer is required to specify what other option was named by the respondent.

Filtered

- if there are many categories, it is confusing to show them all;
- for example, there may be thousands of settlements (villages, towns and cities) in the country, presenting them all would be overwhelming;
- instead one can rely on search, where the proper item is found by searching the list as the interviewer types the answer: “filtered”;
- questions with a large number of options are automatically declared to be “filtered”;
- when categorical questions contain many items, it is often more convenient to type a tab-delimited file with codes and **upload** it into the question;

Linked

- **linked** questions get their items not from a predefined list, but from another question in the same questionnaire;
- we will look at linked questions later;

Categorical multi-answer questions

 Categorical: multiple answers 

- convenient when yes/no question must be asked regarding many items;
- for example: *“Do you have in your household any of the following: stove, refrigerator, dishwasher, microwave oven, ...?”*
- interviewer may select for each of the items whether the answer is positive or not;

Categorical multi-answer ordered questions

Multi-answer questions can be of two kinds: **ordered** and **not ordered**. For ordered questions the order of selection of each item is also recorded:

Select, in order of importance, the three most important values a person should have

1 Honesty
 Sincerity
 Loyalty

3 Gratitude
 Respect

2 Other

Categorical multi-answer questions

Number of selected categories can be limited by a certain value (for example 3):



List question

- suitable for situations when neither number nor values of the options are known when the questionnaire is designed;
- for example: names of the household members, their favorite books, etc;
- there must be something common among these items to constitute a list (“household members”, “books”, “hobbies”, etc)
- number of items may not be larger than **60**, and can be restricted to a smaller value;
- list questions are commonly used as triggers for rosters, but can be used independently as well;

List question

List the name of the people who live in the household

Mary Smith

Paul Smith

-

-

-

+

- the + sign can be used to add further items to the list;
- the - sign can be used to remove items from the list;
- items can't be reordered;
- items can be added only to the end of the list;

Static text

Static text:

- is not a question;
- can be added wherever a question can be added;
- may be *formatted*;
- may contain images;
- may be conditional;
- may be validated!

Enabling conditions

- Survey Solutions software allows interviewers answer any **enabled** questions;
- and in any order;
- there are no skips (jumps);
- instead the questions that are jumped over in the paper questionnaire are simply disabled automatically;
- Enabling conditions are used to determine when a question (or subgroup or a chapter) should be enabled (asked);

Enabling conditions

- For example, suppose the gender of a person is collected in a variable *gender* and pregnancy status in variable *pregnant*.
- Suppose the codes for gender are: 1 “Male” and 2 “Female”.
- Furthermore, we want to pose question “Have you ever been pregnant?” only to women;
- To do this we will write the following condition to the *pregnant* question: `gender==2`
- In this case the gender question is the “unleash question” and question on pregnancy is the “recipient” question.
- Conditions can be complicated and involve answers to multiple questions.

Logical operators

The following logical operators can be used in enabling conditions:

Logical operator	Description	Type of questions
>	Greater than	Numeric and Categorical one answer
<	Less than	Numeric and Categorical one answer
==	Equal to	Text, Numeric and Categorical one answer
!=	Not equal to	Text, Numeric and Categorical one answer
>=	Greater than or equal to	Numeric and Categorical one answer
<=	Less than or equal to	Numeric and Categorical one answer
&&	And	
	Or	
!	Not	

- Use parentheses as necessary in complex conditions;
- To refer to the answer of a question, specify the variable name corresponding to that question, like so: `age`
- To compare strings, enclose string constants in quotes, like so: `city=="New York"`

Before you start

- typing questions is not difficult;
- creating a robust and intuitive questionnaire is more of an art that needs to be mastered;
- plan ahead, think about relationships between data and which types of questions are most suitable to capture the answers of the respondents;
- explore new possibilities available in CAPI; copying paper questionnaire one to one is not necessarily the best option.

