Mobile Data Collection using Open Data Toolkit

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Steps:

- 1. Create your own data collection form
- 2. Install ODK app in you mobile device from Google Play
- 3. Configure your app to repoint to geonode-mobile.appspot.com
- 4. Add form into your device
- 5. Collect (real time) data using smartphone
- 6. Store data (offline) on smartphone and/or send it to server for publishing/sharing

Create your own data collection form:

- a. Create a user account on <u>http://build.opendatakit.org/</u>
- b. Sign in to your account

You must have an account Build.	in order to create forms on ODK
Username	bishwa.pandey@gmail.co
Password	
Forgot your password?	
Don't yet have an account?	•
Sign in Cancel	

b. Use the web interface to build the custom form

		× ×
Customize Links 🔬 Translate English Sp 🗋 UploadhileDirectly 👼 Webmail WB 📋 WB VPN 🔬 Google Translate 🤤 GN 2.0 🧱 ConnectED 😂 Dictionary and The	💵 Blackb	oard Learn " 🔄 Other bookn
School Survey rename File Edit View Help		Signed in as bishwa. Sign out
Name of the school	×	Properties Data Name The data name of this field in the final exported XML.
	_	Barcode Caption Text The name of this field as it is presented to the user.
Type		English Barcode Hint Additional bala for this quastion
Date	×	English
		Default Value The value this field is presented with at first.
Photo Photo	×	Read Only Whether this field can be edited by the end user or not.
		Kequired Whether this field must be filled in before continuing. Advanced
Video	×	Relevance Specify a custom expression to evaluate to determine if this field is shown.

c. Save the form as XML

d. Directly save the form on your server



Install ODK app in you mobile device from Google Play

Playstore - ODK Collect

Or from the Web:

http://code.google.com/p/opendatakit/downloads/list

Configure your app to repoint to your server of choice for example (geonode-mobile.appspot.com)



Add the form into your device (by connecting to your server)

Option - Get Blank form



Collect (real time) data using smartphone





Location

Replace Location

Latitude: N 38°52'54" Longitude: W 77°24'9" Altitude: 85m Accuracy: 5m

Number of Stories



Store data (offline) on smartphone and/or send it to server for publishing/sharing

Option Send Finalized form

Select the forms you want to send it to the server and hit "send selected"



For more information: use <u>www.opendatakit.org</u>

Getting data out from Server:

- 1. Open the server location <u>https://geonode-mobile.appspot.com/</u>
- 2. Select the form that you used for data collection. Note that the server may house several data collection forms



3. Click on Export button located at upper right hand side.

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						d Visualize	💠 Exp	ort < Publish	
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s OpeningPercentage	WallMaterial	WallTypeOther	StoriesNumber	GPS Latitude	GPS Longitude	GPS Altitude	GPS Accuracy	FrontBuilding	î
10	Other	Concrete and brick and stone	2						
40	Concrete		2					384	
40	Stone		2						E
10	Stone		2						
10	Concrete		4					1	

4. You now have three choices to export. It is recommended to export as CSV or KML.

Form: build_Shelter-Sample-Form_1384364011 Type:	CSV file ▼ CSV file	Filter: none 🔹 🖒 Export 😫
Geopoint: GPS Title: *meta-instance-id*	KML file JSON file	Picture: FrontBuilding

Once you see this interface, click one more time on export button. You should now see the following interface.

Filter Sub	Submissions missions Exported	Form Management		
	Exported Files			
File Type	Status	Time Completed	Download File	Delete
CSV file	Dataset Available	Sat Nov 23 05:35:51 GMT-500 2013	Shelter Sample Form results.csv	🗱 Delete
CSV file	Dataset Available	Thu Nov 14 22:49:16 GMT-500 2013	Shelter Sample Form results.csv	🗱 Delete
CSV file	Dataset Available	Thu Nov 14 12:31:55 GMT-500 2013	Shelter Sample Form results.csv	🗱 Delete
CSV file	Dataset Available	Thu Nov 14 11:50:07 GMT-500 2013	Shelter Sample Form results.csv	🗱 Delete
CSV file	Dataset Available	Wed Nov 13 15:49:11 GMT-500 2013	Shelter Sample Form results.csv	🗱 Delete

The first one in the list is normally the file that you just created. Click on the file name and download the file. You can save it in the directory of your choice.

	Submissions	Form Management		
Filter Su	Exported Eiles	1 Sudmissions		
File Type	Status	Time Completed	Download File	Delete
CSV file	Dataset Available	Sat Nov 23 05:35:51 GMT-500 2013	Shelter Sample Form results.csv	🗱 Delete
https://geonode	e-mobile.appspot.com/view/bi	naryData?blobKey=aggregate.opendatakit.org	g%3APersistentResults%5B%40version%3Dnull+and+%40u	iVersion%3Dnull%5D%
Shelter_S	ample_Forcsv			

KML file can be directly opened on Google Earth or can be converted to Shapefile. CSV file can be opened using QGIS or ArcMap.

- 5. Opening CSV file using QGIS:
- a. Open QGIS
- b. Open the tab Add Delimited Text layer



c. Select CSV file that you have saved earlier, Remember to check CSV and review X field and Y filed are correctly read.

<u>ø</u> 0	ìreate a Layer f	rom a Delimited T	ext File					? ×
File	Name C:/The	WB/data/Shelter_Sa	mple_Form_results	.CSV				Browse
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Lay	er settings	os, spatial inde	ay .		e subset indev		Watch	file
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1	Stone	null	2	13.15174608	-61.22363116	-25.1000061	55	https://geonode-mobile.appspot.co
2		Brick and concrete	2	13.15273936	-61.22337429	-12	18	https://geonode-mobile.appspot.co
3	Stone	null	2	13.1520537	-61.22362688	-43.3999939	20	https://geonode-mobile.appspot.co
4	Concrete	null	2	13.15219034	-61.223821	-30.80000041	15	https://geonode-mobile.appspot.co
5	Concrete	null	2	13.15137731	-61.22303732	-30.20000076	9	https://geonode-mobile.appspot.co
6	Stone	null	2	13.1518235	-61.22240345	-19.29999924	10	https://geonode-mobile.appspot.co
7	Concrete	null	3	13.15178144	-61.22231278	-29.5	3	https://geonode-mobile.appspot.co
8	Concrete	null	4	18.52754334	-72.29738525	291.0246897	4	https://geonode-mobile.appspot.co
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d. <u>Select the coordinate system as WGS84</u>

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e. The feature should be displayed now.



Note: In this screenshot, the road network is pulled from SVG GeoNode http://geonode.gov.vc/