Glossary

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General Terms

Project	A Project is the overall container for the data collection project. There can only be one Project per Designer file. A single Project can contain multiple data-collection Forms, although this is rarely necessary.
Form	A Form consists of one or more Fields and allows for the collection of data. A Project can have more than one Form that can be used to separate groups of Fields and collect data on different topics. For instance, a Project could have a Form for collecting data about schools and a Form for collecting data about the students within that school.

Terms used in decision trees

Branch/Parent node	The options the user can select to follow a route through the tree, these decisions are not captured in the data collection. The branch or "parent" is a container for a set of choices or decisions.
Child node	The options that are reached from a parent node. Some child nodes can also be parent nodes for other options. All leaf nodes are child nodes (but not all child nodes are leaf nodes).
Leaf node	The final point of a branch, the piece of information that is recorded in data collection.
Sibling	Sibling nodes only occur in a hierarchical structure. Siblings are multiple child nodes that exist at the same level. A parent node can have multiple child nodes and each of those child nodes will be siblings of each other.

Modes

Edit mode	The mode used when editing a previously created Designer project
Create mode	The mode used when capturing data ("creating" a data point)

⚙ The Cog (top right)

Project Settings:

ID	A unique identifier for your project
Name	The name of your project
Default Language	The language to use when displaying the project to the user (e.g. for text-to-speech synthesis). A warning will be produced if the project includes a feature that queries this attribute but the attribute was not specified. Note that languages can also be defined on a per-form basis. **Currently the only default language is English**.

Form settings

ID	The ID used to recognise and refer to this Form
Store End Time	Whether or not to store the time at which the user saved and exited this form.
Start Field	Which of the form's fields should be presented to the user first. If no field is specified then the first defined field in the form will be shown to the user.
Click Animation	Whether or not to animate the widget that the user has clicked for providing visual feedback.
Screen Transition	Whether the next screen in this form should transition onto the display vertically or horizontally, or if no transition should be shown at all.
Obfuscate Media Files	Whether or not the names of media files captured by the user (e.g. photo, video, audio recordings) should be obfuscated to impede their detection. NOTE: This is not a form of safe encryption and the obfuscation can still be reverted to retrieve the media files.
Next	What to do once the user completes this form: start this form again ("loopform"), start this project again ("loopproj"), exit the application ("exitapp"), return to the previous form ("prevform") or go to the next form ("nextform").
Save Sound	Whether or not to make the device play a sound when the user saves their input for this form.
Save Vibrate	Whether or not to make the device vibrate when the user saves their input for this form.
Control Background Colour	The colour of the background for the control buttons (back, forward, cancel)
Shortcut Image	An image file that should be used as a project shortcut for Android's Home Launcher or for Sapelli Launcher. Only the image of the first form in a project file will be used as a shortcut.
Single Page	Whether or not all of the fields included in this form should be displayed on a single page. The default behaviour is to use a different page for every defined field, for instance a Choice field will occupy a full page and so will a Text field.
Show Img Sizes	When set to "on" Sapelli will display the exact sizes (measured in pixels) of each <Choice> image occurring anywhere in the Form.

Field options

Choice	Allows the collection of a user's "choice" from a set of options. Click on the "Choice" image to go to the Choice Attributes section of this glossary.
Photo	Allows the user to take a photo. Click on the "Photo" image to go to the Photo Attributes section of this glossary.
Location	Allows the user to capture the device's location. Click on the "Location" image to go to the Location Attributes section of this glossary.
Audio	Allows the user to capture audio. Click on the "Audio" image to go to the Audio Attributes section of this glossary.
Trigger	Acts as a jump from a particular Field within a Form Click on the "Trigger" image to go to the Trigger Attributes section of this glossary.
Button	Represents a button the user can press. Click on the "Button" image to go to the Button Attributes section of this glossary.
Page	Allows multiple fields to be displayed together on a page. Click on the "Page" image to go to the Page Attributes section of this glossary.
Orientation	Allows the user to capture the device's orientation. Click on the "Orientation" image to go to the Orientation Attributes section of this glossary.

Editing Panel (on the right)

Once you have selected your field, a panel will open on the right-hand side. This panel will contain different options depending on the type of field you have selected.

Below are some common icons that will be found in the panel, and how to use them.

Common icons

	Toggle – "Off"	The selected option is turned "off". Clicking on this will turn it "on" and it will turn blue (see below).
	Toggle – "On"	The selected option is turned "on". Clicking on this will turn it "off" and it will turn grey (see above).
	Select a file	Clicking on this pencil icon will enable you to select an image or audio file. If you have already uploaded file, they will appear in the box that opens when you click on this. There will also be the option to upload files.
	Select colour	This button enables you to change the colour of certain aspects of the project. Clicking on this will open a colour selection tool.
	Increase/Decrease Number	This button enables you to input a numerical value either using the keyboard or by clicking the up and down arrows.

Common attributes

All fields in Sapelli Designer have these common attribute options at the top of the right-hand panel.

ID	The ID is used to identify each field. Every ID in a project has to be unique. The ID is used to navigate through the project (see Jumps), it is not captured in data collection.
Caption	A caption is optional. Text written in the caption box will appear as a caption under your chosen field.
Optional	Whether or not the user can skip this field without entering information. If this is switched to "On" the user can skip this question.
Jump	This option enables you to "jump" from the current choice field to another field in the project. See "Jumps".
Editable	Whether or not the value originally set for this field can later be changed when the user is in 'edit' mode.

Most Basic Settings

For many projects, the most basic settings will be sufficient in order to design a data collection project. Listed below are the options that MUST be filled in for every project.

Field Type	Setting	Why it needs to be changed
Choice	Value	The value is required for all leaf node options because this is the data that gets recorded. If the value is missing you will see a warning icon in both the choice field box in the decision tree and in the value box on the Editing panel.
Page	Label	If using labels, they always need a caption
Page	Text	If using text fields, they always need a minimum length (default will be 1)

On the next few pages the Glossary will go into more depth about the options you can change to customise your project further. The most important settings to focus on will be highlighted in yellow.

Choice Field

Images

Img ✎	This gives you the option to select an image to display for your choice field.

Audio

Question Description ✎	This gives you the option to upload audio that gives a description of the question. (If no audio is selected "No Audio" will appear below this. If an audio file is selected the name of the file will appear)
Answer Description ✎	This gives you the option to upload audio that gives a description of the answers available.

Choice attributes

Value	The value is required for all leaf node options because this is the data that gets recorded. If the value is missing you will see a warning icon ⛔ in both the choice field box in the decision tree and in the value box on the Editing panel.
Cols	The number of columns with which to display children (answers) of this choice when it is presented as a question. (e.g. if you have four children/answers you may want to display them in a grid of two columns and two rows.) **The Cols and Rows options only appear in the attributes of child nodes. If not selected, the default is to scroll through the options, displaying two on the screen at a time.**
Rows	The number of rows with which to display children (answers) of this choice when it is presented as a question. **The Cols and Rows options only appear in the attributes of child nodes.**
Match text size	Whether or not the font size of text displayed on choices (as captions or instead of an image) should be coordinated across choice siblings (i.e. per "screen").
Background colour	Background colour for the element that represents this choice when presented as an answer.
Crossed	Whether or not a cross should be positioned on top of the UI element for this choice when it is presented as an answer.
Cross colour	The colour of the cross that could be positioned on top of the choice.
No Column	Setting this attribute to "on" on the root of a choice tree (it is ignored on children) specifies that the choice tree will not produce any data (i.e. the field will not be backed by a database column). Such choice trees without a column are useful as a means to direct control flow in a form or project.

Photo Field

Images

Discard Img ✎	You can select a custom image to use on the "discard media" button. The default is a trash can icon.
Approve Img ✎	You can select a custom image to use on the "approve media" button. The default is a tick icon.

Capture Img ✏️	You can select a custom image to use on the "take photo" button. The default is a camera icon.

Photo attributes

Max	The maximum number of photos that can be attached to this field. If max is set to 1, then the multi-item review interface is disabled and the user can only ever visit the single-item review interface to review their capture.
Review	Whether or not to allow the user to review the photo they have just made. If set to "off", the user will be taken straight to the next field when they take a photo.
Use Front Camera	Whether or not to use the device's front-facing camera (if it exists).
Flash	Which setting to use for the camera's flash (if it exists — note that most phones do not have flashes on their front-facing cameras).

Location Field

When adding location options to a form, defaults are selected. The options below give you more control over the location field but it is not necessary to change them unless you need to. Most of the options below are useful for occasions where GPS signal is limited.

Type	Gives the user the option to select the source of location data for this field. Options are "Any", "GPS", or "Network"
Start With	This gives the option of when the device should start 'listening' for location data — as soon as the user enters the form ('form'), as soon as the user enters the page containing this field ('page' — only valid if the location field is actually on a page), or not until the user reaches this particular field ('field').
Wait At Field	If "on", the application will force the user to wait until a sufficiently accurate and recent location is received using the provider specified in the type attribute. The user must wait at this field until an acceptable location is found in the time since they entered this field, regardless of the setting on the startWith attribute. Once such a location is received the user can proceed to the next field. If "off" the current best known location will be used if it is sufficiently recent and accurate and is from the specified provider, even if it was recorded before the user entered this location field.
Use Best Known Location On Timeout	Whether or not to accept a sub-optimal location (in terms of accuracy, recency and provider) if no satisfactory location is detected after listening for timeout seconds.
Timeout	Amount of time to wait before using the best known location regardless of whether or not it is sufficient in terms of accuracy, recency and provider.
Max Age	The maximum age that location data can be before it is deemed too old to record.
Max Accuracy Radius	The maximum accuracy that location data can be before it is deemed too inaccurate to record, expressed as a float that represents the maximum accuracy radius in metres.
Double Precision	Whether to use double precision (64 bits) or single precision (32 bits) when storing latitude, longitude and altitude values
Store Altitude	Whether or not the user's altitude should be stored for this field (if the survey device supports it).

Store Bearing	Whether or not the user's bearing should be stored for this field (if the survey device supports it).
Store Speed	Whether or not the user's speed should be stored for this field (if the survey device supports it).
Store Accuracy	Whether or not the accuracy of the final location data that is stored with this field should also be stored.
Store Provider	Whether or not the location provider used to obtain the final location data should also be stored.

Audio Field

Images

Approve Img	You can select a custom image to use on the "approve media" button. The default is a tick icon.
Discard Img	You can select a custom image to use on the "discard media" button. The default is a trash can icon.
Start Rec Img	You can select a custom image to use on the "start recording" button. The default is a microphone icon.
Stop Rec Img	You can select a custom image to use on the "stop recording" button. The default is a square stop button.
Recording Img	You can select a custom image to use to represent the audio at the review stage. The default is a cassette icon.
Start Playback Img	You can select a custom image to use on the "start playback" button. The default is a play icon.
Stop Playback Img	You can select a custom image to use on the "stop playback" button. The default is a square stop button.

Photo attributes

Max	The maximum number of audio recordings that can be attached to this field. If max is set to 1, then the multi-item review interface is disabled and the user can only ever visit the single-item review interface to review their capture.
Review	Whether or not to allow the user to review the audio they have just made. If set to "off", the user will be taken straight to the next field when they take a recording.

Trigger Field

Triggers act as a jump from a particular Field within a Form.. A trigger uses existing buttons on your smartphone (back button, menu button, etc.) to perform the action.

Key

This gives the option of choosing which key(s) will activate the trigger.

The options are:

- Back
- Menu
- Home
- App Switch
- Camera
- Volume Up
- Volume Down
- Volume Mute

Bear in mind not all phones will have the same keys available so it can be worthwhile to select a couple of keys for each trigger you use.

Fixed timer
The duration (in seconds) to wait before enacting the specified jump.

Button Field

A button is similar to a trigger. It's something that you press to take you to a specific part of your form. Whereas a trigger uses buttons that are already on your phone (e.g. home button), a button is one that you create for the project that appears on the screen.

Button Attributes

Column:	Gives the user the option to select the type of data to store that is associated with this button.
None	No data is stored regardless of user interaction
Boolean	"True" will be stored if the button was pressed and "False" will be stored if the button was displayed to the user but they chose not to press it.
True	"Datetime", then pressing the button will store the timestamp for the point in time when the button was pressed. Note that if the column type is set to "datetime" and the field is not marked as optional then the user will not be able to complete the form until they press the button.

Page Field

Pages allow multiple fields to be displayed together on a page. Clicking on the plus ( ) icon underneath a pages gives the user multiple options for the type of page they can add. You are not able to nest pages within choice fields, they have to be a separate parent field in the project.

Label

Label

Represents a non-interactive text label. This acts similarly to a caption and is required when inserting other forms of pages (e.g. a label is required for a text page).

Scale	Factor by which to scale the text in the label from the default size specified by Android.
Centred	Whether or not the text should be centred within the label.

Text

Text

Allows a string of text or numeric data to be captured.

Min Length	The minimum number of characters that should be deemed an acceptable submission for this field. The default is set to 1.
Max Length	The maximum number of characters that should be deemed an acceptable submission for this field.
Multi Line	Whether or not the user's submission for this field may span multiple lines.
Default Value	The default value to submit for this field if the user does not provide a response.
Content	The content type that this field expects. This can alter how the user interacts with the field – for example, selecting a numerical content type may present a numerical keyboard rather than the usual alphanumeric. The options are: text, password, email, phone number
Regex	A regular expression against which to match the user's submission. If this attribute is provided, only submissions which match the regular expression will be accepted.
Auto Caps	The mode for auto-capitalising user submissions for this field: none (no auto-capitalisation), all (capitalise all characters), words (only capitalise letters at the start of words), sentences (only capitalise letters at the start of sentences) Note these are only applied if content = "text".

List and Multilist

List

List

Represents a flat list of items

Multilist

Multilist

Represents a hierarchical list of items

Pre Select Default	Whether or not to automatically select the default item before the user has interacted with the list.

Item

Item

Represents the options within a List or MultiList

Value	The value to be displayed on this list item.
Default	Whether or not this item is the default item in its containing list. If multiple items are marked as the default then the first such item will be used as the default.

Check

Check

Represents a "true"/ "false" check box the user can check.

Default Value	Whether or not to check this check box before the user has interacted with it.

Orientation Field

Enables the user to capture the device's orientation

Store Azimuth	Whether or not to store azimuth (direction phone is pointing)
Store Pitch	Whether or not to store pitch (forward tipping motion)
Store Roll	Whether or not to store roll (sideways tipping motion)

Navigation

Standard Navigation

Show Back	Whether or not to present the 'back' button to the user on this field. NOTE: Overrides mode-specific settings above.
Show Cancel	Whether or not to present the 'cancel' button to the user on this field. NOTE: Overrides mode-specific settings above.
Show Forward	Whether or not to present the 'forward' button to the user on this field. NOTE: Overrides mode-specific settings above.

Advanced Navigation

Skip on Back	Whether or not this field should be skipped when the user goes backwards through fields they have already encountered. This behaviour could be useful in fields such as Location or Orientation.
Show on Create	Whether or not to show this field when the user is in 'create' mode (they are creating a new record, rather than editing an existing one).
Show on Edit	Whether or not to show the 'back' button when the user is on this field and in 'edit' mode.
Show Back on Create	Whether or not to show the 'back' button when the user is on this field and in 'create' mode.
Show Back on Edit	Whether or not to show the 'back' button when the user is on this field and in 'edit' mode.
Show Cancel on Create	Whether or not to show the 'cancel' button when the user is on this field and in 'create' mode.
Show Cancel on Edit	Whether or not to show the 'cancel' button when the user is on this field and in 'edit' mode.
Show Forward on Create	Whether or not to show the 'forward' button when the user is on this field and in 'create' mode.
Show Forward on Edit	Whether or not to show the 'forward' button when the user is on this field and in 'edit' mode.

Jumps

Jumps enable you to create a link from one field in a project to another field. The standard jumps are listed below. As you add fields to your project, the field IDs will appear in the Jump list.

Loop Project	Start this project again
Exit App	Exit the Sapelli Collector Application
Loop Form	Start this form again
Previous Form	Return to the previous form
Next Form	Go to the next form
End Project	Exit the project and go back into Sapelli Collector
Cancel	Cancel

Once a jump is selected "Save on Jump?" will appear as an option

Save on Jump	If selected "on" this will save the contents of the form before the jump occurs.