



**THE OHIO STATE  
UNIVERSITY**  

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**COLLEGE OF MEDICINE**

# **REDCap Grand Rounds Creative Uses**

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# What is "Creative Use?"

Using REDCap in creative ways!

- Utilizing the existing functionality of REDCap
- No advanced coding beyond copy/paste

There are so many creative ways to use REDCap! Don't be shy in exploring its capabilities and finding your own new creative uses.

# Conditional Piping



## EXAMPLE:

- There is a survey where both parents and children will be responding. Questions should ask “your” or “your child’s,” depending on the child’s age.






## SOLUTION:

- Page 1 of the survey asks who is completing it
- Page 2 has a hidden field with the same coding, but with the labels “your and “your child’s” instead. @DEFAULT pipes the correct value and @HIDDEN-SURVEY hides the field
- Pipe the label of the hidden field into the rest of the questions

# Conditional Piping



 

[Add Field](#) [Add Matrix of Fields](#)

     Variable: who How to embed a field elsewhere






**Who is completing the survey?**  Parent  Child reset

[Add Field](#) [Add Matrix of Fields](#)









**Main Survey**

[Add Field](#) [Add Matrix of Fields](#)

     Variable: who2 How to embed a field elsewhere

**Who is completing 2**  your child's  your reset

# Conditional Piping

Instrument: <b>Conditional Piping Page1</b> (conditional_piping_page1)  Enabled as survey <span style="float: right;">^ Collapse</span>								
	1	record_id	Record ID	text				
 	2	who	Section Header: Who is completing the survey?	radio <table border="1"> <tr><td>1</td><td>Parent</td></tr> <tr><td>2</td><td>Child</td></tr> </table>	1	Parent	2	Child
1	Parent							
2	Child							
 	3	who2	Section Header: <i>Main Survey</i> Who is completing 2	radio <table border="1"> <tr><td>1</td><td>your child's</td></tr> <tr><td>2</td><td>your</td></tr> </table> Field Annotation: @DEFAULT="[who:value]" @HIDDEN-SURVEY	1	your child's	2	your
1	your child's							
2	your							
 	4	age	What is [who2] age?	text (number)				

# Conditional Piping



## Question Display Format

*One page or multiple pages? Section headers, which begin new sections on the instrument, will serve as the page break in a multi-page survey, in which each page will begin with a section header.*

One section per page (multiple pages) ▾

- Display page numbers at top of survey page
- Hide the 'Previous Page' button (i.e., Back button) on the survey page  
(prevents respondents from going back to previous pages)

# Conditional Piping

1) Who is completing the survey?

Parent  
 Child

reset

**Main Survey**

2) What is your child's age?

3) What is your child's favorite color?

Red  
 Blue  
 Yellow

reset

# Random Number Generator

- Generate a single random number:
  - `if([rnd]="", Math.random(), [rnd])`
- Generate a number in a range:
  - `rounddown([rnd] * ([max] - [min] + 1) + [min], 0)`



# Random Number Generator

     Variable: min

**Lower bound**

\* must provide value


[Add Field](#) [Add Matrix of Fields](#)

     Variable: max

**Upper bound**

\* must provide value

[Add Field](#) [Add Matrix of Fields](#)

     Variable: calcrnd

**Random integer between [min] and [max]**

 [View equation](#)

[Add Field](#) [Add Matrix of Fields](#)

# Field Notes in Matrices

## EXAMPLE:

- Sometimes you want to clarify your matrix variables with field notes but the REDCap user interface doesn't allow this.

## SOLUTION:

- You can add fields notes in matrices if you use the Data Dictionary instead of the UI.

# Field Notes in Matrices

	A	B	C	D	E	F	G	
1	Variable /	Form Nam	Section He	Field Type	Field Labe	Choices, C	Field Note	T
2	record_id	field_notes_in_matr		text	Record ID			
3	wski	field_note	How awes	radio	Skiing	1, Not awe	Water Skiing	
4	sski	field_notes_in_matr		radio	Skiing	1, Not awe	Snow Skiing	
5	soccer	field_notes_in_matr		radio	Football	1, Not awe	Soccer	
6	usfoot	field_notes_in_matr		radio	Football	1, Not awe	American Football	
7	ausfoot	field_notes_in_matr		radio	Football	1, Not awe	Aussie Football	
8								

# Field Notes in Matrices

Matrix group: sports

How awesome is each sport?

Variable: wski	Not awesome at all	Kind of awesome	Definitely awesome	Totally awesome!
Skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset

How awesome is each sport?

Variable: wski	Not awesome at all	Kind of awesome	Definitely awesome	Totally awesome!
Skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Water Skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Snow Skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Soccer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
American Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset
Aussie Football	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> reset

# Password Locking Public Surveys



## EXAMPLE:

- You need to use the public survey link, but you want to make sure only your participants can access the survey

## SOLUTION:

- Use a public survey landing page and use the survey queue to require a password to access the rest of the queue
- Don't forget to mask the password!

# Password Locking Public Surveys

Activated?	Survey Title	Display survey in the Survey Queue when...	Auto start?
 Not activated <input type="button" value="Activate"/>	"Welcome: Login"	<input type="checkbox"/> When the following survey is completed: -- select a survey -- AND <input type="checkbox"/> When the following logic becomes true: <a href="#">How to use this</a> <input type="text"/> (e.g., [age] > 30 and [sex] = "1") Test logic with a record: -- select record --	<input type="checkbox"/>
 Activated <input type="button" value="Deactivate"/>	"Actual Survey"	<input checked="" type="checkbox"/> When the following survey is completed: "Welcome: Login" AND <input checked="" type="checkbox"/> When the following logic becomes true: <a href="#">How to use this</a> [password]="password" (e.g., [age] > 30 and [sex] = "1") Test logic with a record: -- select record --	<input checked="" type="checkbox"/>

Don't forget to password mask!

**Field Label**  Use the Rich Text Editor [?](#)

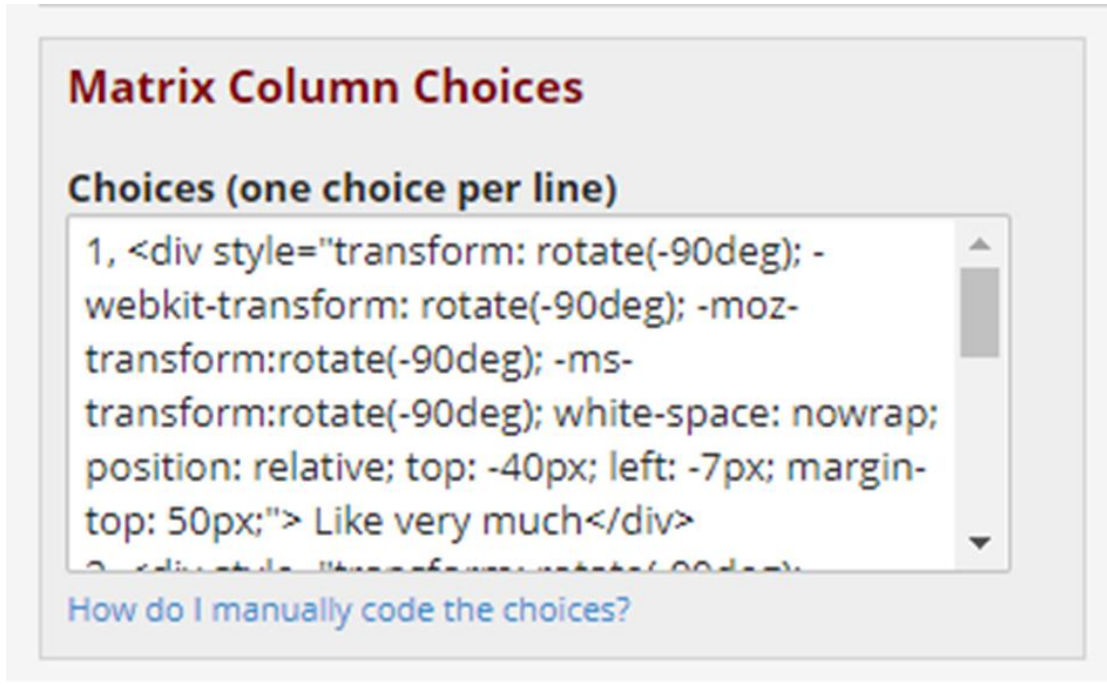
Please enter the password:

**Action Tags / Field Annotation** (optional)

@PASSWORDMASK

Learn about [@ Action Tags](#) or [using Field Annotation](#)

# Rotate Matrix Headers with HTML






```
<div style="transform: rotate(-90deg); -webkit-transform: rotate(-90deg); -moz-transform: rotate(-90deg); -ms-transform: rotate(-90deg); white-space: nowrap; position: relative; top: -40px; left: -7px; margin-top: 50px;">INSERTCHOICE</div>
```




You may have to play with the margins!

# Rotate Matrix Headers with HTML

Add Field Add Matrix of Fields

   Matrix group: headers

**What direction do you like your matrix headers?**

	Like very much	Like a little	Don't like	
 Variable: vert				
<b>Vertical</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
 Variable: horz				
<b>Horizontal</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
 Variable: diag				
<b>Diagonal</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset

Add Field Add Matrix of Fields



# SQL query for Specific Value

## EXAMPLE:

- You have several date fields in one record and need a way to identify max/min entry from within the record

## SOLUTION:

- SQL!

# SQL query for Specific Value

**Date Fields**

Adding new Record ID 16

**Record ID** 16

**Date 01:**  Today M-D-Y

**Date 02:**  Today M-D-Y

**Date 03:**  Today M-D-Y

**Date 04:**  Today M-D-Y

**Date 05:**  Today M-D-Y

**Form Status**

**Complete?** Incomplete ▾

**Lock this instrument?**  Lock  
If locked, no user will be able to modify this instrument for this record until someone with Instrument Level Lock/Unlock privileges unlocks it.






Save & Exit Form Save & ... ▾

-- Cancel --

# SQL query for Specific Value


**Date Fields**

➕ Adding new Record ID 16

<b>Record ID</b>	16
<b>Date 01:</b>	<input type="text" value="07-04-2021"/>  Today M-D-Y
<b>Date 02:</b>	<input type="text" value="02-14-2021"/>  Today M-D-Y
<b>Date 03:</b>	<input type="text" value="03-17-2021"/>  Today M-D-Y
<b>Date 04:</b>	<input type="text" value="12-25-2021"/>  Today M-D-Y
<b>Date 05:</b>	<input type="text" value="11-25-2021"/>  Today M-D-Y

**Form Status**

**Complete?**  ▾

**Lock this instrument?**   Lock  
If locked, no user will be able to modify this instrument for this record until someone with Instrument Level Lock/Unlock privileges unlocks it.

▾

# SQL query for Specific Value

**Date Fields**

Adding new Record ID 16

<b>Record ID</b>	16
<b>Date 01:</b>	<input type="text" value="07-04-2021"/> <input type="button" value="Today"/> M-D-Y
<b>Date 02:</b>	<input type="text" value="02-14-2021"/> <input type="button" value="Today"/> M-D-Y
<b>Date 03:</b>	<input type="text" value="03-17-2021"/> <input type="button" value="Today"/> M-D-Y
<b>Date 04:</b>	<input type="text" value="12-25-2021"/> <input type="button" value="Today"/> M-D-Y
<b>Date 05:</b>	<input type="text" value="11-25-2021"/> <input type="button" value="Today"/> M-D-Y

**Form Status**

**Complete?**


**Lock this instrument?**   Lock  
If locked, no user will be able to modify this instrument for this record until someone with Instrument Level Lock/Unlock privileges unlocks it.


← Min

← Max

# SQL query for Specific Value





### Summary

 Editing existing Record ID 17


<b>Record ID</b>	17
<b>Max Date:</b>	<input type="text" value="2021-12-25 00:00:00"/>
<b>Min Date:</b>	<input type="text" value="2021-02-14 00:00:00"/>
<b>Form Status</b>	
<b>Complete?</b>	<input type="text" value="Incomplete"/>
<b>Lock this instrument?</b> <small>If locked, no user will be able to modify this instrument for this record until someone with Instrument Level Lock/Unlock privileges unlocks it.</small>	<input type="checkbox"/>  <b>Lock</b>


NOTE: To delete the entire record (all forms/events), see the record action drop-down at top of the [Record Home Page](#).

# SQL query for Specific Value

Instrument: <b>Summary</b> (summary) <span style="float: right;">^ Collapse</span>				
 	14	max_date	Max Date:	<p>sql</p> <pre>select 'dm', MAX(CAST(value AS datetime)) FROM redcap_data WHERE project_id = 12144 AND field_name IN('date_01', 'date_02', 'date_03', 'date_04', 'date_05') AND record = [record-name];</pre> <p>Field Annotation: @PREFILL='dm'</p>
 	15	min_date	Min Date:	<p>sql</p> <pre>select 'dmin', MIN(CAST(value AS datetime)) FROM redcap_data WHERE project_id = 12144 AND field_name IN('date_01', 'date_02', 'date_03', 'date_04', 'date_05') AND record = [record-name];</pre> <p>Field Annotation: @PREFILL='dmin'</p>

# html <abbr> Tag for hover text

 **hover text**


 Editing existing Record ID 17

**Record ID** 17

**Employee Unique ID #**

**Form Status**

**Complete?**  ▾

**Lock this instrument?**  
If locked, no user will be able to modify this instrument for this record until someone with Instrument Level Lock/Unlock privileges unlocks it.   **Lock**

▾

# html <abbr> Tag for hover text

### Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

**Field Type:** Text Box (Short Text, Number, Date/Time, ...)

**Field Label**  Use the Rich Text Editor ?

Employee <abbr title="Located on back of access badge">Unique ID # </abbr>

**Action Tags / Field Annotation** (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

**Variable Name** (utilized in logic, calcs, and exports)  
hover  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#)

[Field Embedding](#)

**Validation?** (optional)  
---- None ----

- or -  
-- select ontology service --

**Required?\***  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV)

Align the position of the field on the page

**Save** **Cancel**



# html <abbr> Tag for hover text

**Edit Field**

You may add a new property to a field (it will be [min](#)).

Field Type: Text Box

Field Label

Employee <abbr title="Located on back of access badge">Unique ID # </abbr>

html open      Text to display on hover      Text to display in label      html close

**Action Tags / Field Annotation (optional)**

Learn about [@ Action Tags](#) or [using Field Annotation](#)

-- or --

-- select ontology service --

**Required?\***  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, SSN, address)?

**Custom Alignment** Right / Vertical (RV)

Align the position of the field on the page

Save Cancel

# Using tables for extra wide matrix fields

**wide matrix**

Editing existing Record ID 1

Record ID 1

Wide Matrix

#1#2#3#4#5#6#7#8#9#10#11#12#13#14#15#16#17#18#19#20#21#22#23#24#25#26#27#28#29#30#31#32#33#34#35#36#37#38#39#40

Field 01

Field 02

Field 03

Field 04

Field 05

Field 06

Field 07

Field 08

Field 09

Field 10

Field 11



# Using tables for extra wide matrix fields

55	f01	wide_matrix_table		checkbox	Field 01	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
56	f02	wide_matrix_table		checkbox	Field 02	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
57	f03	wide_matrix_table		checkbox	Field 03	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
58	f04	wide_matrix_table		checkbox	Field 04	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
59	f05	wide_matrix_table		checkbox	Field 05	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
60	f06	wide_matrix_table		checkbox	Field 06	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
61	f07	wide_matrix_table		checkbox	Field 07	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
62	f08	wide_matrix_table		checkbox	Field 08	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
63	f09	wide_matrix_table		checkbox	Field 09	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
64	f10	wide_matrix_table		checkbox	Field 10	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
65	f11	wide_matrix_table		checkbox	Field 11	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
66	f12	wide_matrix_table		checkbox	Field 12	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
67	f13	wide_matrix_table		checkbox	Field 13	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
68	f14	wide_matrix_table		checkbox	Field 14	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
69	f15	wide_matrix_table		checkbox	Field 15	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
70	f16	wide_matrix_table		checkbox	Field 16	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
71	f17	wide_matrix_table		checkbox	Field 17	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
72	f18	wide_matrix_table		checkbox	Field 18	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10
73	f19	wide_matrix_table		checkbox	Field 19	1, #1   2, #2   3, #3   4, #4   5, #5   6, #6   7, #7   8, #8   9, #9   10, #10

# Using tables for extra wide matrix fields

### Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Descriptive Text (with optional Image/Video/Audio/File Attachment) ▼

Field Label Use the Rich Text Editor ?

Heading 2 ▼ **B** *I*

**Wide Table:**

Field 01:	Field 02:	Field 03:
{f01}	{f02}	{f03}

**Action Tags / Field Annotation** (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

**Variable Name** (utilized in logic, calcs, and exports)

Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#) [Field Embedding](#)

Optional file attachment, image, audio, or video:

**Embed an external video** (provide video URL) ?

e.g. <https://youtube.com/watch?v=E1cCuWMupz0>,  
<https://vimeo.com/62730281>, <http://example.com/movie.mp4>

Display format of video:  Inline  Inside popup

- or -

**Attach an image, file, or embedded audio**

[Upload file](#)

Display format of attachment on page:

Link

Inline image

Audio file (play in embedded player on page)

[Compatibility notice for embedded audio](#)

(Images wider than 600 pixels will be downsized to fit page.)

**Save** **Cancel**

# Using tables for extra wide matrix fields

The screenshot shows a rich text editor interface with a toolbar at the top. The toolbar includes options for heading (Heading 2), bold (B), italic (I), link, bulleted list, numbered list, indent, outdent, table, text color, background color, search, undo, redo, and a table icon. Below the toolbar, the text "Wide Table:" is followed by a table with five columns and three rows. The first row contains the headers "Field 01:", "Field 02:", "Field 03:", "Field 04:", and "Field 05:". The second row is empty. The third row contains the placeholder text "{f01}", "{f02}", "{f03}", "{f04}", and "{f05}" respectively.

Field 01:	Field 02:	Field 03:	Field 04:	Field 05:
{f01}	{f02}	{f03}	{f04}	{f05}

# Using tables for extra wide matrix fields

Heading 2 | B | I | | | | | | | |

| | | | | | | | | |

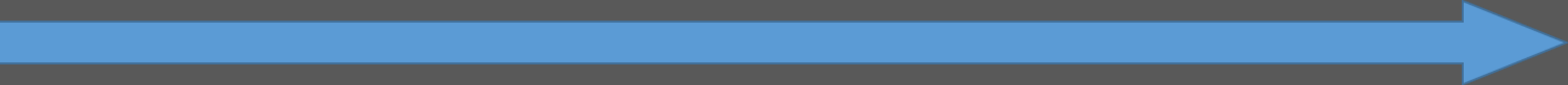
**Wide Table:**

Field 01:	Field 02:	Field 03:	Field 04:	Field 05:
{f01}	{f02}	{f03}	{f04}	{f05}

Hard coded field label



Embedded fields



# Using tables for extra wide matrix fields

wide matrix table

Editing existing Record ID 1

Record ID

Wide Table:

Field 01:	Field 02:	Field 03:	Field 04:	Field 05:	Field 06:	Field 07:
<input type="checkbox"/> #1	<input type="checkbox"/> #1	<input type="checkbox"/> #1	<input type="checkbox"/> #1	<input type="checkbox"/> #1	<input type="checkbox"/> #1	<input type="checkbox"/> #1
<input type="checkbox"/> #2	<input type="checkbox"/> #2	<input type="checkbox"/> #2	<input type="checkbox"/> #2	<input type="checkbox"/> #2	<input type="checkbox"/> #2	<input type="checkbox"/> #2
<input type="checkbox"/> #3	<input type="checkbox"/> #3	<input type="checkbox"/> #3	<input type="checkbox"/> #3	<input type="checkbox"/> #3	<input type="checkbox"/> #3	<input type="checkbox"/> #3
<input type="checkbox"/> #4	<input type="checkbox"/> #4	<input type="checkbox"/> #4	<input type="checkbox"/> #4	<input type="checkbox"/> #4	<input type="checkbox"/> #4	<input type="checkbox"/> #4
<input type="checkbox"/> #5	<input type="checkbox"/> #5	<input type="checkbox"/> #5	<input type="checkbox"/> #5	<input type="checkbox"/> #5	<input type="checkbox"/> #5	<input type="checkbox"/> #5
<input type="checkbox"/> #6	<input type="checkbox"/> #6	<input type="checkbox"/> #6	<input type="checkbox"/> #6	<input type="checkbox"/> #6	<input type="checkbox"/> #6	<input type="checkbox"/> #6
<input type="checkbox"/> #7	<input type="checkbox"/> #7	<input type="checkbox"/> #7	<input type="checkbox"/> #7	<input type="checkbox"/> #7	<input type="checkbox"/> #7	<input type="checkbox"/> #7
<input type="checkbox"/> #8	<input type="checkbox"/> #8	<input type="checkbox"/> #8	<input type="checkbox"/> #8	<input type="checkbox"/> #8	<input type="checkbox"/> #8	<input type="checkbox"/> #8
<input type="checkbox"/> #9	<input type="checkbox"/> #9	<input type="checkbox"/> #9	<input type="checkbox"/> #9	<input type="checkbox"/> #9	<input type="checkbox"/> #9	<input type="checkbox"/> #9
<input type="checkbox"/> #10	<input type="checkbox"/> #10	<input type="checkbox"/> #10	<input type="checkbox"/> #10	<input type="checkbox"/> #10	<input type="checkbox"/> #10	<input type="checkbox"/> #10
<input type="checkbox"/> #11	<input type="checkbox"/> #11	<input type="checkbox"/> #11	<input type="checkbox"/> #11	<input type="checkbox"/> #11	<input type="checkbox"/> #11	<input type="checkbox"/> #11
<input type="checkbox"/> #12	<input type="checkbox"/> #12	<input type="checkbox"/> #12	<input type="checkbox"/> #12	<input type="checkbox"/> #12	<input type="checkbox"/> #12	<input type="checkbox"/> #12
<input type="checkbox"/> #13	<input type="checkbox"/> #13	<input type="checkbox"/> #13	<input type="checkbox"/> #13	<input type="checkbox"/> #13	<input type="checkbox"/> #13	<input type="checkbox"/> #13
<input type="checkbox"/> #14	<input type="checkbox"/> #14	<input type="checkbox"/> #14	<input type="checkbox"/> #14	<input type="checkbox"/> #14	<input type="checkbox"/> #14	<input type="checkbox"/> #14
<input type="checkbox"/> #15	<input type="checkbox"/> #15	<input type="checkbox"/> #15	<input type="checkbox"/> #15	<input type="checkbox"/> #15	<input type="checkbox"/> #15	<input type="checkbox"/> #15
<input type="checkbox"/> #16	<input type="checkbox"/> #16	<input type="checkbox"/> #16	<input type="checkbox"/> #16	<input type="checkbox"/> #16	<input type="checkbox"/> #16	<input type="checkbox"/> #16
<input type="checkbox"/> #17	<input type="checkbox"/> #17	<input type="checkbox"/> #17	<input type="checkbox"/> #17	<input type="checkbox"/> #17	<input type="checkbox"/> #17	<input type="checkbox"/> #17
<input type="checkbox"/> #18	<input type="checkbox"/> #18	<input type="checkbox"/> #18	<input type="checkbox"/> #18	<input type="checkbox"/> #18	<input type="checkbox"/> #18	<input type="checkbox"/> #18
<input type="checkbox"/> #19	<input type="checkbox"/> #19	<input type="checkbox"/> #19	<input type="checkbox"/> #19	<input type="checkbox"/> #19	<input type="checkbox"/> #19	<input type="checkbox"/> #19
<input type="checkbox"/> #20	<input type="checkbox"/> #20	<input type="checkbox"/> #20	<input type="checkbox"/> #20	<input type="checkbox"/> #20	<input type="checkbox"/> #20	<input type="checkbox"/> #20
<input type="checkbox"/> #21	<input type="checkbox"/> #21	<input type="checkbox"/> #21	<input type="checkbox"/> #21	<input type="checkbox"/> #21	<input type="checkbox"/> #21	<input type="checkbox"/> #21
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<input type="checkbox"/> #26	<input type="checkbox"/> #26	<input type="checkbox"/> #26	<input type="checkbox"/> #26	<input type="checkbox"/> #26	<input type="checkbox"/> #26	<input type="checkbox"/> #26
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<input type="checkbox"/> #31	<input type="checkbox"/> #31	<input type="checkbox"/> #31	<input type="checkbox"/> #31	<input type="checkbox"/> #31	<input type="checkbox"/> #31	<input type="checkbox"/> #31
<input type="checkbox"/> #32	<input type="checkbox"/> #32	<input type="checkbox"/> #32	<input type="checkbox"/> #32	<input type="checkbox"/> #32	<input type="checkbox"/> #32	<input type="checkbox"/> #32
<input type="checkbox"/> #33	<input type="checkbox"/> #33	<input type="checkbox"/> #33	<input type="checkbox"/> #33	<input type="checkbox"/> #33	<input type="checkbox"/> #33	<input type="checkbox"/> #33
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<input type="checkbox"/> #37	<input type="checkbox"/> #37	<input type="checkbox"/> #37	<input type="checkbox"/> #37	<input type="checkbox"/> #37	<input type="checkbox"/> #37	<input type="checkbox"/> #37
<input type="checkbox"/> #38	<input type="checkbox"/> #38	<input type="checkbox"/> #38	<input type="checkbox"/> #38	<input type="checkbox"/> #38	<input type="checkbox"/> #38	<input type="checkbox"/> #38
<input type="checkbox"/> #39	<input type="checkbox"/> #39	<input type="checkbox"/> #39	<input type="checkbox"/> #39	<input type="checkbox"/> #39	<input type="checkbox"/> #39	<input type="checkbox"/> #39
<input type="checkbox"/> #40	<input type="checkbox"/> #40	<input type="checkbox"/> #40	<input type="checkbox"/> #40	<input type="checkbox"/> #40	<input type="checkbox"/> #40	<input type="checkbox"/> #40

Scroll left for the rest



# Combine date and time fields with CONCAT






## EXAMPLE:


- Dates and times were collected separately, but they need to do a datediff calculation

## SOLUTION:





- Use @CALCTEXT(concat()) to combine the date/time fields into one for the calculation


# Combine date and time fields with CONCAT

     Variable: date1





**Date 1**   Today Y-M-D


[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

     Variable: time1





**Time 1**   Now H:M


[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

     Variable: date2

**Date 2**   Today Y-M-D

[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

     Variable: time2

**Time2**   Now H:M

# Combine date and time fields with CONCAT

**Action Tags / Field Annotation** (optional)

```
@CALCTEXT(concat([date1],"",[time1]))
```

Learn about [@ Action Tags](#) or [using Field Annotation](#)

**Action Tags / Field Annotation** (optional)

```
@CALCTEXT(concat([date2],"",[time2]))
```




Learn about [@ Action Tags](#) or [using Field Annotation](#)

**Calculation Equation** [How do I format the equation?](#)

Learn how to use [√\\* Special Functions](#)

```
datediff([concat1],[concat2],"m")
```

# Combine date and time fields with CONCAT

<b>Record ID</b>	1
<b>Date 1</b>	<input type="text" value="2021-09-13"/>  <input type="button" value="Today"/> Y-M-D
<b>Time 1</b>	<input type="text" value="17:09"/>  <input type="button" value="Now"/> H:M
<b>Date 2</b>	<input type="text" value="2021-08-13"/>  <input type="button" value="Today"/> Y-M-D
<b>Time2</b>	<input type="text" value="02:09"/>  <input type="button" value="Now"/> H:M
<b>Concat1</b>	<input type="text" value="2021-09-13 17:09"/> <a href="#">View equation</a>
<b>Concat2</b>	<input type="text" value="2021-08-13 02:09"/> <a href="#">View equation</a>
<b>Datediff</b>	<input type="text" value="45540"/> <a href="#">View equation</a>

# Emailing Text Messages



## EXAMPLE:

- You want to send invitations via SMS, but Twilio isn't an option

## SOLUTION:

- Use their cell number and carrier to email them a text message

# Emailing Text Messages



*Variable: name*

**Name**

[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

---

*Variable: phone*

**Phone number**

[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

---

*Variable: number*

**Nine Digit Number**  [View equation](#)

@CALCTEXT

[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

---

*Variable: provider*

**Provider**

- AT&T
- T-Mobile
- Verizon
- Sprint
- Virgin Mobile
- Tracfone
- Ting
- Boost Mobile
- US Cellular
- Metro PCS

[reset](#)

[Add Field](#) [Add Matrix of Fields](#) [Import from Field Bank](#)

---

*Variable: email*

**Email**  [View equation](#)

@CALCTEXT

# Emailing Text Messages



**Field Label**  Use the Rich Text Editor ?

Phone number

**Variable Name** (utilized in logic, calcs, and exports)  
phone  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#) [Field Embedding](#)

**Logic Editor** ✕

Use the text box below to compose your logic, calculation, action tags, etc. If you need more space, click the Fullscreen Mode button to enlarge the text box. When you are finished, click the 'Update' button to minimize the Editor window. Learn how to use [Smart Variables](#) [Special Functions](#)

```
@CALCTEXT@concat(mid([phone],2,3),mid([phone],7,3),right([phone],4))@
```

on at the bottom. When you add a new field, it will be added to the

**Variable Name** (utilized in logic, calcs, and exports)  
number  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#) [Field Embedding](#)

**Validation?** (optional) Integer ▾

# Emailing Text Messages



**Field Label**  Use the Rich Text Editor ?

Provider

**Variable Name** (utilized in logic, calculations, and formulas)  
provider  
ONLY letters, numbers, and underscores

How to use  Smart Variables  P...

**Required?\***  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain identifying information (e.g., name, address, phone number, email address, etc.)?

**Custom Alignment** Right / Vertical

Align the position of the field on the page

**Field Note** (optional)

Small reminder text displayed underneath field

**Choices (one choice per line)** [Copy existing choices](#)

txt.att.net, AT&T  
tmomail.net, T-Mobile  
vtext.com, Verizon  
messaging.sprintpcs.com, Sprint  
vmobl.com, Virgin Mobile  
mmst5.tracfone.com, Tracfone  
message.ting.com, Ting



# Emailing Text Messages



**Edit Field** **Logic Editor**

Use the text box below to compose your logic, calculation, action tags, etc. If you need more space, click the Fullscreen Mode button to enlarge the text box. When you are finished, click the 'Update' button to minimize the Editor window. Learn how to use [Smart Variables](#) [Special Functions](#)

```
@CALCTEXT(concat([number], "@", [provider:value]))
```

**Variable Name** (utilized in logic, calcs, and exports)  
email  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

How to use [Smart Variables](#) [Piping](#) [Field Embedding](#)

**Validation?** (optional) Email

-- OR --

-- select ontology service --

**Required?\***  No  Yes  
\* Prompt if field is blank

# Emailing Text Messages



<b>Record ID</b>	6
<b>Name</b>	<input type="text" value="Bilbo Baggins"/>
<b>Phone number</b>	<input type="text" value="(414) 323-1234"/>
<b>Nine Digit Number</b>	<input type="text" value="4143231234"/> <a href="#">View equation</a>
<b>Provider</b>	<ul style="list-style-type: none"><li><input type="radio"/> AT&amp;T</li><li><input checked="" type="radio"/> T-Mobile</li><li><input type="radio"/> Verizon</li><li><input type="radio"/> Sprint</li><li><input type="radio"/> Virgin Mobile</li><li><input type="radio"/> Tracfone</li><li><input type="radio"/> Ting</li><li><input type="radio"/> Boost Mobile</li><li><input type="radio"/> US Cellular</li><li><input type="radio"/> Metro PCS</li></ul> <span style="float: right;">reset</span>
<b>Email</b>	<input type="text" value="4143231234@tmomail.net"/> <a href="#">View equation</a>

# Emailing Text Messages



- T-Mobile - number@tmomail.net
- Virgin Mobile - number@vmobl.com
- AT&T - number@txt.att.net
- Sprint - number@messaging.sprintpcs.com
- Verizon - number@vtext.com
- Tracfone - number@mmst5.tracfone.com
- Ting - number@message.ting.com
- Boost Mobile - number@myboostmobile.com
- U.S. Cellular - number@email.uscc.net
- Metro PCS - number@mymetropcs.com

This is a list of carriers providing email to SMS gateways, which allow you to **send text messages** to mobile phones **via email**:






<https://email2sms.info/>

# Field Embedding Fun

What are the best cookies?

Chocolate chip  
 Snickerdoodles  
 Double chocolate  
 Other






reset

     Variable: cookies How to embed a field elsewhere

What are the best cookies?

Chocolate chip  
 Snickerdoodles  
 Double chocolate  
 Other {cookies\_oth}

reset

     Variable: cookies\_oth *Branching logic: [cookies] = '4'* Field is embedded elsewhere on page ↑

Other cookies

# Field Embedding Fun

	Snack	Date
Day 1	<input type="text"/>	<input type="text"/> Now <small>D-M-Y H:M</small>
Day 2	<input type="text"/>	<input type="text"/> Now <small>D-M-Y H:M</small>

Variable: snacks How to embed a field elsewhere

	Snack	Date
Day 1	{snack1:icons}	{snack1date:icons}
Day 2	{snack2:icons}	{snack2date:icons}

---

Variable: snack1 Field is embedded elsewhere on page

**Snack 1**

---

Variable: snack1date Field is embedded elsewhere on page

**Snack 1 Date**  Now D-M-Y H:M

---

Variable: snack2 Field is embedded elsewhere on page

**Snack 2**

---

Variable: snack2date Field is embedded elsewhere on page

**Snack 2 Date**  Now D-M-Y H:M

# Field Embedding Fun

Embedding inside of embedding!

What types of dessert do you like?

Ice Cream

- Chocolate
- Vanilla
- Strawberry
- Mint
- Lemon
- Other

Pastries

- Eclairs
- Croissant
- Cannoli
- Cream horn
- Other

Cakes

Pies

reset

reset

# Field Embedding Fun

The screenshot displays a survey editor interface with four question fields, each with its own set of options and branching logic. The interface includes a toolbar at the top of each field with icons for edit, copy, paste, and delete, along with a 'Variable' name and a 'How to embed a field elsewhere' link.

- Field 1:** Variable: like. Question: "What types of dessert do you like?". Options:  Ice Cream {flavor},  Pastries {pastry},  Cakes {cakes},  Pies {pies}. Buttons: "Add Field", "Add Matrix of Fields".
- Field 2:** Variable: flavor. Branching logic: `[[like(1)] = '1'`. Question: "Best flavor". Options:  Chocolate,  Vanilla,  Strawberry,  Mint,  Lemon,  Other {ic\_oth}. A green status bar indicates "Field is embedded elsewhere on page". A "reset" button is present at the bottom right.
- Field 3:** Variable: ic\_oth. Branching logic: `[flavor]='99'`. Question: "Other ice cream". A text input field is provided. A green status bar indicates "Field is embedded elsewhere on page".
- Field 4:** Variable: pastry. Branching logic: `[[like(2)] = '1'`. Question: "Best Pastry". Options:  Eclairs,  Croissant,  Cannoli,  Cream horn,  Other {pastry\_oth}. A green status bar indicates "Field is embedded elsewhere on page". A "reset" button is present at the bottom right.

# Field Embedding Fun

Preferred cake size

H 8  
M  Inches  Centimeters

reset

## Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type:

Field Label  Use the Rich Text Editor ?

Preferred cake size

Action Tags / Field Annotation (optional)

Learn about [@ Action Tags](#) or [using Field Annotation](#)

Variable Name (utilized in logic, calcs, and exports)

cake\_size

Enable auto naming of variable based upon its Field Label?

ONLY letters, numbers, and underscores

How to use  Smart Variables  Piping  Field embedding

Validation? (optional)

- or -

Required?\*  No  Yes

\* Prompt if field is blank

Identifier?  No  Yes

Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment

Align the position of the field on the page

Field Note (optional)

Small reminder text displayed underneath field



# Field Embedding Fun

<input type="text" value="First name"/>	<input type="text" value="Last name"/>
---	--

Variable: name\_embed How to embed a field elsewhere

<code>{fname:icons}</code>	<code>{lname:icons}</code>
----------------------------	----------------------------

[Add Field](#) [Add Matrix of Fields](#)

Variable: fname Field is embedded elsewhere on page ↑

<b>First Name</b>	<input type="text" value="First name"/>
-------------------	---

[Add Field](#) [Add Matrix of Fields](#)

Variable: lname Field is embedded elsewhere on page ↑

<b>Last name</b>	<input type="text" value="Last name"/>
------------------	--

---

# Questions?