



# Creating New Project in OS-DPI - Simple grid plus display bar

24 Steps    [View on Tango](#)

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STEP 1

## Go to OS-DPI

STEP 2

### Click on New



## STEP 3

### Click on Content

You will need to navigate to the **Content** tab in order to load the data from your spread-sheet.



## STEP 4

### Uploading Data

If your spreadsheet is saved locally, you press 'load local sheet' and a window will appear allowing you to navigate your files to find the spreadsheet you want. On this page you can see no data are uploaded because under content it says, "0 rows with these fields:"

If your spread sheet is in google sheets simply copy and paste the url in the space provided. Remember to make the spreadsheet public before pasting.

The screenshot shows the 'Content' section of the Tango application. At the top, there are three tabs: 'Layout', 'Actions', and 'Access'. Below the tabs, the word 'Content' is displayed in large, bold, black font. A message '0 rows with these fields:' is shown. Underneath, there is a heading 'Load content from spreadsheets' followed by a URL input field containing 'Enter a URL' and a 'Load' button. Below this, two buttons are visible: 'Load local sheet' (which is highlighted with a red border) and 'Reload local sheet'. Under the 'Save content as a spreadsheet' section, there is a dropdown menu labeled 'Choose your format'. In the 'Load audio clips' section, there is an 'Upload audio clips:' input field with 'Choose Files' and 'No file chosen' options, and a 'Made with Tango.us' watermark in the bottom right corner.

## STEP 5

### Confirm Upload

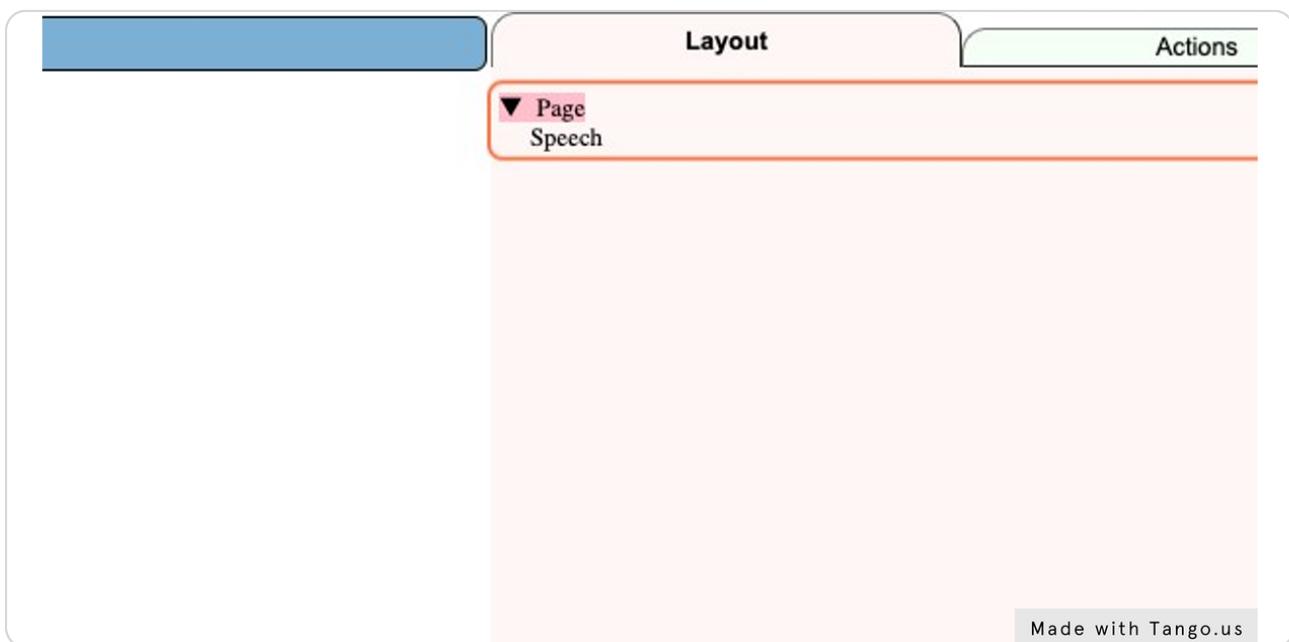
You can confirm the data loaded here by seeing that the message below content has uploaded to indicate the number of rows in your spreadsheet as well as the names of the columns (referred to here as fields).

Now, navigate the to Layout tab to create the layout you want to the data to populate.

The screenshot shows a web interface for managing content. At the top, there's a navigation bar with tabs: 'Layout' (which is highlighted with a red border), 'Actions', and others. Below the navigation is a section titled 'Content'. It displays a message: '59 rows with these fields: #sheetName, #role, #row, #column, #label, #fill\_display, #symbol'. Underneath this, there's a section titled 'Load content from spreadsheets' with a 'URL:' input field containing 'Enter a URL'. Below it are two buttons: 'Load local sheet' and 'Reload local sheet', with the latter showing the status 'Loaded 60\_PODC\_Example.xlsx'. There's also a 'Spreadsheet type' dropdown set to 'Choose your format'. The next section is 'Save content as a spreadsheet'. Following that is 'Load audio clips' with an 'Upload audio clips:' input field showing 'No file chosen'. Then comes 'Load images' with an 'Upload images:' input field also showing 'No file chosen'. In the bottom right corner of the content area, it says 'Made with Tango.us'.

STEP 6

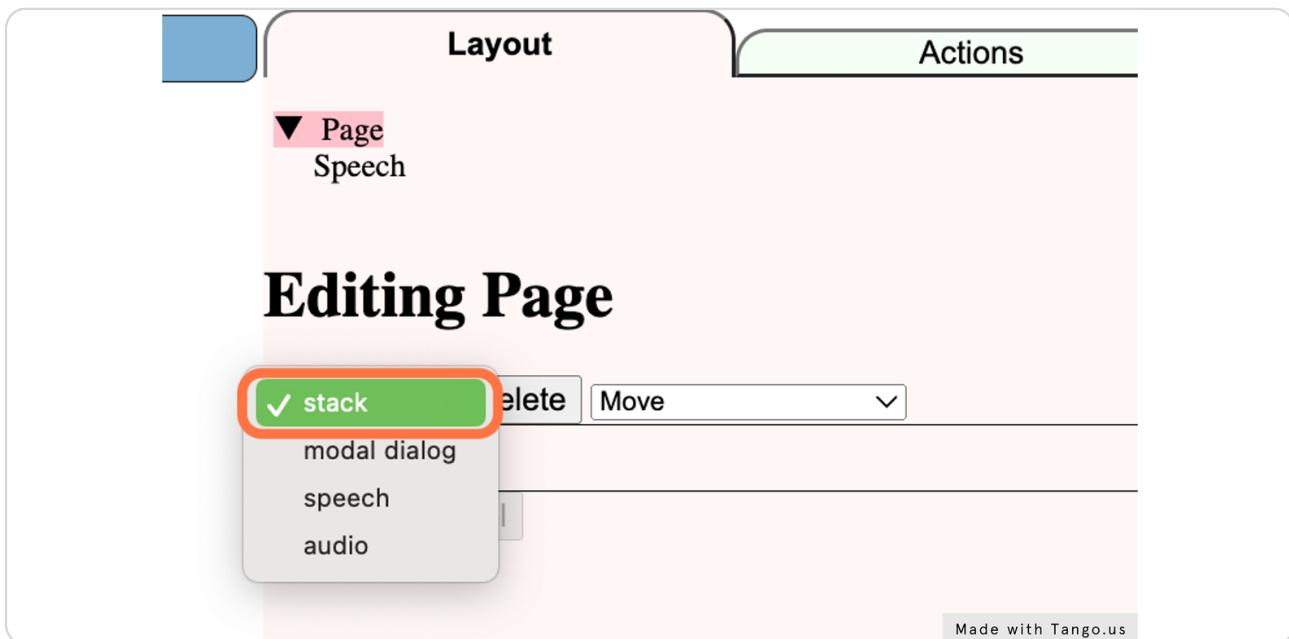
Once on the layout tab press 'Page'



STEP 7

Add Stack

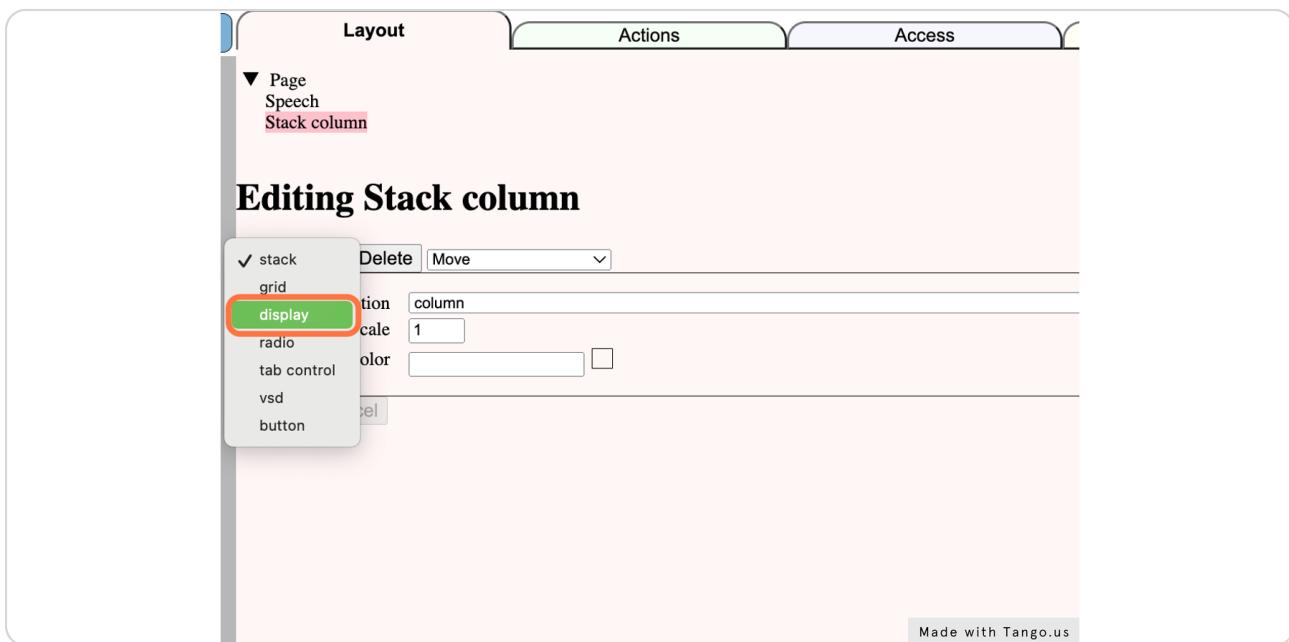
Press 'Add' and select the first option 'stack'



## STEP 8

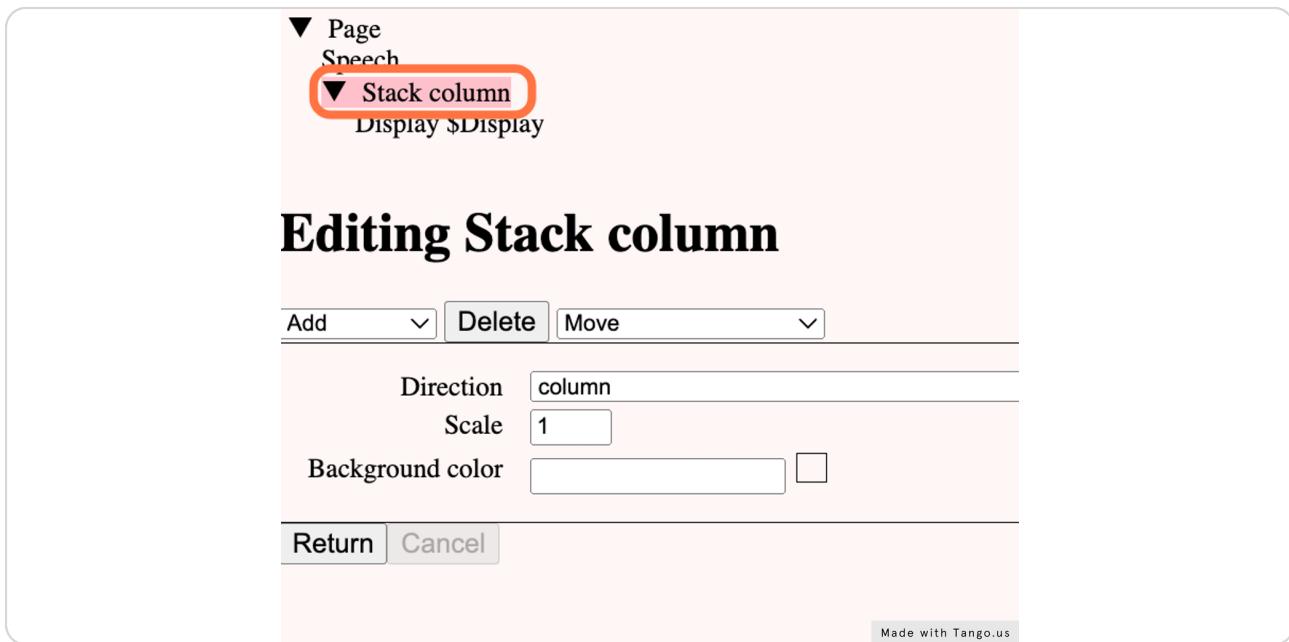
### Add Display

The display will be your message window.



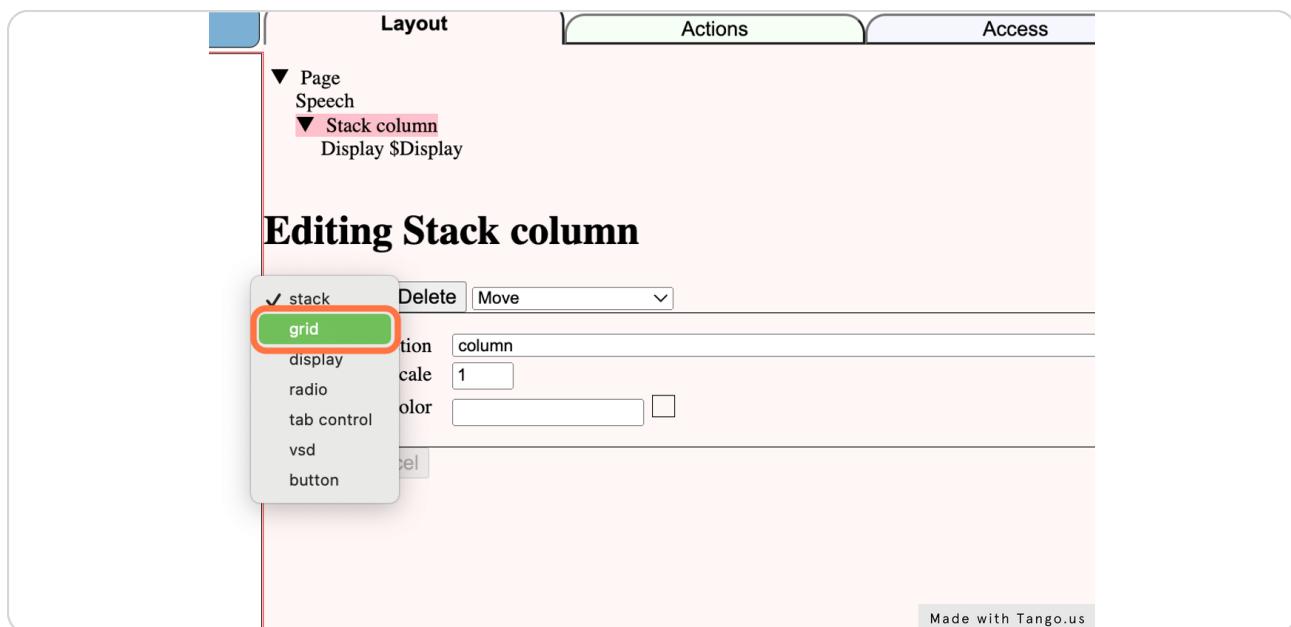
## STEP 9

### Go back and select "Stack Column"



STEP 10

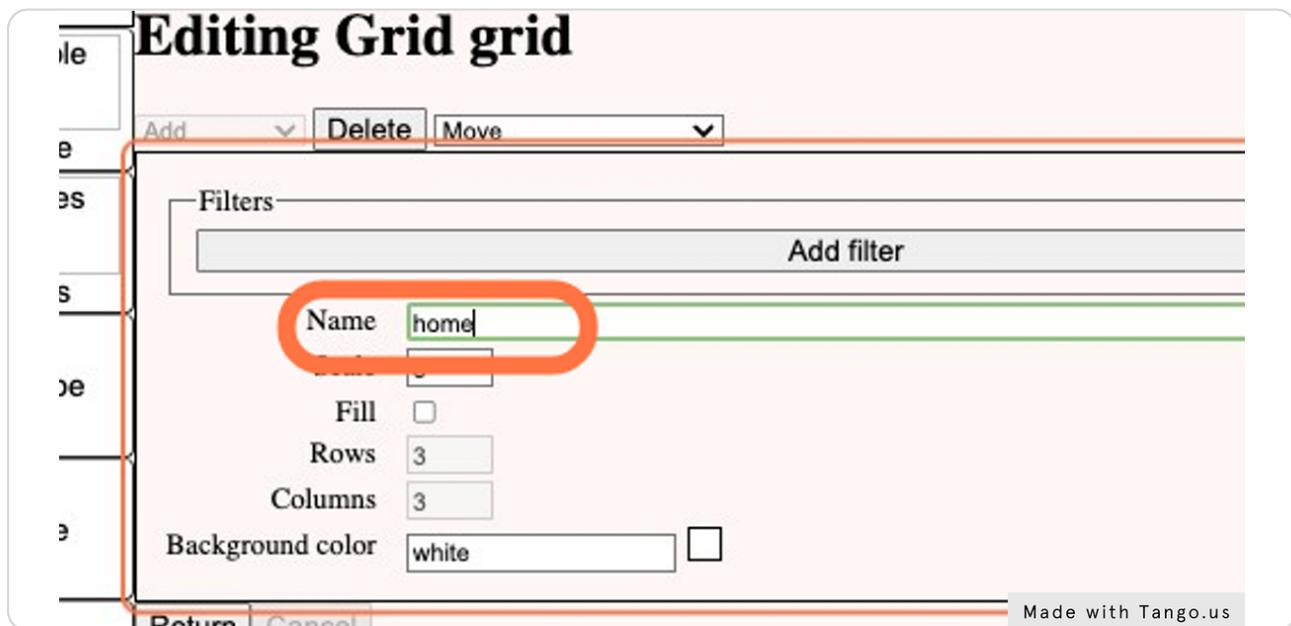
## Add 'grid'



STEP 11

## Change grid name

Here you can change the name of the grid to anything that is meaningful to you. This name will be used in the action tabs. Here we will change the name to 'home'



## STEP 12

### Upload symbols/images

You now have a grid with the labels you want, and placeholders for images, but you need to upload your images for them to fill. Return to the content tab and select "choose files" under the **Load Images** heading.

### Save content as a spreadsheet

Spreadsheet type

### Load audio clips

Upload audio clips:  No file chosen

### Load images

Upload images  No file chosen

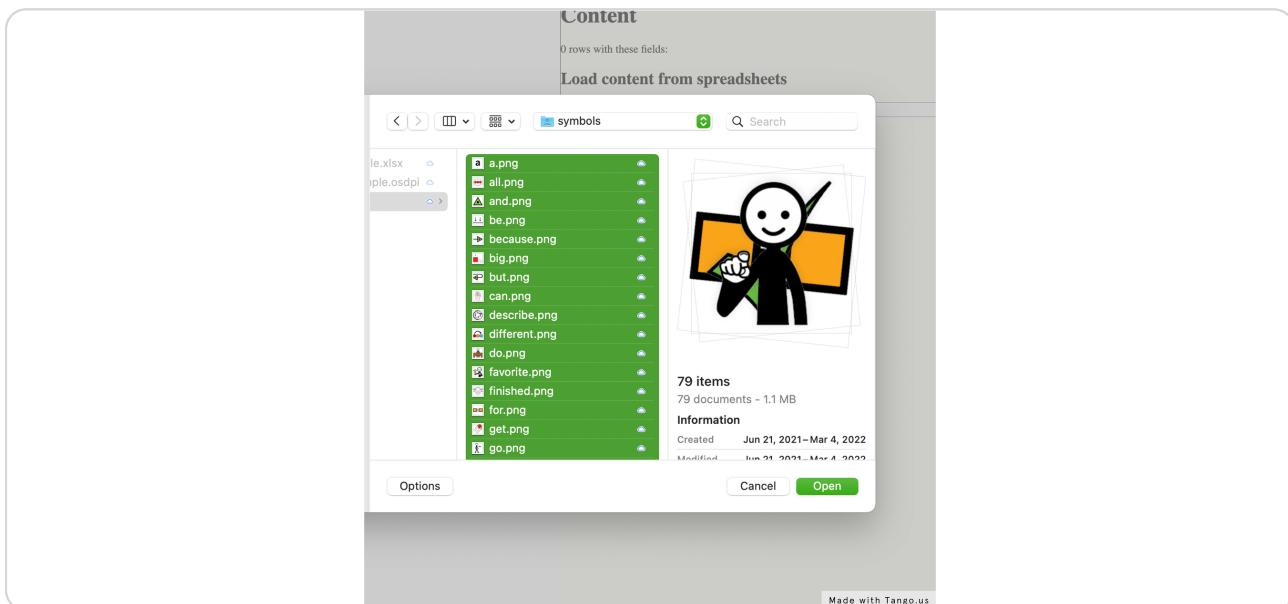
### Currently loaded media files

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## STEP 13

### Bulk upload images

In the finder window that opens, you can select all the images you want uploaded at once.



## STEP 14

### Grid auto-populates images

As soon as you upload your grid with auto-populate with the images as indicated by your spreadsheet.

A screenshot of the Tango grid interface. The top navigation bar shows 'OS-DPI' and 'OS-DPI'. The main area is titled 'Content' and shows a 7x7 grid of icons. Each icon has a label below it: 'my', 'like', 'want', 'get', 'make', 'good', 'more', 'Things', 'People', 'not', 'go', 'look', 'turn', 'help', 'different', 'same', 'she', 'think', 'open', 'do', 'put', 'Describe', 'we', 'they', 'that', 'up', 'all', 'some', 'Delete', 'Wh-', 'here', 'in', 'on', 'can', 'finish', 'STOP stop', 'Keyboard', and 'Numbers'. To the right of the grid, there are sections for 'Load content from spreadsheets', 'Save content as a spreadsheet', 'Load audio clips', 'Load images', and 'Currently loaded media files'. The 'Currently loaded media files' section lists 151 file names, such as 1.png, Numbers.png, People.png, Places.png, Speak.png, Things.png, 7.png, 8.all.png, 9.and.png, 10.be.png, 11.because.png, 12.big.png, 13.but.png, 14.can.png, 15.describe.png, 28.here.png, 29.home.png, 30.how.png, 31.in.png, 32.it.png, 33.key.png, 34.late.png, 35.latte.png, 36.like.png, 37.look.png, 38.mall.png, 39.mail.png, 40.more.png, 41.my.png, 42.no.png, 56.somewhere.png, 57.stop.png, 58.teacher.png, 59.that.png, 60.the.png, 61.there.png, 62.think.png, 63.time.png, 64.to.png, 65.turn.png, and 66.ub.png. The status bar at the bottom says 'Made with Tango.us'.

## STEP 15

### Add actions

Now you have a grid and a display, but nothing happens when you click in your grid. Go to the **Actions** tab to start declaring actions that will occur in your grid.

Press "Add an action" to add your first action.

The screenshot shows a user interface for creating a grid-based application. On the left is a 3x3 grid with the following data:

		Describe

To the right of the grid is a vertical sidebar with tabs:

- Layout (selected)
- Actions

Under the Actions tab, there are two main sections:

- Origin
- Event

A button labeled "Add an action" is highlighted with a red box. In the bottom right corner of the interface, the text "Made with Tango.us" is visible.

## STEP 16

### Fill Display

Let's first create an action so that when a cell is pressed in the grid the label is added.

The origin is the grid we named home and the action is press.

There are no conditions, we want this action to occur anytime a cell is pressed regardless of what the data are associated with that cell.

The state is \$Display and what we want to have happen is add\_word(#fill\_display)

Add\_word tells the system to treat the data in the spreadsheet as a word, so that when it is inserted into the display window a space will automatically be placed after.

#fill\_display is the name of a column in our spreadsheet.

Origin	Event	Conditions	Updates		
			State	New value	
home	press				

**Add an action**

Origin   
Event   
Conditions

Updates  
State  New value

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STEP 17

## Confirm Action works in grid

Press on a cell in the grid to confirm your action is working.

Name: new-4    Export    Home    Undo

like

I	my	like	want	get	make
you	it	not	go	look	turn
back	back			blue	Made with Tango.us

STEP 18

## Add another action

Layout			Actions		
Origin	Event	Conditions			
home	press				
<a href="#">Add an action</a>					
more	Things	People			
different		Places			
same		Describe			

## STEP 19

### Speak Button Action

Let's write an action so that the words in the display bar are spoken when our "Speak" button is pressed.

Again the origin is **home** and the event is **press**

This time we have conditions. We only want this action to happen when the cell with the **#label** is **Speak**. We also only want this action to happen when there is something in the **\$Display** to be spoken.

The updates are saying:

- 1) speak what is in the display
- 2) clear the display
- 3) creating a state variable called again that is now linked to what was in the display when this action was triggered

The screenshot shows the Tango.us interface for defining actions. On the left, a sidebar lists actions: 'people', 'aces', 'scribe', 'elete', 'clear', and 'peak'. The 'peak' action is currently selected. The main area shows the configuration for this action:

State	New value
home press	\$Display add_word(#fill_display)
home press	\$Speak \$Display
	\$Display "
	\$Again \$Display

Below the table, there is an 'Add an action' button. Under 'Actions' (origin: home, event: press), there are 'Conditions' (two conditions: #label = 'Speak' and \$Display) and 'Updates' (three updates: \$Speak to \$Display, \$Display to '', and \$Again to \$Display). At the bottom, there are buttons for 'Return', 'Move earlier', 'Move later', and 'Delete', and a note 'Made with Tango.us'.

## STEP 20

### Move this action earlier

In order for our new action to work, it needs to come before the action that adds words to the display. Use the **move earlier** button to move it up on the list of actions.

The screenshot shows the Tango app's interface. On the left, a 2x2 grid of actions is displayed:

- Top-left: A red STOP sign icon with the word "stop" below it.
- Top-right: A "Clear" button.
- Bottom-left: An empty slot.
- Bottom-right: A "Speak" button with a microphone icon.

To the right of the grid is a detailed view of the "Speak" action:

**Updates**

State	New value
1 \$Speak	\$Display
2 \$Display	..
3 \$Again	\$Display

**A**

At the bottom of this view are four buttons: "Return", "Move earlier" (which is highlighted with a red box), "Move later", and "Delete".

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## STEP 21

### New Action

Let's add one more action. Since we have the display empty after our speak button is pressed, we created the state variable **\$Again** so that we could create a new action. This action will make is so that if the speak button is pressed again, and the display is empty, the system will repeat what was last said.

			Origin	Event	Conditions
more	Things	People	home	press	#label = 'Speak' \$Display
different		Places	home	press	
same		Describe	Add an action		
		Delete	Origin	home	
			Event	press	
			Conditions		
			1	#label = 'Speak'	
			2	\$Display	

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## STEP 22

### Speak Again

Let's write an action so that when our speak button is pressed again, it will repeat what was last spoken.

Again the origin is **home** and the event is **press**

We have conditions again. We only want this action to happen for a cell when the **#label** is **Speak** and when the speak button has previously been selected, so when **\$Again** has data associated with it.

The updates are informing the system to **\$Speak** the data that are stored in **\$Again**

The screenshot shows the 'Add an action' dialog box. It has sections for 'Origin' (set to 'home'), 'Event' (set to 'press'), 'Conditions' (containing two conditions: '#label = 'Speak'' and '\$Again'), and 'Updates' (containing one update: '\$Speak' set to '\$Again'). At the bottom are buttons for 'Return', 'Move earlier', 'Move later', and 'Delete'. A note at the bottom right says 'Made with Tango.us'.

State	New value
\$Speak	\$Again

## STEP 23

### Move this action earlier

Again, this action needs to be moved higher on this list to work.

The screenshot shows a user interface for a mobile application. On the left, there is a 2x2 grid with icons: a red STOP sign labeled 'stop', a white square labeled 'Clear', a black square labeled 'Speak' with a speech bubble icon, and an empty white square. On the right, a list of actions is displayed:

- Action 2: '\$Again' (with a red 'A' icon)
- Action 1: '\$speak' (with a green 'A' icon)

Below the actions is a button bar with 'Return', 'Move earlier' (which is highlighted with a red box), 'Move later', and 'Delete'.

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## STEP 24

### Move the Speak Again action between the other two actions.

Layout		Actions		Access		Content	
Origin	Event	Conditions	Updates				
			State	New value			
home	press	#label = 'Speak' \$Display	\$Speak	\$Display			
			\$Display	"			
			\$Again	\$Display			
home	press	#label = 'Speak' \$Again	\$Speak	\$Again			
home	press		\$Display	add_word(#fill_display)			
<a href="#">Add an action</a>							

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