

## App Variables

### App OnStart Variables and Collections formulas:

```
Concurrent(  
Set(varUser,User()),  
Set(varColors,{TealDark:RGBA(0,98,129,1),TealBright:RGBA(28,181,216,1),GrayCharcoal:RGBA(62,67,74,1),GrayMedium:RGBA(215,215,215,1),GrayLight:RGBA(245,245,245,1)}),  
Set(isAdmin,CountRows('Tool Request Admins')>0),  
ClearCollect(colRequests,'Tool Design Support Requests'),  
ClearCollect(colPhase,"Phase All"),ClearCollect(colStatus,"Status All"));  
Concurrent(  
Collect(colPhase,Choices('Tool Design Support Requests'.Request Phase)),  
Collect(colStatus,Choices('Tool Design Support Requests'.Request Status')))
```

Some notes on the highlighted formulas above. I create a global variable of varUser OnStart of the app and add Microsoft365 Users as a data source. I like that I don't need to have an extra "Requestor" field as SharePoint captures the CreatedBy automatically. This approach also helps me with the security trimming aspects of the app. The Set(isAdmin,CountRows('Tool Request Admins')>0) idea came from a Reza Dorrani security trim video: <https://www.youtube.com/watch?v=dIzOAbMjN7g>

I also picked up the filter collection technique from a Reza Dorrani video: <https://www.youtube.com/watch?v=pn50AKn3Q1Y>

Setting a global variable for colors (you can do it for font settings as well) was suggested in a Matt Devaney/Reza video. The video is long, but packed with so many helpful tips it is totally worth watching!

[https://www.youtube.com/watch?v=F67\\_sZYMC2E](https://www.youtube.com/watch?v=F67_sZYMC2E)

### Gallery Nav Icon OnSelect Variable:

```
Set(varRecord,ThisItem);Navigate('Edit Request Screen',Transition.None)
```

STATUS	PHASE	REQUEST TITLE	REQUESTOR	PROJECT MGR	MECH ENGR	PROJECT #	PERCENT COMPLETE
More Info Needed	Designer	Acme Tool Set 123	Agustin, T.				50%
Approval Pending	New Request	Bird House Build	Agustin, T.				44%

This tip came from a Shane Young video:

[https://www.youtube.com/watch?v=UWy5I\\_MuIgu](https://www.youtube.com/watch?v=UWy5I_MuIgu)

The tip starts around 8:45. He has other helpful tips in the video as well.

## EDIT SCREEN

When the user clicks the Nav arrow icon they land on the Request tab.

Request	Designer	Model Shop	Comments
Request Summary Title	Priority	Needed By	
Acme Tool Set 123	High	9/16/2020	
Project Number	Project Name	Program Manager/Product Engineer	
NEW	3	NPD	
Part Number	Quantity Required	On	
test entry			
Description			
File Location			

## EDIT SCREEN REQUEST TAB AND FORM VARIABLES

**Request Tab** OnSelect property formula.

```
OnSelect = fx Set(varFormTab, "Request")
```

The **Request Form** Visible property:

```
Visible = fx varFormTab="Request"
```

The **Request Form** Item property:

```
Item = fx varRecord
```

Since each tab has its own form, each tab also has its own Edit, Submit Update and Cancel icons/buttons. The Visible properties are currently set to `varFormTab="Name of Tab"`. Obviously, not all 3 should be shown at once. I will likely be asking for help on a separate Forum ticket for advice on how to get them all working the way I need them to. If there were only a few fields, I would just show/hide fields of one form across tabs, but there are other requirements such as Requestors should be able to edit their Request and add Comments, but should not be able to see the Edit icon much less edit the forms on the Designer and Model Shop tabs. They can view the content.

**Designer Tab** OnSelect property formula. The slider keeps reverting back to 1%. The gallery retains the value that was set, but when the Designer returns to the form, the slider goes back to 1%. On a side note, I will be introducing buttons with contextual variables to show/hide the “Placed on Hold” and “Cancelled” fields. As it stands now, Requestors could panic thinking their project has been placed on Hold or Cancelled since the date picker fields default to Today().

OnSelect = fx Set(varFormTab, "Designer")

← Project: Acme Tool Set 123

Request	Designer	Model Shop	Comments
Request Phase	Request Status	ME Assigned	ME Hours
Designer	More Info Needed	[REDACTED]	50
Start Date	Cost Estimate	Percent Complete	
8/20/2020	\$500.00	1% <input type="range" value="1"/>	
Placed On Hold By	Date Placed on Hold	Cancelled By	Cancellation Date
	8/20/2020		8/20/2020

SUBMIT UPDATE

The **Designer Form Visible** property:

Visible = fx varFormTab= "Designer"

The **Designer Form Item** property:



Item = fx varRecord

**Model Shop Tab** OnSelect property formula.

OnSelect = fx Set(varFormTab, "Model Shop")

Project: Acme Tool Set 123

Request	Designer	Model Shop	Comments
Date Sent to MS	MS Needed By Date	MS Completion Date	
8/20/2020	8/20/2020	8/20/2020	
MS Plating Cost	MS Material Cost	MS Outsourcing Cost	
3085	200	300	
MS Machinist	MS Hours	Total Cost	
	30	\$6,015.00	

  [SUBMIT UPDATE](#)

The **Model Shop Form** Visible property:

Visible = fx varFormTab="Model Shop"

The **Model Shop Form** Item property:

Item = fx varRecord

The Text property for the Total Cost field is:

`Text(Sum(valPlatingCost + valMatCost + valOutCost) + (QtyMShHours * 10.00), "[$-en-US]$###,###.00")`

\$10.00 is a made-up number since I don't want to state the real number here. Even when the form is converted to Edit mode, the Total Cost field remains read-only. The math happens in real time as numbers are entered above. I plan to format them as currency, just haven't gotten to it yet.

**Comments Tab** OnSelect property formula. The blue highlight looks funny in the screenshot below, but it renders correctly when you click from item to item in the adjustable height gallery. I have not figured out how to filter the gallery to only show items for the selected project. I'm still working on how to tie the child "Comments" SharePoint list with the parent "Tool Design Support Requests" SharePoint list.

OnSelect = fx Set(varFormTab, "Comments")

Project: Acme Tool Set 123

Request Designer Model Shop Comments

Author Role  
-Select One-

\* Comment Title  
Enter a brief title

Comment Body  
Enter comments here

ADD COMMENT Clear Form

Agustin, Teresa	Requestor	8/18/2020 4:41 PM
<b>Short Comment Test</b>		
Notice that the flexible height gallery adjusts to the length of the entry.		
Agustin, Teresa	Designer	8/18/2020 4:42 PM
<b>Next Up - Filter Gallery</b>		
Any and all comments will be shown to the right. Teresa will work on filtering them so only comments associated with the job will be displayed. She will also sort them in descending order so the most recent ones are displayed at the top of the list.		
Agustin, Teresa	Mechanical Engineer	8/18/2020 4:43 PM
<b>Scroll Bar</b>		
If there are too many comments to be seen on one page, the gallery will display a scroll bar.		
Agustin, Teresa	Product Engineer	8/18/2020 4:44 PM
<b>Author Role</b>		
Do we need to adjust the choices in the Author Role dropdown menu?		
Agustin, Teresa	Requestor	8/18/2020 4:46 PM
<b>Spell Check</b>		
If I spill a word wrong, red squiggles appear under the misspelled words before I click the submit button. If I click submit, any errors I haven't corrected are submitted, but I can delete		

The **Comments Form** and **Gallery Visible** property:

Visible = fx varFormTab="Comments"

Here are the settings for each tab. Note that the Teal color is the DisabledFill color.

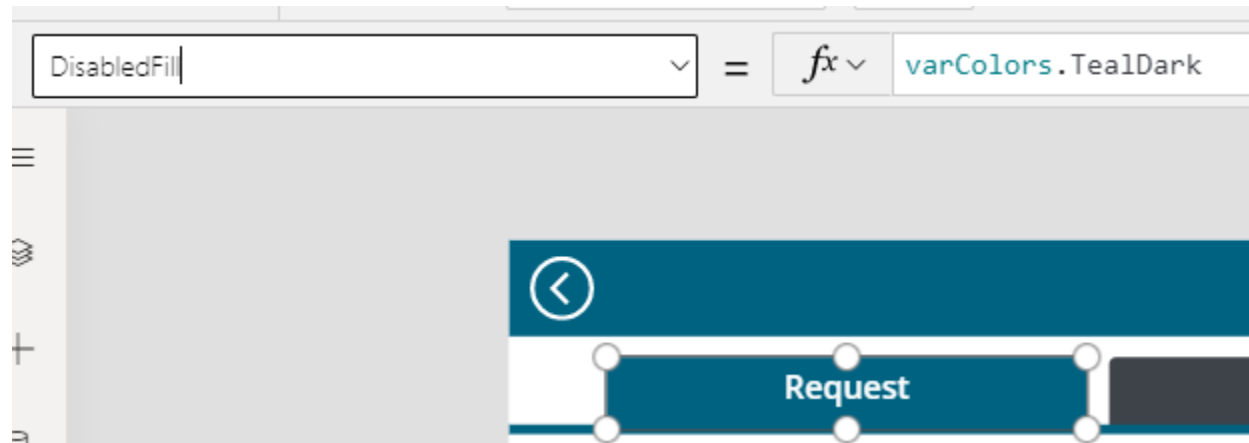
The screenshot shows the 'Properties' tab for a button control named 'btnRequest'. The settings are as follows:

- Position:** X=61, Y=73
- Size:** Width=300, Height=45
- Padding:** Top=5, Bottom=5, Left=5, Right=5
- Color:** Default color is 'A' (white), with a teal color swatch selected for the DisabledFill property.
- Border:** Width=0, Color=Black
- Border radius:** Multiple
- Font:** Open Sans
- Font size:** 15
- Font weight:** Semibold
- Font style:** /, U, +
- Text alignment:** Center
- Vertical align:** Top
- Auto disable on select:** On (indicated by a red arrow)
- Disabled color:** A, Teal (DisabledFill), Gray
- Pressed color:** A, Black, Black
- Hover color:** A, Black, Black

Here is the DisplayMode property formula.

```
DisplayMode| = fx If(varFormTab=btnRequest.Text, Disabled, Edit)
```

As previously mentioned, my Brand color variables are set in the OnStart formula bar of the App (see page 1) which makes it really easy to reference them as needed.



To create the appearance of a tab, I inserted a button and set the RadiusTopLeft and RadiusTopRight properties to 5.

RadiusBottomLeft and RadiusBottomRight are set to 0.

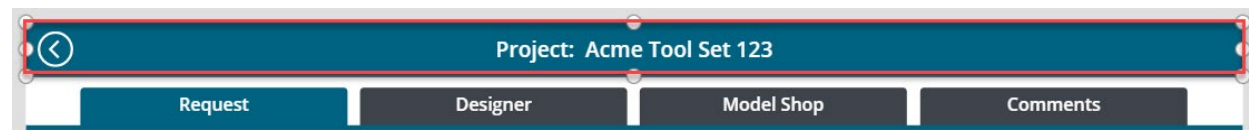
Here is the Text Property formula for the label at the top. I haven't created a Component yet, but I will...

"Project: " & galHome.Selected.'Request Summary Title'

I really like how it sets the project name in a dynamic way so the user has verification they are looking at the correct record. That tip came from a Brian of Pragmatic Works video on pop-up dialog boxes. I use this trick when asking users to confirm deletion of an item. Note that I am not bothering to do that with the little trash icon next to comments in this particular gallery.

<https://www.youtube.com/watch?v=SaDEVogOIYY>

Tip is shown around 3:36



I hope these tips help whoever might stumble across this document.