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# Joget DX8

**Improving** Your Form Design & Presentation



# **Prerequisites**

1. Good understanding on the basic functionality of the Form Builder.

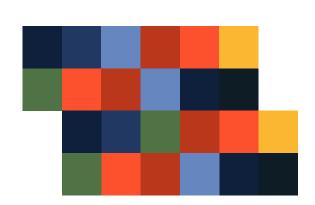


#### Content

- 1. Introduction
- 2. Grid
- 3. Form Grid
- 4. Multirow Form Data Store
- 5. List Grid
- 6. CRUD
- 7. Custom HTML
- 8. Multiple Dynamic Cascading Drop-Down List
- 9. Using Advanced Tool's Permission
- 10. Ajax Trigger and Listening
- 11. Tooltip







# Chapter 1 Introduction



#### Introduction

- Learning about more Joget plugins/elements to improve your form design and presentation.
- In this module, we will be covering the following elements.
  - Grid (Form Element)
  - Form Grid (Form Element)
  - 3. Multirow Form Data Store(Form Store)
  - 4. List Grid (Form Element)
  - 5. CRUD (UI Menu)
  - 6. Custom HTML (Form Element)

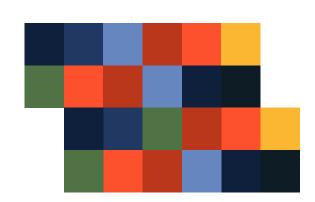


#### **List of Available Elements**

- Check out
   <a href="https://dev.joget.org/community/display/DX8/UI+Builder">https://dev.joget.org/community/display/DX8/UI+Builder</a> for the list of **UI** related elements.







# Chapter 2 Grid



#### **Grid**

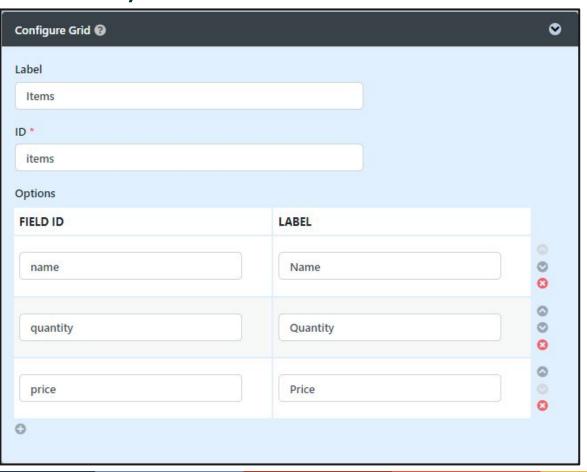
 Grid is the most basic element available in the Form Builder in capturing multi-row data.

- Reference: <a href="http://dev.joget.org/community/display/DX8/Grid">http://dev.joget.org/community/display/DX8/Grid</a>
- For your information: The other grid-like element available in Form Builder is Form Grid.



#### Refresh

- Refresh your memory on what you did back in module
   5 Designing your first Form
- Take a look at your "items" field element





#### Just In Case...

- You can download the base Purchase Requisition app – 13.jwa to start 'playing around' with it.
- Completed Form Definition for "1-Submit Request" can be obtained from **13.2.1.txt**.

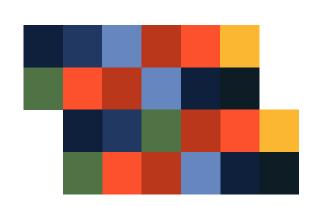


# **Chapter Review**

Able to use the Grid element.







# Chapter 3 Form Grid



- Form Grid works similarly like the basic Grid.
- Instead of editing data row inline, editing is done on a full fledged Form that opens up in a dialog.
- Able to reuse validation and formatting from the selected Form.

 Reference: <a href="https://dev.joget.org/community/display/DX8/Form+Grid">https://dev.joget.org/community/display/DX8/Form+Grid</a>



 New feature - Request URL Parameter for Pop Up Form

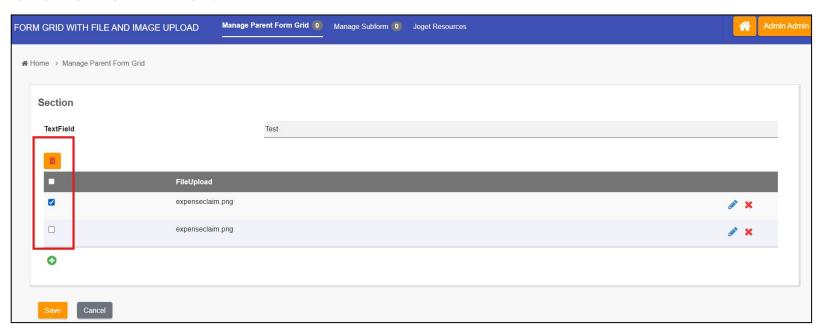
Pass field value to prepopulate the form grid

field

L Request Parameters for Popup Form  URL Request Parameters for Popup Form	1
Parameter *	
Field Id	
	~
Default Value	
	000

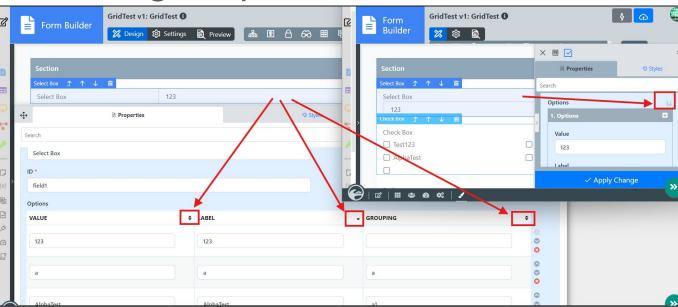


- New feature Bulk Deletion
- Bulk delete rows of data by a simple check box, users can select the records they want to delete in bulk.





- New feature Sorting by headers and sorting control button
- The first numerical value in the sequence having priority over alphabetical characters in the string sequence.



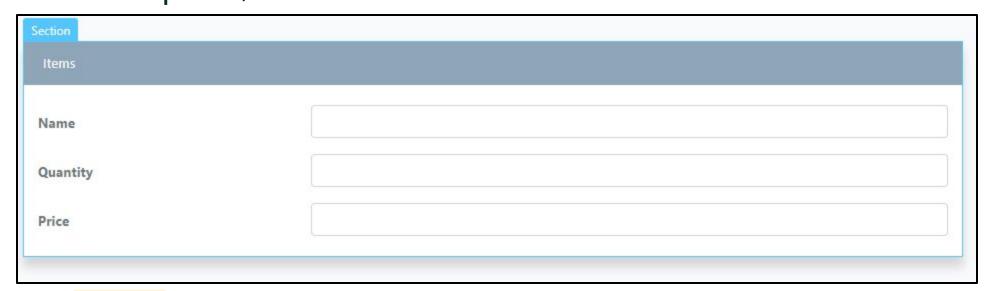


- Re-import the base app "13.jwa" into your copy of Joget, OR delete the "items" Grid element.
- Create a new Form with the following details.

FORM DETAILS	
Form ID *	items
Form Name *	Items
Table Name *	app_fd_ purchase_items
Description	



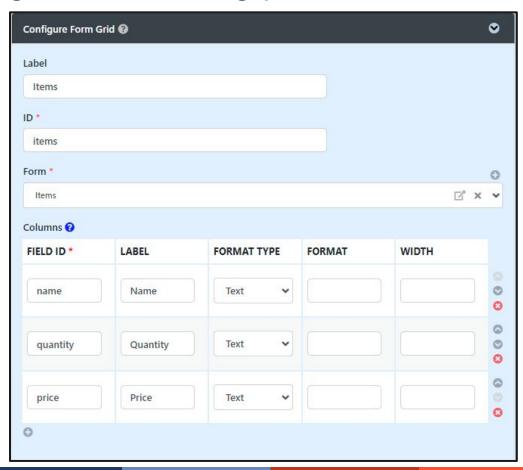
- Add 3 text fields with the following details:-
  - ID: name, Label: Name
  - ID: quantity, Label: Quantity
  - ID: price, Label: Price



Save the form

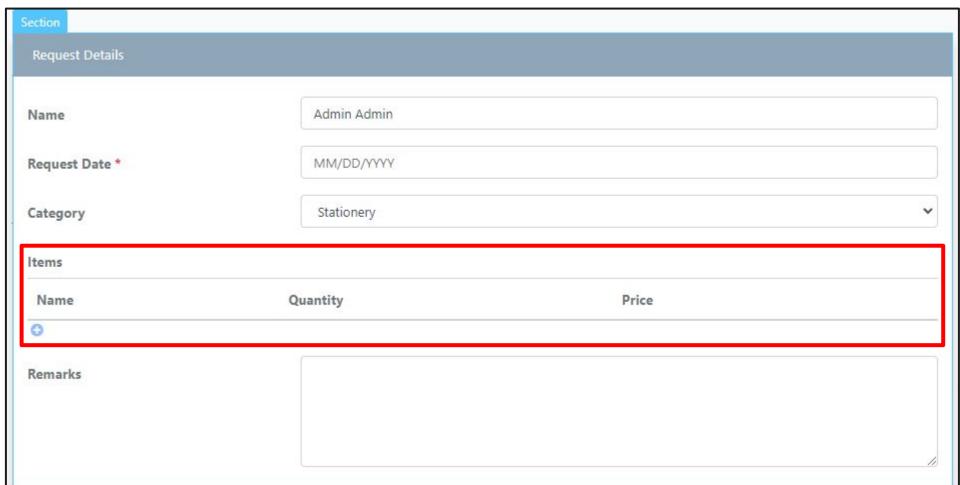


- Edit the "1-Submit Request" form.
- Add a "Form Grid" wherever relevant.
- Configure accordingly.





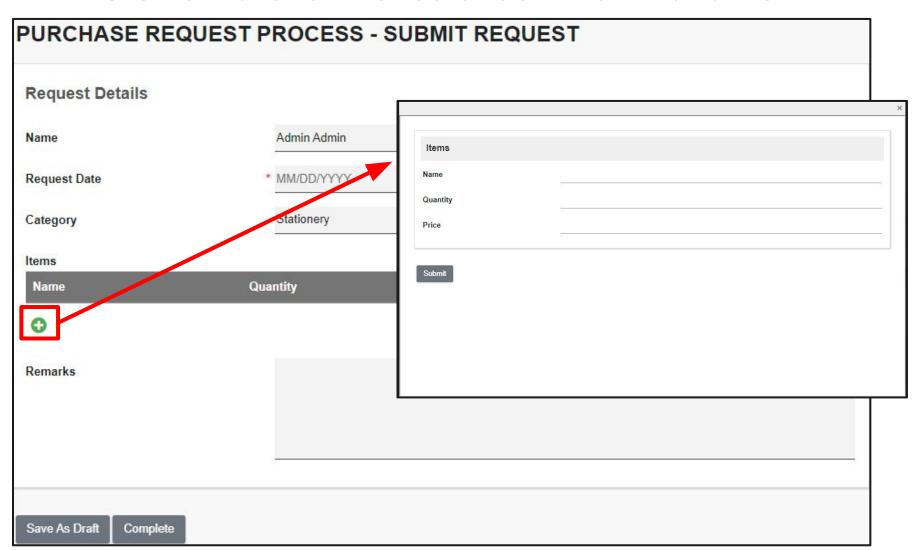
This is how your form design should look like.



<del>-)</del>(



• This is how the form should look like in runtime.





 Run a new "Submit New Request" process, and submit the form to observe.



#### **Materials**

- "1-Submit Request" form definition can be obtained from **13.3.1**.txt
- "Items" form definition can be obtained from 13.3.2.txt
- Complete app is available at 13.3.1.jwa

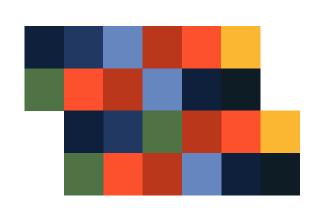


# **Chapter Review**

- Being able to use the Form Grid element.
- PS: Check out Advanced Grid
   (<a href="http://dev.joget.org/community/display/DX8/Advanced+Grid">http://dev.joget.org/community/display/DX8/Advanced+Grid</a>)
   Element that performs similarly as Form Grid.







# Chapter 4 Multiple Row Form Data Store

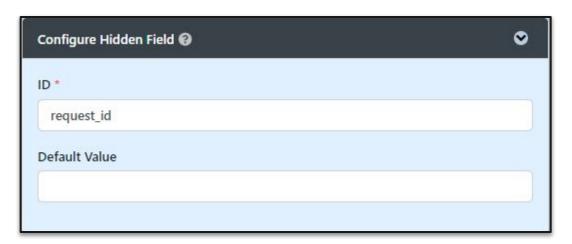


# **Multiple Row Form**

- Multiple Row Form Data Store (Formerly called Multirow Form Binder) is a Store/Load Form Data Store that is designed to treat multi-row data for grid form element.
- Rather than storing as traditional JSON data format in a single column cell, the Multiple Row Form saves the data into its respective tables.
- This would make data retrieval easier for sorting, statistics, and indexing/performance purpose.
- Reference: <a href="https://dev.joget.org/community/display/DX8/Multiple+Form+Row">https://dev.joget.org/community/display/DX8/Multiple+Form+Row</a>

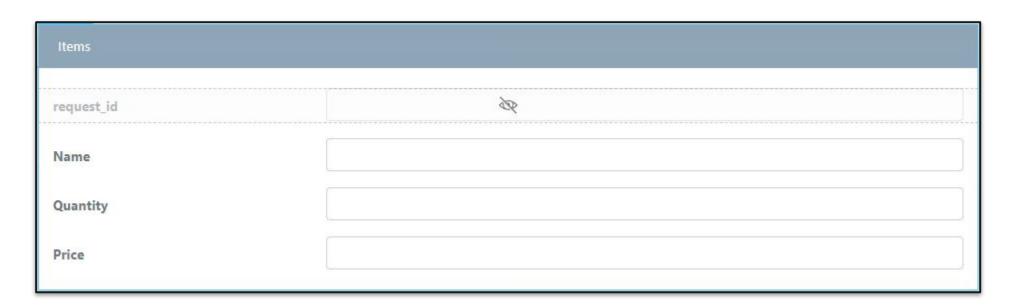


- Continue to use the application from the previous chapter OR import app from 13.4.1.jwa.
- Edit the "Items" form.
- Add a Hidden Field to the form.
- Configure accordingly.



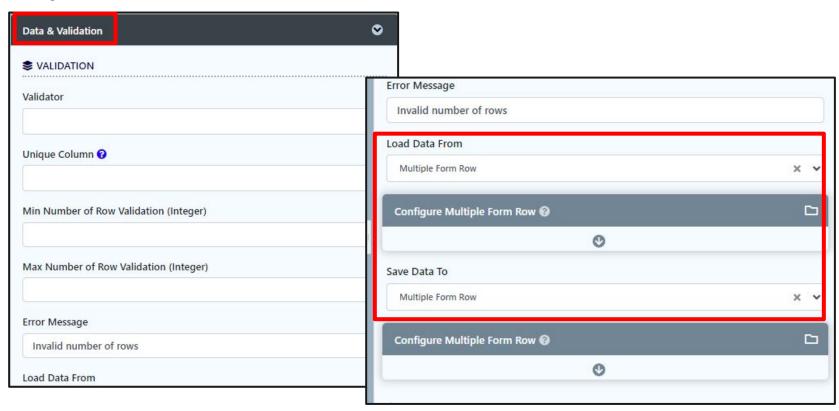


• This is how your "Items" form should look like.



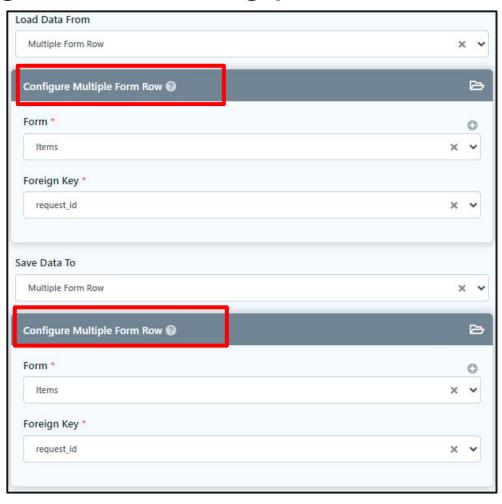


- Edit the "1-Submit Request" form.
- Configure the Form Grid element to utilize the Multiple Row Form in Data Store.





- Click next to configure the Binder.
- Configure accordingly.





 Run a new "Submit New Request" process, and submit the form to observe.



### **Exercise - Optional**

 Inspect the database table of "Items", you will notice that rows of data is now being saved into this table rather than the parent table as JSON.





#### **Materials**

- "1-Submit Request" form definition is available at **13.4.2**.txt
- "Items" form definition is available at 13.4.3.txt
- Complete app is available at 13.4.4.jwa

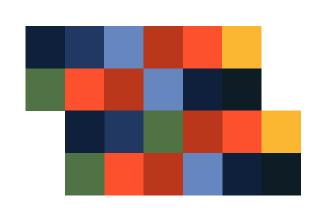


# **Chapter Review**

 Understand the use case of the Multirow Form Binder and its benefits.







# **Chapter 5 List Grid**



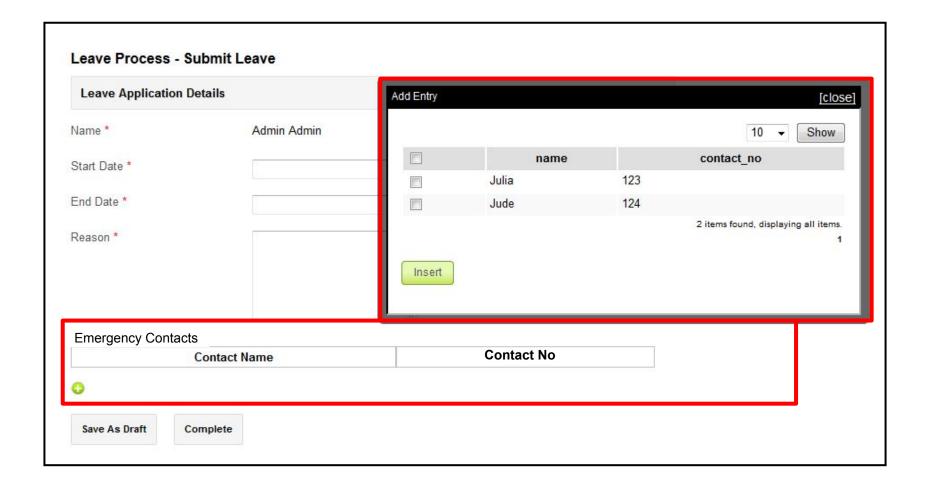
#### **List Grid**

- List Grid is a grid table that populates its data from a Datalist.
- It behaves similarly like a Grid (Chapter 2) but new rows are added from a specified Datalist instead.
- It also behaves similarly like a Form Grid that allows one to open up a Form for editing.

 Reference: <a href="https://dev.joget.org/community/display/DX8/List+Grid">https://dev.joget.org/community/display/DX8/List+Grid</a>



#### Sample Use Case



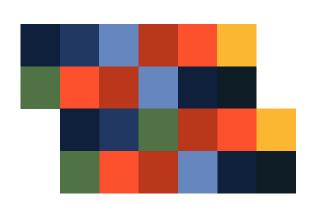


#### **Chapter Review**

- Understand the List Grid element and be able to think of use cases of it.
- Able to differentiate Grid, Form Grid, and List Grid.







## Chapter 6 CRUD



#### **CRUD**

- CRUD is a UI Menu allows one to easily achieve the functionality of Create, Retrieve, Update, and Delete on a data entity.
- In short, manipulate records on a specified table.

 Reference: <a href="https://dev.joget.org/community/display/DX8/CRUD+">https://dev.joget.org/community/display/DX8/CRUD+</a> <a href="mailto:Menu">Menu</a>



#### What Is Needed For CRUD To run?

- A Form entity
- A List of the same data entity as the form
- A UI



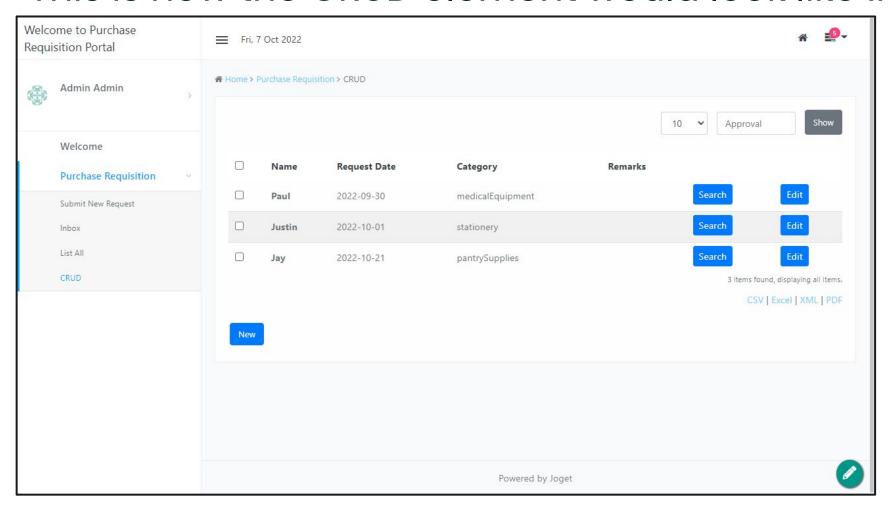
#### Refresh

- You've already done it! Refresh what you did back in Module 8 - Designing your first UI
- If you do not have the CRUD for "Request List", ask your colleague how to, or raise hand...



#### **How CRUD Looks Like...**

This is how the CRUD element would look like in



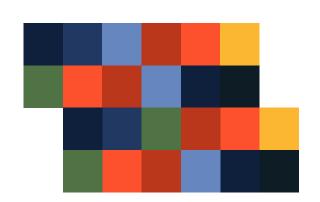


#### **Chapter Review**

Able to use CRUD and understand the linkages.







## Chapter 7 Custom HTML



#### **Custom HTML**

**Custom HTML** in Form Builder can be used to achieve advanced form design by putting in any valid -

HTML

```
E.g: <b>this text is in bold</b>
```

JavaScript (jQuery is supported)

```
Remember to put in <script
type="text/javascript"></script> block
```

• CSS

Don't forget to put in <style type="text/css"></style> block

#### Reference:

https://dev.joget.org/community/display/DX8/Custom+HTML



#### Exercise - CSS (Optional)

- Customize the look and feel of how the form is rendered by modifying its CSS.
  - Add a Custom HTML form element into the bottom of the form.
  - Edit it, add the following code into Custom HTML property.

```
<style type="text/css">
.form-cell .label,
.subform-cell .label{
   width: 100%;
}
</style>
```

Request Details			
Name	Admin Admin		
Request Date *	MM/DD/YYYY		
Category	Stationery •		
Items			
Name	Quantity	Price	
0			
Remarks			
Custom HTML	200		



#### Exercise - Color Picker (Optional)

- Create a text field "Color Code" with ID "color\_code"
- Create a Custom HTML. Make use of color picker library to turn text field into a color picker.





#### **Exercise - Color Picker - Materials**

Do import these JS and CSS libraries into the app's resource from the materials folder:

- colorPick.min.css
- colorPick.min.js



#### **Exercise - Color Picker**

```
<script src="#appResource.colorPick.min.js#"></script>
<link rel="stylesheet" href="#appResource.colorPick.min.css#">
<script type="text/javascript">
loadJSCount = 0; loadJSCountProcessed = 0;
   function loadJS(FILE_URL, async = true) {
     loadJSCount += 1;
     let scriptEle = document.createElement("script");
     scriptEle.setAttribute("src", FILE_URL);
     scriptEle.setAttribute("type", "text/javascript");
     scriptEle.setAttribute("async", async);
     document.body.appendChild(scriptEle);
     // success event
     scriptEle.addEventListener("load", () => {
       console.log("File loaded");
       loadJSCountProcessed+= 1;
       if(loadJSCount == loadJSCountProcessed){
           windowReady();
     });
      // error event
     scriptEle.addEventListener("error", (ev) => {
       console.log("Error on loading file", ev);
       loadJSCountProcessed+= 1;
       if(loadJSCount == loadJSCountProcessed){
           windowReady();
     });
   loadJS("#appResource.colorPick.min.js#", true);
   //this acts as the replacement for windows.ready
    function windowReady(){
       //continue with usual code execution
                 $(function(){
                    initialColor = FormUtil.getField("color_code").val();
                    //console.log("initial " + initialColor);
                    FormUtil.getField("color_code").colorPick({
                      'initialColor' : initialColor,
                      'onColorSelected': function() {
                         //console.log("The user has selected the color: " + this.color);
                         FormUtil.getField("color_code").val(this.color);
                         this.element.css({'backgroundColor': this.color, 'color': this.color});
                    });
                 });
</script>
```

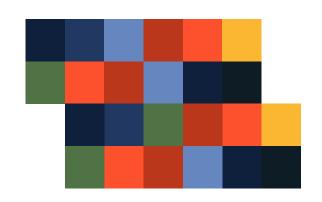


#### **Chapter Review**

Able to use and understand Custom HTML







### **Chapter 8** Multiple **Dynamic** Cascading **Drop-Down List**



#### Multiple Dynamic Cascading Drop-Down List

- New Feature in Joget DX8
- Dynamically change the options/selections of a select box/radio button/radio based on multiple form fields value within the same form.

Name		
Continent	Asia	
Climate	Tropical	
Country		
Save Cancel	Malaysia Singapore	



#### **Materials**

 Sample app and reference is available in <a href="https://dev.joget.org/community/display/DX8/Multi-ple+Dynamic+Cascading+Drop-Down+List">https://dev.joget.org/community/display/DX8/Multi-ple+Dynamic+Cascading+Drop-Down+List</a>

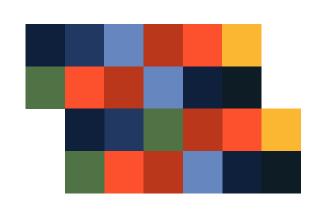


#### **Chapter Review**

 Able to use and understand Multiple Dynamic Cascading Drop Down List





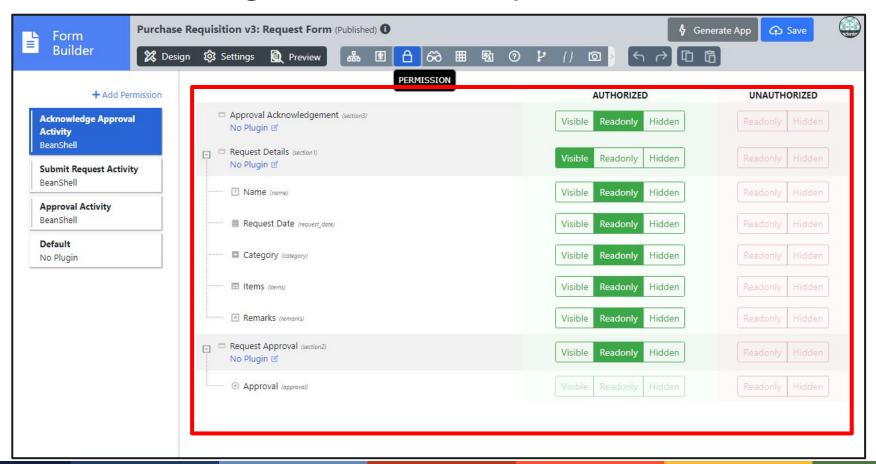


# Chapter 9 Using Advanced Tool's Permission



#### **Permission Control**

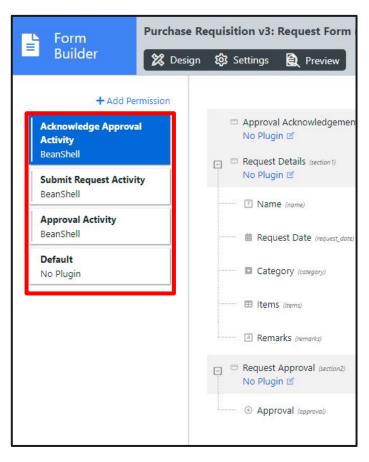
 The Permission in Builders Advanced Tools allows fine grain control up to field level.





#### **Permission Control**

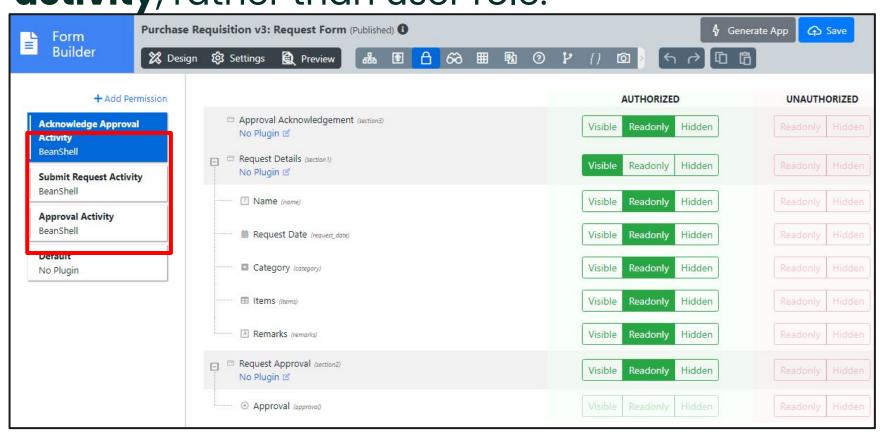
Typically, one would control based on User
 Role most of the time to show/hide fields.





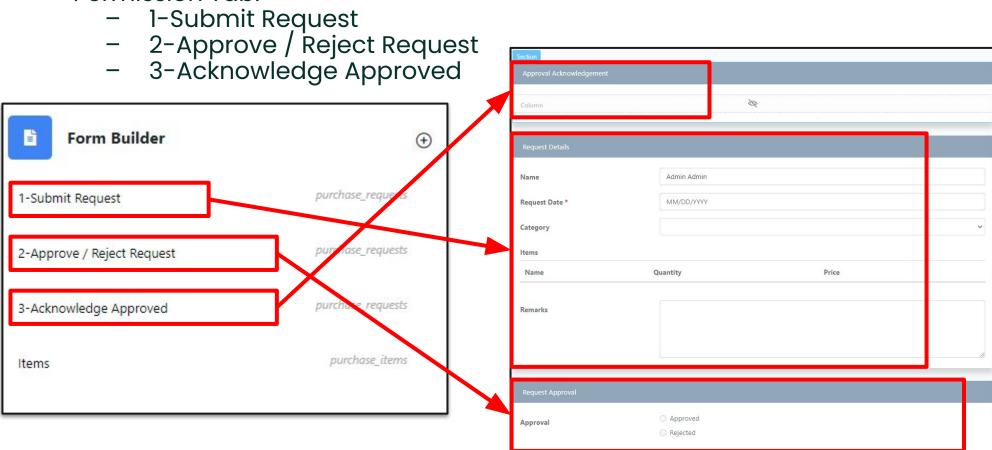
#### **Permission Control**

 If the form is used part of a process flow, it is also possible to exert permission based on activity, rather than user role.



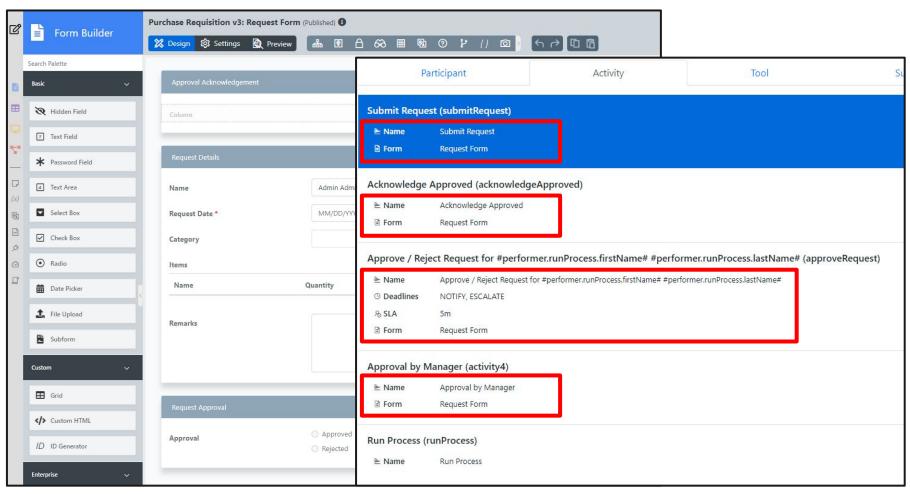


 One Master Form Concept - Try combining the 3 forms in Purchase Requisition into a single form by using the Form Builder's Advance Tool Permission Tab:



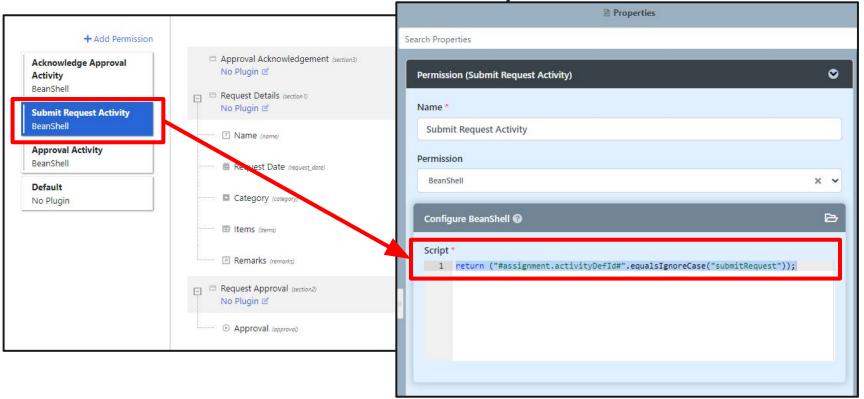


The same form will be used in all activities.





 In the Permission tab, we can control on what to show based on current activity.



return ("#assignment.activityDefId#".equalsIgnoreCase("submitRequest"));



 Once you are done setting up, try to run through the whole flow and check if the form is showing up correctly as per the activity.

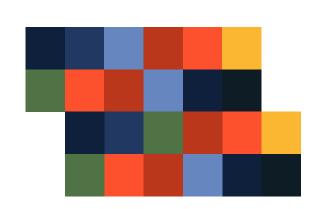


#### **Materials**

• Complete app is available at 13.8.1.jwa







## Chapter 10 Ajax Trigger and Listening



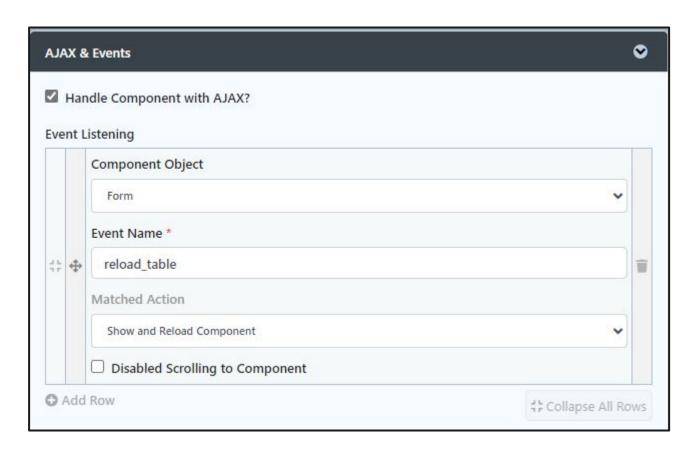
#### **Ajax Trigger and Listening**

- New feature in Joget DX8
- Enable page components to interact with each other by using Ajax event triggering and event listening



#### **Event Listening**

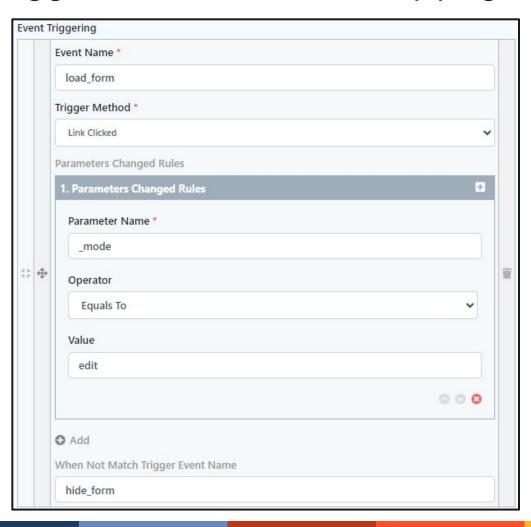
• Listen to events to be trigger by page components





#### **Event Triggering**

Create trigger events to be listen by page components





#### Example

When the Edit Button is clicked, the button triggers an event to show a form below the table for editing.



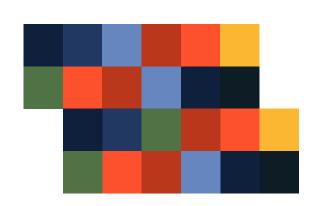


## Exercise - Ajax Triggering and Listening

- Download the complete app at 13.10.1.jwa
- Run the app > Manage Purchase Category > Edit Category > click Edit on any of the rows.





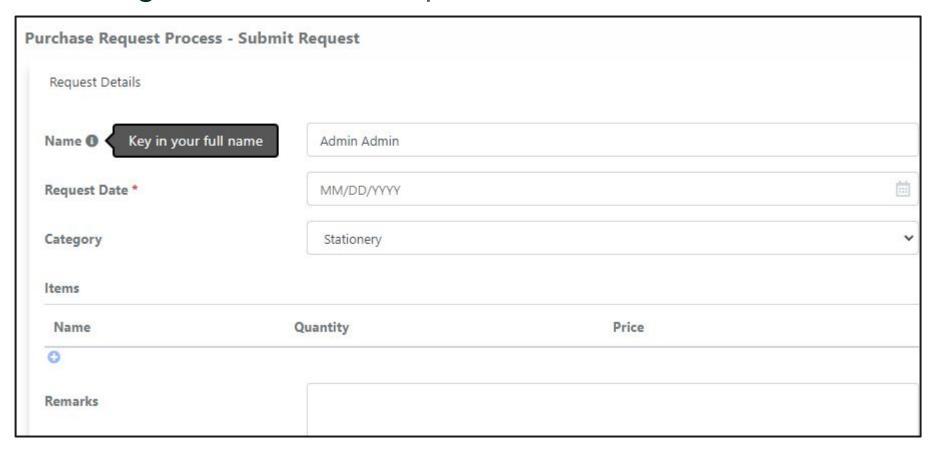


#### Chapter 11 Misc



#### **Exercise - Tooltip**

 Make use of Advanced Tool's Tooltip to add hints into existing form "Submit Request".





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#### **Learn More...**

- Check out
   <a href="https://dev.joget.org/community/display/DX8/Form+B">https://dev.joget.org/community/display/DX8/Form+B</a>
   <a href="mailto:uilder">uilder</a> for the list of **Form** related elements (Form Element, Form Validator, Form Binder, Form Options Binder).
- Check out
   <u>https://dev.joget.org/community/display/DX8/UI+Build</u>
   er for the list of **UI** related elements.



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