HCL Domino Volt

v1.0.5 Tutorial

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Tutorial assumptions

- Domino Volt v1.0.5 or later
- Domino directory has display names, internet email and manager name populated in person documents
- Users should have some experience with Volt. If you are new to Volt, the Introductory step by step tutorial is better place to start

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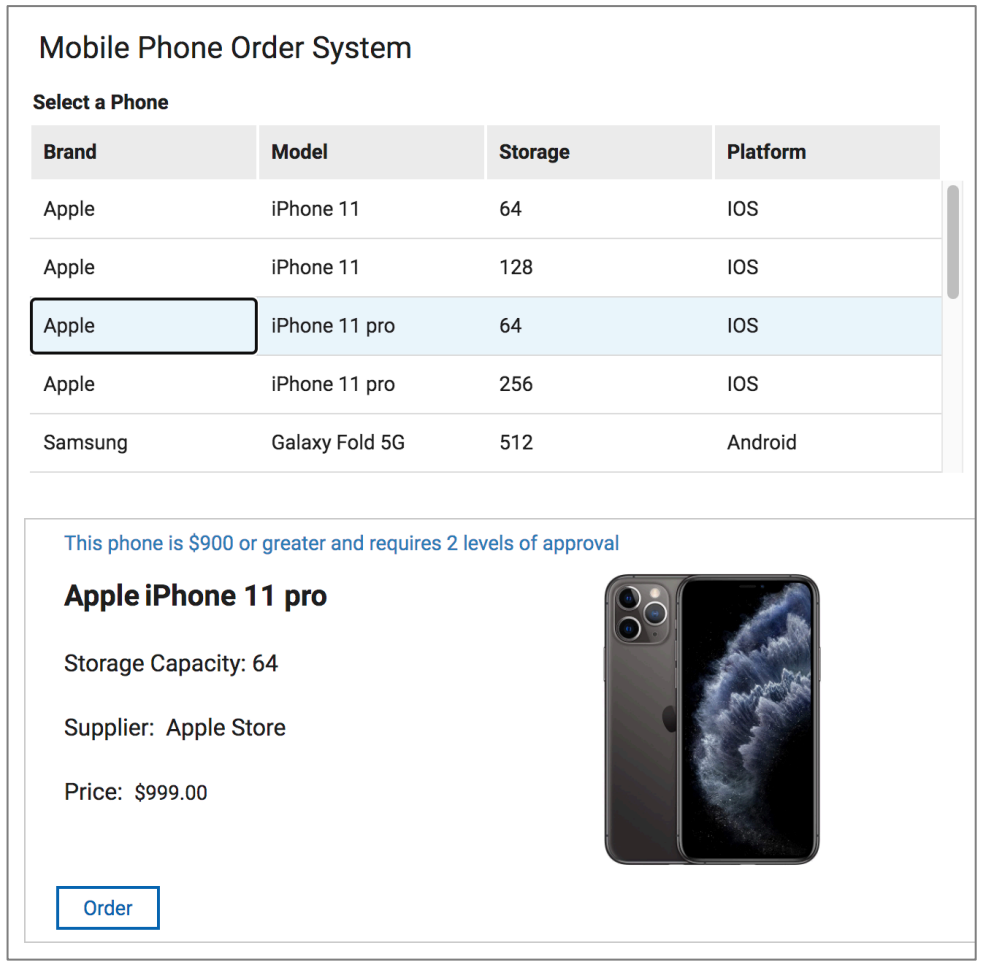
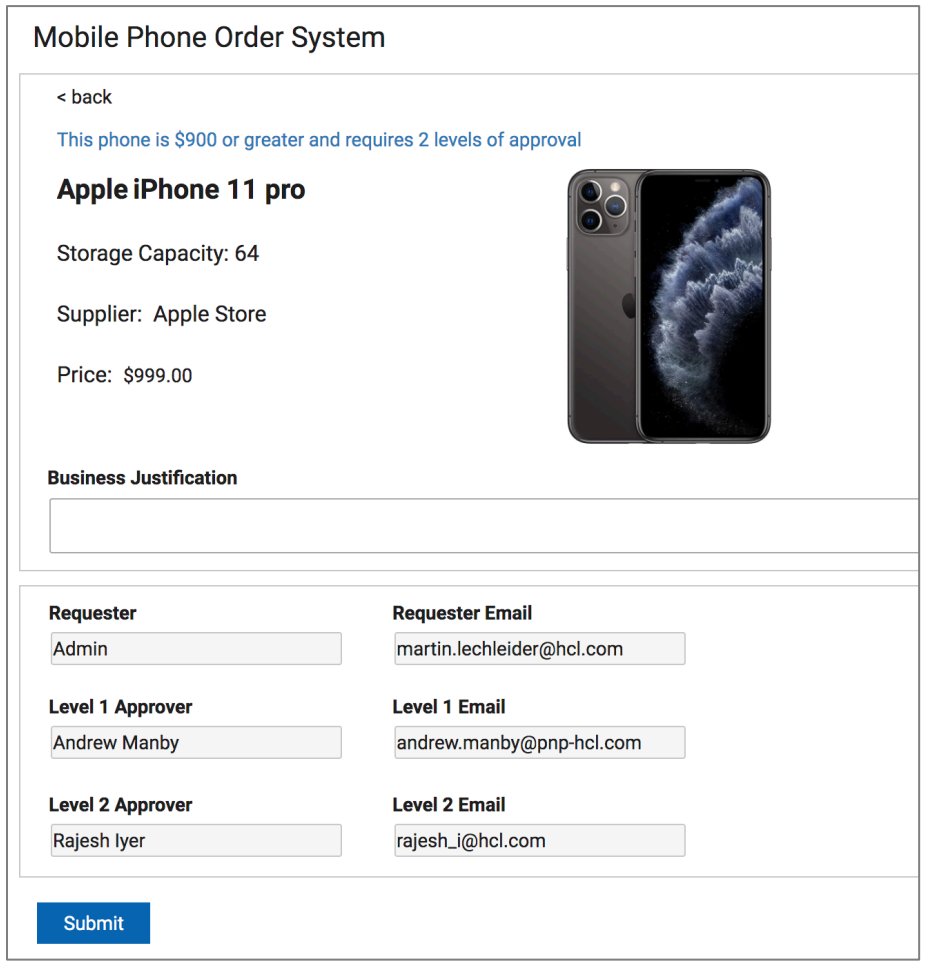
What we are going to build





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How we are going to build it

Project Steps	Pages	Resource
1. Creating catalog app from spreadsheet	5	MobilePhoneCatalog.xls
2. Add order form and data grid for selection	7-11	MobilePhoneOrders1.volt
3. Getting details for the selected phone and presenting it nicely	12-17	MobilePhoneOrders2.volt
4. Getting information on the requester and workflow approver(s)	18-24	MobilePhoneOrders3.volt
5. Creating the workflow	25-42	
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7. Rules for a dynamic user experience	45-51	MobilePhoneOrders5.volt
8. Add a workflow approval log	53-52	MobilePhoneOrders6.volt

cumulative build of the app

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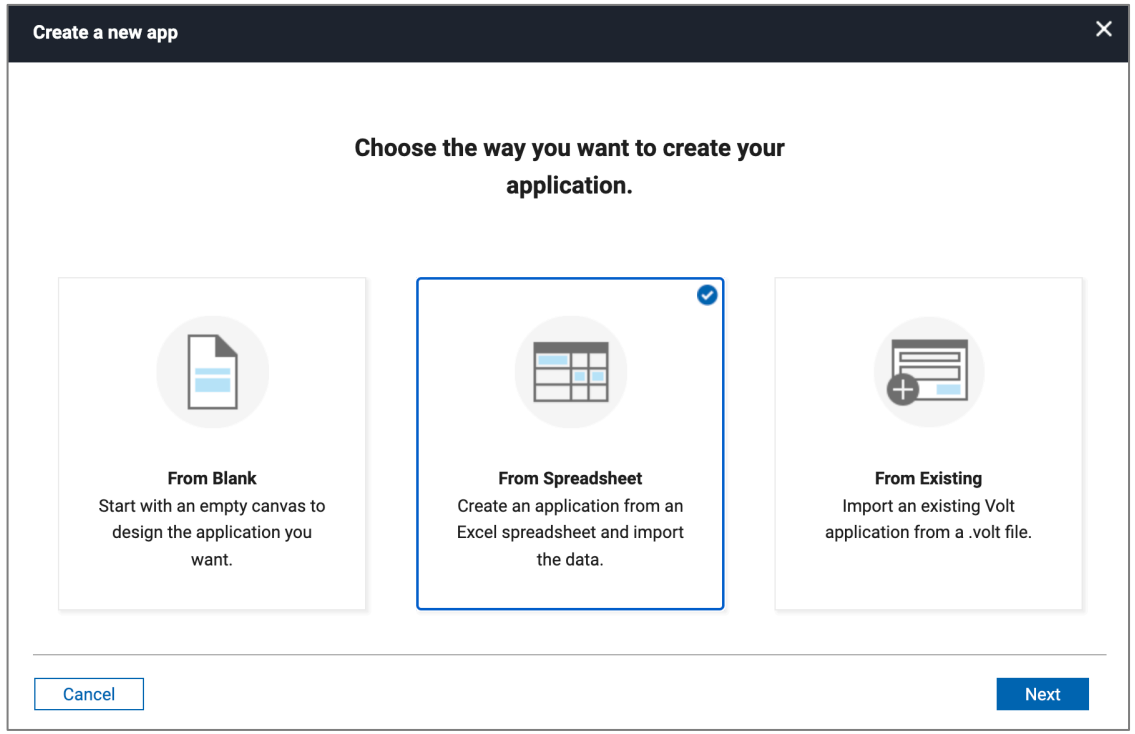
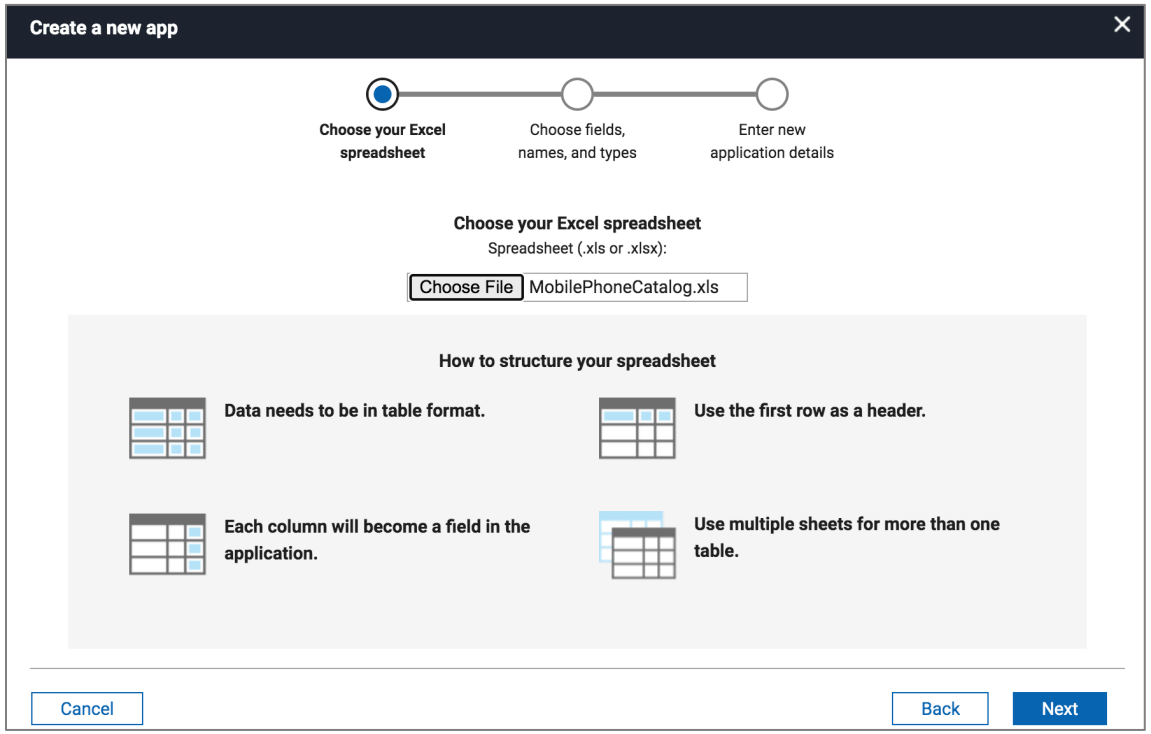
1. Creating catalog app from spreadsheet

MobilePhoneCatalog.xls

1) Click New Application and select From Spreadsheet



2) Choose the spreadsheet supplied with the tutorial



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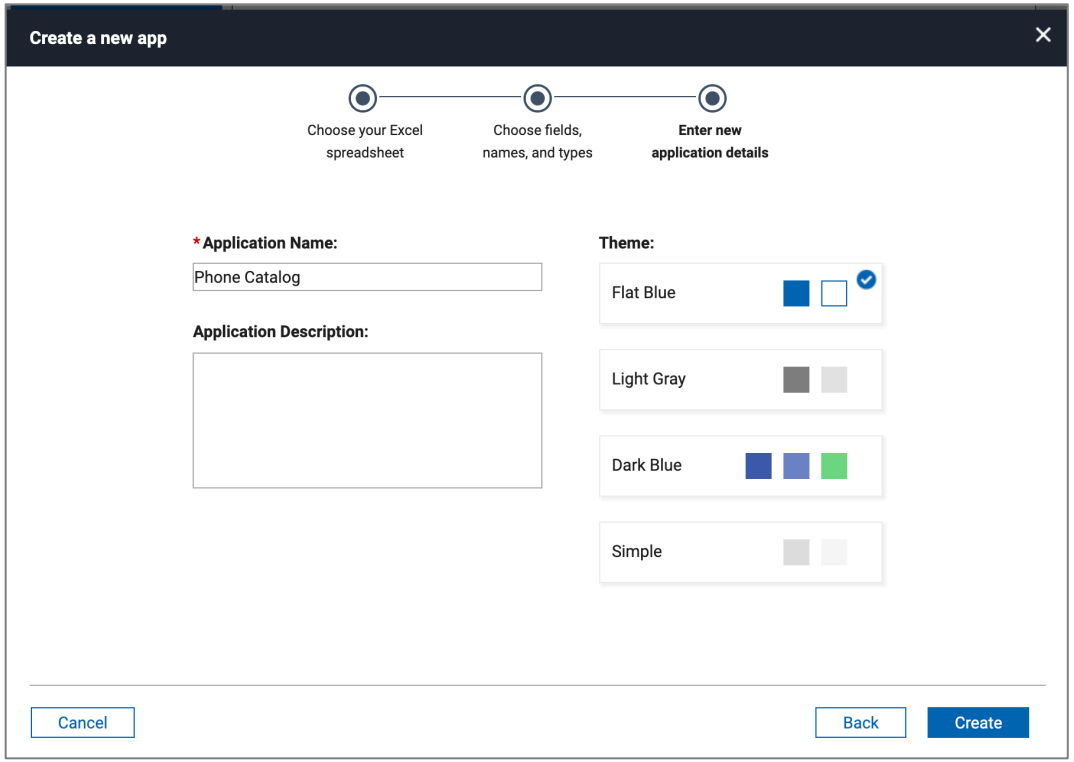
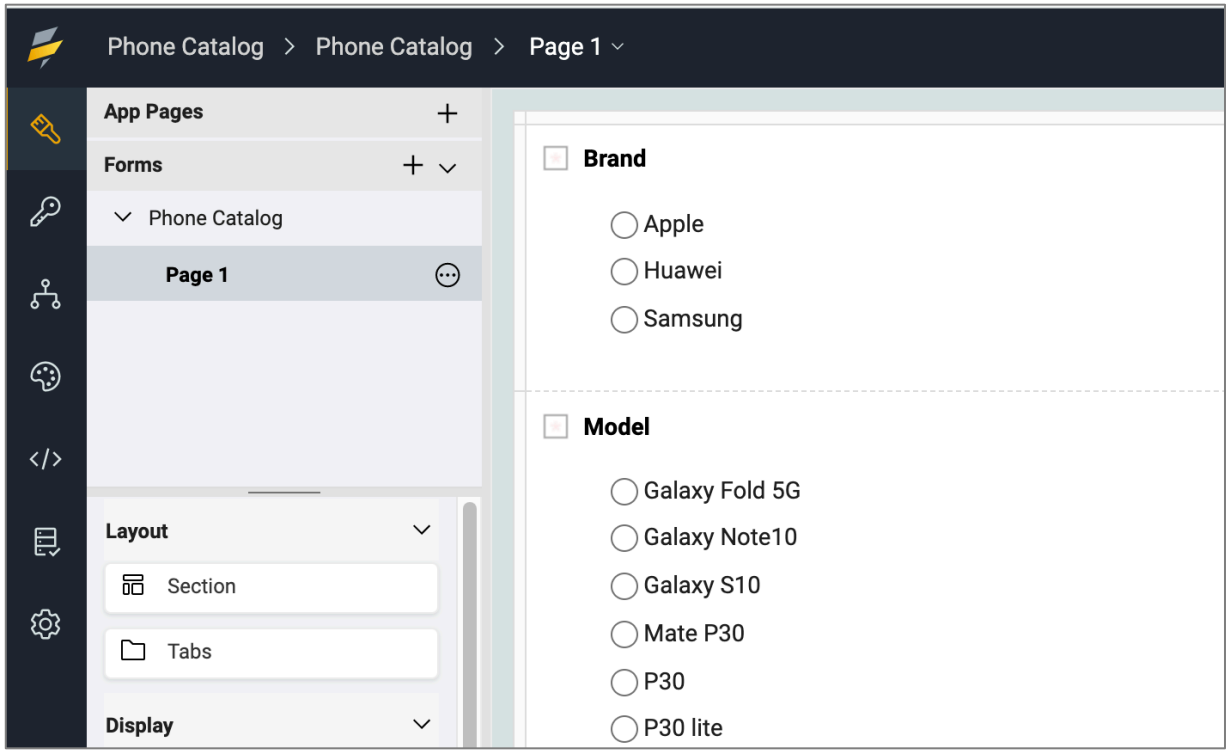
1. Creating catalog app from spreadsheet

MobilePhoneCatalog.xls

1) Accept all the default and click Create



2) Edit the app and it should appear as indicated below



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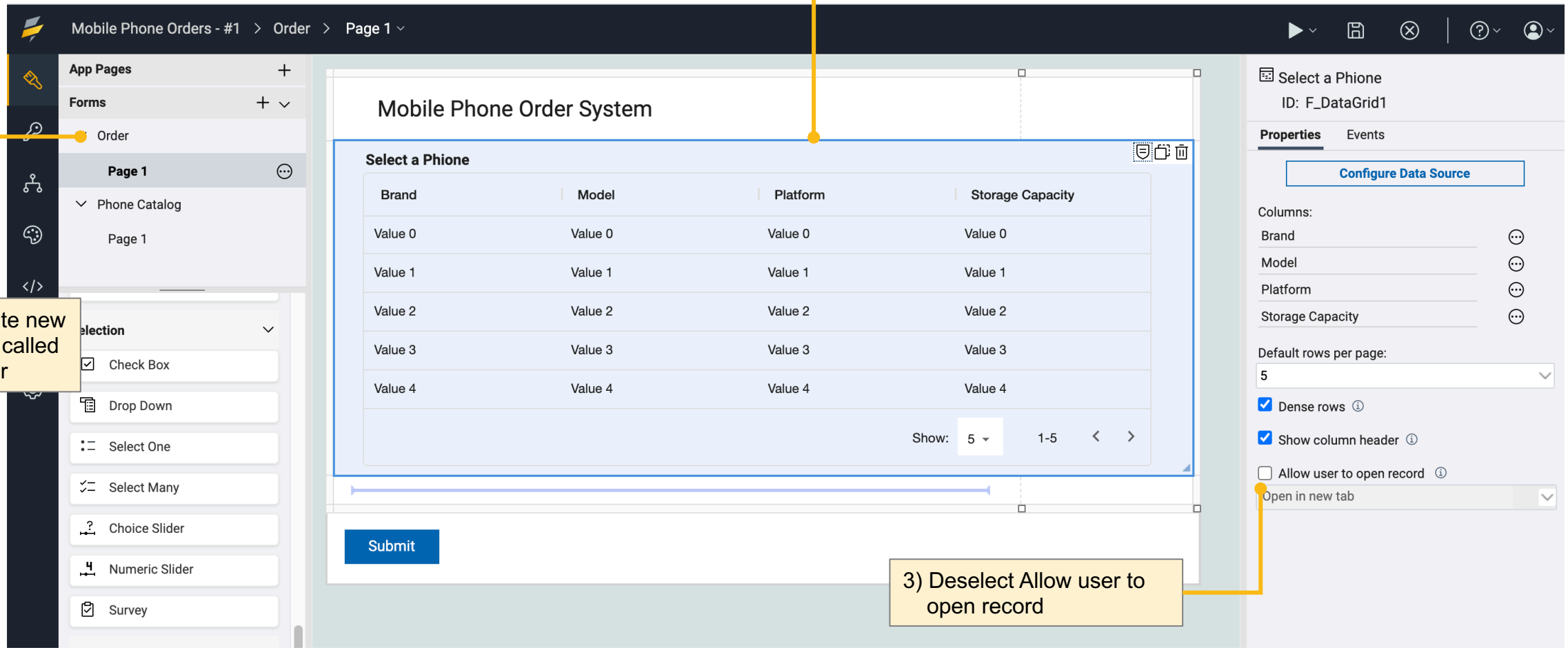
2. Add order form and grid for selection

► Create the order form and selection data grid

2) Add a Data Grid and display brand, model, storage & platform



1) Create new form called Order

3) Deselect Allow user to open record

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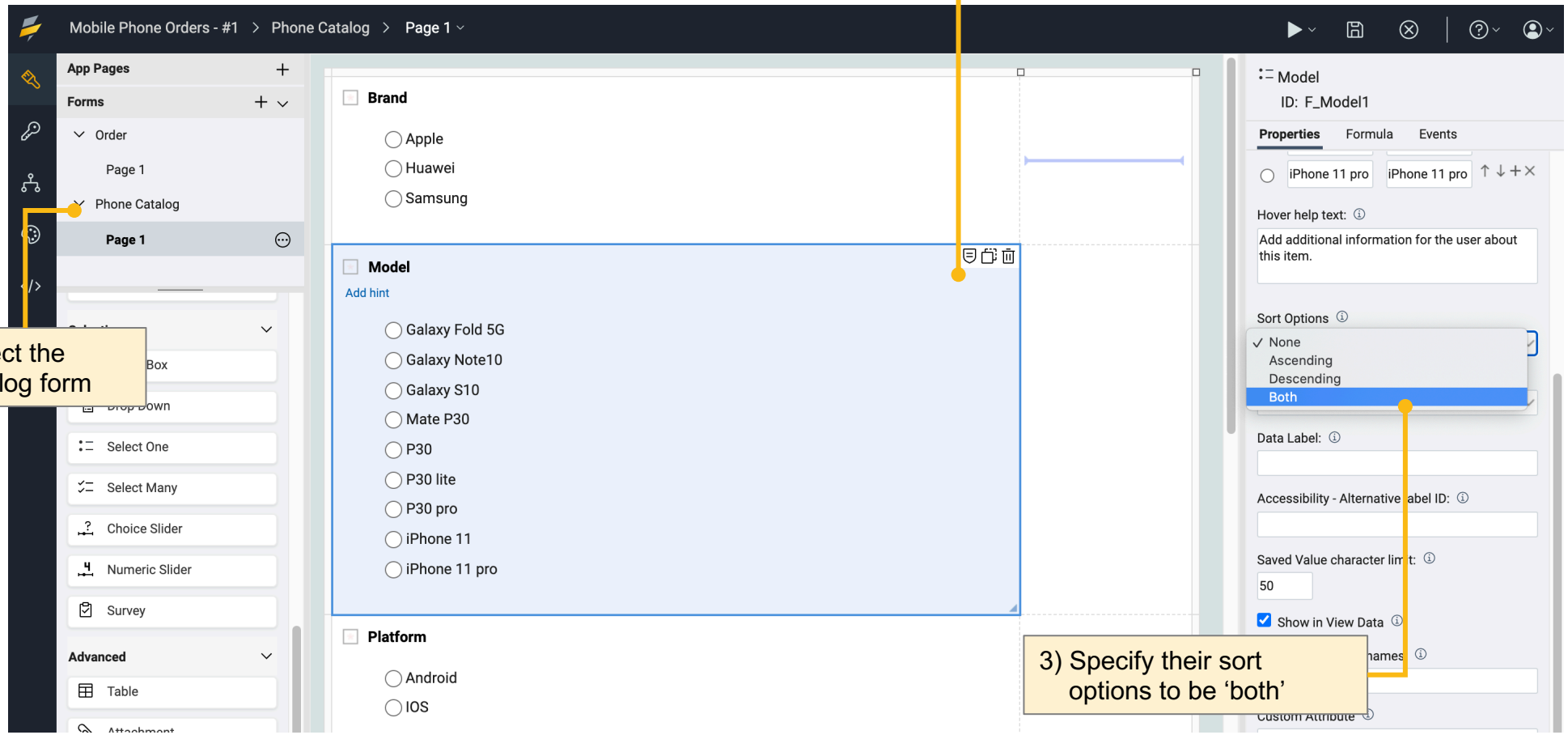
2. Add order form and grid for selection

- Set the display fields to be sortable in the catalog



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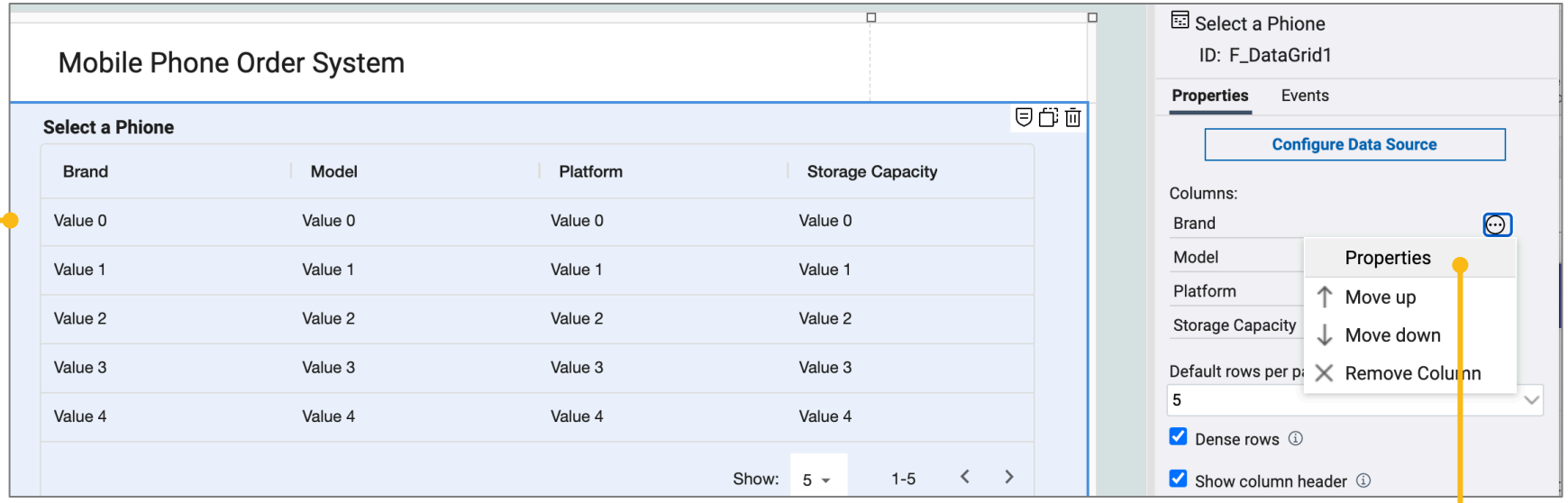
2. Add order form and grid for selection

- Set the display fields to be sortable in the data grid



1) Select the data grid on the Order form

2) Set the properties for each of the display fields to allow the user to sort.

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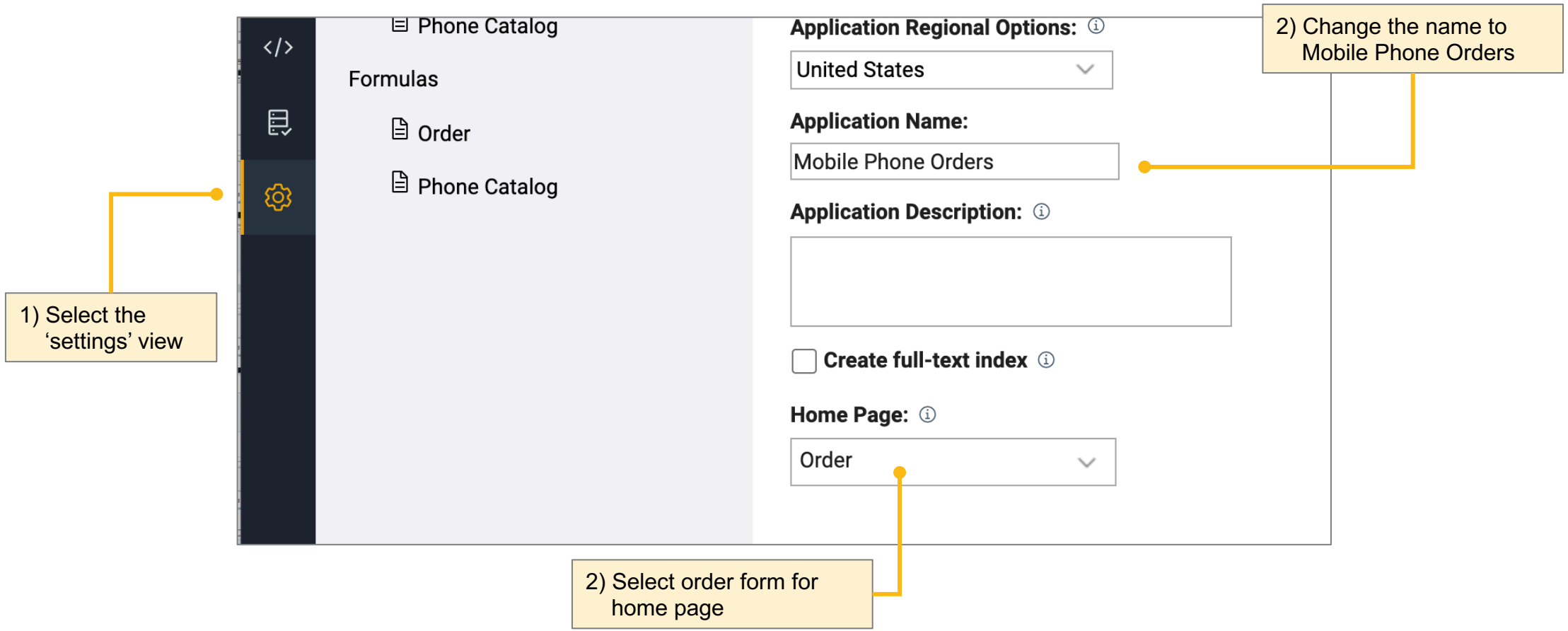
2. Add order form and grid for selection

- Set the order form to be the home page



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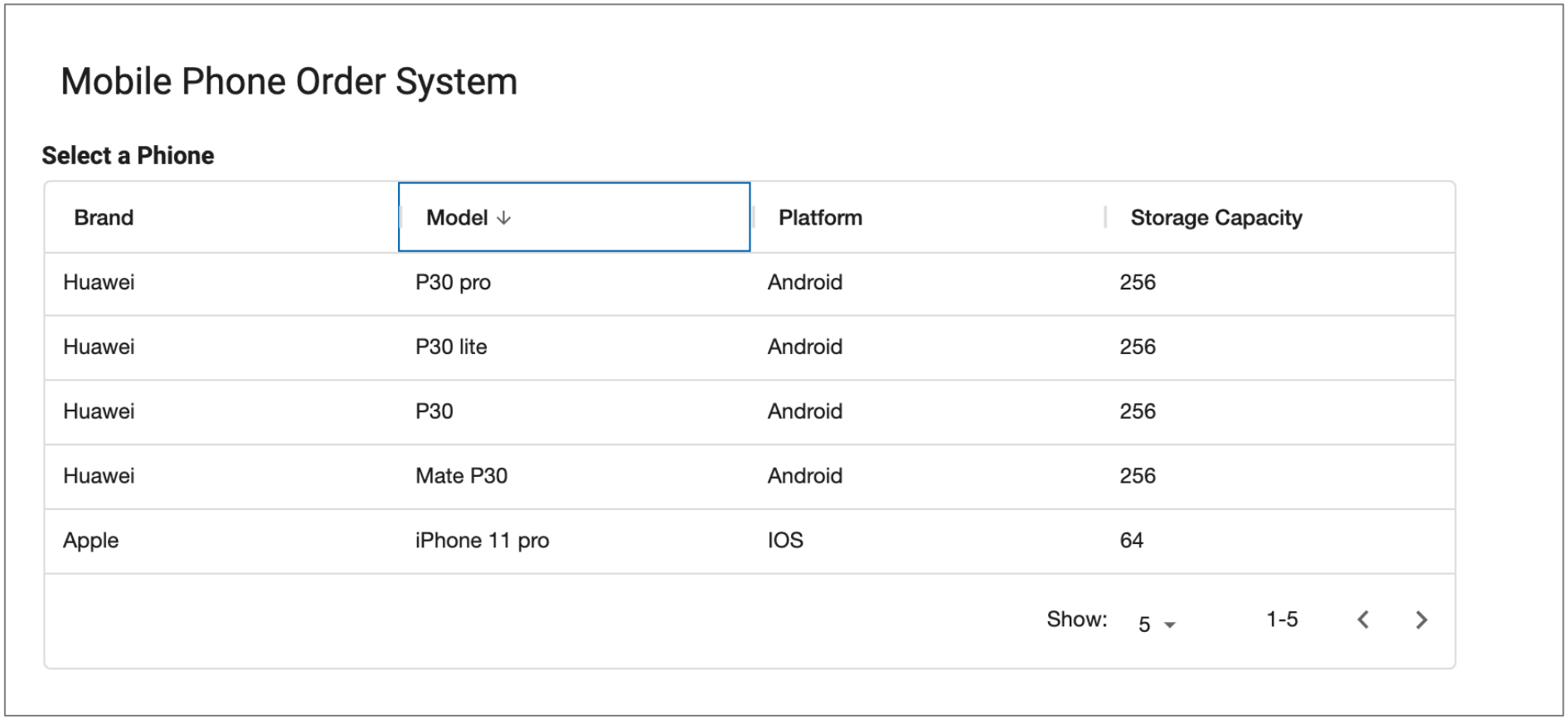
2. Add order form and table for selection

- How things should look on the orders form

MobilePhoneOrders1.volt

1) Save, close, deploy and then launch the app



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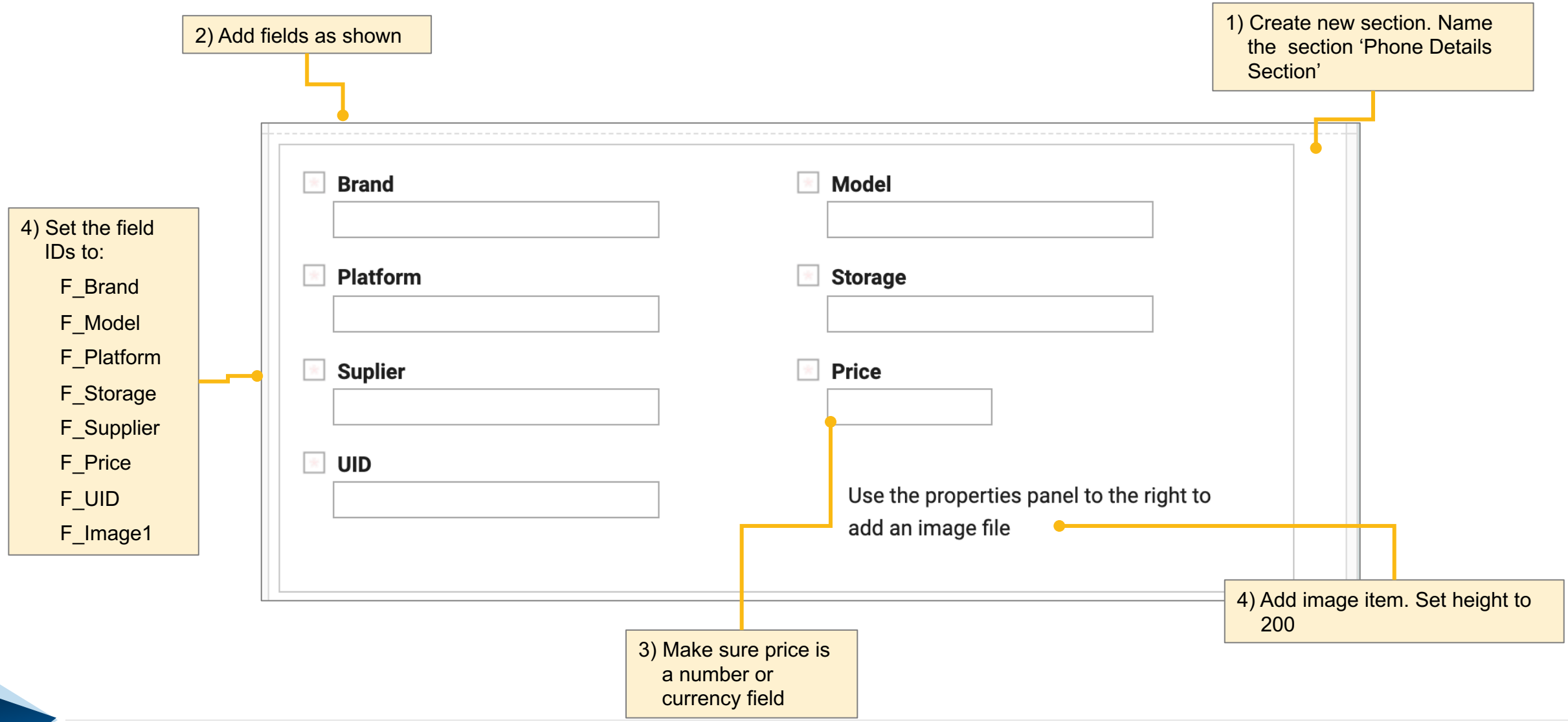
3. Getting details for the selected item and presenting it nicely

- Create a section for selected phone details



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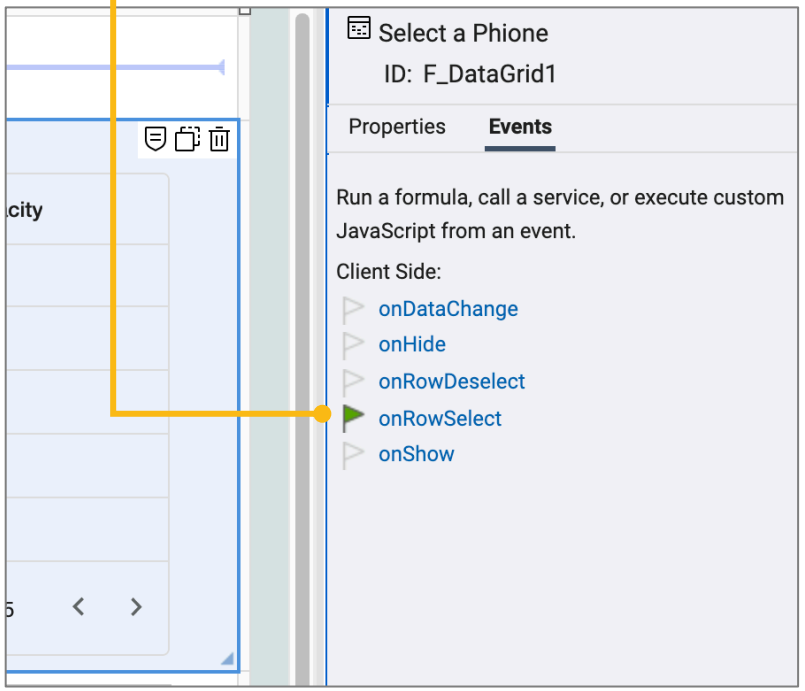
3. Getting details for the selected item and presenting it nicely

- Add JavaScript to pass the selected values to fields in the section

1) Select the onRowSelect event for the data grid



2) Enter the following JavaScript

onRowSelect

This event is invoked when a row is selected in the Data Grid

Predefined Actions:

☐ **Run a Formula**

☐ **Call a Service**

Custom Actions:

This environment allows a reduced set of javaScript and HTML. Learn More

```
1 BO.F_Brand.setValue(rowData.F_Brand1.displayValue);
2 BO.F_Model.setValue(rowData.F_Model1.displayValue);
3 BO.F_Platform.setValue(rowData.F_Platform1.displayValue);
4 BO.F_Storage.setValue(rowData.F_StorageCapacity);
5 BO.F_Supplier.setValue(rowData.F_Supplier1.displayValue);
6 BO.F_Currency1.setValue(rowData.F_Price1);
7 BO.F_UID.setValue(rowData.uid);
8 page.F_Image1.setURL(rowData.F_Picture1);
```

Code to copy and paste and details on next page

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3. Getting details for the selected item and presenting it nicely

- Add JavaScript to pass the selected values to fields in the section

Set the value of the field in the section

Set it to the value of the field in the catalog for the selected row.

Use displayValue (or savedValue) when field is represented by a dropdown or radio button

```
BO.F_Brand.setValue(rowData.F_Brand1.displayValue);
BO.F_Model.setValue(rowData.F_Model1.displayValue);
BO.F_Platform.setValue(rowData.F_Platform1.displayValue);
BO.F_Storage.setValue(rowData.F_StorageCapacity);
BO.F_Supplier.setValue(rowData.F_Supplier1.displayValue);
BO.F_Currency1.setValue(rowData.F_Price1);
BO.F_UID.setValue(rowData.uid);

page.F_Image1.setURL(rowData.F_Picture1);
```

Use page (instead of BO) because an image is not a data object

uid returns the unique identifier for each record

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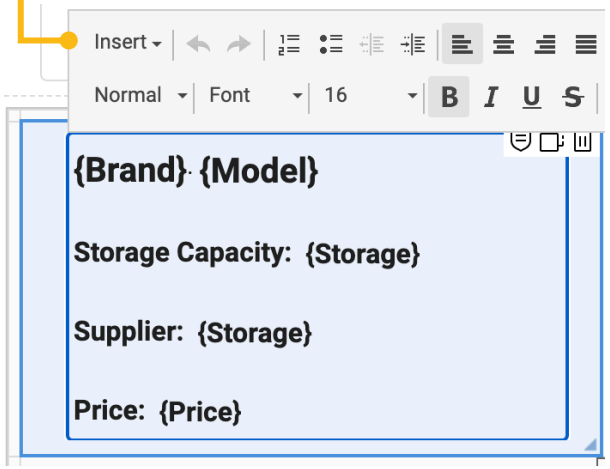
3. Getting details for the selected item and presenting it nicely

- Improve presentation of phone details with text widget

Use Insert drop down to add values from the form. This is referred to as “echo text”.

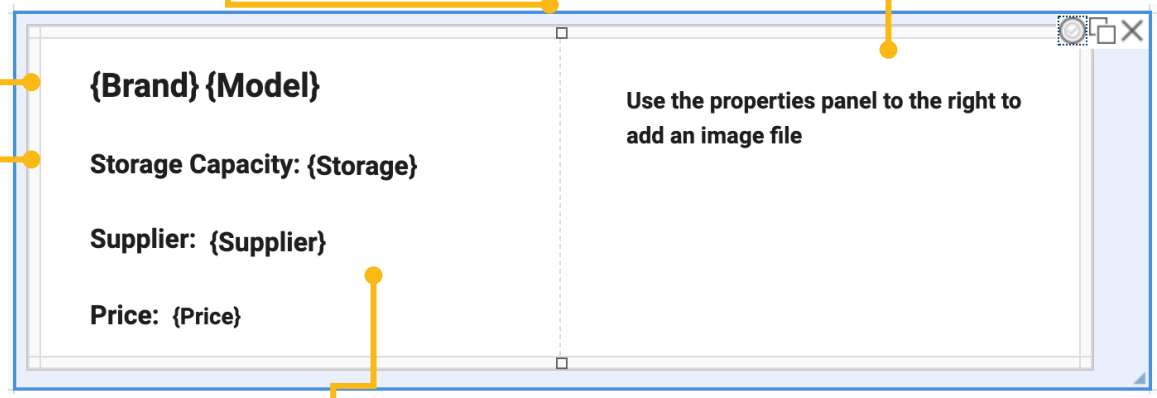


1) Add new Section. Name the Section ‘Details Presentation Section’

2) Move the image item into the section

20px and bold

16px bold



3) Add text item with “echo text”

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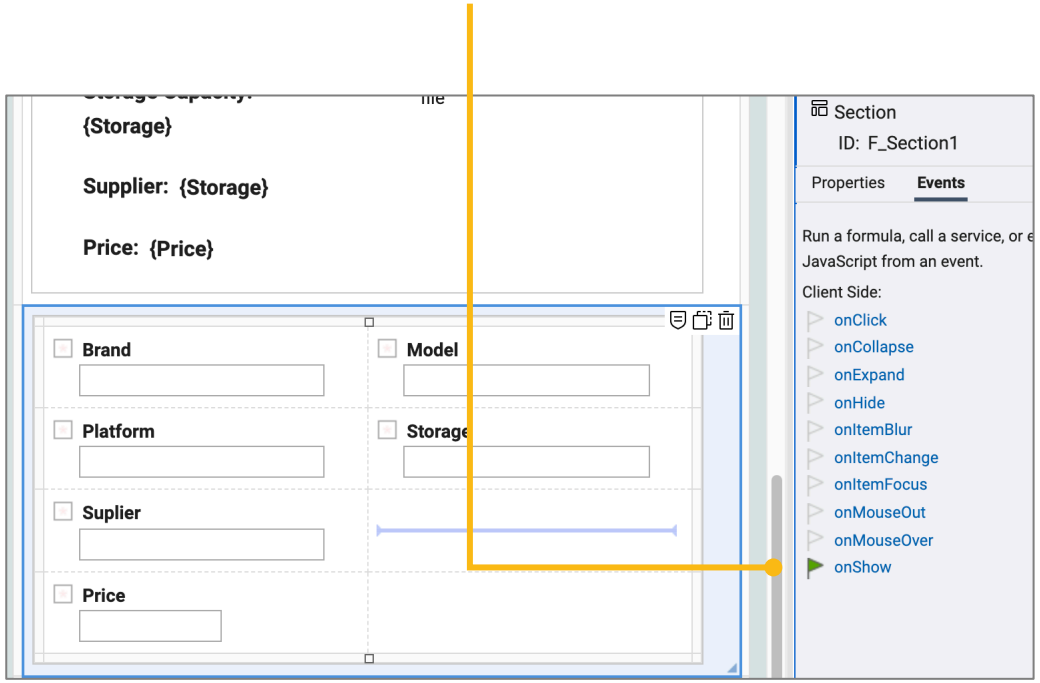
3. Getting details for the selected item and presenting it nicely

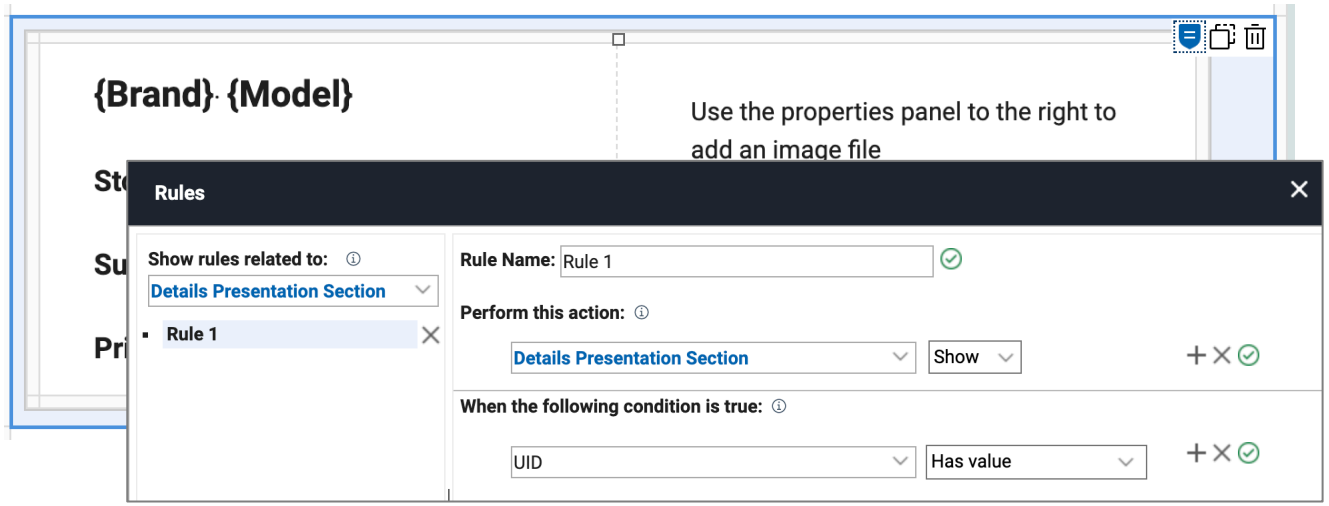
- Hide the phone detail data section and show presentation section

1) On the phone details section onShow event add the following line of JavaScript to hide it

```
item.setVisible(false);
```



2) Click on the rule icon to set a rule on the display section so it shows when UID has a Value



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3. Getting details for the selected item and presenting it nicely

- How things should look - detail presentation of selected phone

MobilePhoneOrders2.volt

1) Save, close, deploy and then launch the app

Mobile Phone Order System

Select a phone

Brand	Model	Platform	Storage Capacity
Apple	iPhone 11	IOS	64
Apple	iPhone 11	IOS	128
Apple	iPhone 11 pro	IOS	64
Apple	iPhone 11 pro	IOS	256
Samsung	Galaxy Fold 5G	Android	512

1 row selected Show: 5 1-5

Apple. iPhone 11 pro

Storage Capacity: 64

Supplier: 64

Price: $999.00

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4. Getting information on the requester and workflow approvers

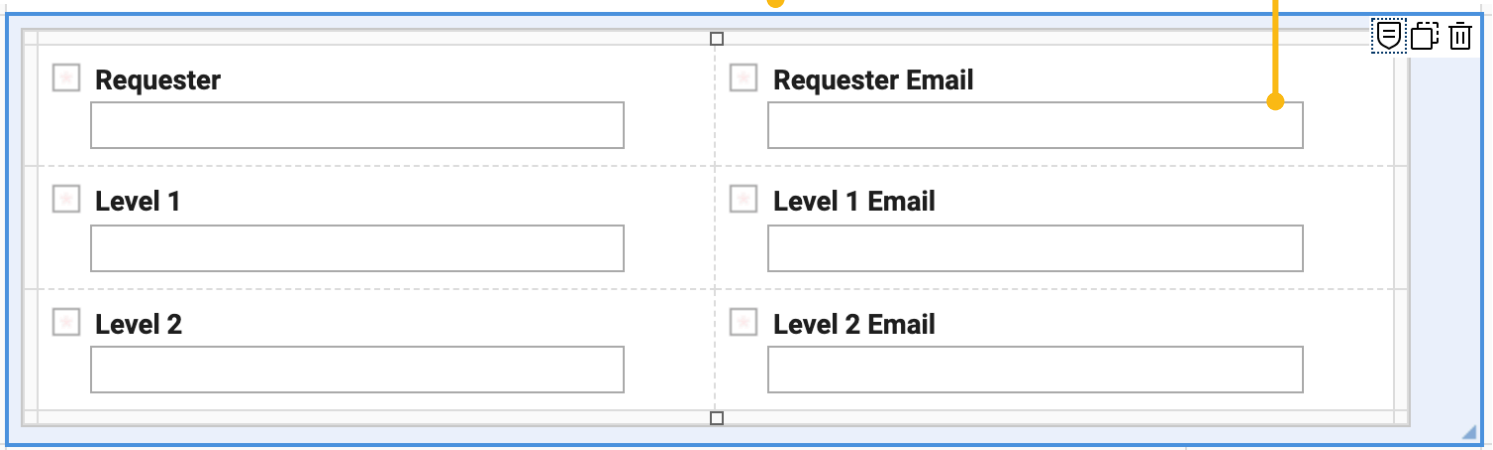
- Create section for requester and workflow approver information

1) Create a new Section and add all these fields. Name the Section 'Workflow Approver Section'.

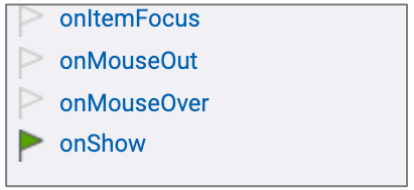
Use email items, not single line since we will use these for notifications

2) Set the field IDs to:

- F_Requester
- F_RequesterEmail
- F_Level1
- F_Level1Email
- F_Level2
- F_Level2Email



3) Add the following JavaScript to the section onShow event to make the values in the section read only.




```
item.setActive(false);
```

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4. Getting information on the requester and workflow approvers

▶ Populating the requester, level 1 and level 2 fields

Assumptions:

- Manager, Display Name and Internet Email are stored in the Domino Directory for each person record

Alternative Approaches:

- Lookup Level 1 and Level 2 information in a different source
- Let the requester manually select Level 1 and Level 2 information in the form using the Name Picker widget

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4. Getting information on the requester and workflow approvers

- When and where the service calls are made

	Timing	Where Specified	What's Returned
1	When the request is filled out	Form onNew	Requester Name, Email and Level 1 Name
2	When the request is being submitted to Level 1 for Approval	Level 1 Workflow Action	Level 1 Email, Level 2 Name
3	When (and if) the request is being submitted to Level 2 for Approval	Level 2 Workflow Action	Level 2 Email

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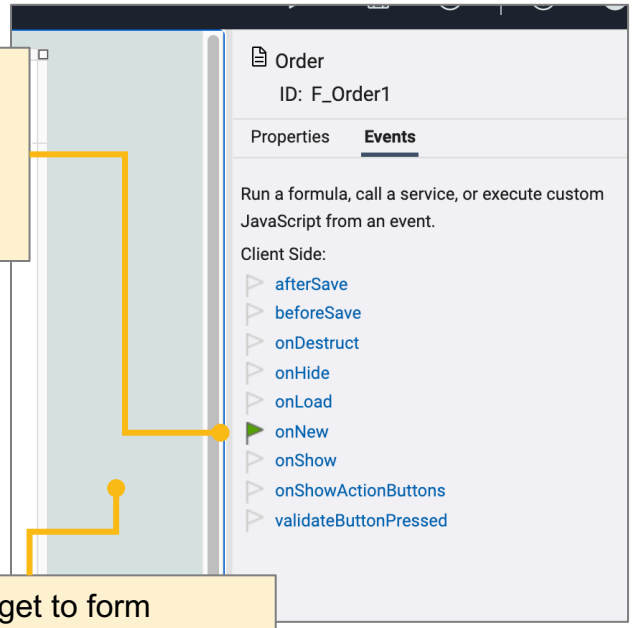
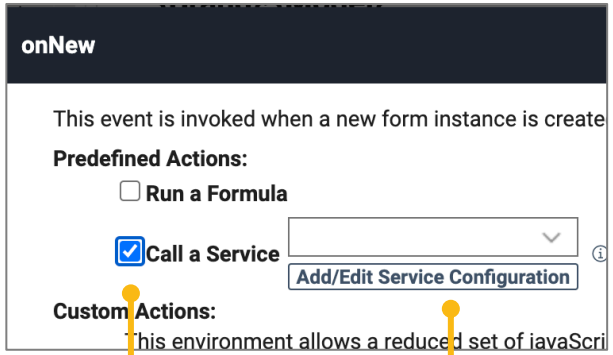
4. Getting information on the requester and workflow approvers

- Add service call 1 to the order form onNew event

1) Select the onNew event for the Order form.

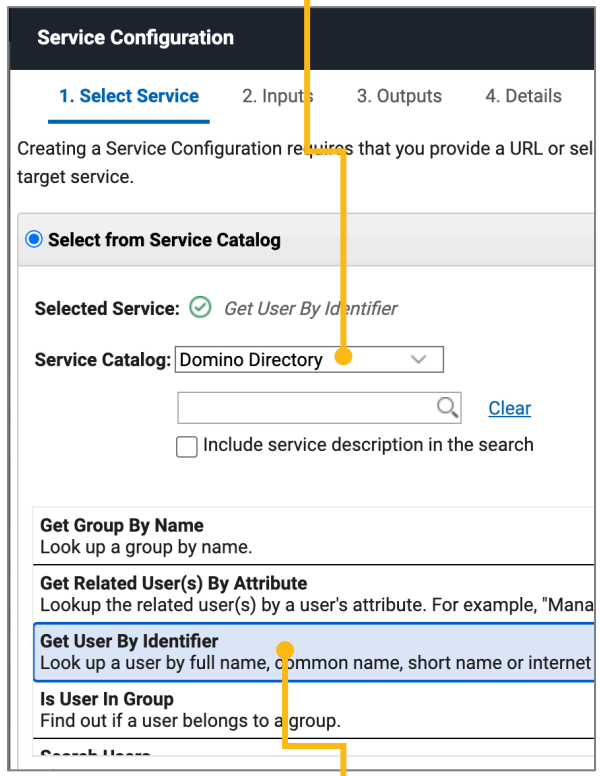


Hint: you can get to form properties by clicking in the gray background of the canvas



2) Select 'Call a Service'. and then 'Add/Edit Service Configuration'

3) Select 'Domino Directory'



4) Select 'Get User By Identifier'

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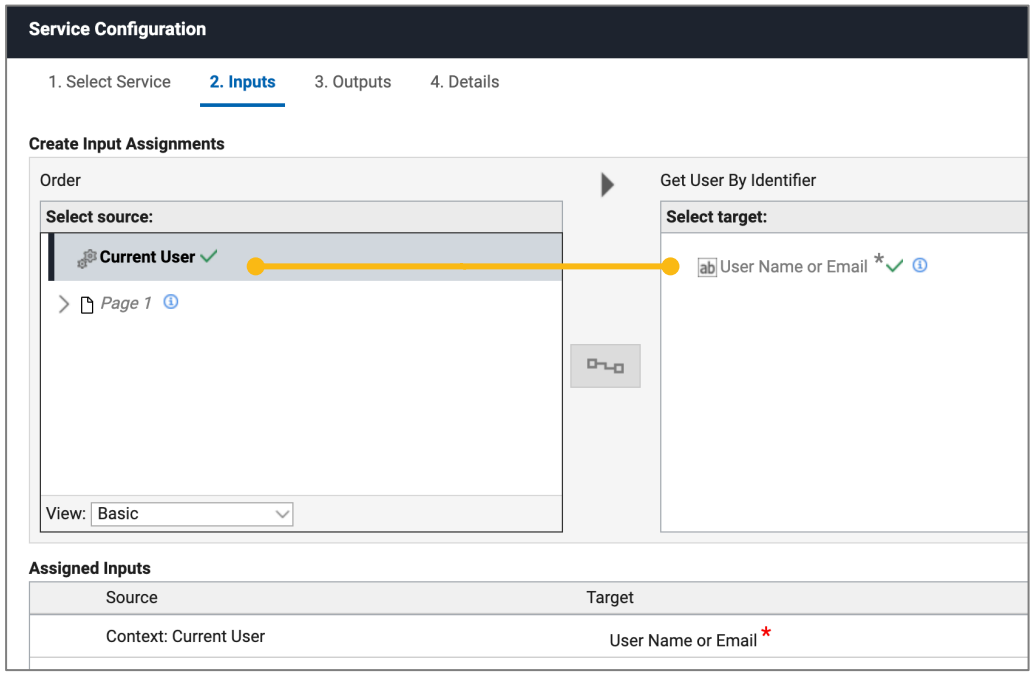
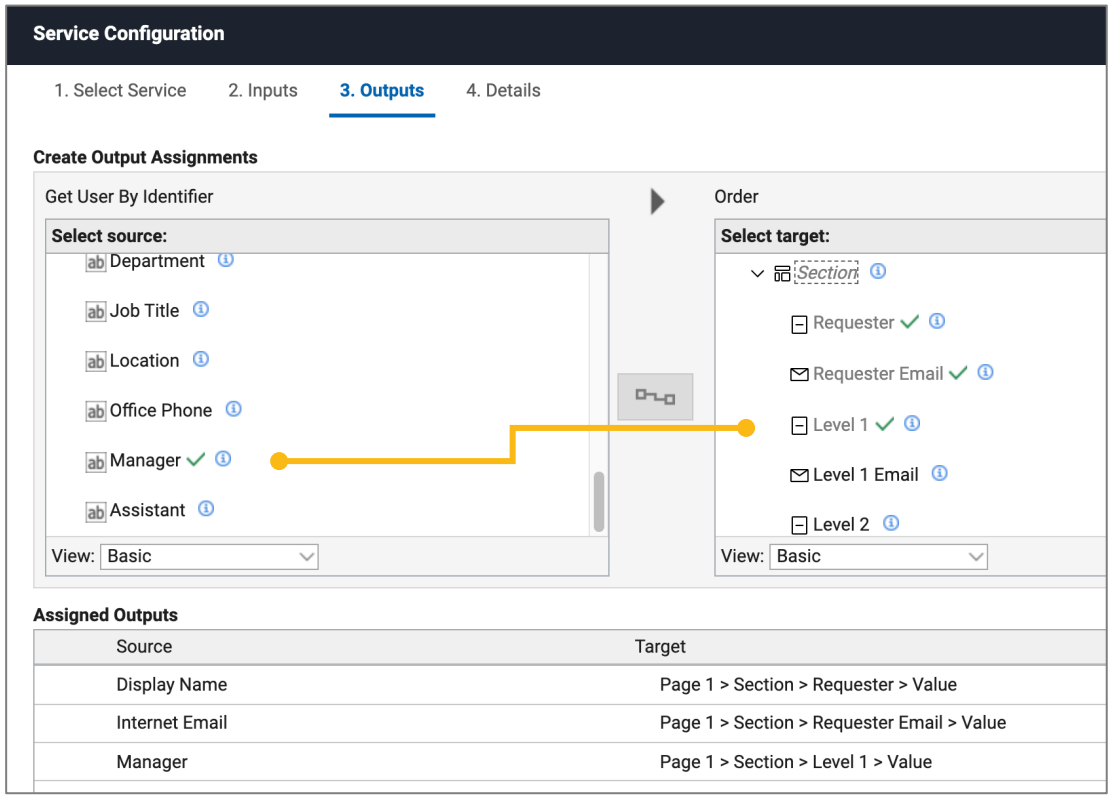
4. Getting information on the requester and workflow approvers

► Create service call 1

1) Map Current User to Inputs



2) Outputs: map Display Name to Requester, Internet Email to Requester Email and Manager to Level 1 Name



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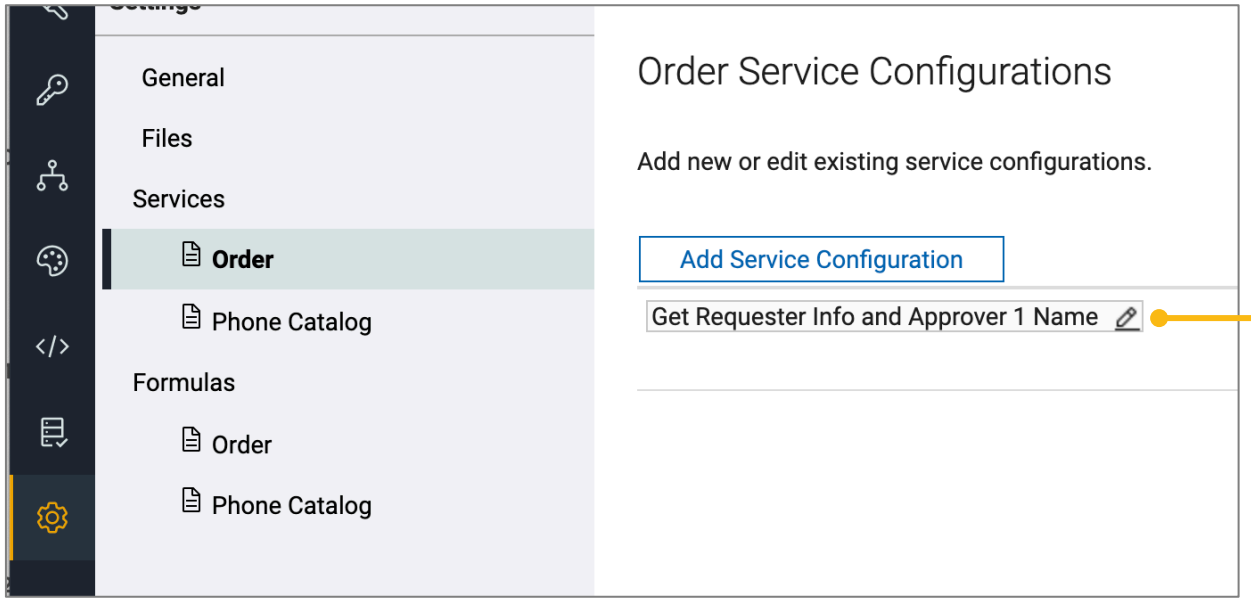
4. Getting information on the requester and workflow approvers

- Give service call 1 a descriptive name

1) Select the ‘Settings’ view



2) Change the name of the service to ‘Get Requester Info and Approver 1 Name’

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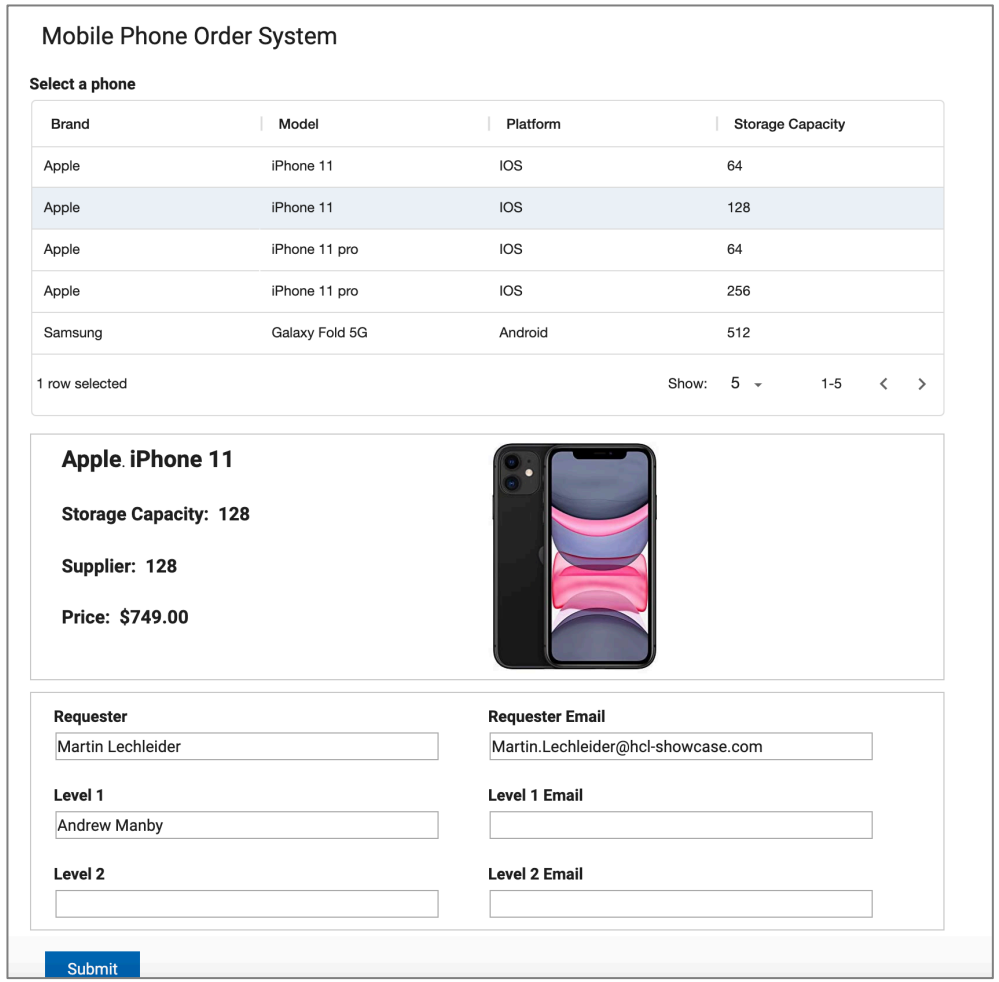
4. Getting information on the requester and workflow approver(s)

► How things should look - workflow approver section

MobilePhoneOrders3.volt



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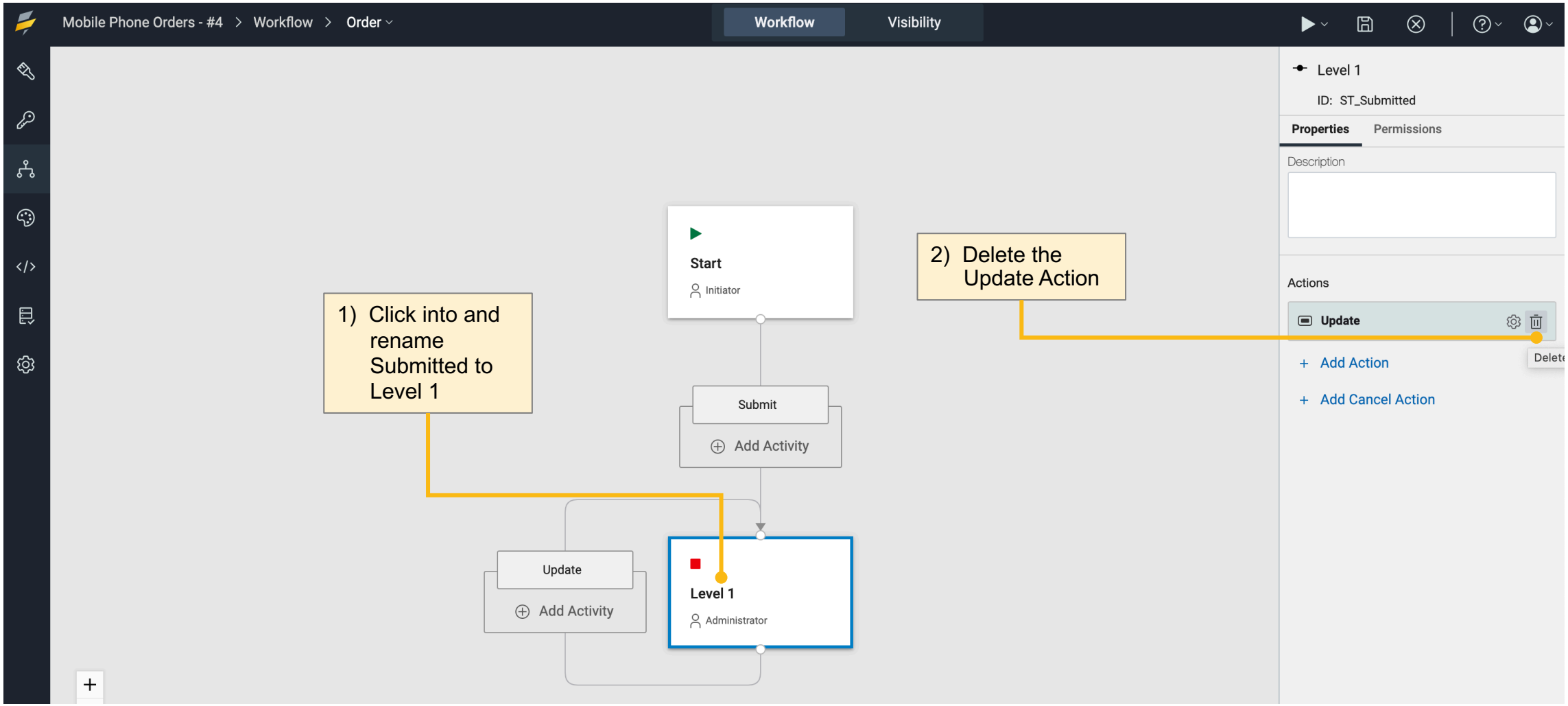
5. Creating the workflow

- Rename submitted to level 1 and delete the update action



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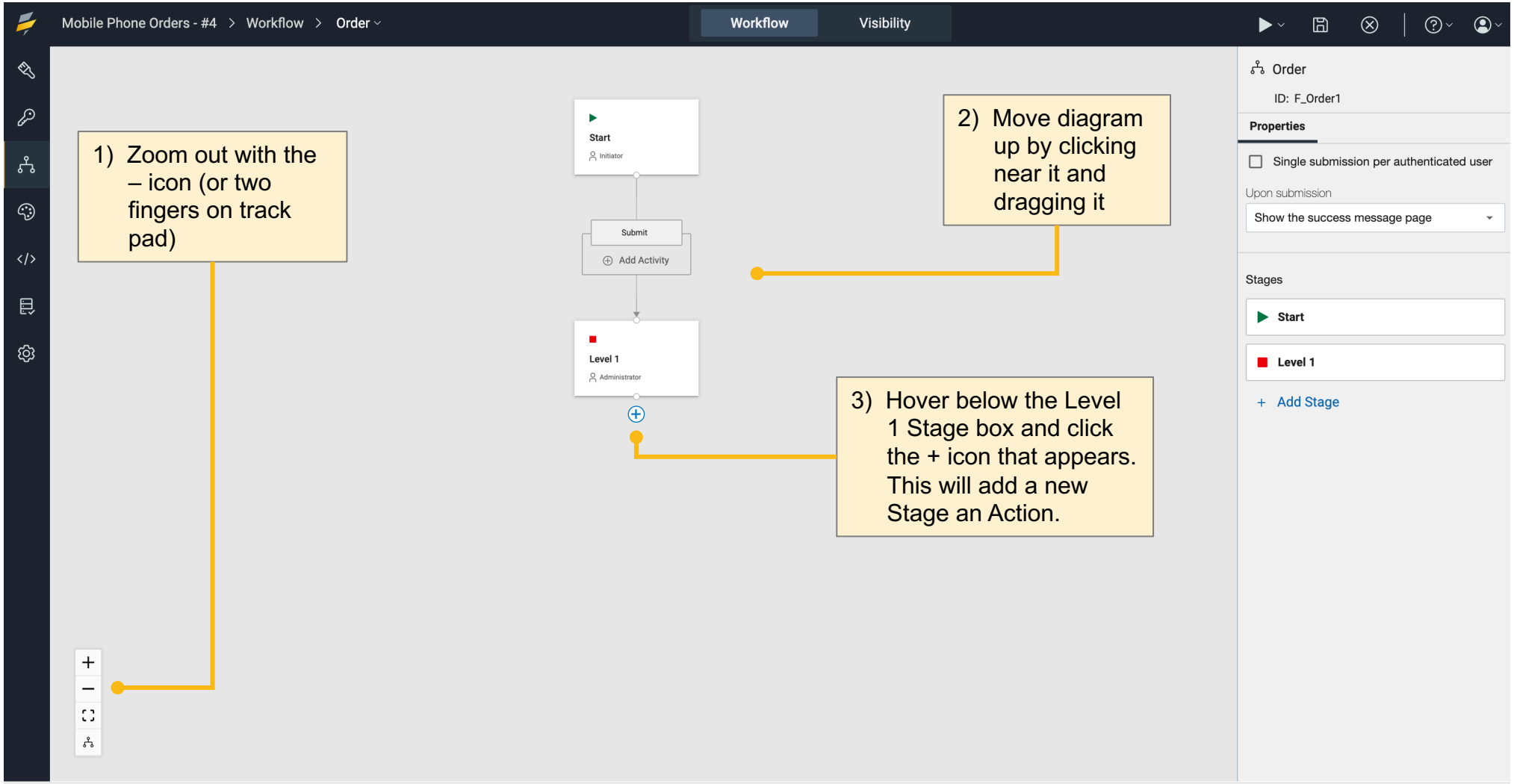
5. Creating the workflow

- Zoom out and add level 2 stage and action



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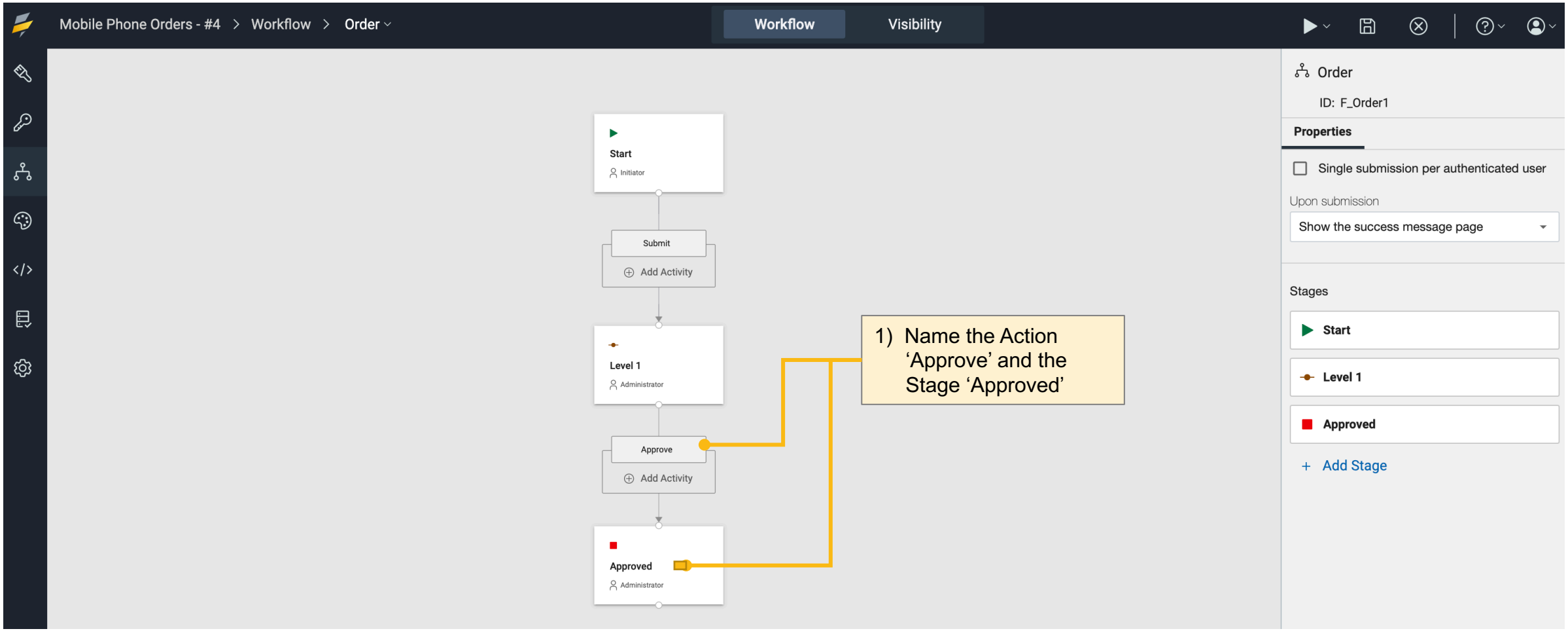
5. Creating the workflow

- Rename submitted to level 1 and delete the update action



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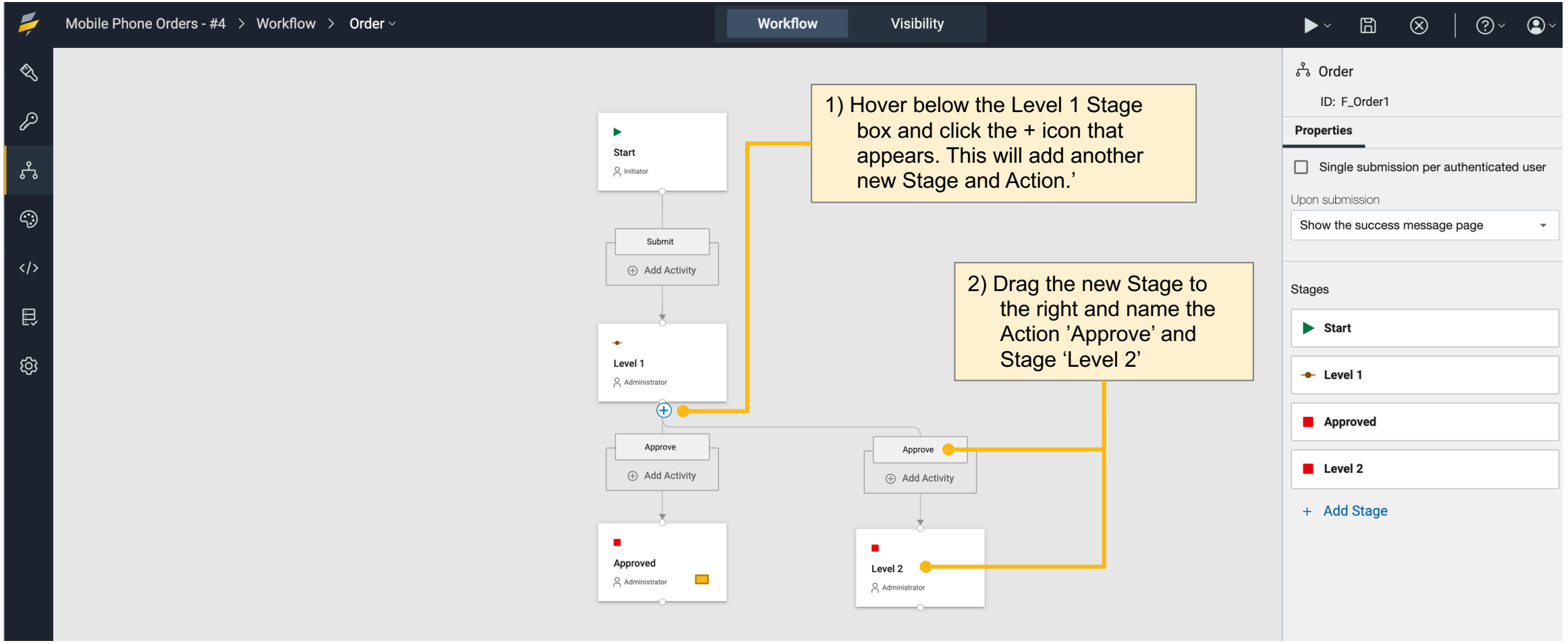
5. Creating the workflow

- Add the level 2 stage and action



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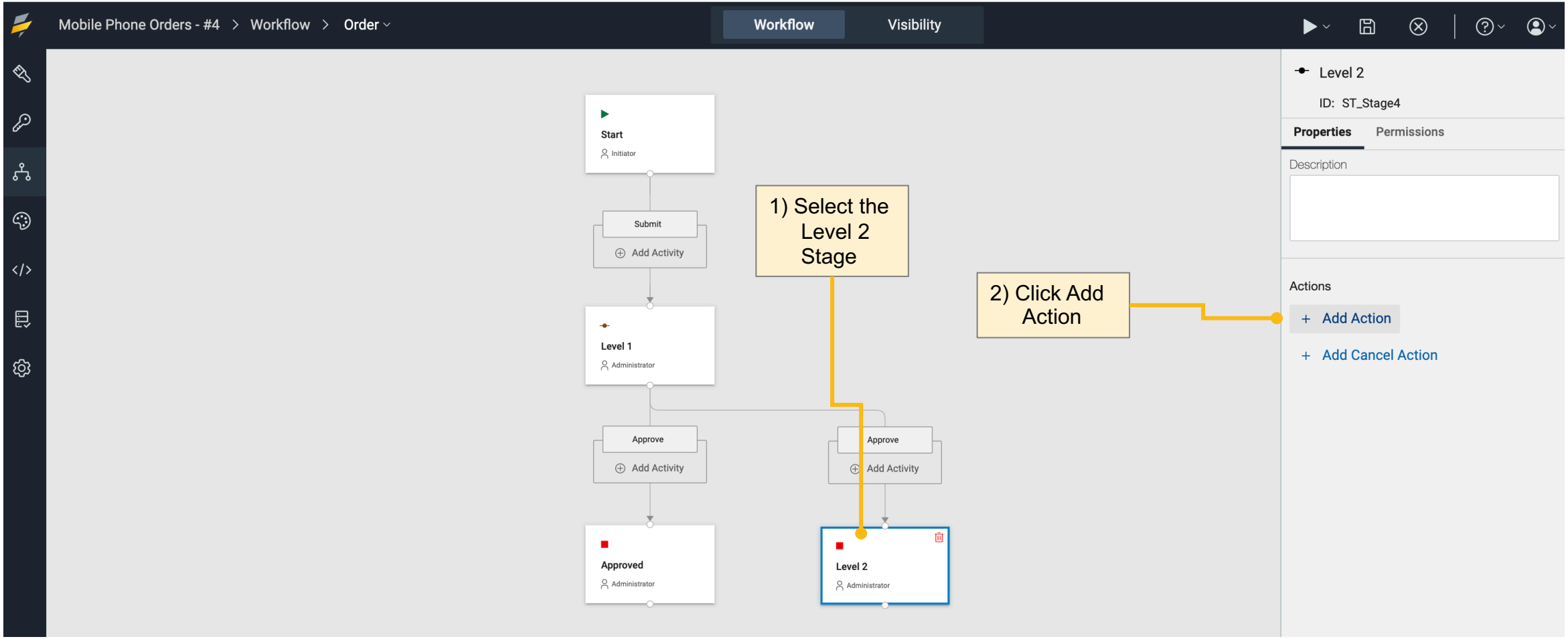
5. Creating the workflow

- Add the level 2 stage and action



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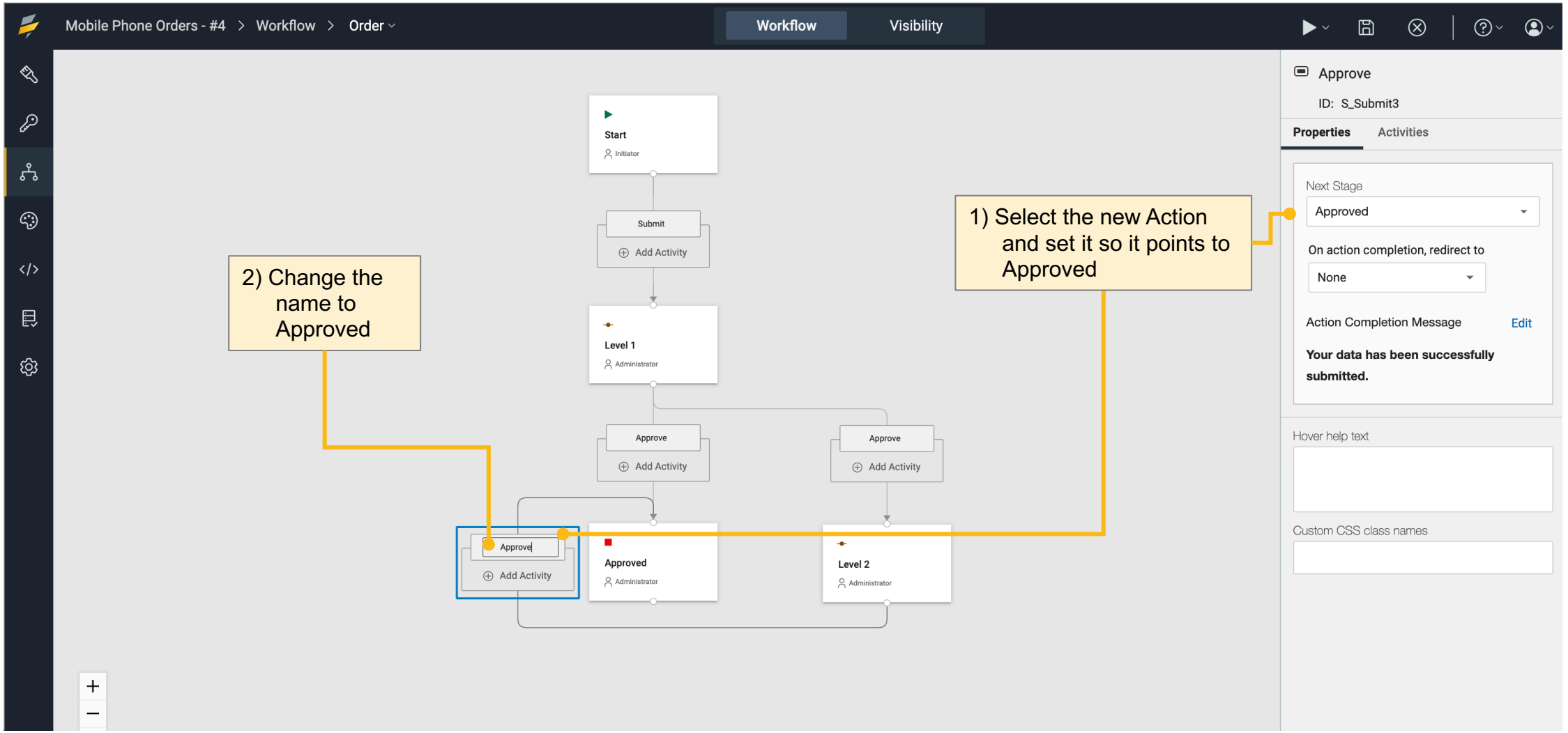
5. Creating the workflow

- Point the level 2 approve action to approved stage



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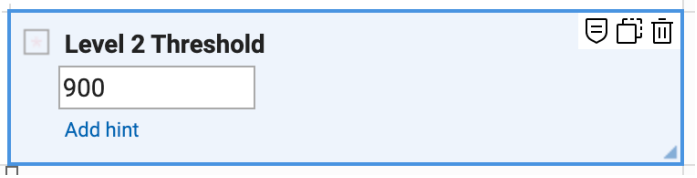
5. Creating the workflow

▶ Define rule for when level 2 approval is required

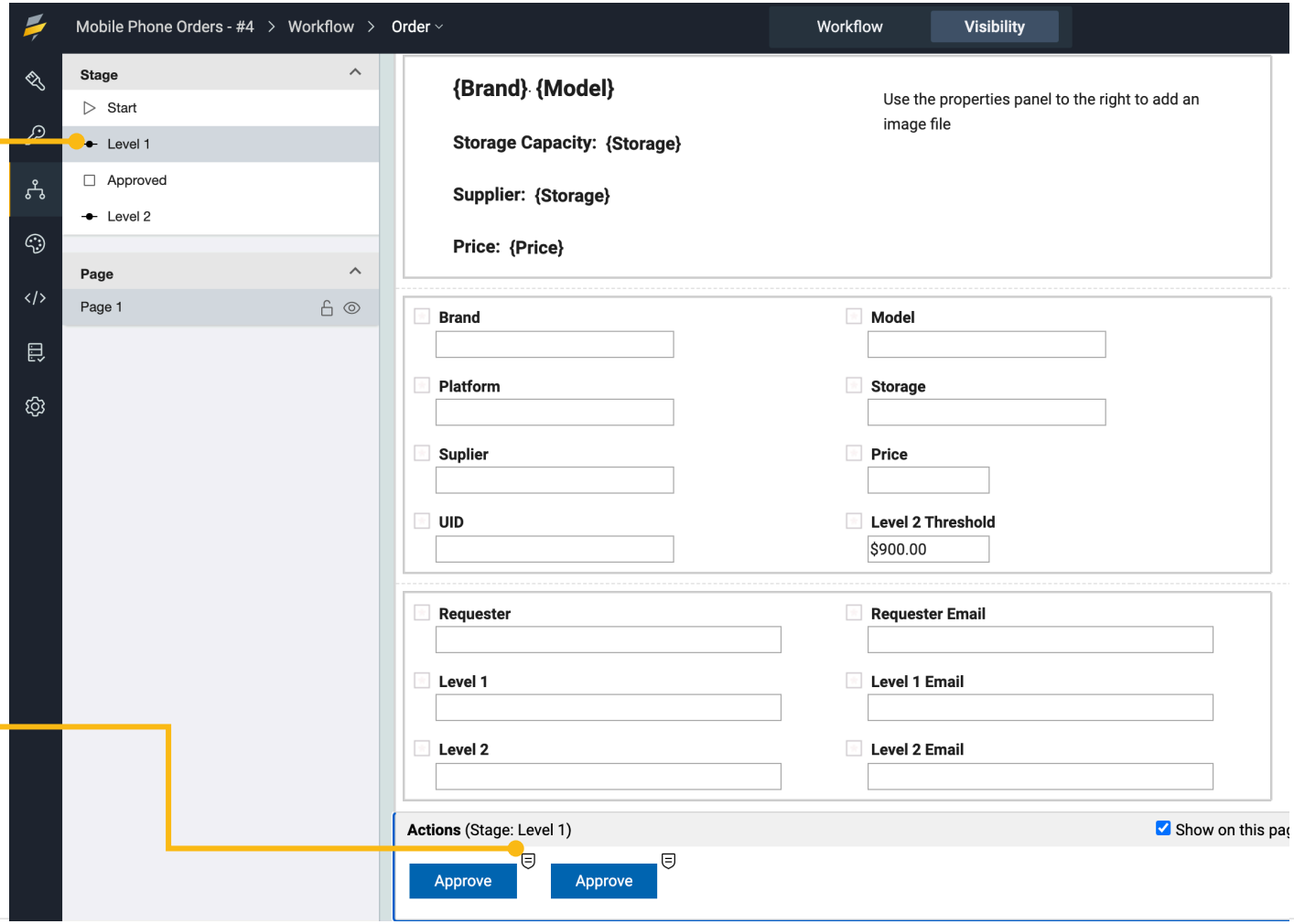
1) Add number field to the hidden section in the Form and set default value to 900



2) Switch to the Visibility tab in the Workflow view

3) Select the Level 1 Stage

4) Click on the Rule icon on the 1st Approve Action



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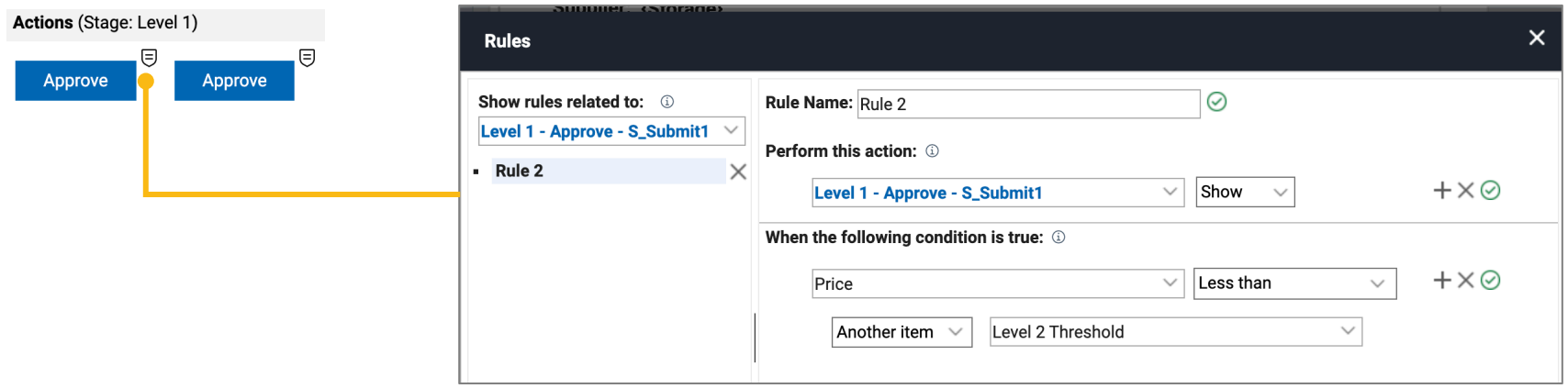
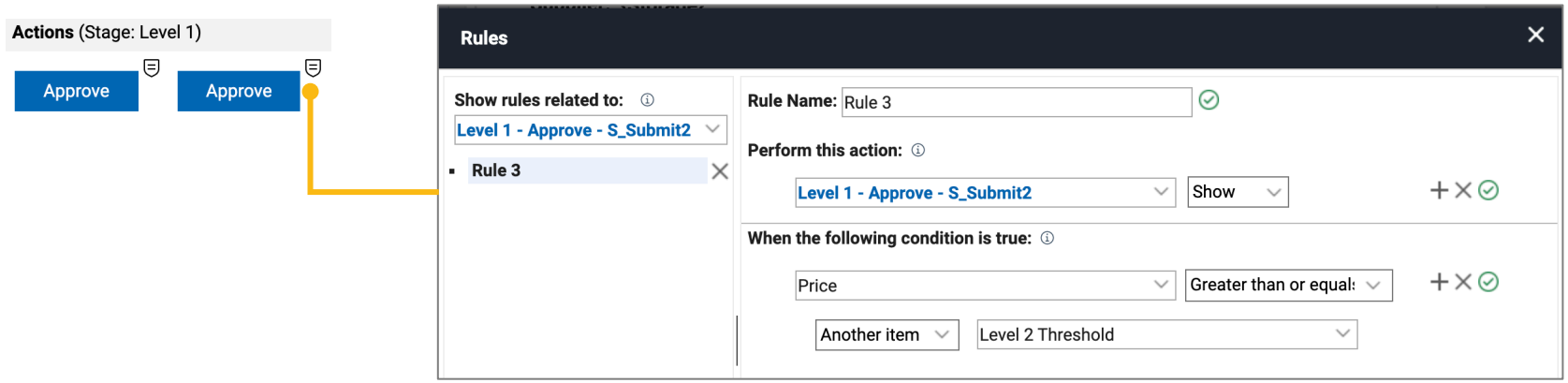
5. Creating the workflow

▶ Define condition for level 2 approval

1) Set the Rule for the 1st Action to Show when Price is less than the Level 2 Threshold



1) Add a rule on the 2nd Action to Show when Price is greater than or equals than the Level 2 Threshold



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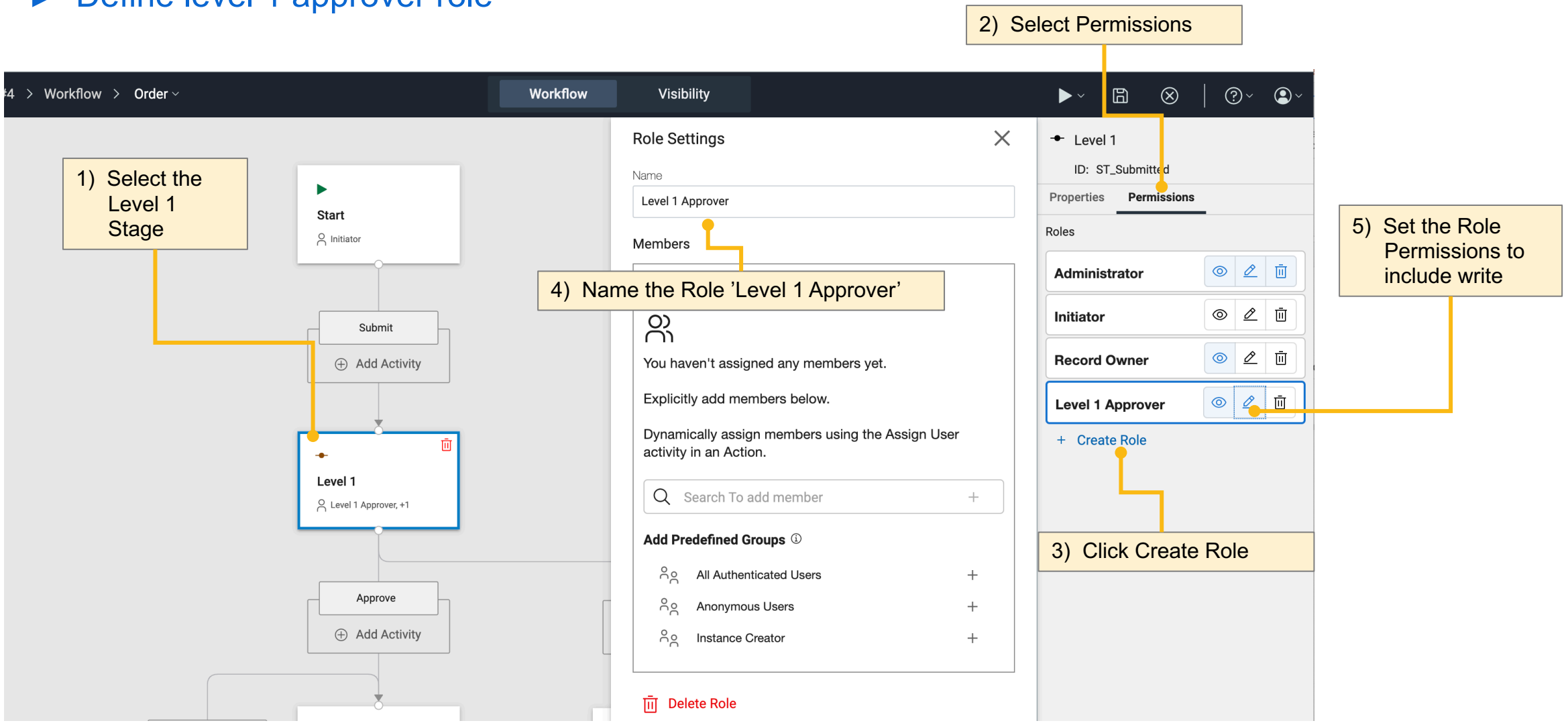
5. Creating the workflow

▶ Define level 1 approver role



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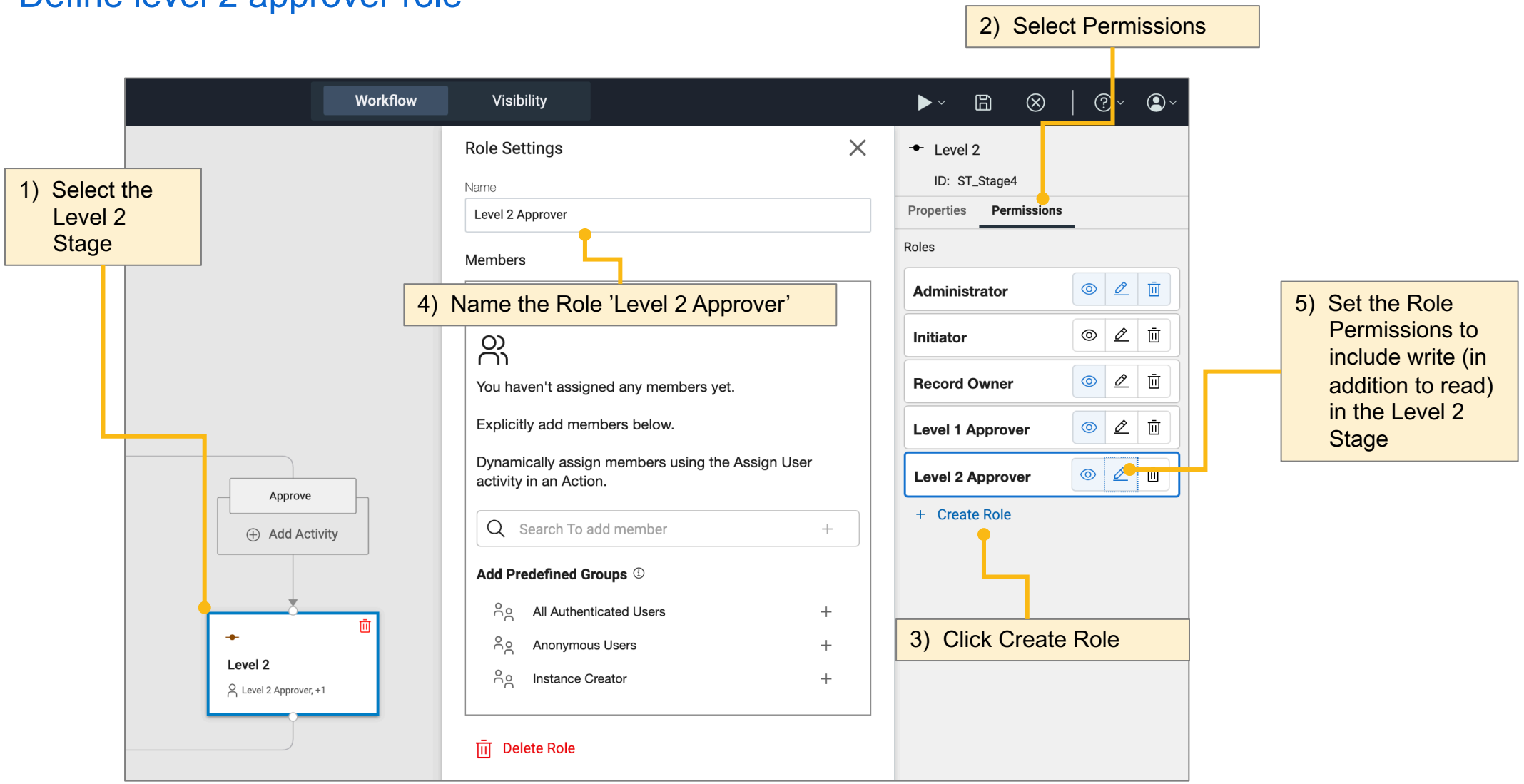
5. Creating the workflow

▶ Define level 2 approver role



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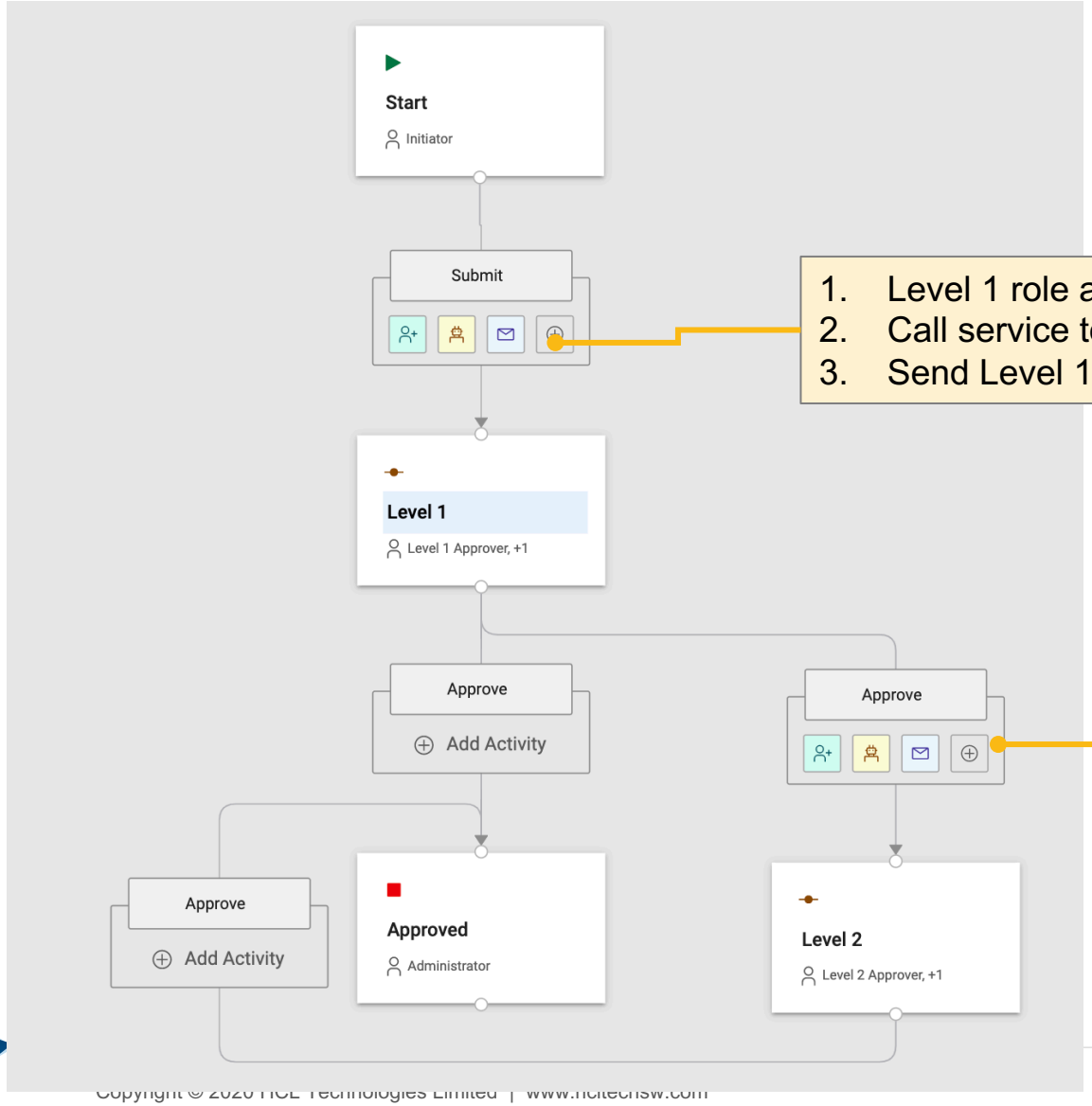
5. Creating the workflow

▶ Overview of workflow activities to be setup



1. Level 1 role assignment
2. Call service to lookup Level 1 email and Level 2 name
3. Send Level 1 email notification

1. Level 2 role assignment
2. Call service to lookup Level 2 email
3. Send Level 2 email notification

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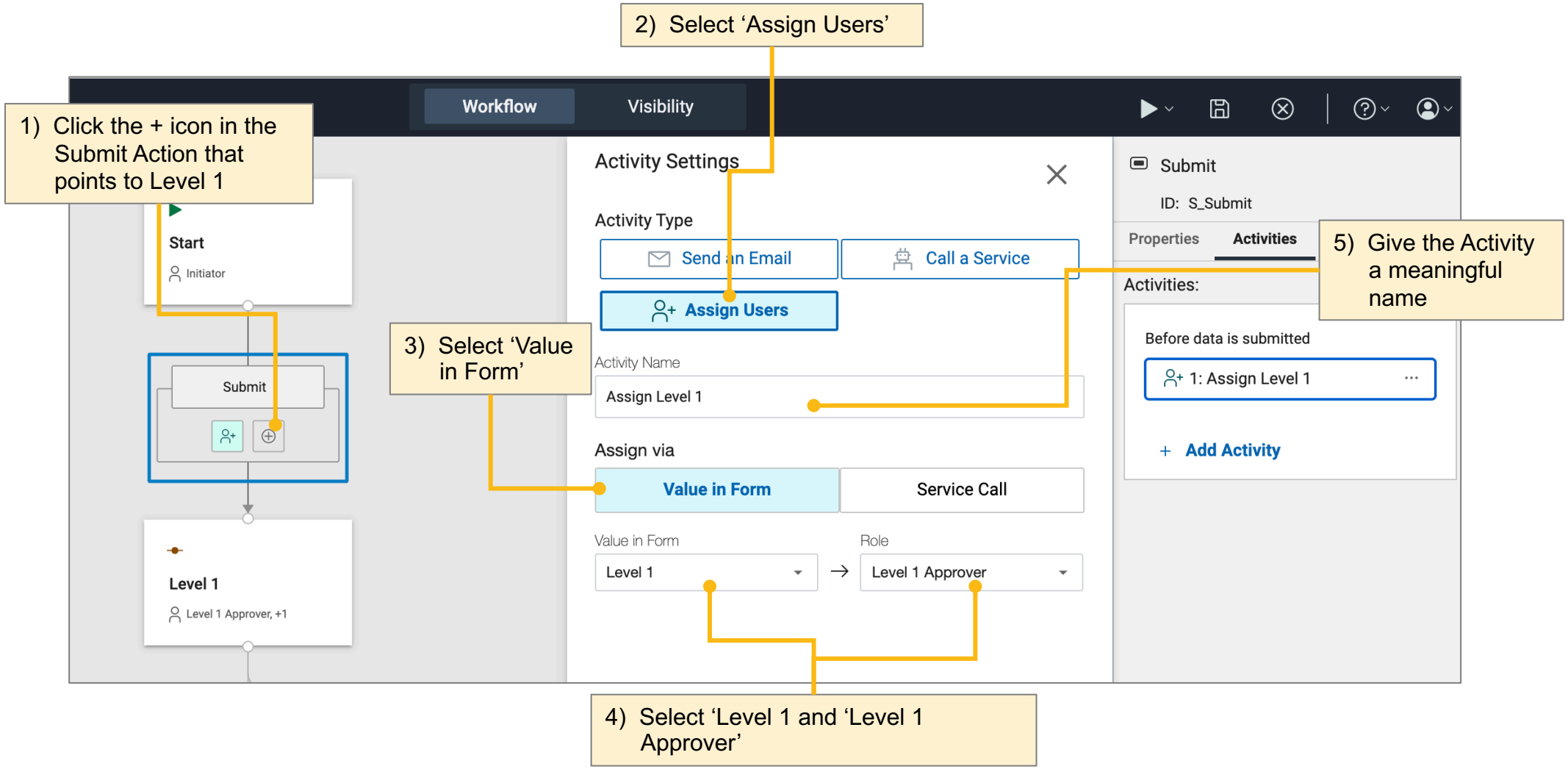
5. Creating the workflow

▶ Level 1 role assignment



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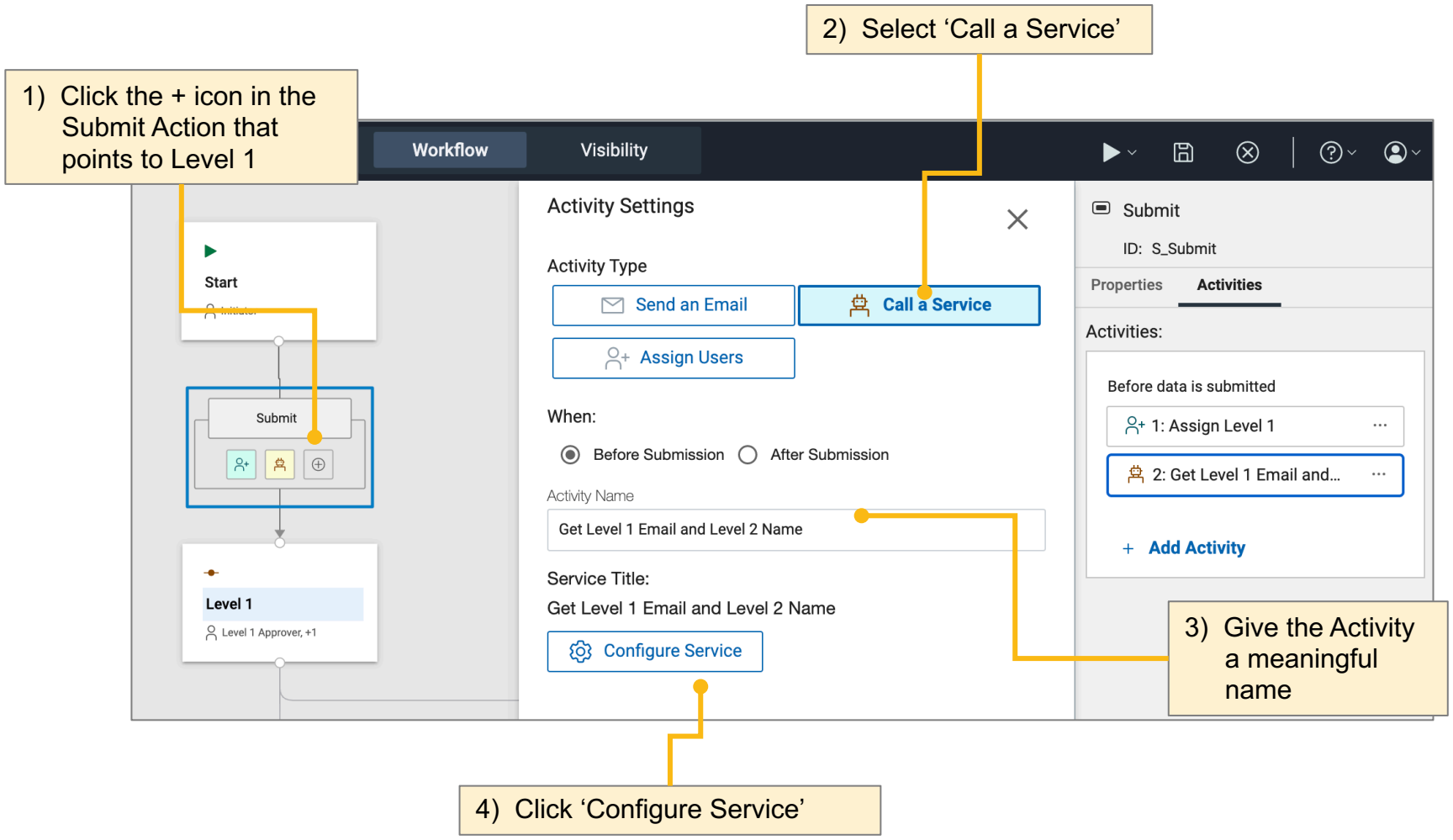
5. Creating the workflow

- Call service to lookup level 1 email and level 2 name



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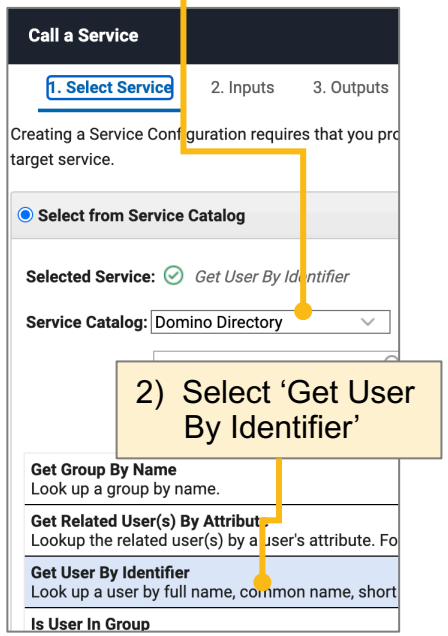
5. Creating the workflow

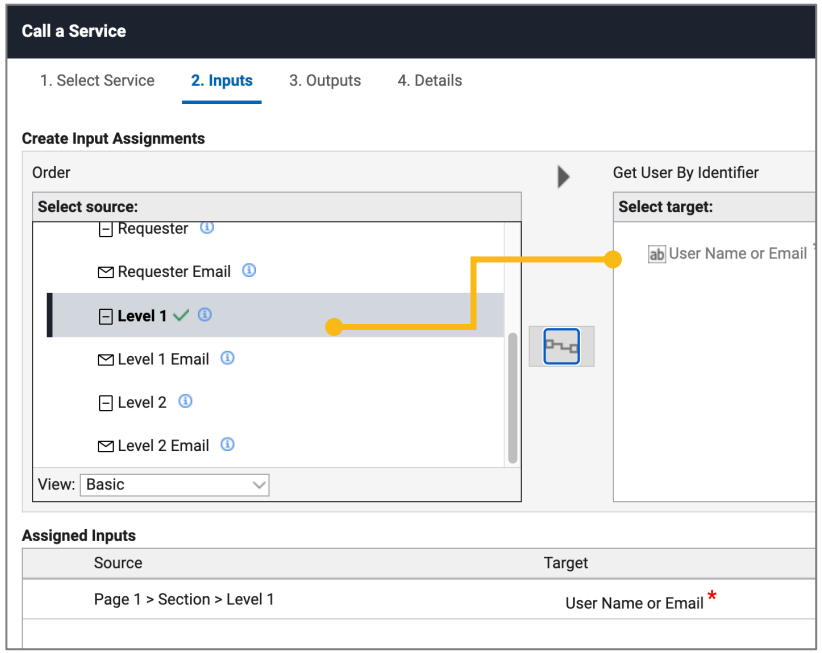
► Call service to lookup level 1 email and level 2 name

1) Select 'Domino Directory'

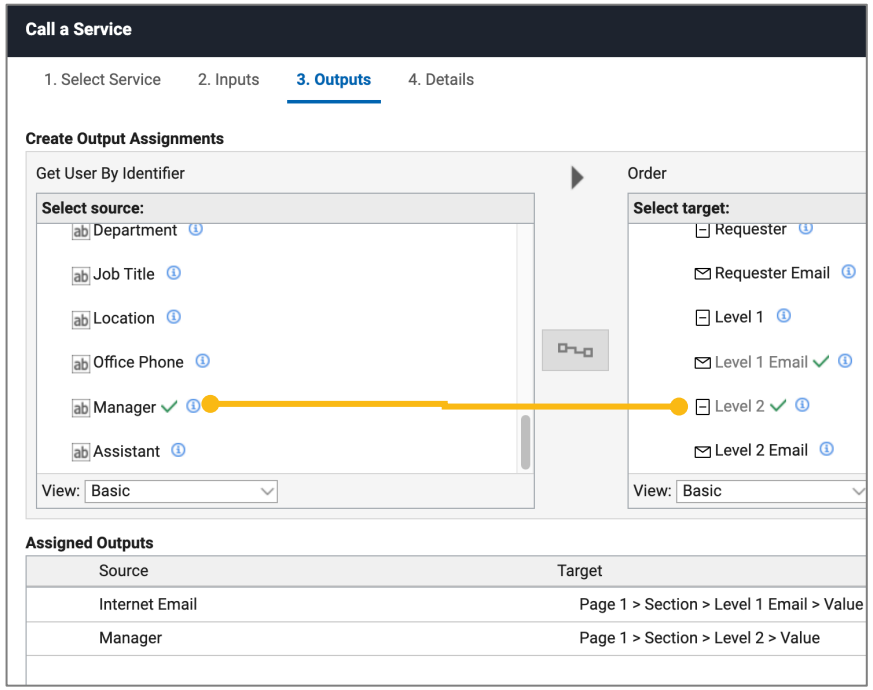


2) Select 'Get User By Identifier'

3) Input: map Level 1



3) Output: map Internet Email to Level 1 Email and Manager to Level 2



4) Give the service a descriptive name on the Details tab

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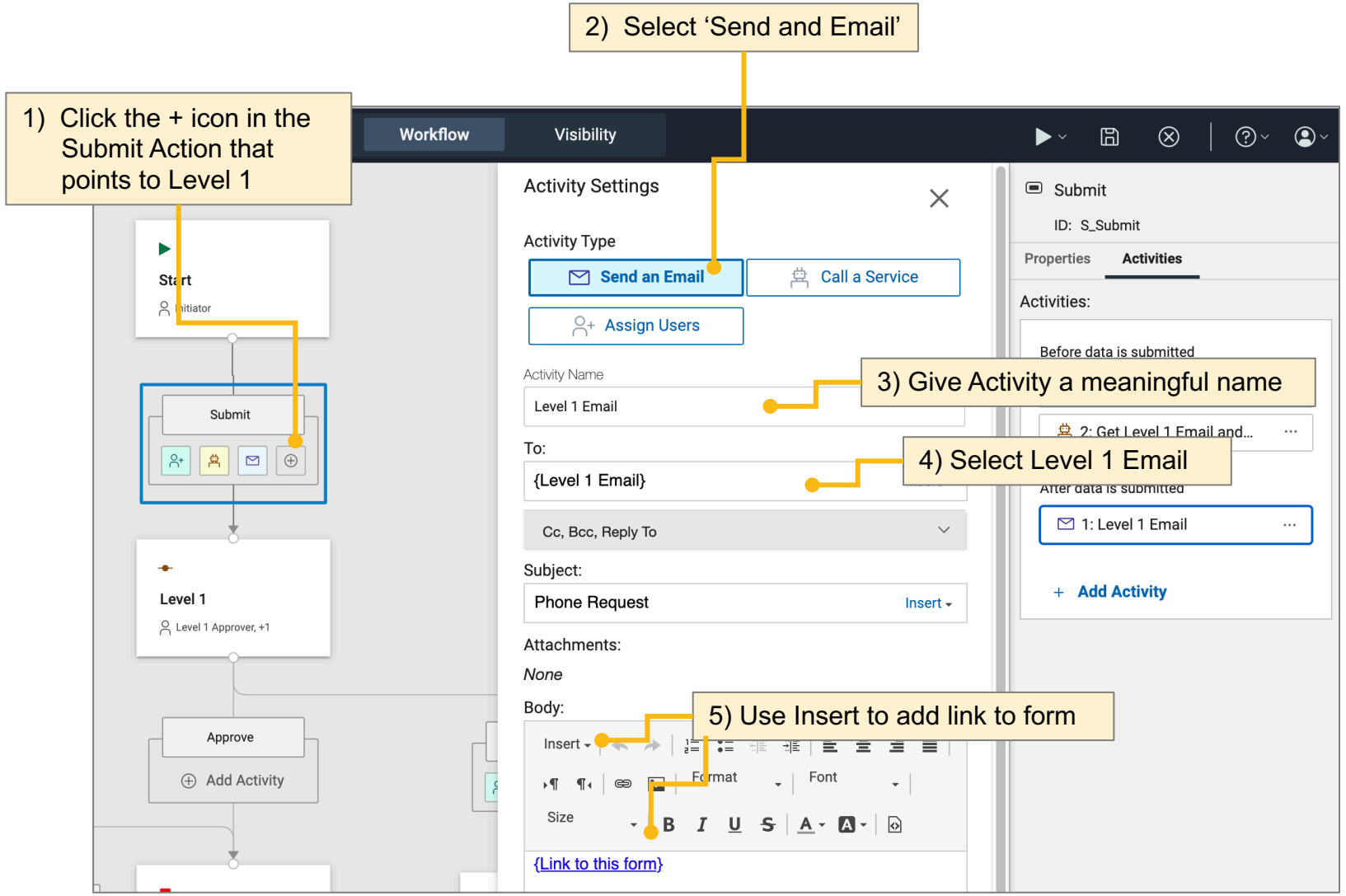
6. Dynamic role assignments and email notifications

▶ Level 1 email notification



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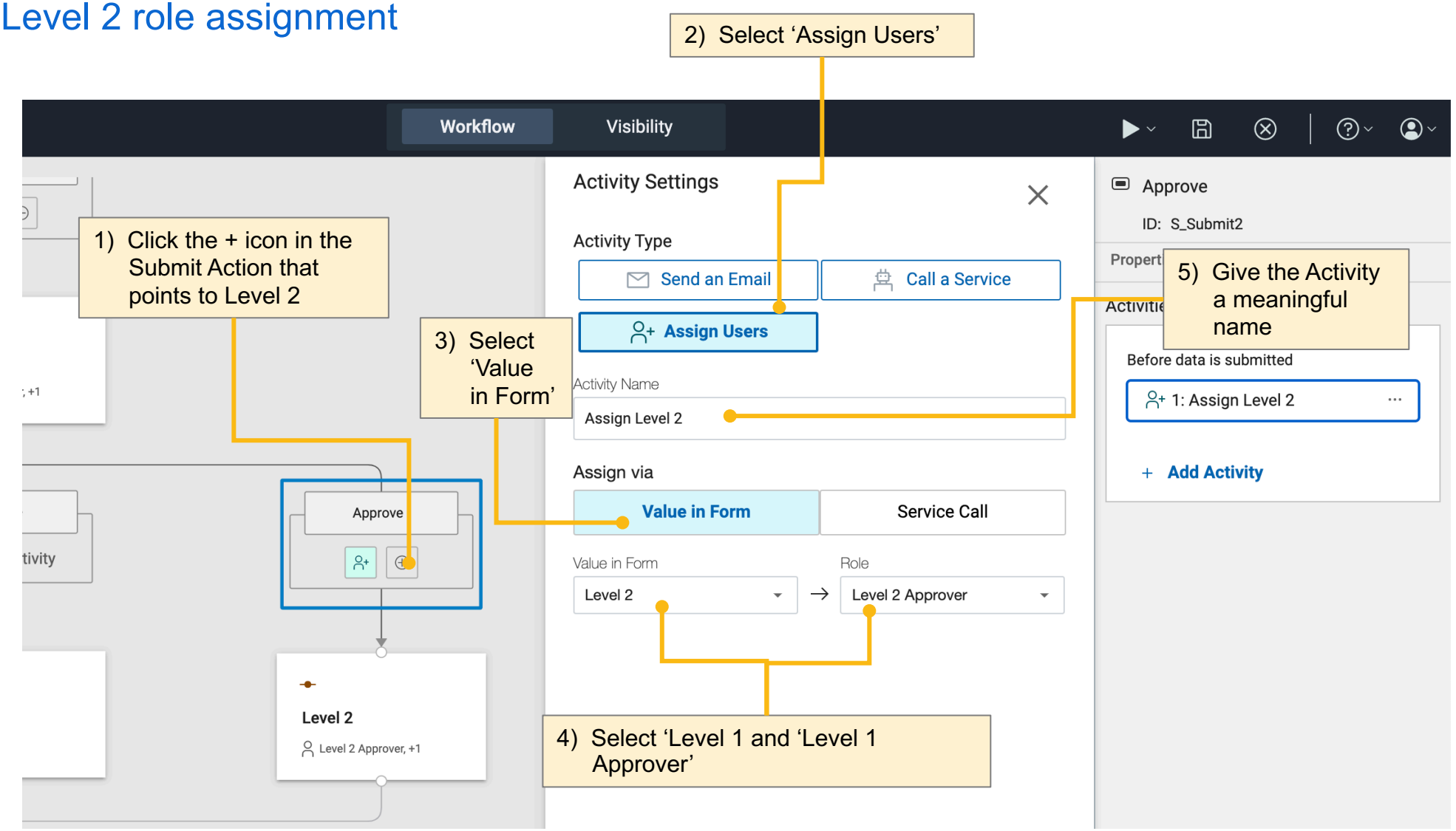
5. Creating the workflow

▶ Level 2 role assignment



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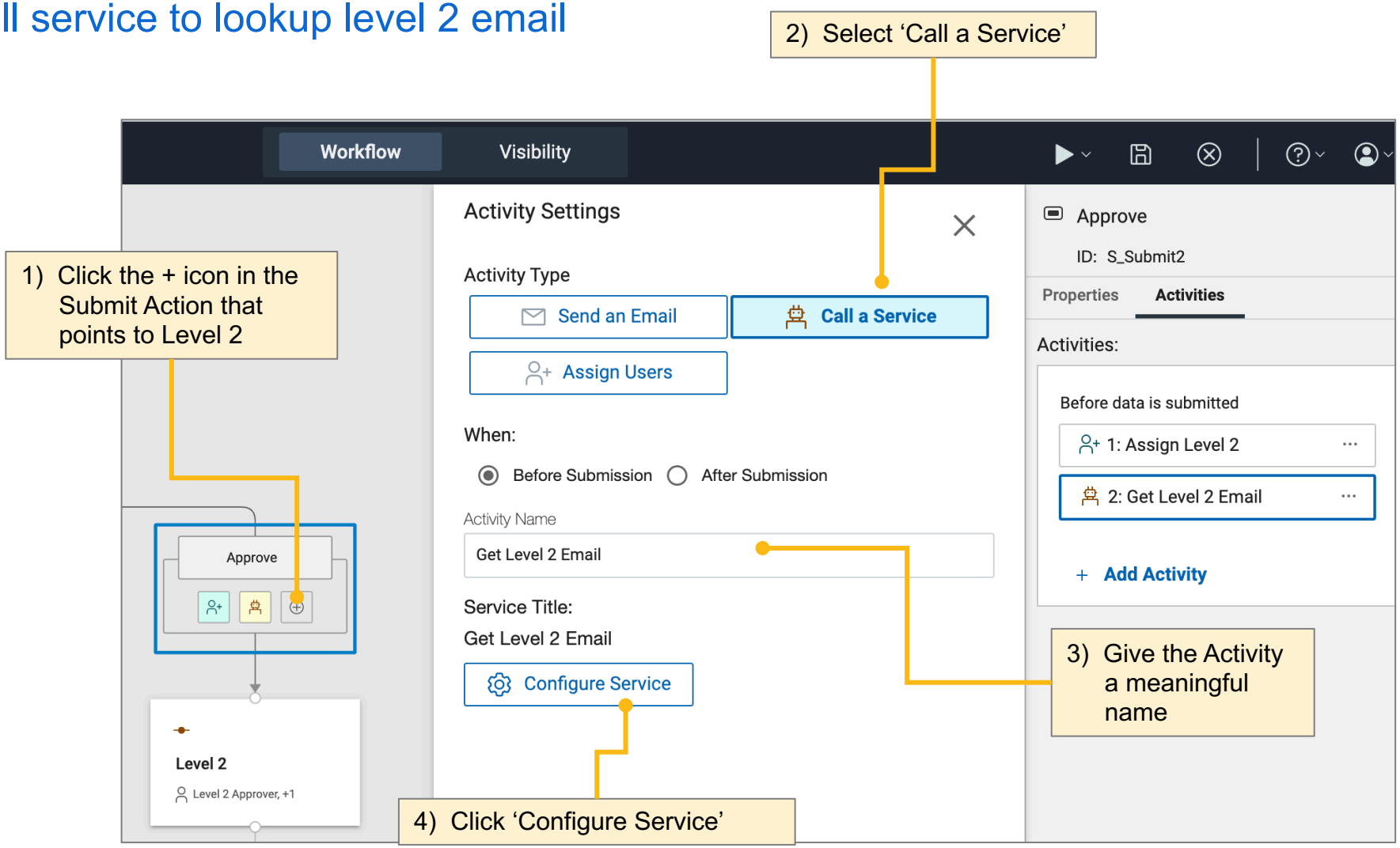
5. Creating the workflow

- Call service to lookup level 2 email



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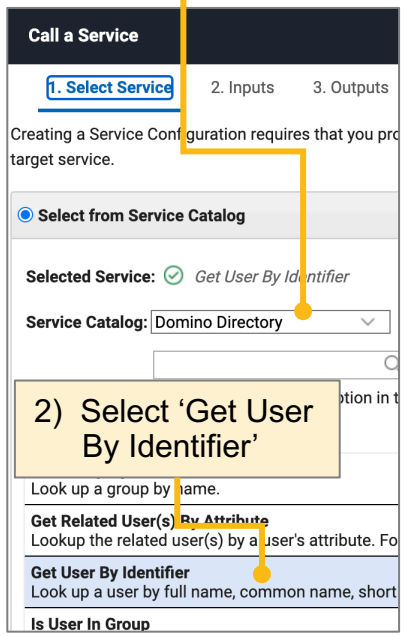
5. Creating the workflow

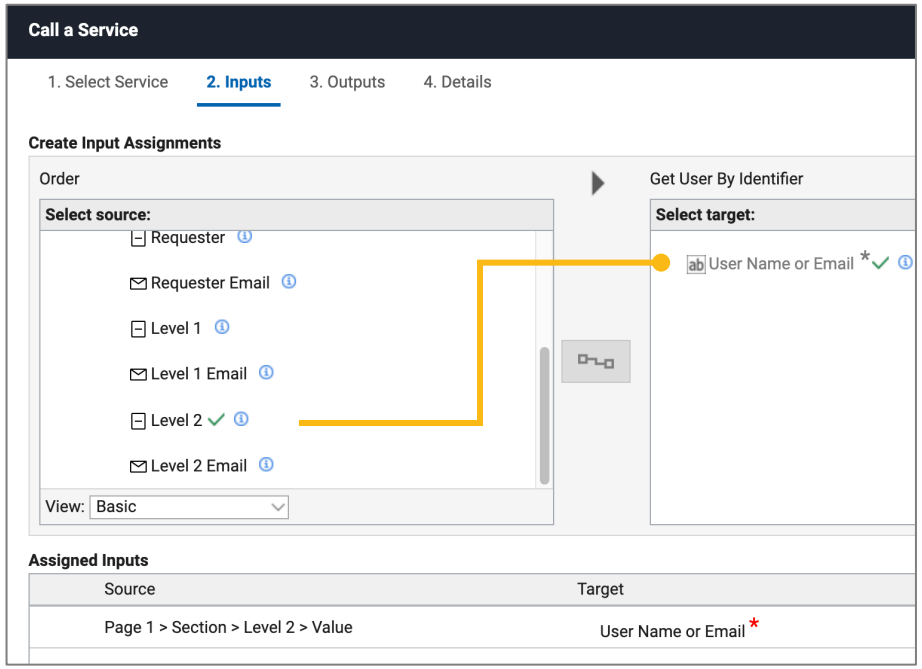
► Call service to lookup level 2 email

1) Select 'Domino Directory'

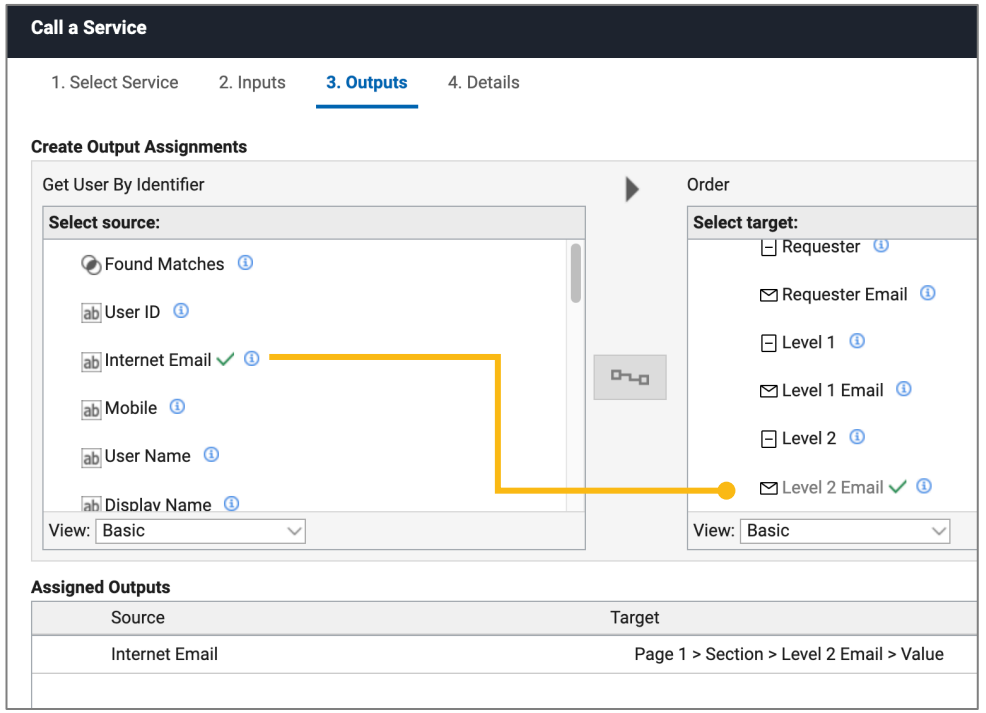


2) Select 'Get User By Identifier'

3) Input: map Level 2



3) Output: map Internet Email to Level 2 Email



4) Give the service a descriptive name on the Details tab

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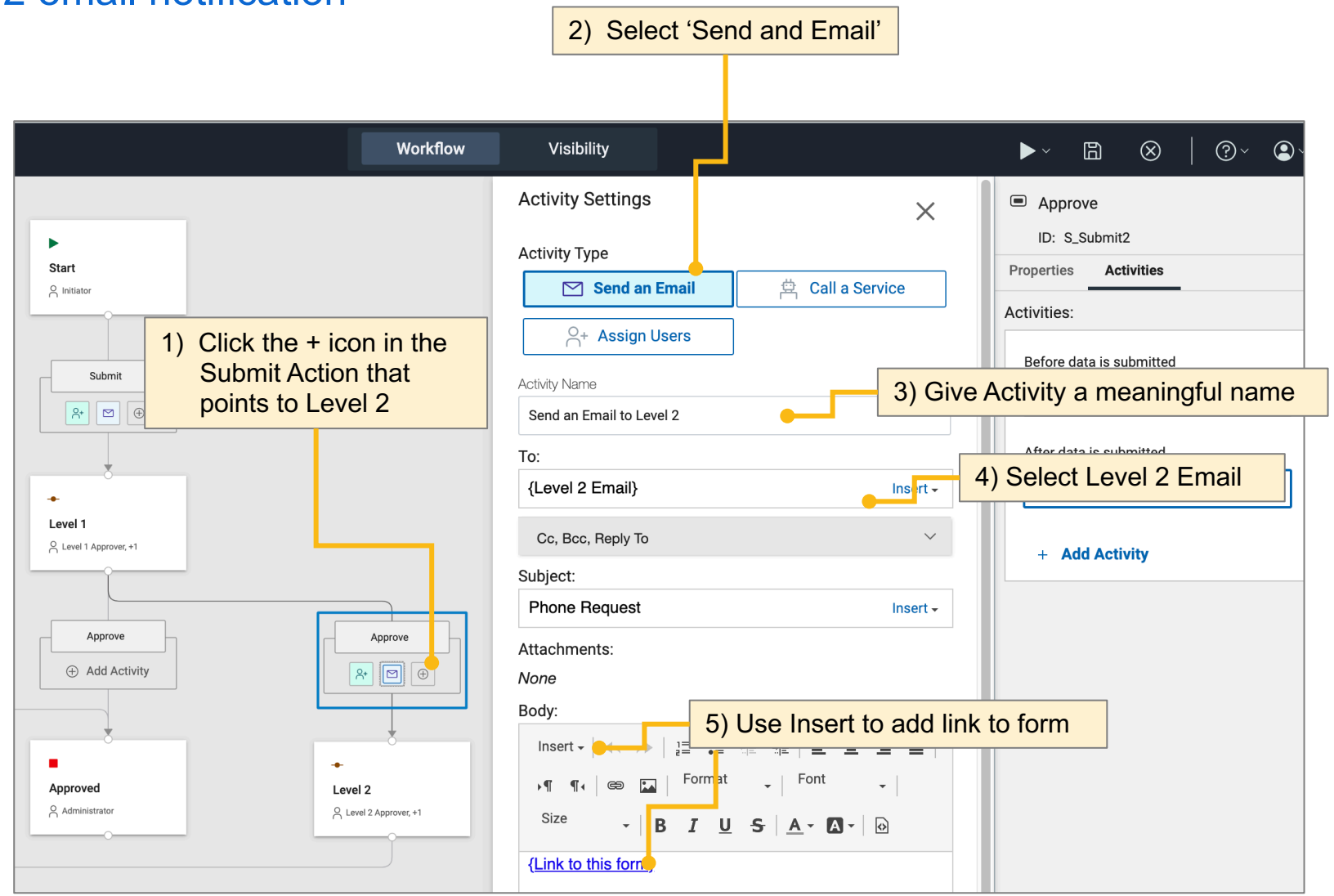
6. Dynamic role assignments and email notifications

- Level 2 email notification



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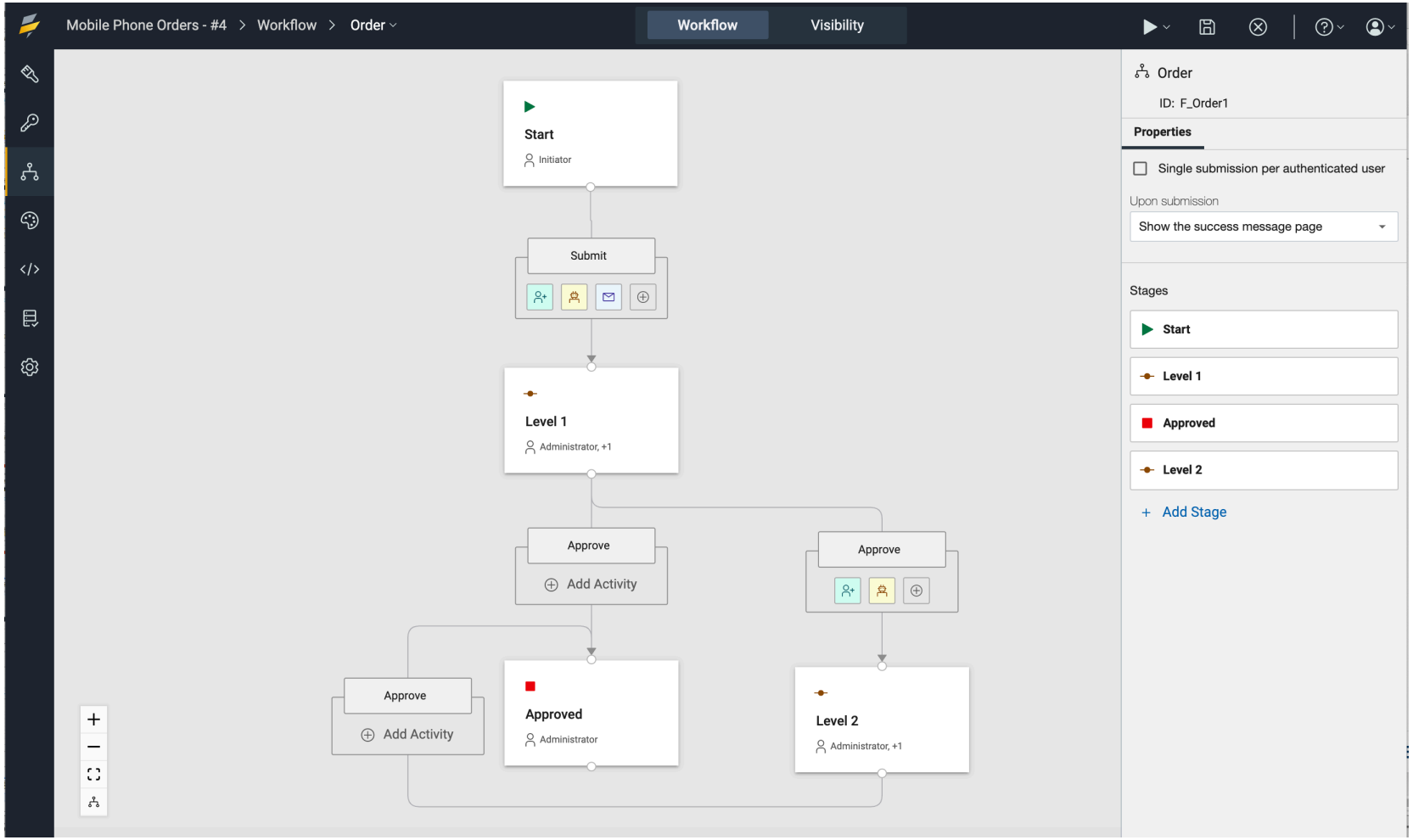
6. Dynamic role assignments and email notifications

- How things should look when the workflow is complete

MobilePhoneOrders4.volt



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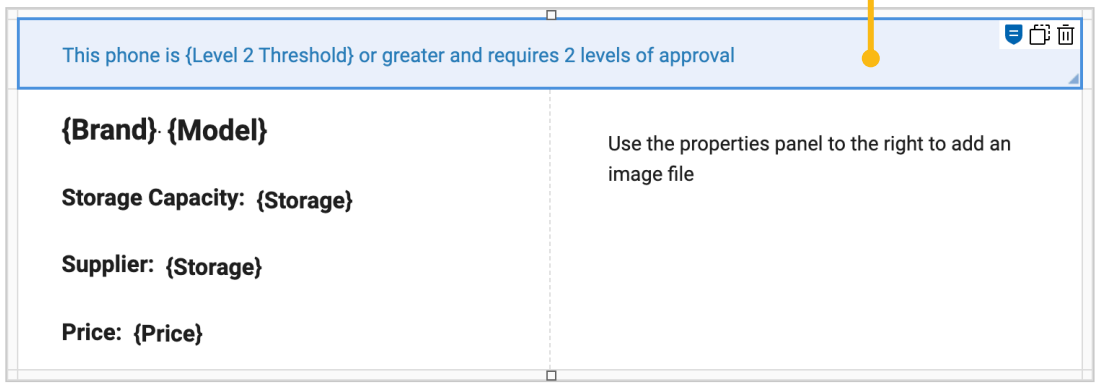
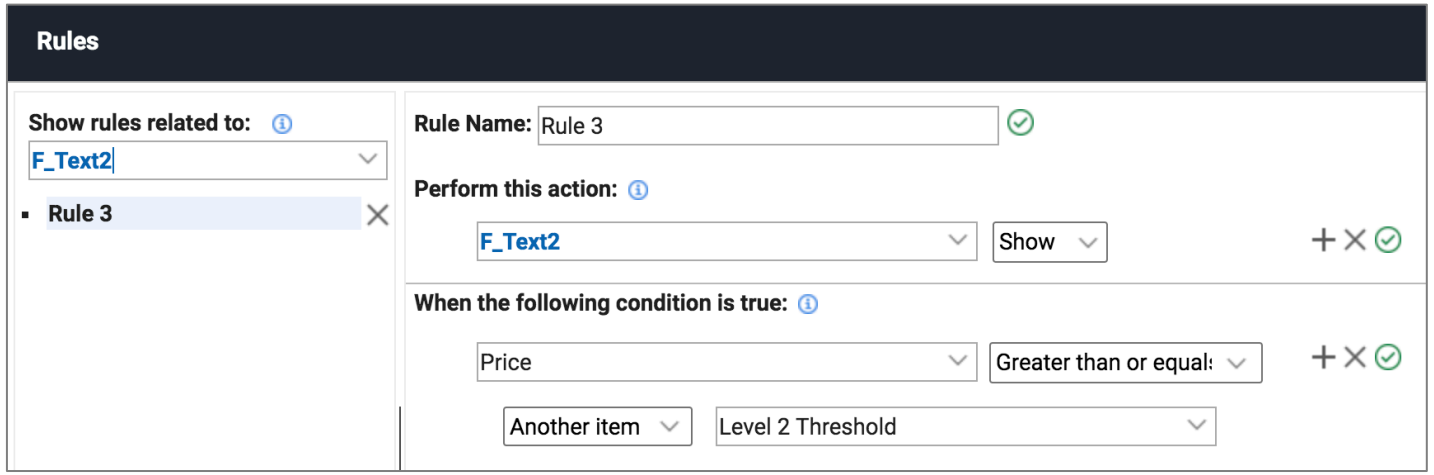
7. Rules for a dynamic user experience

▶ Conditionally show the '2 levels required' indicator

1) Add text item to top of section to inform when 2 levels are required



2) Set a rule on the text item so it shows when price is equal to or greater than the level 2 threshold



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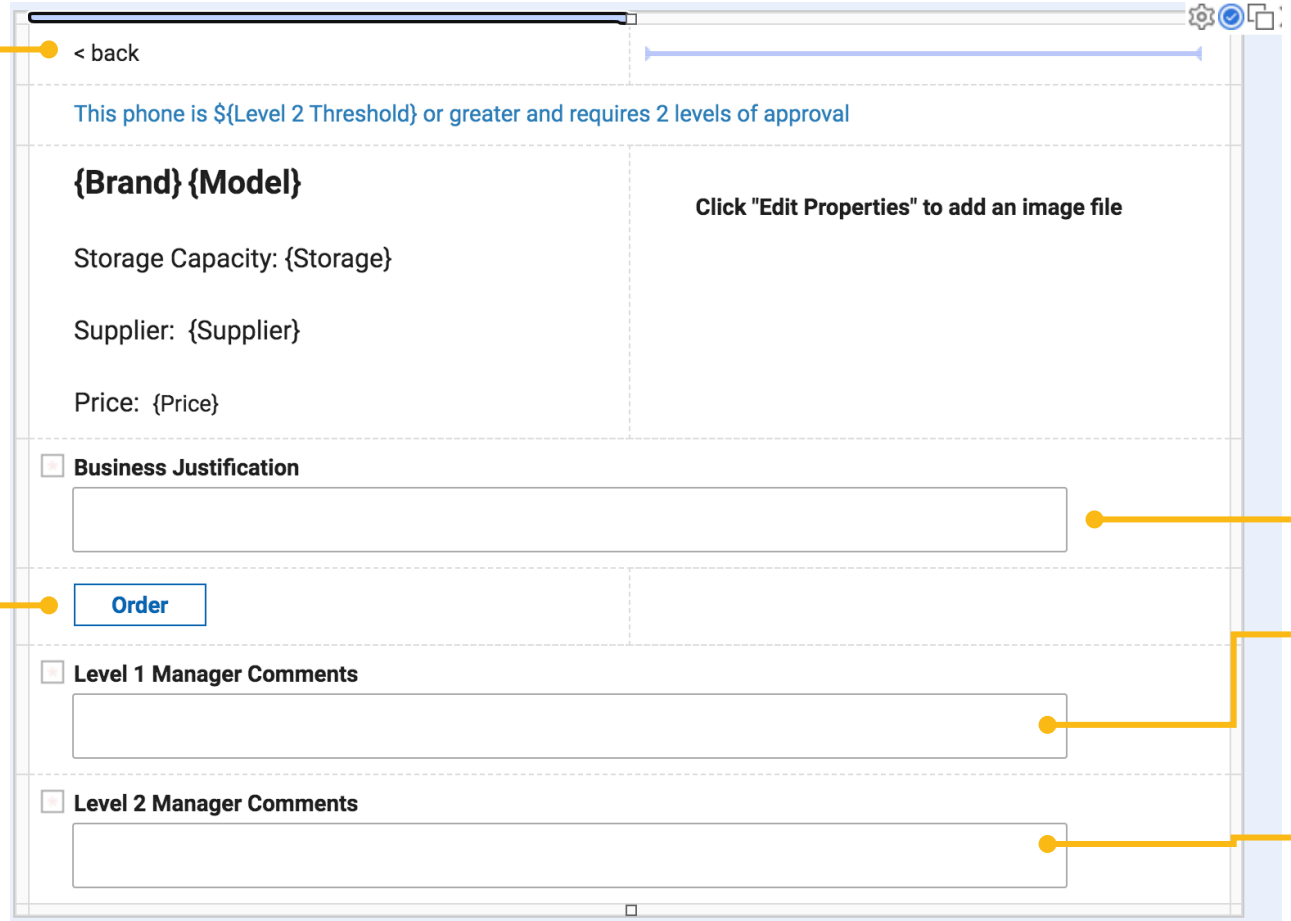
7. Rules for a dynamic user experience

► Add additional fields and navigation

5) Add Text item. Set the ID to 'F_BackText'

6) Add order button.



1) Add a Multi-Line field 'Business Justification'

2) Add Multi-Line 'Level 1 Manager Comments'

3) Add Multi-Line 'Level 2 Manager Comments'

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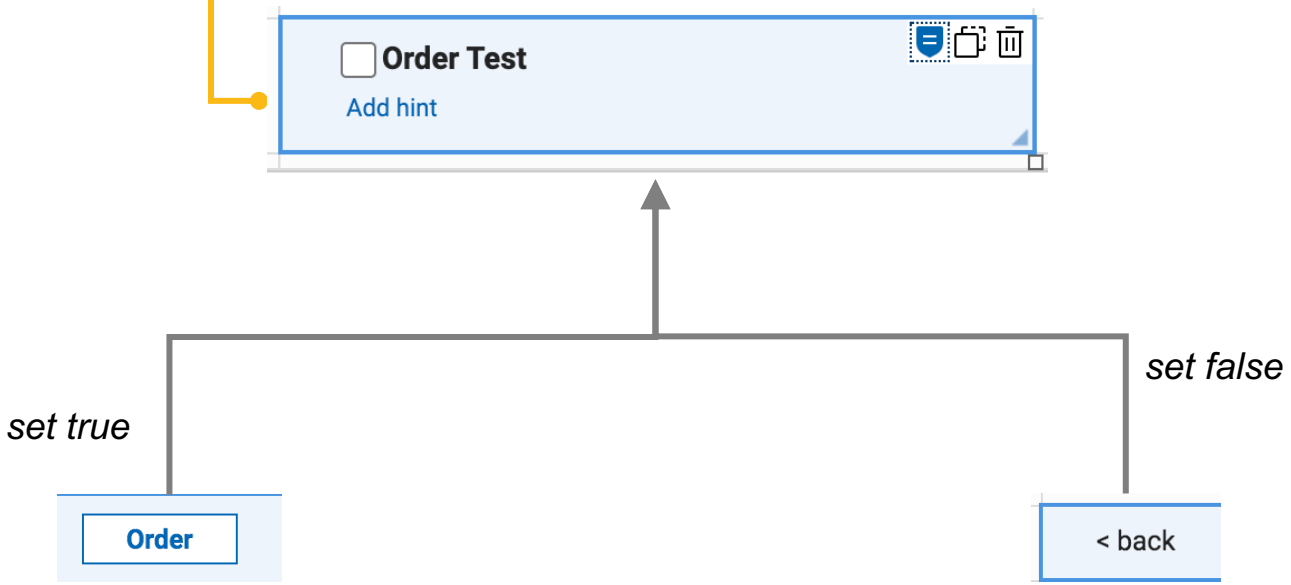
7. Rules for a dynamic user experience

- Determine if order button or back text has been clicked

1) Add Checkbox in the hidden section to record if order button has been clicked. Set the the ID to F_OrderTest




```
BO.F_OrderTest.setValue(true);
```

2) Add JavaScript to the button onClick to set checkbox 'true'

```
BO.F_OrderTest.setValue(false);
```

3) Add JavaScript to the '< back' text item onClick to set checkbox 'false'

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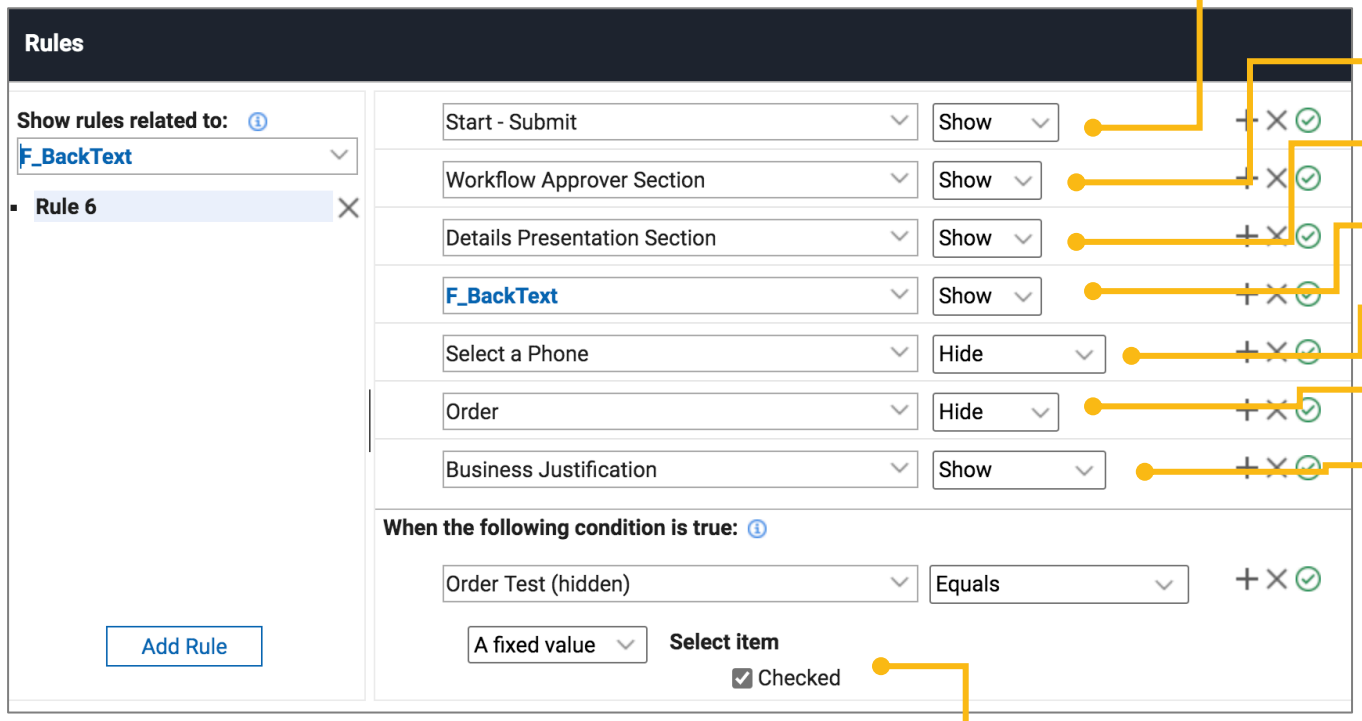
7. Rules for a dynamic user experience

- Making the form dynamic based on the checkbox value



Show submit action button

Show workflow approver section

Show detail presentation section

Show '<back' text item

Hide phone selection table

Hide order button

Show business justification

When Order Test is checked (true)

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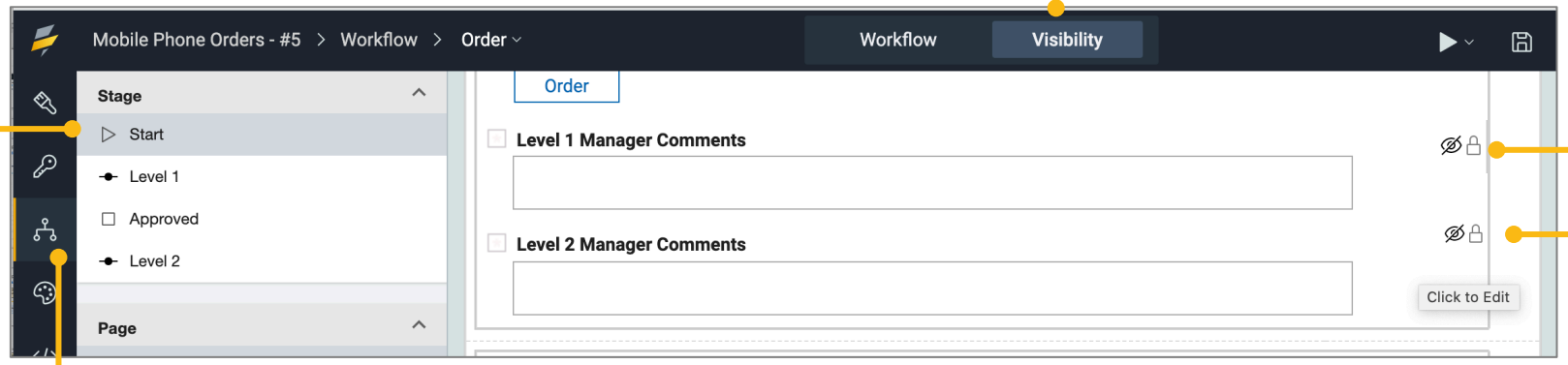
7. Rules for a dynamic user experience

- Hide the approver comments in start

1) Go to the Visibility tab in the Workflow view and hide Level 1 Comments and Level 2 Comments in the Start Stage

2) Select the Start Stage



2) Hover and click the eye icon to hide

Workflow view

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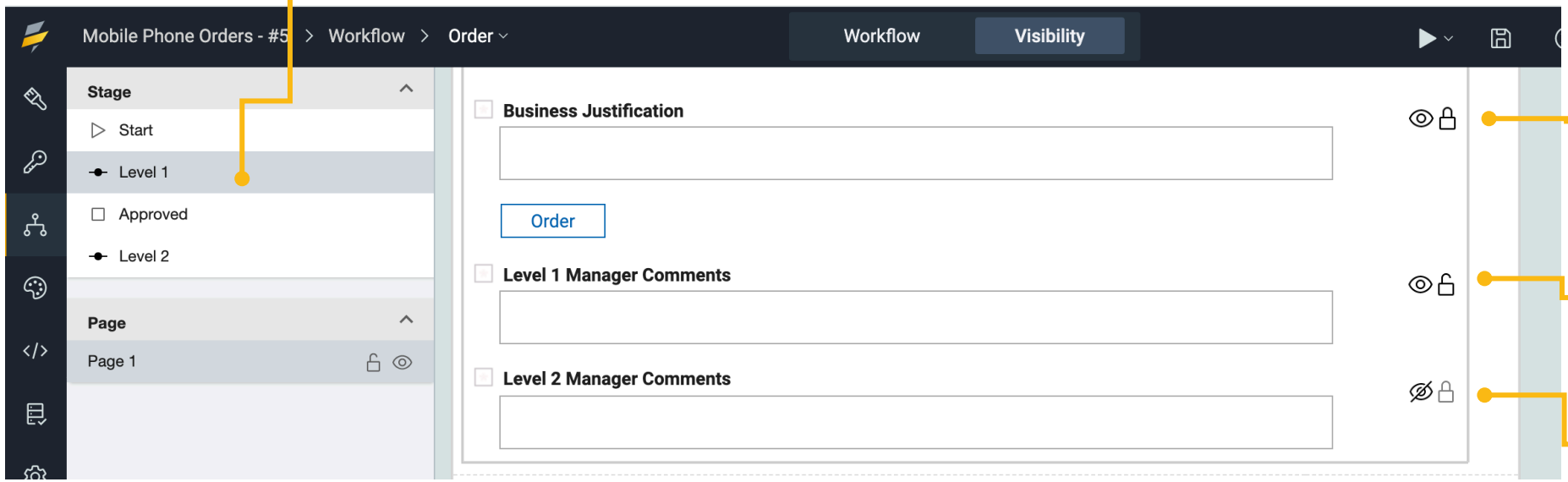
7. Rules for a dynamic user experience

- Set visibility and read only rule in level 1 and level 2



1) Select the Level 1 Stage

2) Hover and click the lock icon to make read only

3) Hover and click the eye icon to show (so there is no line through icon)

4) Hover and click the eye icon to hide

5) Select Level 2 Stage and set Business Justification to read only, Level 1 Comments to read only, and Level 2 Comments to show

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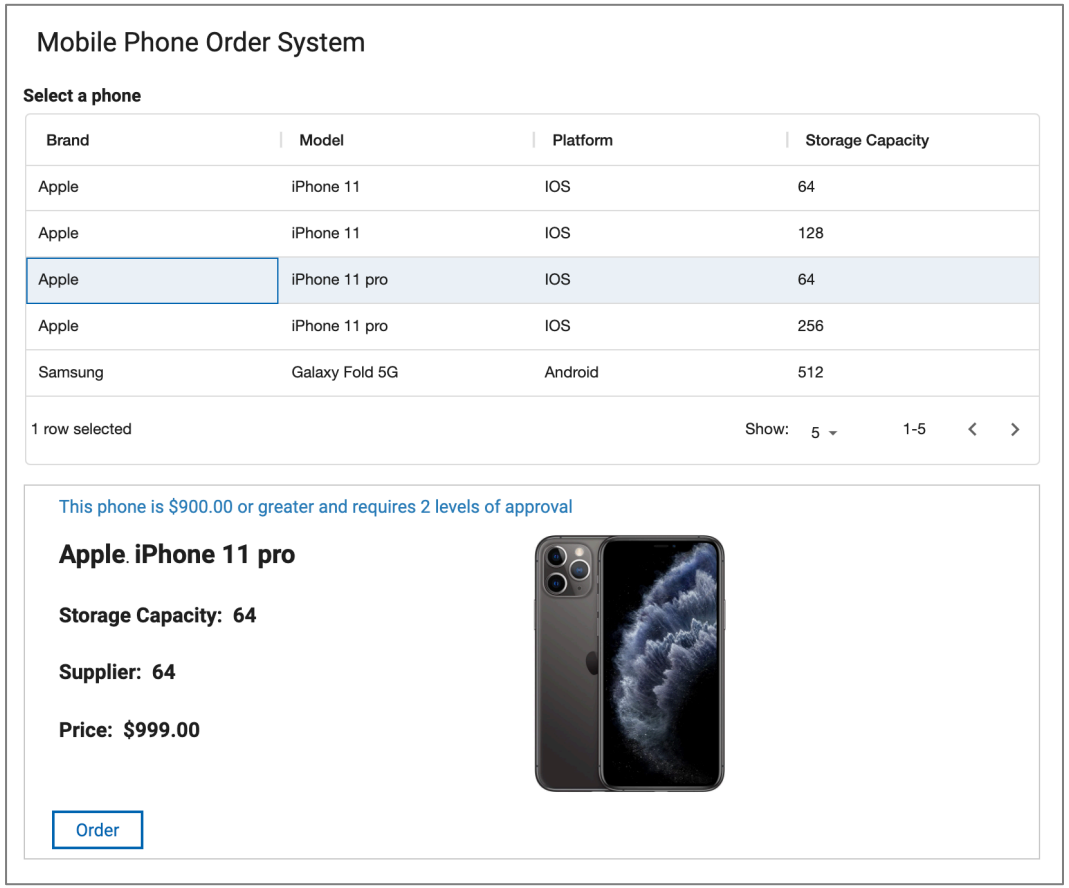
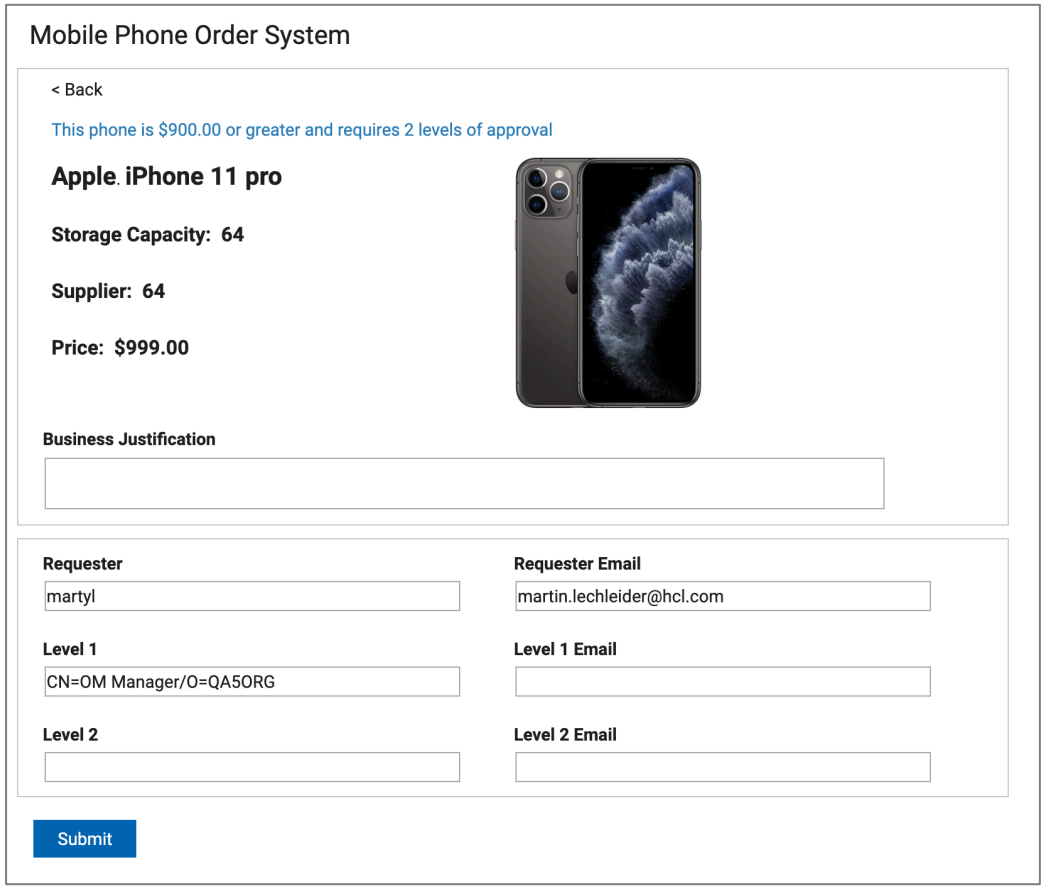
7. Rules for a dynamic user experience

- How things should look with rules and navigation complete

MobilePhoneOrders5.volt





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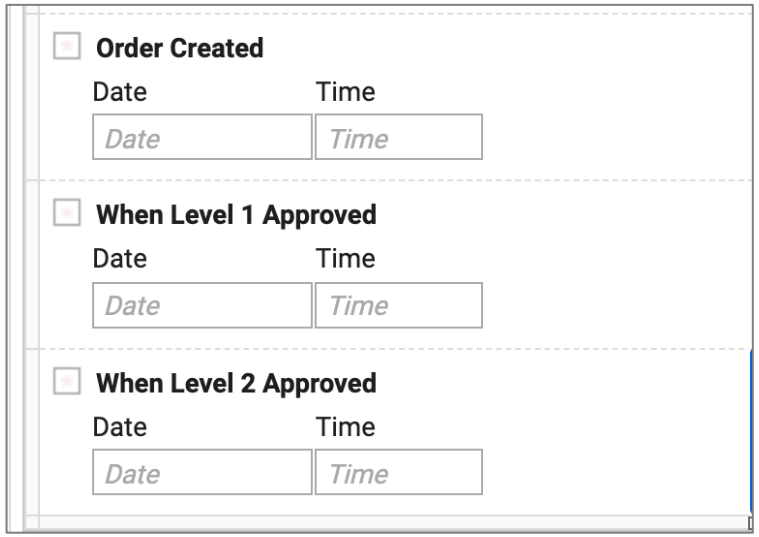
8. Add a workflow approval log

► Adding fields and text to show approval status

1) Add the following fields to hidden section

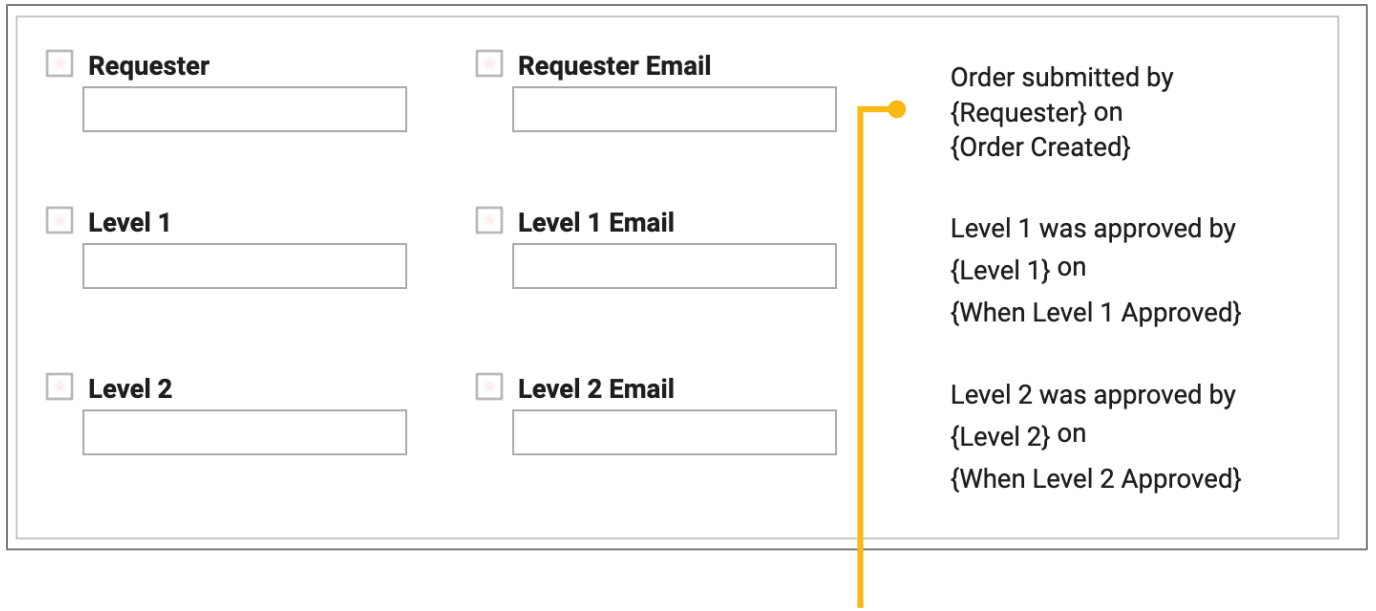


1) Set the IDs to the following:

```
F_OrderCreated
F_L1ApproverTime
F_L2ApproverTime
```

The values of these will be set via JavaScript on the Form onValidButtonPressed event

3) Add text items to the right of the approvers section and enter the text indicated below. Use echo text to get the requester, approvers and times



Set the first text item so that it does not show in Start stage

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8. Add a workflow approval log

▶ Adding function to record approval changes

Add the following JavaScript to Form validButtonPressed event. Check the IDs on your workflow actions to be sure they match

(be mindful when copying and pasting the code: often Microsoft will adjust the quotes to be invalid in JavaScript)

```
//record order creation time
if(pActionId === 'S_Submit')
{
BO.F_OrderCreated.setValue(new Date());
}

//record L1 approval time
if(pActionId === 'S_Submit1' || pActionId ===
'S_Submit2')
{
BO.F_L1ApproverTime.setValue(new Date())
}

//record L2 approval time
if(pActionId === 'S_Submit3')
{
BO.F_L2ApproverTime.setValue(new Date());
}
```

Records date & time when order submitted

Records date & time when Level 1 approved

Records date & time when Level 2 approved

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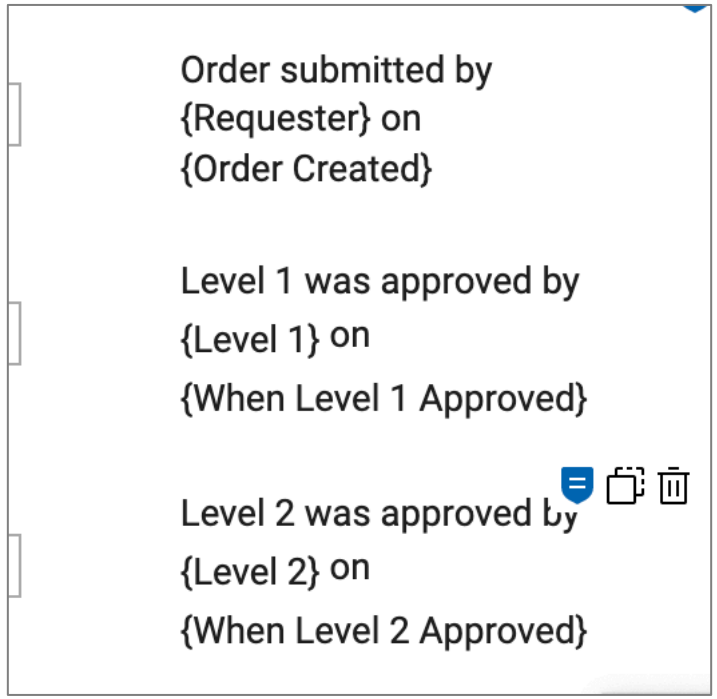
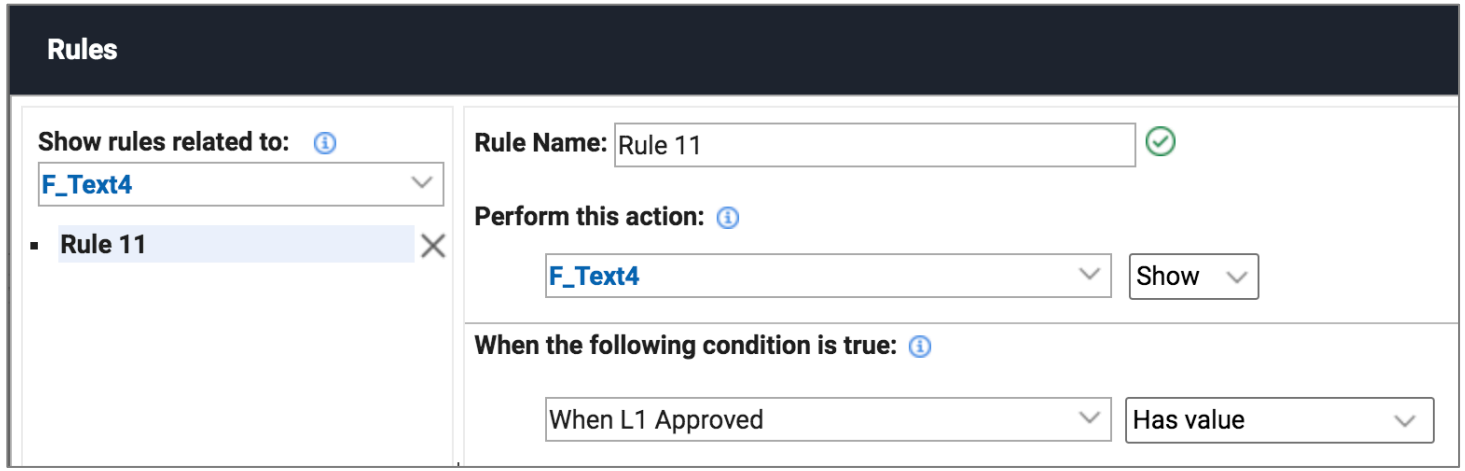
8. Add a workflow approval log

- Adding rules to display approval status



Set rules on the Level 1 and Level 2 text item so that are shown when the timestamp fields have a value



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Finished app – order submission

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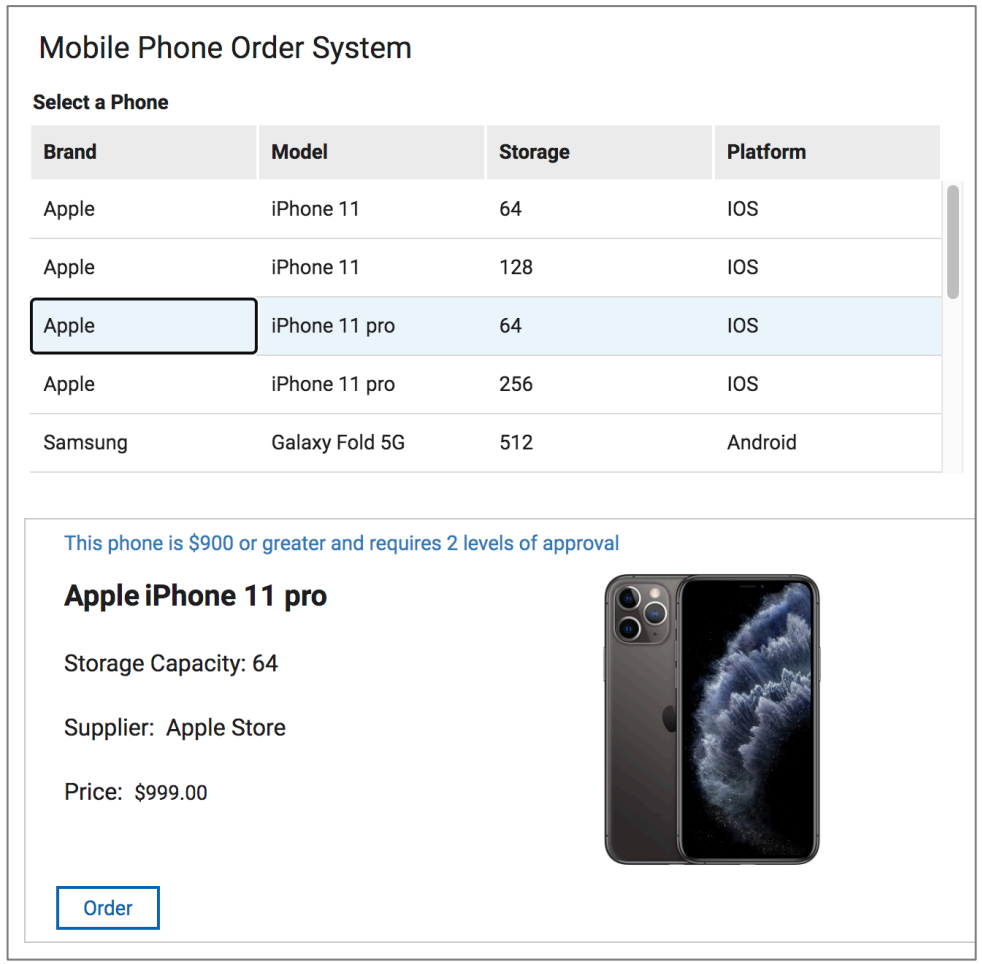

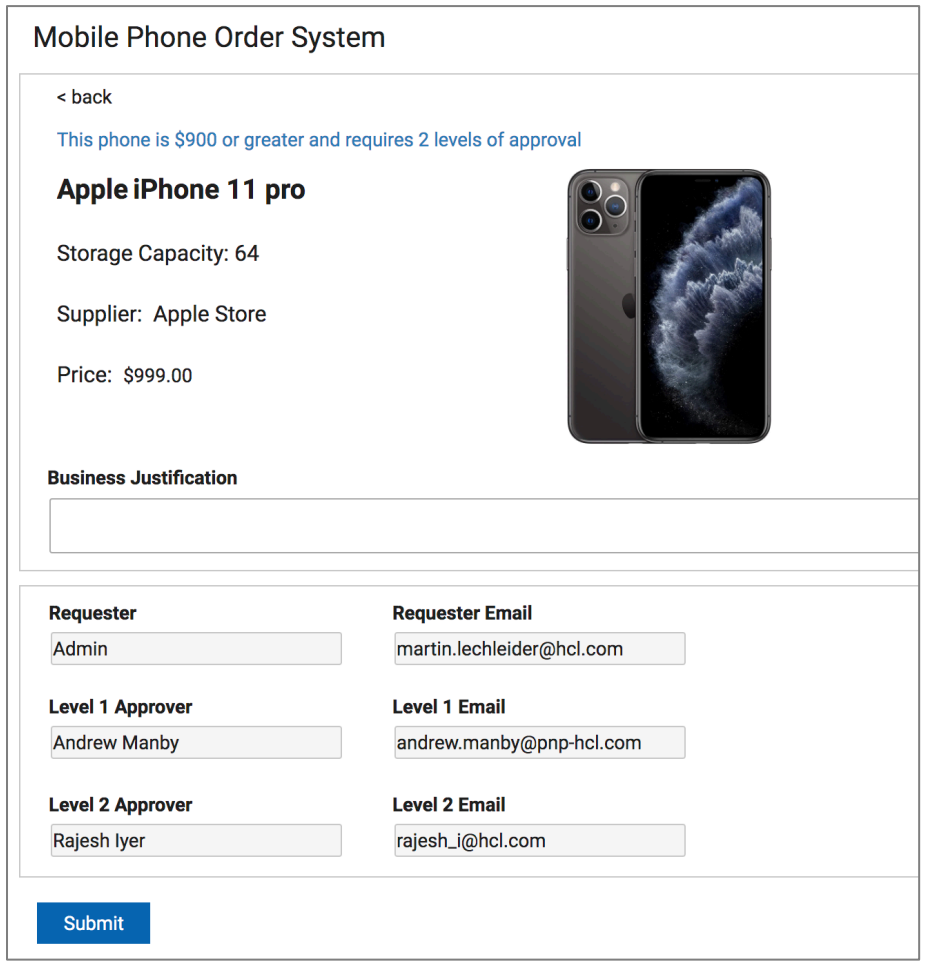

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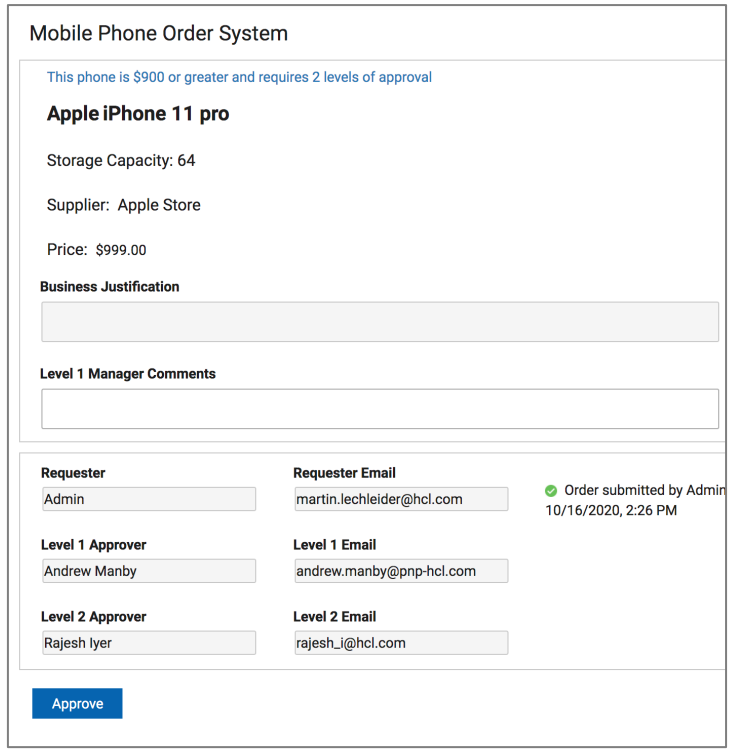
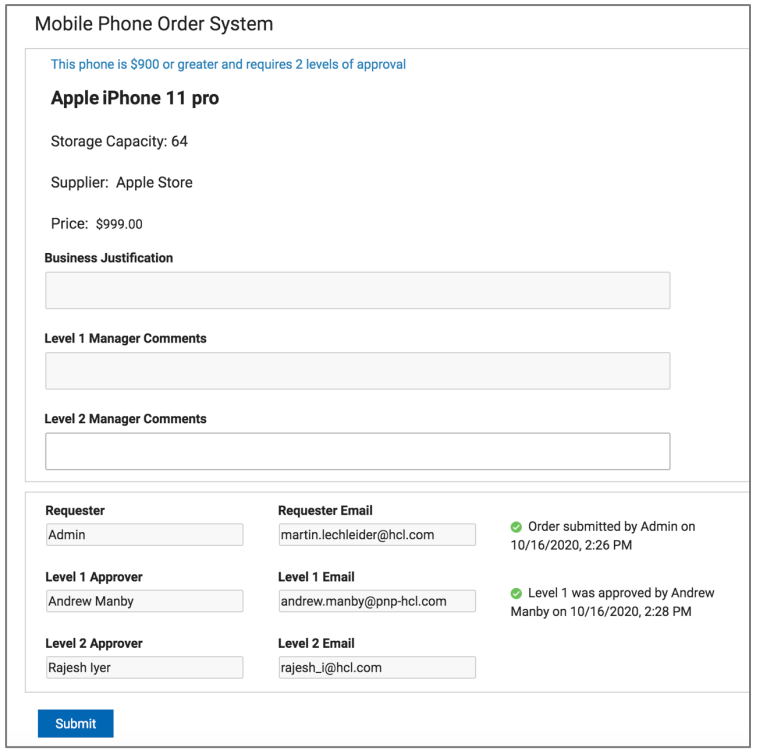
Finished app – approval steps

MobilePhoneOrders6.volt

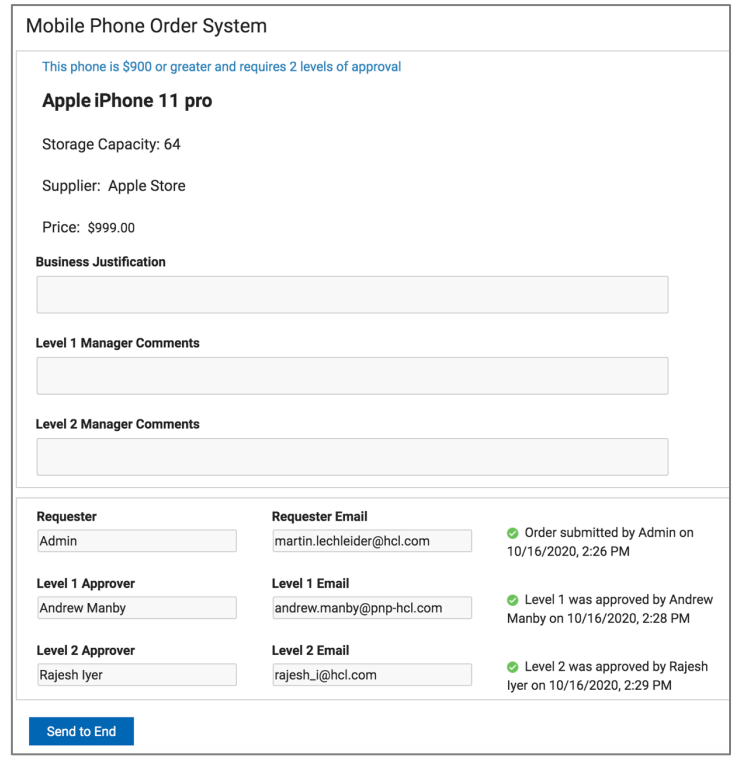
Level 1 approval



Level 2 approval



Approval Complete



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