



Lab 1 – Sort, Filter, and Classify Data in a Dashboard

Overview

Dashboards are used for tracking summarized data that are relevant to a business, department, or specific process. Most companies use it to help them with their decision-making. In this lab, we'll guide you how to apply three techniques that are normally used in dashboards – sorting, filtering, and classifying data.

We'll be using the data from our Expense Reports list and display it in a dashboard.

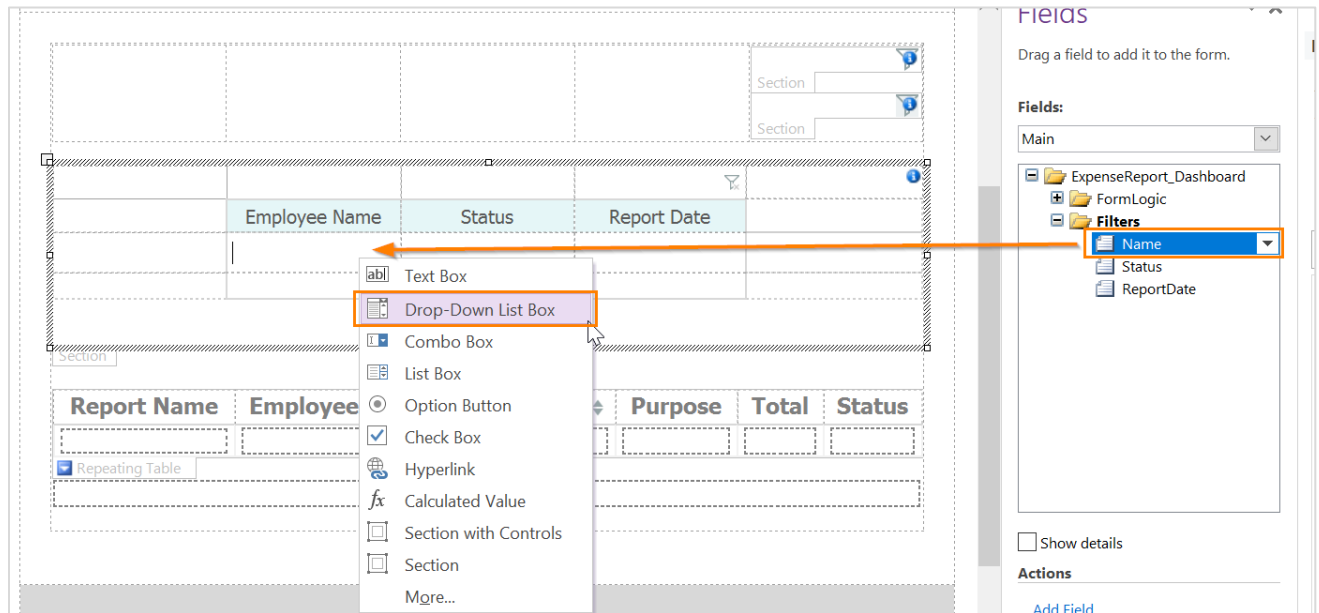
Before you start

Use the Start form provided in this lab.

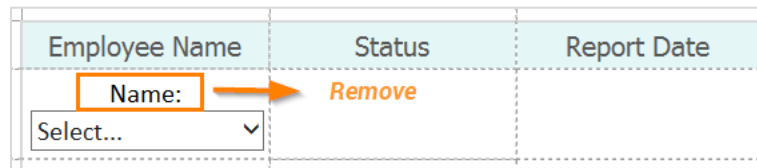
Add the Filters

In the Expense Report Dashboard Form, we've prepared three filters in the form canvas – Employee Name, Status, and Report Date.

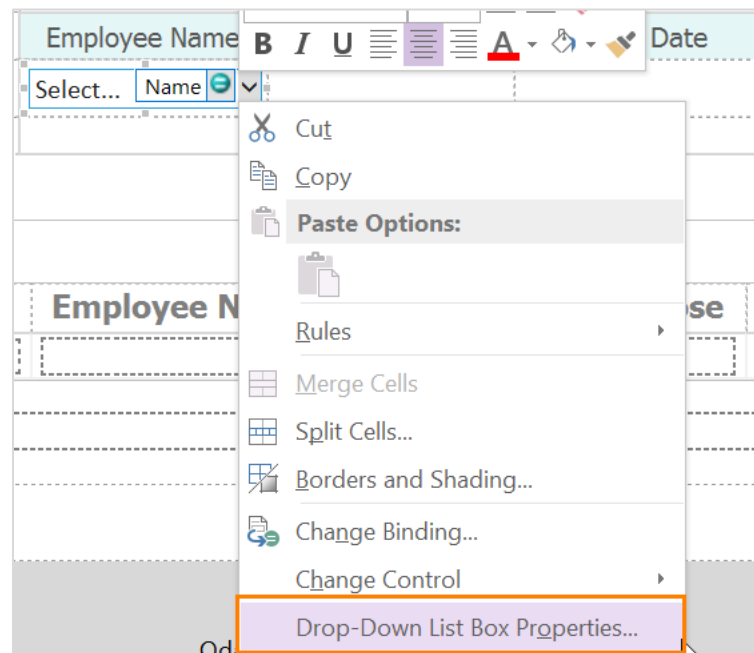
1. Right-click and drag the **Name** field (XPath: `/my:ExpenseReport_Dashboard/my:Filters/my:Name`) from the main data source to the cell under the **Employee Name** text in the canvas. Then choose **Drop-Down List box** to make the control as a dropdown



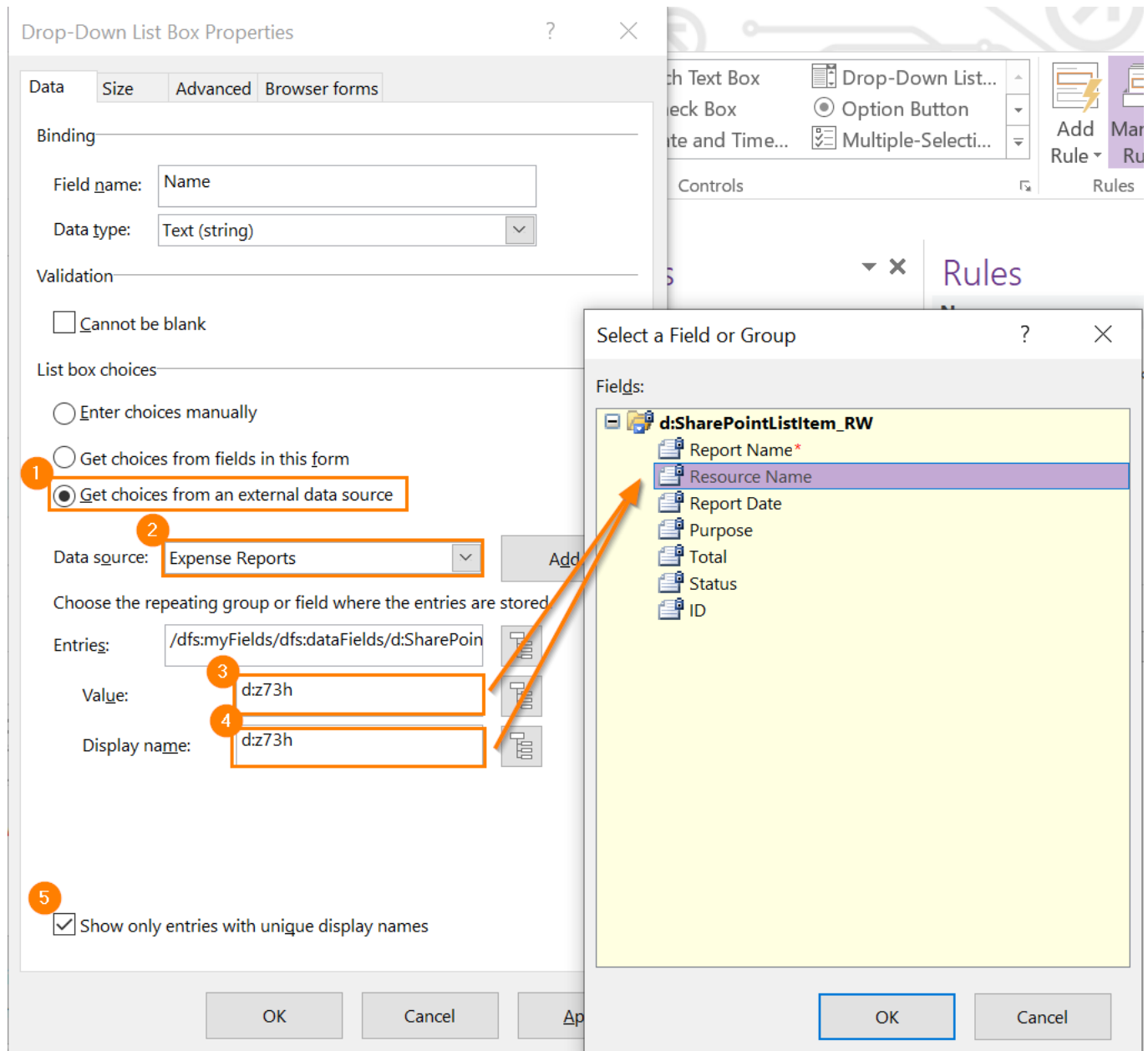
2. Remove the title added in the cell and retain the dropdown



3. Right-click the dropdown and select its properties



4. In the properties window:
 - a. select **Get choices form an external resource**
 - b. select **Expense Reports** as the **Data source**
 - c. choose **Resource Name** as the **Value** and **Display name**
 - d. make sure that the **Show only entries with unique display names** checkbox is ticked
 - e. click **Apply** then **OK**



5. Do the steps 1-4 for the **Status** and **Report Date**. But for the Report Date, choose Date Picker instead of dropdown control

Employee Name	Status	Report Date
No results found.		

Date Picker

Text Box

Drop-Down List Box

Combo Box

List Box

Option Button

Check Box

Calculated Value

- Select the **Name** field in the main data source and add a new rule called **Set Employee Name Filter**

Fields

Drag a field to add it to the form.

Fields:

Main

- ExpenseReport_Dashboard
 - FormLogic
 - Filters**
 - Name**
 - Status
 - ReportDate

☐ Show details

Actions

Rules

Name

Set Employee Name Filter

New

Details for:

Set Employee Name Filter

Condition:

None - Rule runs when field changes

Rule type:

Action

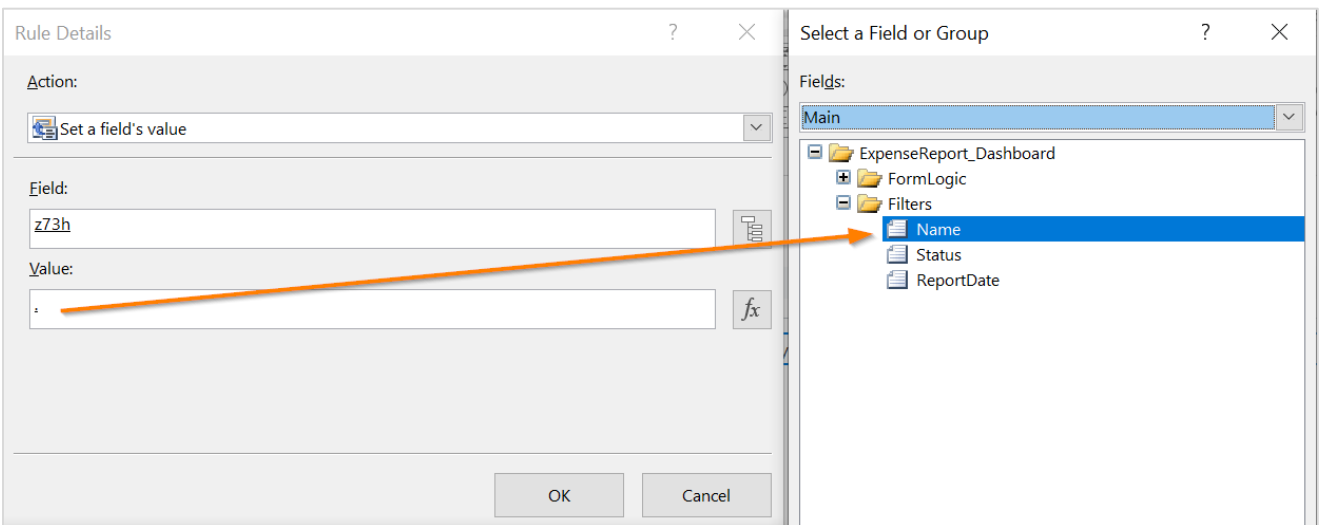
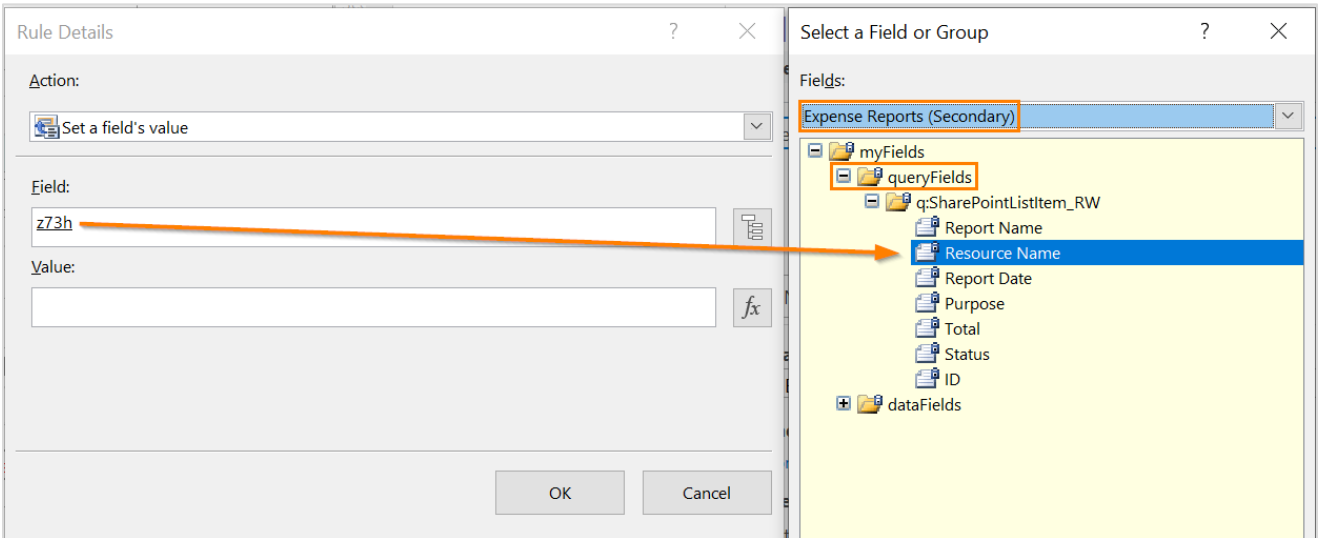
Run these actions:

None

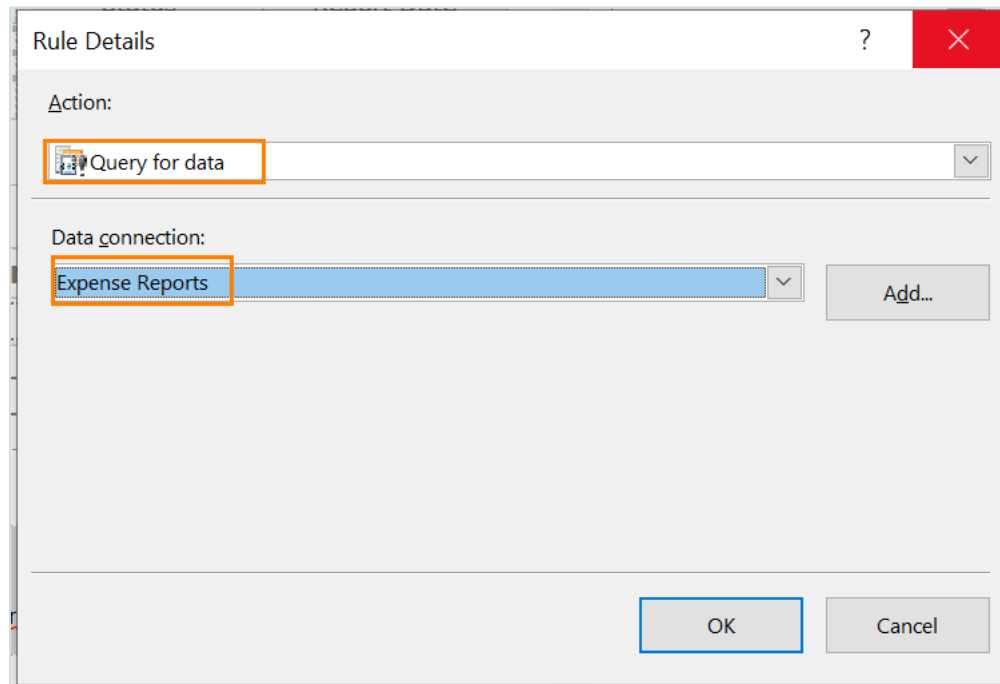
☐ Don't run remaining rules if the condition of this rule is met

Add

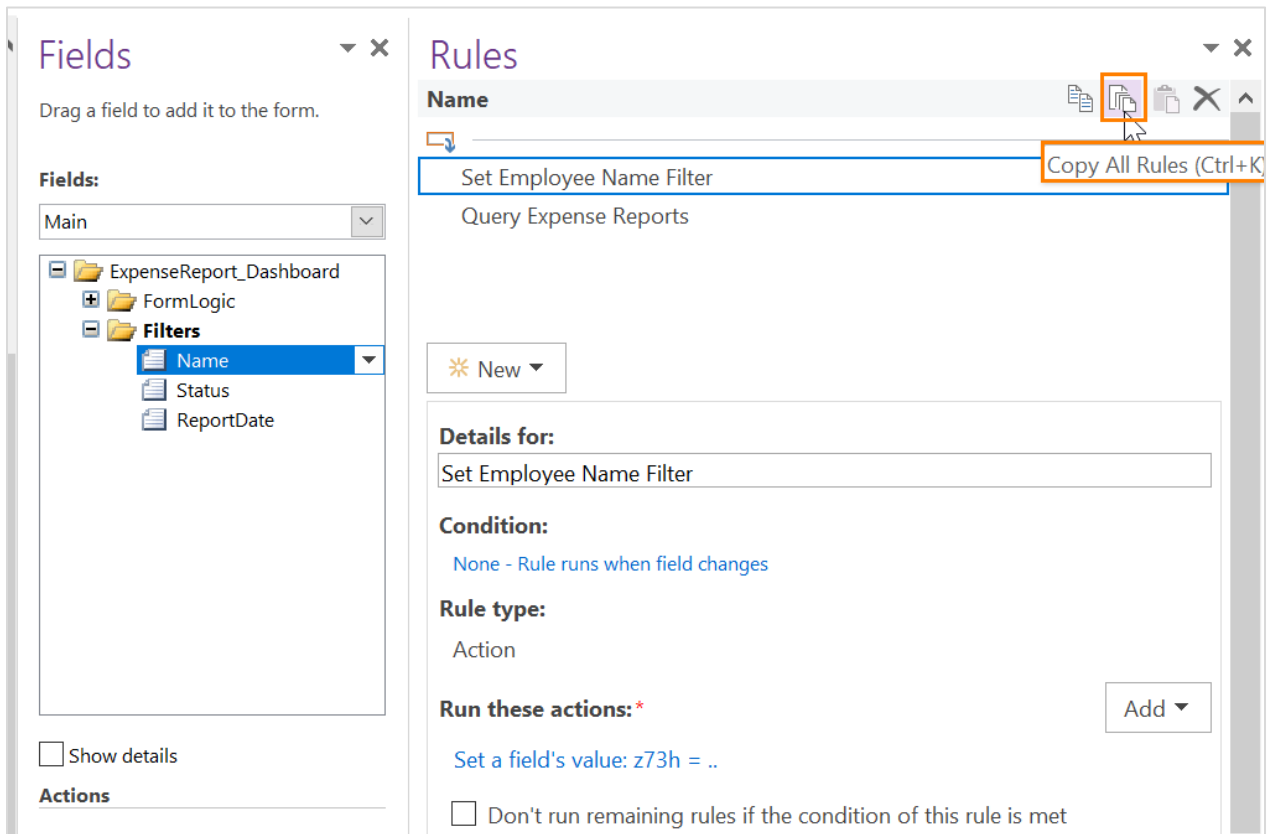
- In this rule, add an action that will set the **Resource Name** *query* field of the Expense Reports data source to have the value of the **Name** field in the main data source



- Add a new rule called **Query Expense Reports** that will query the Expense Reports data source



9. Do steps 6-8 to the **Status** and **Report Date** filters. To make things easier, just click the **Copy All Rules** button and paste the rules to the two remaining filter fields and do the necessary replacement of fields and rule names



Here's the rules for the **Status** and **Report Date** fields:

Fields

Drag a field to add it to the form.

Fields:

Main

ExpenseReport_Dashboard

FormLogic

Filters

Name

Status

ReportDate

☐ Show details

Actions

Add Field

Rules

Status

Set Status Filter

Query Expense Reports

New

Details for:

Set Status Filter

Condition:

None - Rule runs when field changes

Rule type:

Action

Run these actions:

Set a field's value: a2sw = .

☐ Don't run remaining rules if the condition of this rule is met

Add

Fields

Drag a field to add it to the form.

Fields:

Main

- ExpenseReport_Dashboard
 - FormLogic
 - Filters
 - Name
 - Status
 - ReportDate

☐ Show details

Actions

Add Field

Rules

ReportDate

Set Report Date Filter

Query Expense Reports

New

Details for:

Set Report Date Filter

Condition:

None - Rule runs when field changes

Rule type:

Action

Run these actions:*

Set a field's value: cxbt = .

☐ Don't run remaining rules if the condition of this rule is met

Add

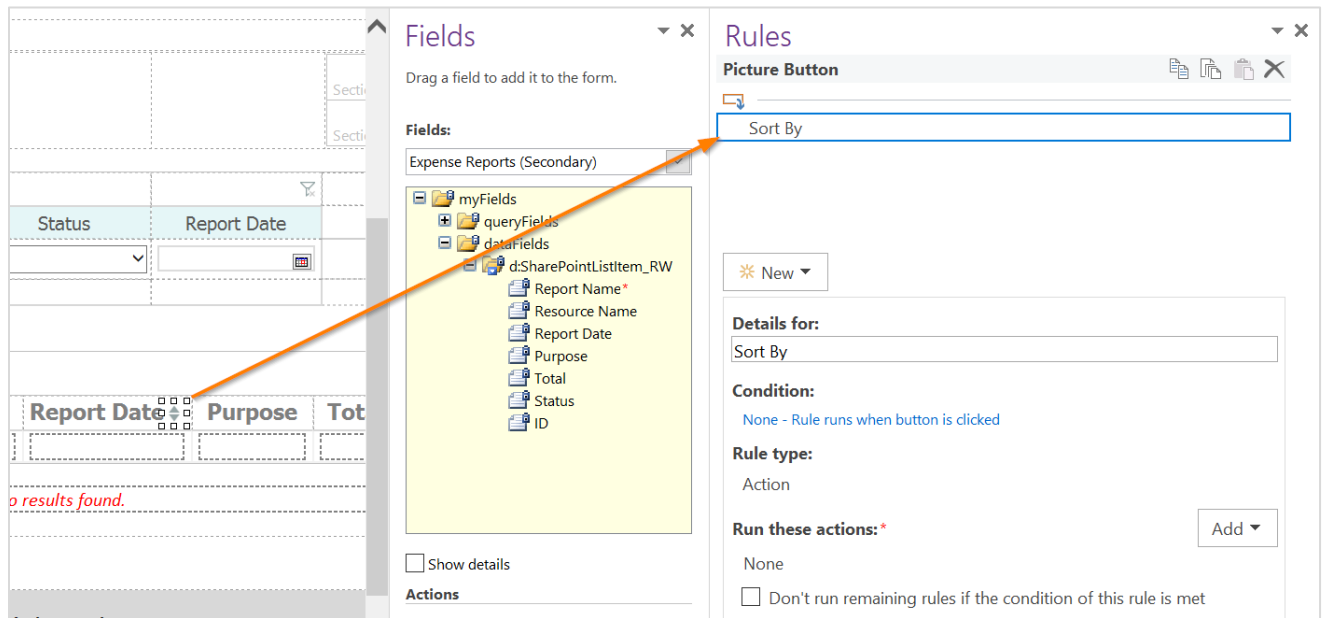
Add Sorting

In the sample dashboard, we're going to add the sorting feature for the Report Date.

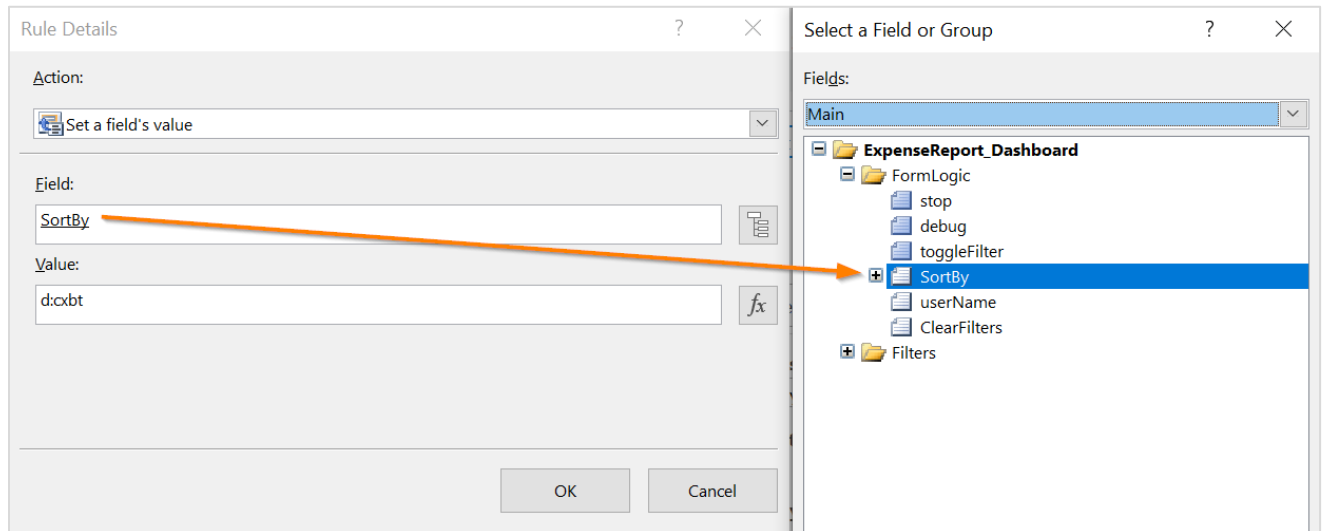
- Click the sort icon beside the **Report Date** in the repeating table in the form canvas

Report Name	Employee Name	Report Date	Purpose	Total	Status
No results found.					

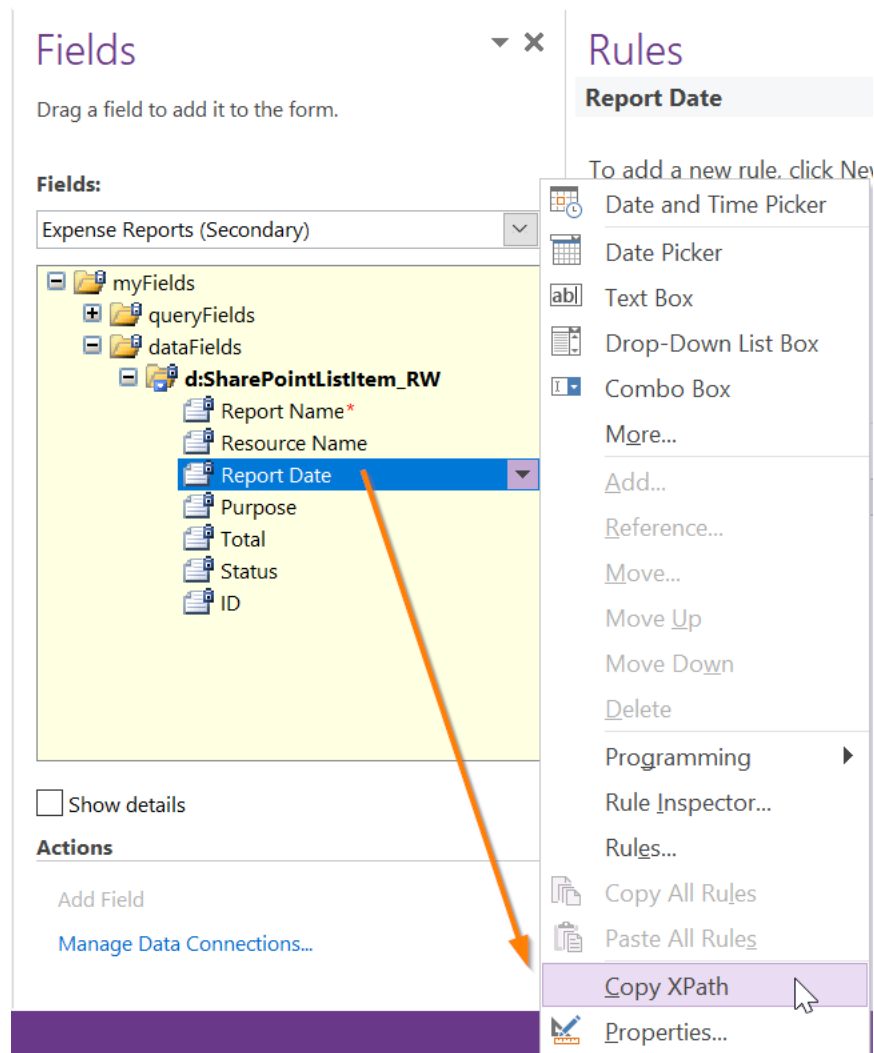
- Add a new rule called **Sort By**



3. Add an action to set the **Sort By** field in the main data source



4. In the **Value** field, add the name of the Report Date *node* from the Expense Reports data source. To do this, go to Fields pane and select the Expense Report data source and copy the XPath of the Report Date.



Here's the XPath:

```
/dfs:myFields/dfs:dataFields/d:SharePointListItem_RW/d:cxbt
```

As you may notice, the XPath doesn't contain the actual name of the field but instead we see `d:cxbt` as its name.

5. Copy the Report Date node name and add it to the **Value** field.

Rule Details
?
X

Action:

 Set a field's value

▼

Field:

SortBy



Value:

d:cbt



OK

Cancel

- In the main data source, select the **SortBy** field and add a new rule called **Sort ASC**

Fields

Drag a field to add it to the form.

Fields:

Main

ExpenseReport_Dashboard

FormLogic

stop

debug

toggleFilter

SortBy

order

userName

ClearFilters

Filters

Name

Status

ReportDate

☐ Show details

Actions

Rules

SortBy

Sort ASC

New

Details for:

Sort ASC

Condition:

None - Rule runs when field changes

Rule type:

Action

Run these actions:

None

Add

☐ Don't run remaining rules if the condition of this rule is met

7. In this rule, add the following condition:

If **order** is not equal to "ASC" AND **SortBy** is not blank

Here's the XPath of these fields in the main data source:

order: /my:ExpenseReport_Dashboard/my:FormLogic/my:SortBy/@my:order

SortBy: /my:ExpenseReport_Dashboard/my:FormLogic/my:SortBy

Fields

Drag a field to add it to the form.

Fields:

Main

- ExpenseReport_Dashboard
 - FormLogic
 - stop
 - debug
 - toggleFilter
 - SortBy
 - order
 - userName
 - ClearFilters
 - Filters
 - Name
 - Status
 - ReportDate

Rules

SortBy

Sort ASC

New

Details for:

Sort ASC

Condition:

order ≠ "ASC" and
SortBy is not blank

8. In the same rule, add an action that will set the **@order** field to **ASC**. Make sure to tick the **Don't run remaining rules if the condition of this rule is met**

Fields

Drag a field to add it to the form.

Fields:

Main

- ExpenseReport_Dashboard
 - FormLogic
 - stop
 - debug
 - toggleFilter
 - SortBy
 - order
 - userName
 - ClearFilters
 - Filters
 - Name
 - Status
 - ReportDate

☐ Show details

Actions

Add Field

Manage Data Connections...

Rules

SortBy

Sort ASC

New

Details for:

Sort ASC

Condition:

order ≠ "ASC" and
SortBy is not blank

Rule type:

Action

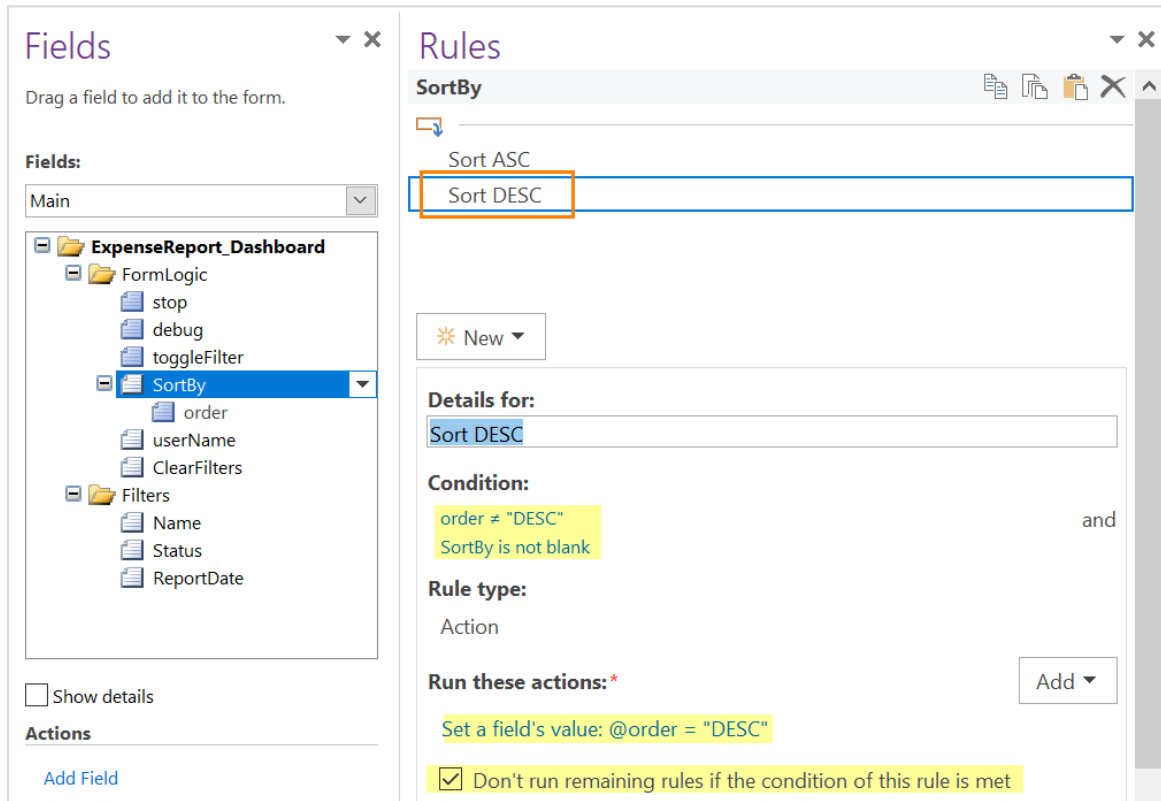
Run these actions:*

Add

Set a field's value: @order = "ASC"

☒ Don't run remaining rules if the condition of this rule is met

9. Create another rule and do steps 6-8 for setting the **@order** with **DESC** value



Fields

Drag a field to add it to the form.

Fields:

Main

- ExpenseReport_Dashboard
 - FormLogic
 - stop
 - debug
 - toggleFilter
 - SortBy (selected)
 - order
 - userName
 - ClearFilters
 - Filters
 - Name
 - Status
 - ReportDate

☐ Show details

Actions

[Add Field](#)

Rules

SortBy

Sort ASC

Sort DESC (selected)

[New](#)

Details for:

Sort DESC

Condition:

order <= "DESC" and SortBy is not blank

Rule type:

Action

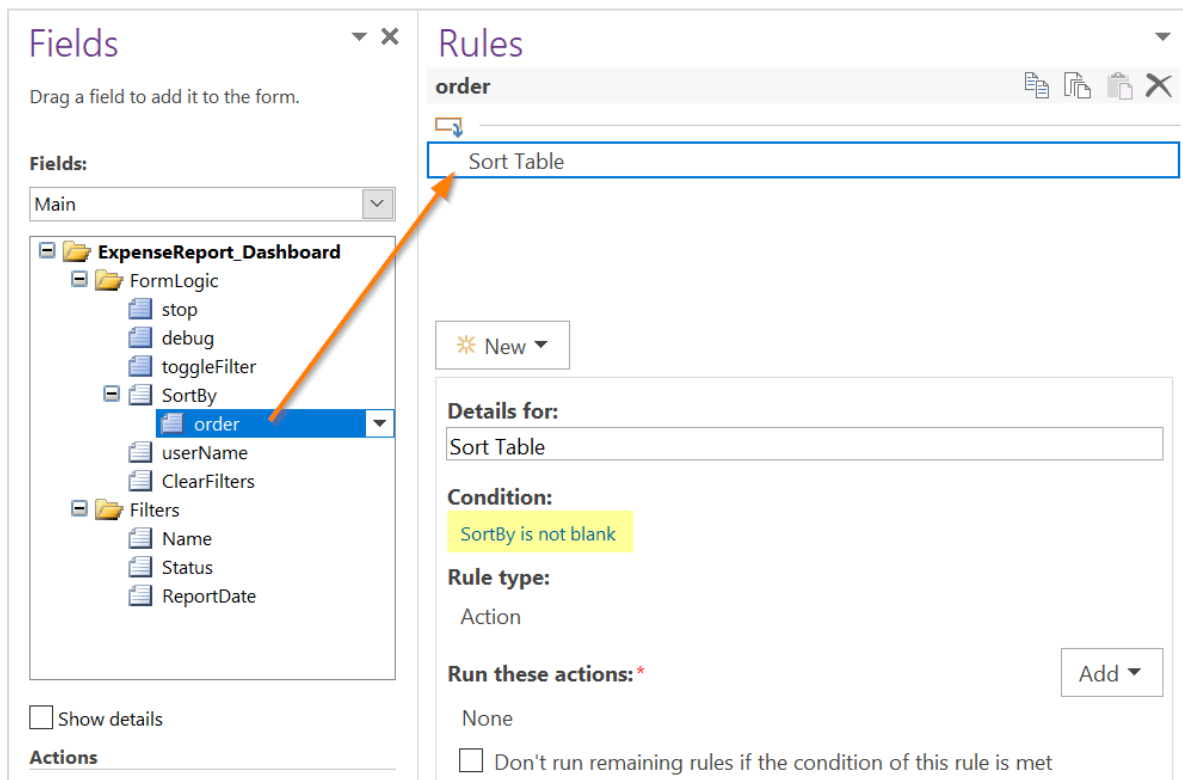
Run these actions:*

Set a field's value: @order = "DESC"

☒ Don't run remaining rules if the condition of this rule is met

[Add](#)

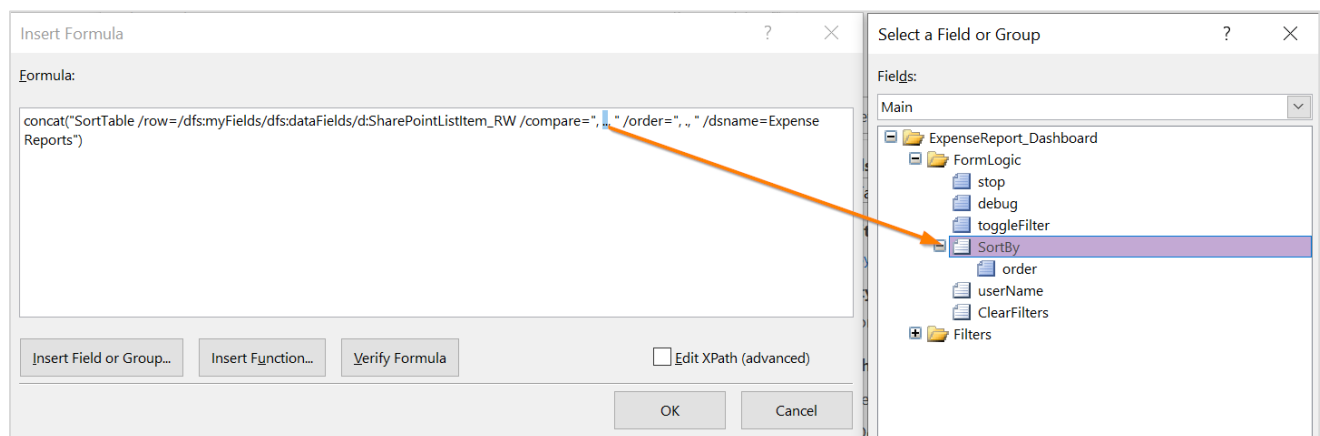
10. In the main data source, select the **@order** field and add a new rule called **Sort Table** with the condition if **SortBy** is not blank



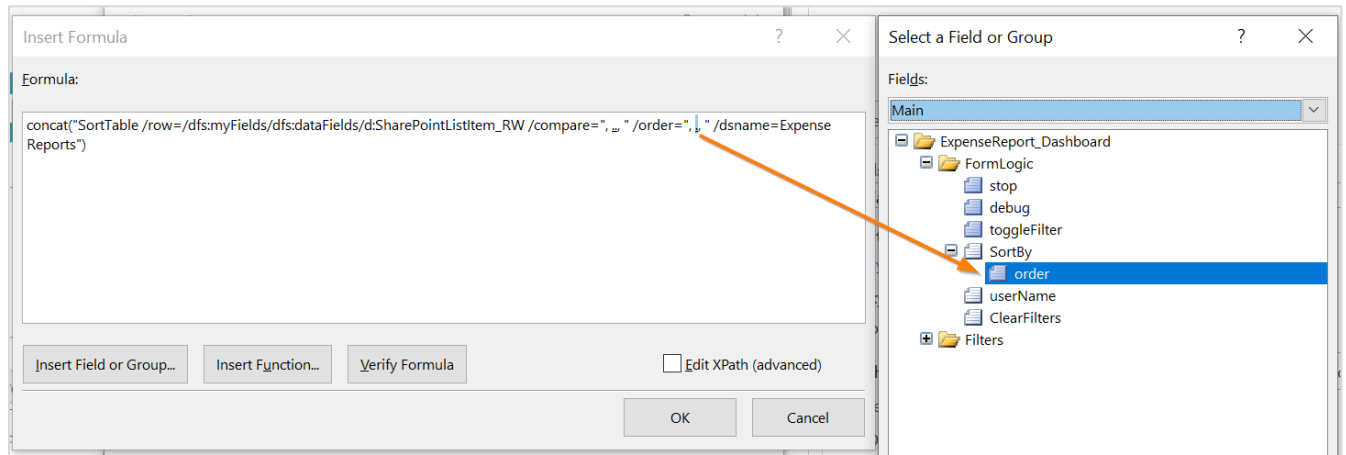
11. Add a rule to use the SortTable command to sort the repeating table by Report Date. Copy the command below and paste in the value to set the QdabraRules Command node

```
concat("SortTable /row=/dfs:myFields/dfs:dataFields/d:SharePointListItem_RW /compare=", .., "
/order=", .., " /dsname=Expense Reports")
```

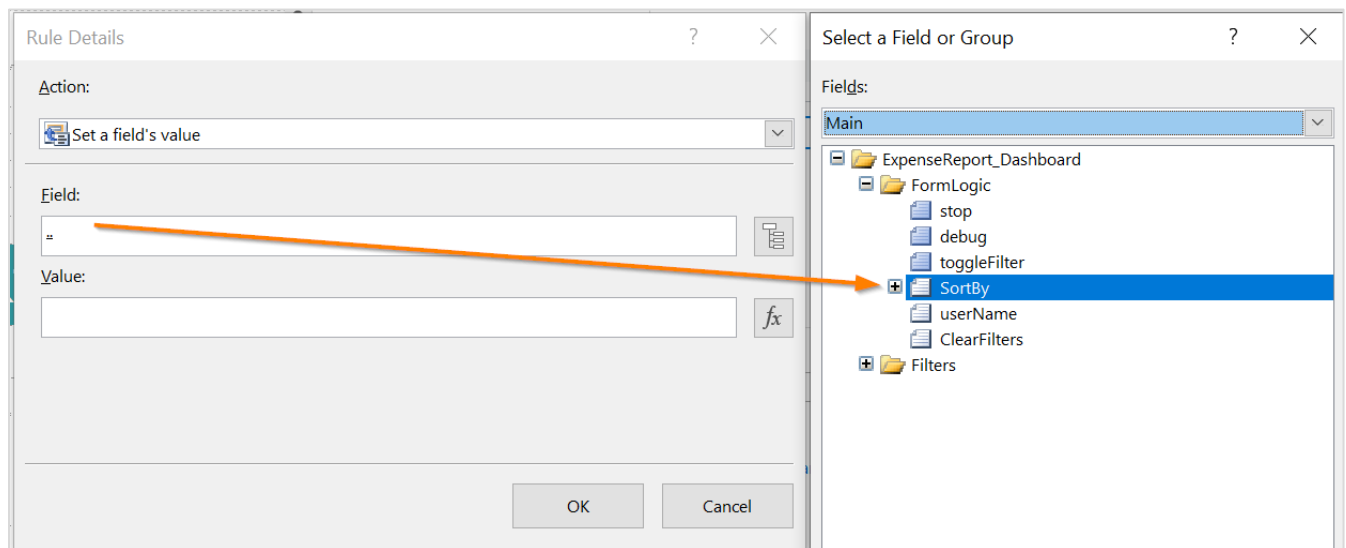
12. After pasting it in the value field, replace the two dots (after /compare) with the **SortBy** field



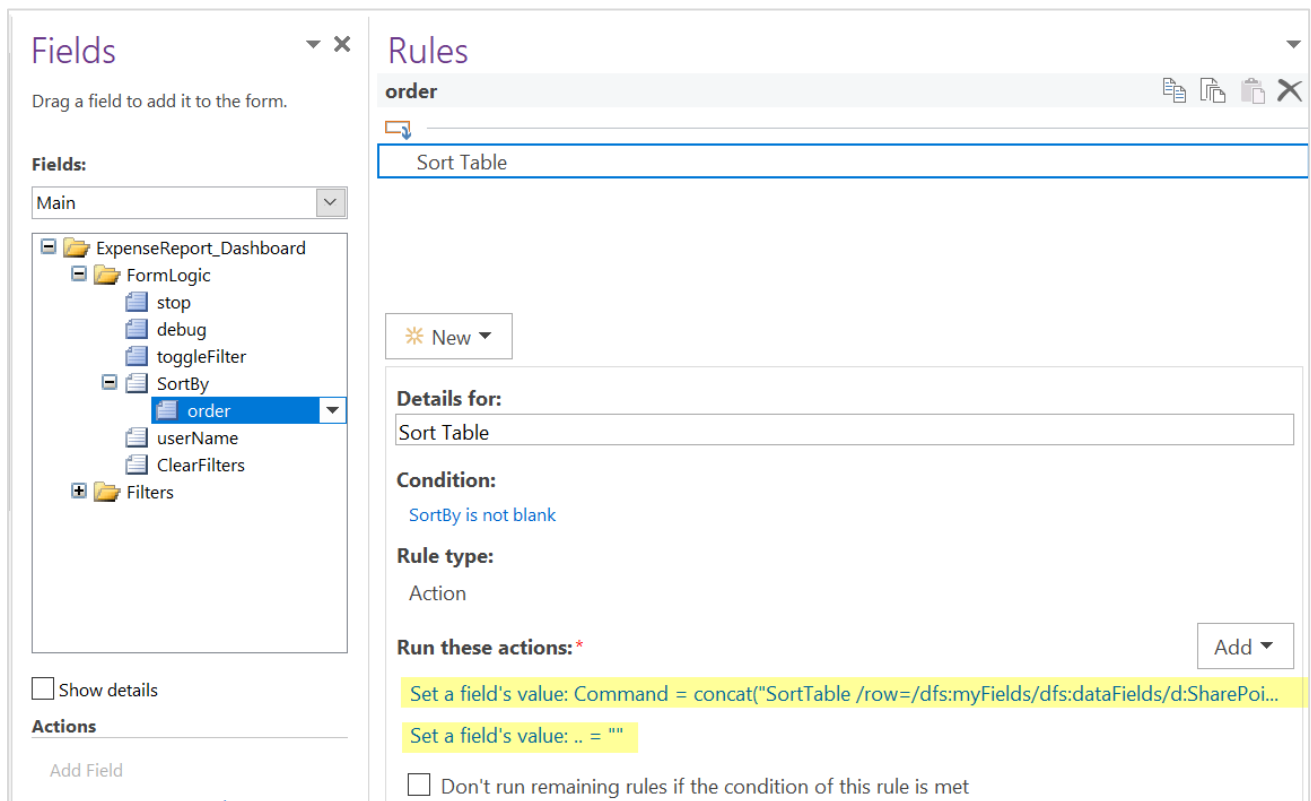
13. Also replace the dot (after /order) with the **@order** field



14. Add a new action that will reset the **SortBy** field



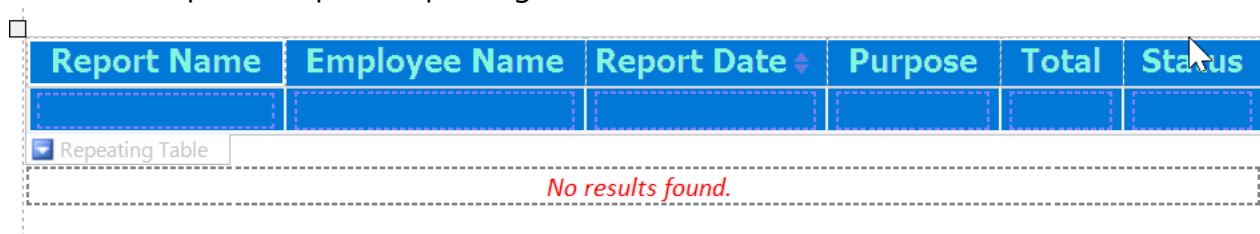
Here are the actions we just added:



Add Status Indicators

For the Expense Reports, we have four statuses – Submitted, Approved, Rejected, and Paid. Let's add formatting for each of the item in the dashboard based on the item's status.

1. Select the Expense Reports repeating table in the form canvas



2. In the Rules pane, add a formatting rule. Let's name it Highlight Submitted and add a condition if Status = Submitted. Then add a text and cell formatting. Here we added a blue highlight for the items with Status = Submitted.

Fields

Drag a field to add it to the form.

Fields:

Expense Reports (Secondary)

- myFields
 - queryFields
 - dataFields
 - d:SharePointListItem_

☐ Show details

Actions

Add Field

[Manage Data Connections...](#)

Rules

SharePointListItem_RW

Highlight Submitted

New

Details for:

Highlight Submitted

Condition: *

Status = "Submitted"

Rule type:

Formatting

Formatting: *

B I U abc A

AaBbCcYyZz

☐ Hide this control

☐ Don't allow users to insert or delete this control

- Do the same thing for the rest of the statuses. Feel free to choose any color you want for each status

Fields

Drag a field to add it to the form.

Fields:

Expense Reports (Secondary)

- myFields
 - queryFields
 - dataFields
 - d:SharePointListItem_

☐ Show details

Actions

[Add Field](#)

[Manage Data Connections...](#)

Rules

SharePointListItem_RW

- Highlight Submitted
- Highlight Approved
- Highlight Rejected
- Highlight Paid

Details for:

Highlight Paid

Condition:*

Status = "Paid"

Rule type:

Formatting

Formatting:*

B I U abc A ▼ ▼

AaBbCcYyZz

☐ Hide this control

☐ Don't allow users to insert or delete this control

4. Save the form changes and upload it to FormsViewer.

Test the form

Open the Expense Report Dashboard in your browser. Click the Filter button to display the Filter section.

EXPENSE REPORT DASHBOARD

Logged in user: Kervi Laborte



Report Name	Employee Name	Report Date	Purpose	Total	Status
ER Jo-Anne Tandan 2020-04-11	Jo-Anne Tandan	4/11/2020	Client meeting	\$210.00	Submitted
ER Kervi Laborte 2020-04-12	Kervi Laborte	4/12/2020	Training	\$50.00	Submitted
ER Jo-Anne Tandan 2020-04-14	Jo-Anne Tandan	4/14/2020	Client meeting	\$35.00	Submitted
ER Jo-Anne Tandan 2020-04-14	Jo-Anne Tandan	4/14/2020	Client meeting	\$25.00	Submitted
ER Kervi Laborte 2020-04-14	Kervi Laborte	4/14/2020	testing	\$0.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test 15	\$12.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test	\$12.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test	\$15.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test	\$1.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test receipt	\$1.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test renderform	\$1.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test renderform 2	\$12.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test create folder	\$12.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	upload files	\$12.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test upload	\$2.00	Submitted

EXPENSE REPORT DASHBOARD

Logged in user: Kervi Laborte



Employee Name

Status

Report Date

Report Name	Employee Name	Report Date	Purpose	Total	Status
ER Jo-Anne Tandan 2020-04-11	Jo-Anne Tandan	4/11/2020	Client meeting	\$210.00	Submitted
ER Kervi Laborte 2020-04-12	Kervi Laborte	4/12/2020	Training	\$50.00	Submitted
ER Jo-Anne Tandan 2020-04-14	Jo-Anne Tandan	4/14/2020	Client meeting	\$35.00	Submitted
ER Jo-Anne Tandan 2020-04-14	Jo-Anne Tandan	4/14/2020	Client meeting	\$25.00	Submitted
ER Kervi Laborte 2020-04-14	Kervi Laborte	4/14/2020	testing	\$0.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test 15	\$12.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test	\$12.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test	\$15.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test	\$1.00	Submitted
ER Kervi Laborte 2020-04-15	Kervi Laborte	4/15/2020	test receipt	\$1.00	Submitted

Feel free to check each filters:

Employee Name Status Report Date					
Jo-Anne Tandan					
Report Name	Employee Name	Report Date	Purpose	Total	Status
ER Jo-Anne Tandan 2020-04-11	Jo-Anne Tandan	4/11/2020	Client meeting	\$210.00	Approved
ER Jo-Anne Tandan 2020-04-14	Jo-Anne Tandan	4/14/2020	Client meeting	\$35.00	Approved
ER Jo-Anne Tandan 2020-04-14	Jo-Anne Tandan	4/14/2020	Client meeting	\$25.00	Paid
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test 15	\$12.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test	\$12.00	Submitted
ER Jo-Anne Tandan 2020-04-15	Jo-Anne Tandan	4/15/2020	test	\$15.00	Paid

Clicking the Sort icon will sort the Report Date in ascending and descending order:

Report Date
4/11/2020
4/14/2020
4/14/2020
4/15/2020
4/15/2020
4/15/2020

Congratulations! You have successfully implemented the three dashboard features in FormsViewer.

Contact Information

Qdabra Software
218 Main Street,
Suite 731,
Kirkland, WA
98033

Phone: 877.544.2389
Email: Support@Qdabra.com
Website: <http://www.qdabra.com>
Community: <http://www.infopathdev.com>