

# CREATE ANALYTICAL SAP FIORI APPS QUICKLY AND EFFICIENTLY

In this session, you will learn how to create an SAP Fiori application using SAP Fiori elements

In our use case, we want to create an app that allows a sales manager to have an overview of all the sales orders created in the past months, to analyze the sales figures through different dimensions (e.g. time or customer) and see detailed information about a specific sales order item

At the end of the exercise, the app will consist of 2 screens. The first screen leverages the “analytical list page” template and displays a collection of sales order items in a chart and a table, with analytics and filtering capabilities. The second screen uses the “object page” template to display details about a sales order item.

## Requirements

You will need to have a computer with Internet access, a browser (preferably Google Chrome), and access to your email in the event that you need to create an SAP Cloud Platform trial account

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# Getting Started - Setting up your Development Environment

Welcome to the workshop 'Create Analytical SAP Fiori Apps Quickly and Efficiently'

This workshop will guide you step-by-step through the process of creating a Fiori elements floorplans for OData V2. You will be using a local OData service equipped with basic UI annotations. You will learn how to generate and enhance an Analytical List Page Fiori elements application with the help of Fiori Tools.

## Access SAP Business Application Studio (TechEd 2020 live workshop registered participants only)

Log on the SAP Business Application Studio via [this link](#) by using the provided live workshop credentials

You can continue with step 'Create Dev Space'.

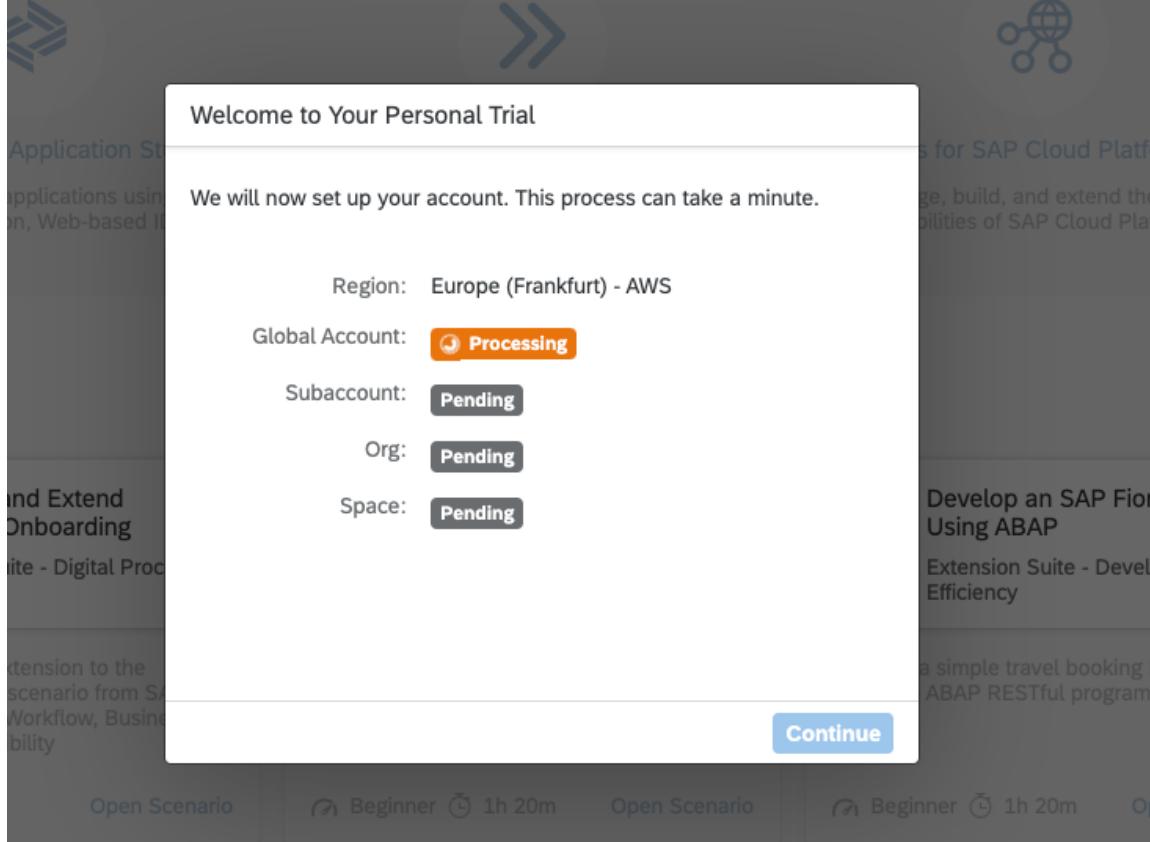
## Set up Business Application Studio in an SAP Cloud Platform Trial Account

If you don't have an SAP Cloud Platform account already, you can create your own [here](#).

### New Trial Users

After having registered your new user, start your trial via [this link](#). At first time log in, you'll be asked to select your preferred region.

This will start the set up of your account.



Your subaccount, org and space is created automatically, along with the necessary role configurations and subscriptions. When done, the subaccount overview page is shown.

## Existing Trial Users

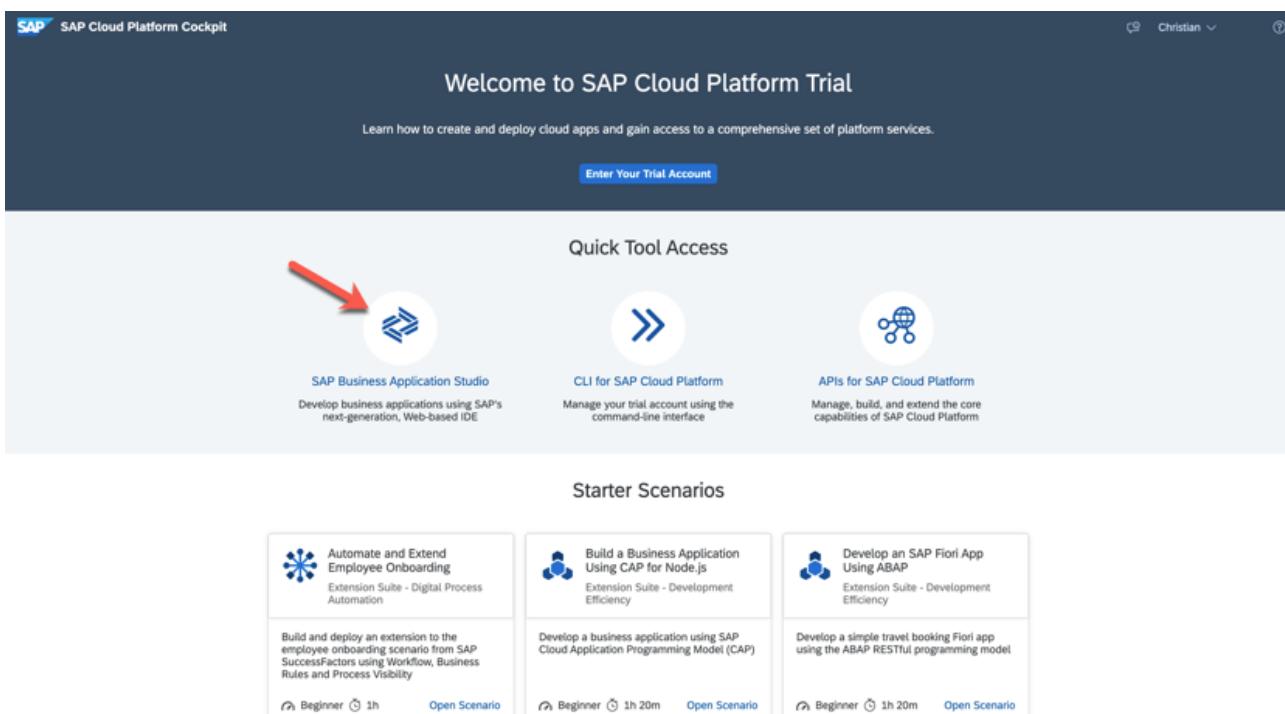
In your subaccount,

- Choose 'Subscriptions' in the left-hand navigation
- Choose 'SAP Business Application Studio' in the list of available subscriptions
- Choose 'Subscribe'

Navigate back to your subaccount overview page.

## Access SAP Business Application Studio

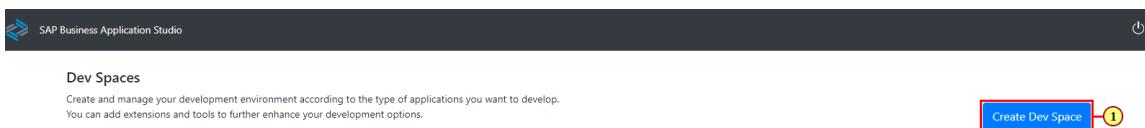
Click this tool icon to access the SAP Business Application Studio.



The screenshot shows the SAP Cloud Platform Trial Cockpit. At the top, it says "Welcome to SAP Cloud Platform Trial" and "Enter Your Trial Account". Below that is a "Quick Tool Access" section with three icons: SAP Business Application Studio (highlighted with a red arrow), CLI for SAP Cloud Platform, and APIs for SAP Cloud Platform. Underneath each icon is a brief description. Below this is a "Starter Scenarios" section with three cards, each with a title, icon, description, and "Open Scenario" button.

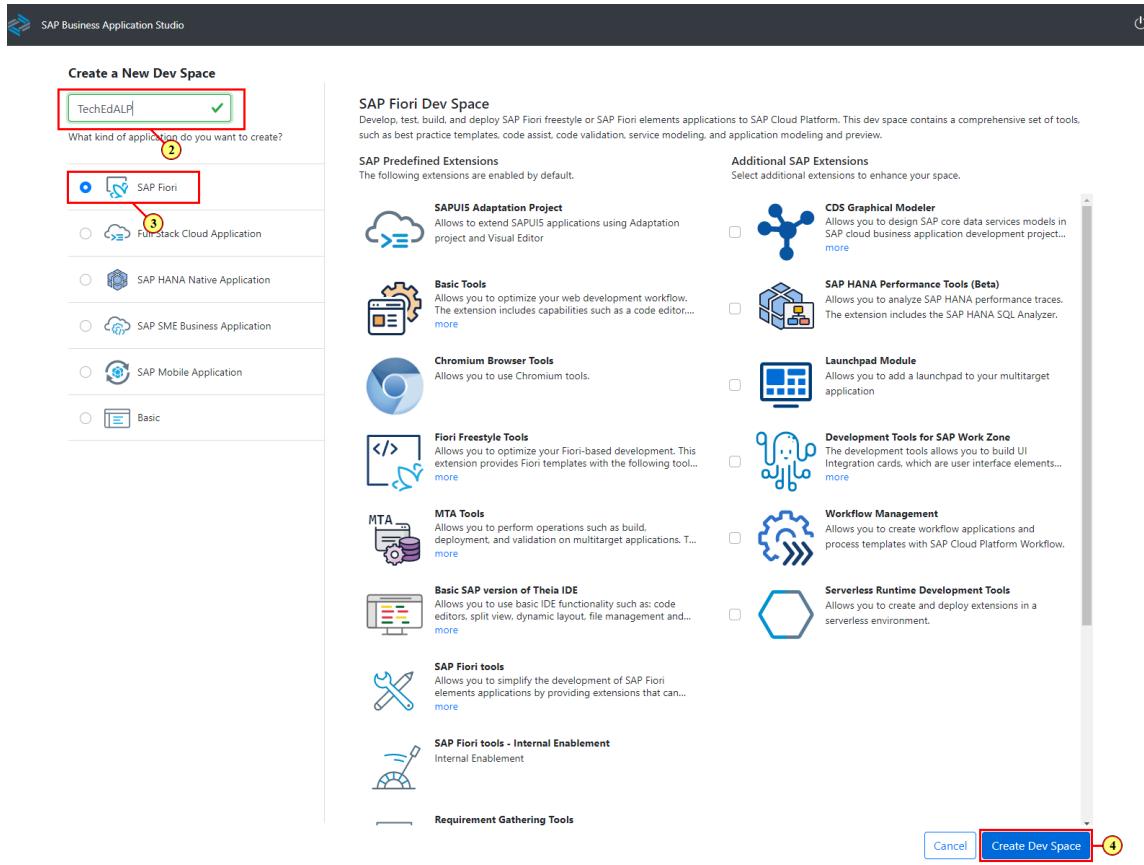
Starter Scenarios		
 <b>Automate and Extend Employee Onboarding</b> Extension Suite - Digital Process Automation  Build and deploy an extension to the employee onboarding scenario from SAP SuccessFactors using Workflow, Business Rules and Process Visibility  Beginner 1h Open Scenario	 <b>Build a Business Application Using CAP for Node.js</b> Extension Suite - Development Efficiency  Develop a business application using SAP Cloud Application Programming Model (CAP)  Beginner 1h 20m Open Scenario	 <b>Develop an SAP Fiori App Using ABAP</b> Extension Suite - Development Efficiency  Develop a simple travel booking Fiori app using the ABAP RESTful programming model  Beginner 1h 20m Open Scenario

## Create Dev Space



The screenshot shows the SAP Business Application Studio interface. At the top, it says "SAP Business Application Studio". Below that is a "Dev Spaces" section with a brief description and a "Create Dev Space" button, which is highlighted with a red box.

(1) Click **Create Dev Space** button to add a new dev space.



- (2) Enter a name for your dev space.
- (3) Select profile **SAP Fiori**.
- (4) Click **Create Dev Space**.

**Dev Spaces**

Create and manage your development environment according to the type of applications you want to develop. You can add extensions and tools to further enhance your development options.

Dev Space Name	Status	Created On	ID	Action
TechEdALP <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">5</span>	RUNNING	Created On 11/30/2020 3:42 PM	ID ws-ggnl4	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">6</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">7</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">8</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">9</span>

Create Dev Space

- (5) Once your dev space has status **running**, click on the dev space name to access it.

## Get the Sample Scenario

Access the Github Repository via [this link](#).

SAP-samples / teched2020-IIS361

**Code** ▾

main · 7 branches · 0 tags

Clone  
HTTPS SSH GitHub CLI  
<https://github.com/SAP-samples/teched2020-IIS361.git>

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

.reuse  
LICENSES  
exercises  
README.md

README.md

## IIS361 - Create Analytical SAP Fiori Apps Quickly and Efficiently

- (6) Click on the code button **Code** ▾  
(7) Click copy icon . The GitHub link is copied.

File Edit Selection View Go Run Terminal Help

EXPLORER

NO FOLDER OPENED

You have not yet opened a workspace.

**New Terminal** Ctrl+`

Run Task 8

Run Build Task...  
Run Test Task...  
Run Last Task Ctrl+Shift+K

Show Running Tasks...  
Restart Running Task...  
Terminate Task...  
Attach Task...  
Configure Tasks...

More...

Help Documentation

- (8) In SAP Business Application Studio, open a new terminal by choosing **Terminal->New Terminal**. In the terminal window, make sure you are in **projects** folder run the command `git clone` with the GitHub link you copied: `git clone https://github.com/SAP-samples/teched2020-IIS361.git`
- ```
user: projects $ git clone https://github.com/SAP-samples/teched2020-IIS361.git
```

**Note:** (9) As an alternative to cloning, you can choose **Download ZIP** in the Github repository.

SAP-samples / tecched2020-IIS361

Code Issues Pull requests Actions Projects Security Insights

main 7 branches 0 tags Go to file Add file Code

MN-public Updated screenshot for ex5

- .reuse
- LICENSES
- exercises
- README.md

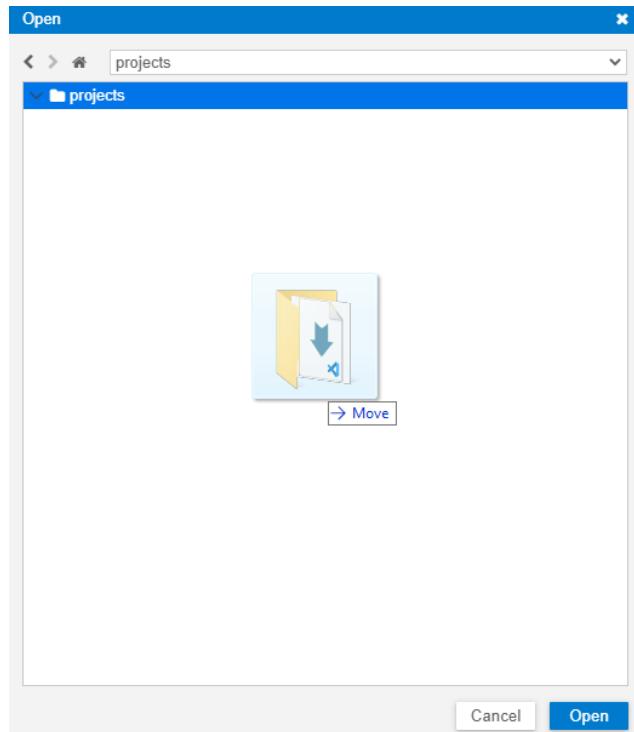
Clone  
HTTPS SSH GitHub CLI  
<https://github.com/SAP-samples/tecched2020-IIS361>

Open with GitHub Desktop

Download ZIP

IIS361 - Create Analytical SAP Fiori Apps Quickly and Efficiently

Then in SAP Business Application Studio, choose **File->Open** and drag the unpacked project to the folder **home->user->projects**. Once the project upload is finished, choose **Open**.



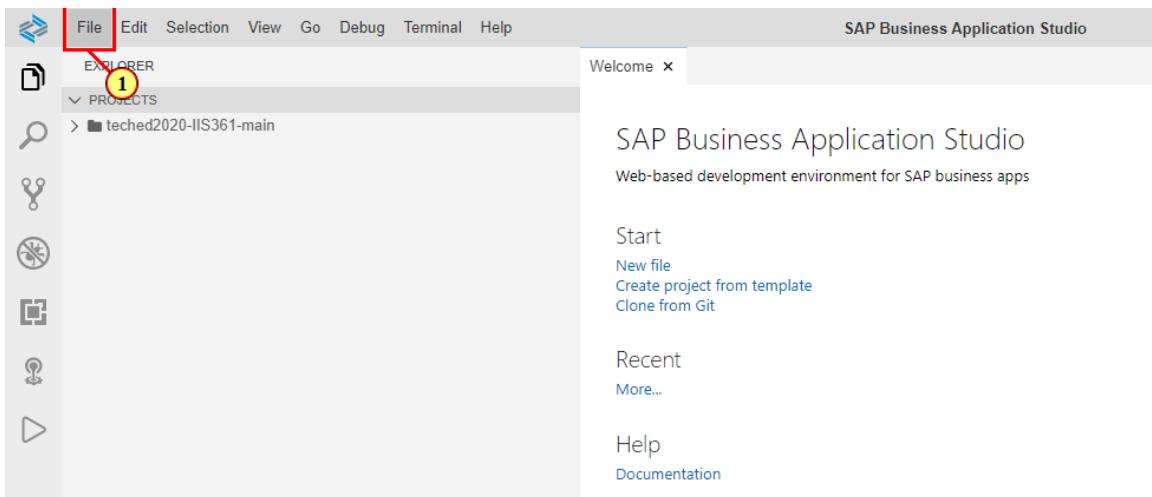
## Summary

You have the environment setup for development of Fiori applications. Continue to the [Exercise 1 - Generating a Fiori elements app.](#)

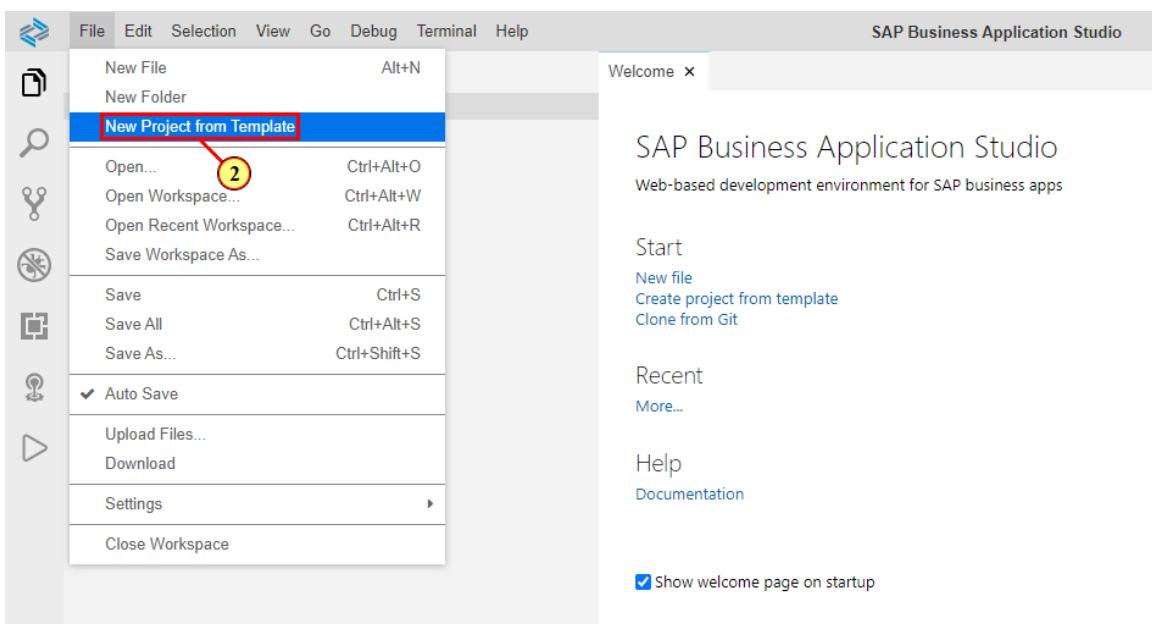
## Exercise 1 - Generating a Fiori elements app

In this exercise, we will create a new SAP Fiori elements project In SAP Business Application Studio. For this exercise, you will not connect to a real backend system. Instead, you will use local metadata and mock data files to simulate a backend server (mock server).

### Exercise 1.1 Using the UI Generator



(1) In SAP Business Application Studio, open **File** menu.



(2) Click **New Project from Template**.

**Select Template and Target Location**

Select the template that best fits the type of application you want to develop.

The template will be generated in the folder specified below and it will contain the relevant files and configurations that will help you create a project quickly and easily.

Specify a target folder path ? \*

/home/user/projects

Templates ?

**Basic Multitarget Application**

Create a project for developing a multitarget application (MTA). MTAs are comprised of multiple software modules that are created with different technologies, yet share the same development lifecycle.

[More Information](#)

**SAP Fiori Freestyle Project**

Allows you to accelerate the generation of your SAP Fiori freestyle application using a wizard-style approach.

[More Information](#)

**Adaptation Project**

Adaptation Project Generator

[More Information](#)

**SAP Fiori elements application**

Accelerate the generation (3) of your SAP Fiori elements application using a wizard-style approach combined with any of the provided floorplans.

[More Information](#)

**SAP Fiori freestyle SAPUI5 application**

Create an SAP Fiori freestyle SAPUI5 application following our best practices and based on one of the supplied SAPUI5 floorplans.

[More Information](#)



**Next >**

**(3)**

**Click SAP Fiori elements application.****Select Template and Target Location**

Select the template that best fits the type of application you want to develop.

The template will be generated in the folder specified below and it will contain the relevant files and configurations that will help you create a project quickly and easily.

Specify a target folder path ? \*

/home/user/projects

Templates ?

**Basic Multitarget Application**

Create a project for developing a multitarget application (MTA). MTAs are comprised of multiple software modules that are created with different technologies, yet share the same development lifecycle.

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**SAP Fiori Freestyle Project**

Allows you to accelerate the generation of your SAP Fiori freestyle application using a wizard-style approach.

[More Information](#)

**Adaptation Project**

Adaptation Project Generator

[More Information](#)

**SAP Fiori elements application**

Accelerate the generation of your SAP Fiori elements application using a wizard-style approach combined with any of the provided floorplans.

[More Information](#)

**SAP Fiori freestyle SAPUI5 application**

Create an SAP Fiori freestyle SAPUI5 application following our best practices and based on one of the supplied SAPUI5 floorplans.

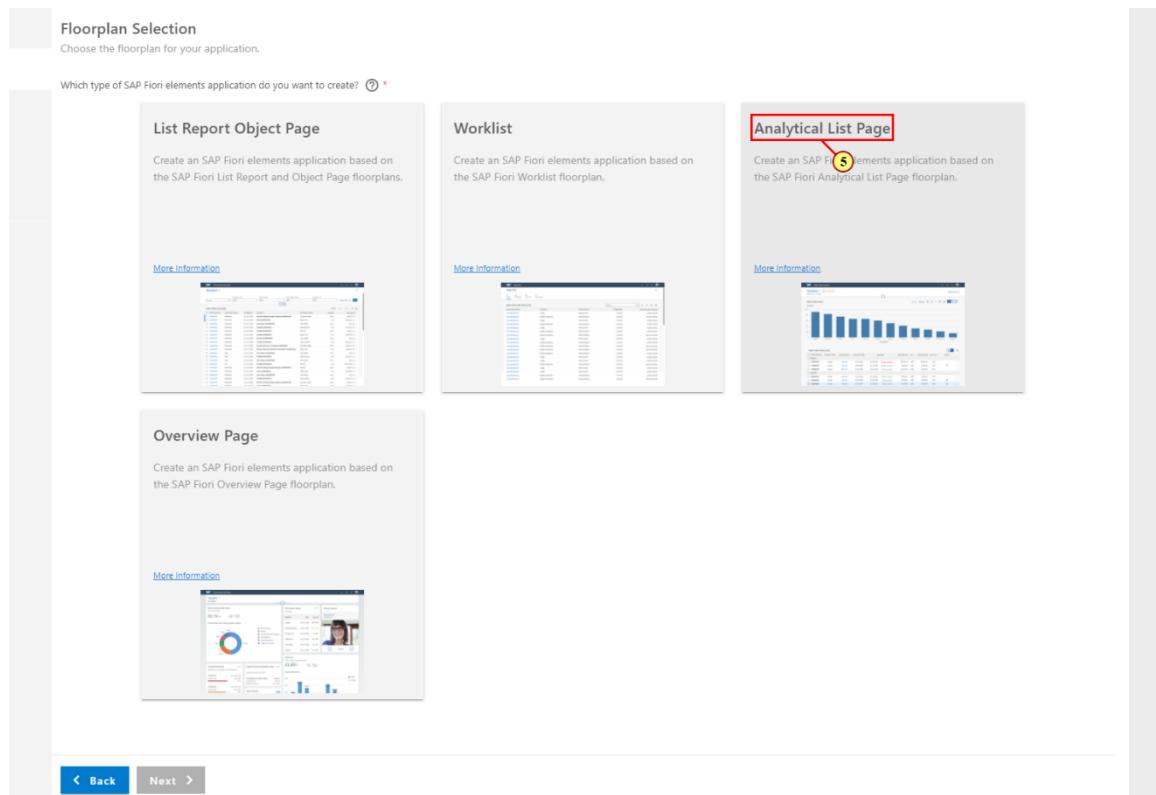
[More Information](#)



**Next >**

**4**

(4) Click **Next**.



(5) In the template selection, click on the tile **Analytical List Page**.

**Floorplan Selection**

Choose the floorplan for your application.

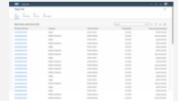
Which type of SAP Fiori elements application do you want to create? ⓘ \*

**List Report Object Page**

Create an SAP Fiori elements application based on the SAP Fiori List Report and Object Page floorplans.

[More Information](#)**Worklist**

Create an SAP Fiori elements application based on the SAP Fiori Worklist floorplan.

[More Information](#)**Analytical List Page**

Create an SAP Fiori elements application based on the SAP Fiori Analytical List Page floorplan.

[More Information](#)**Overview Page**

Create an SAP Fiori elements application based on the SAP Fiori Overview Page floorplan.

[More Information](#)
[◀ Back](#) **Next >** 6
**(6) Click Next.**

SAP Business Application Studio

Welcome Project From Template x

### New Project From Template

- Select Template and Target Location
- Floorplan Selection
- Data Source and Service Selection
- Entity Selection
- Project Attributes

#### Data Source and Service Selection

Configure the data source and select a service.

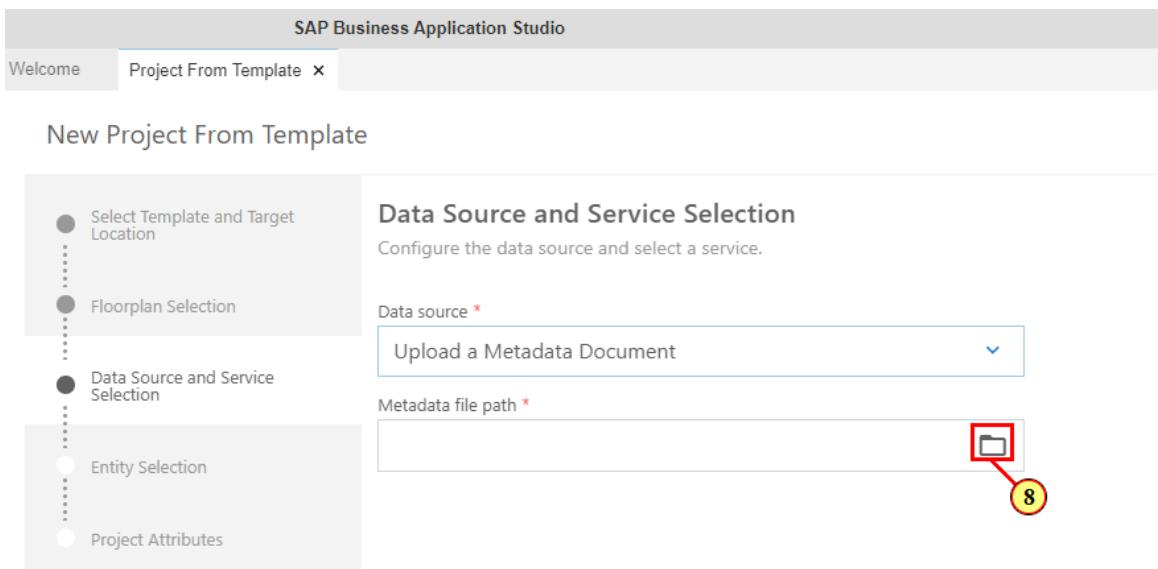
Data source \*

Upload a Metadata Document

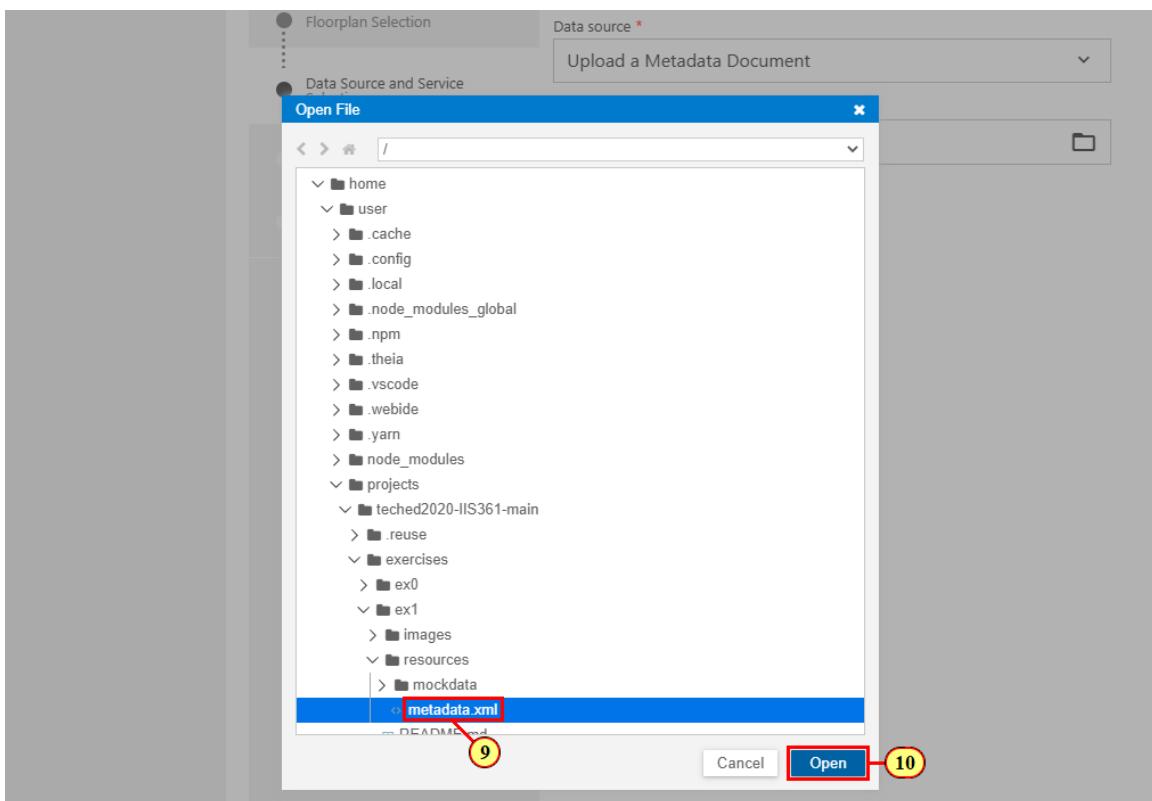
Metadata file path \*

7

**(7) In the step **Datasource and Service Selection**, select **Upload a Metadata Document**.**

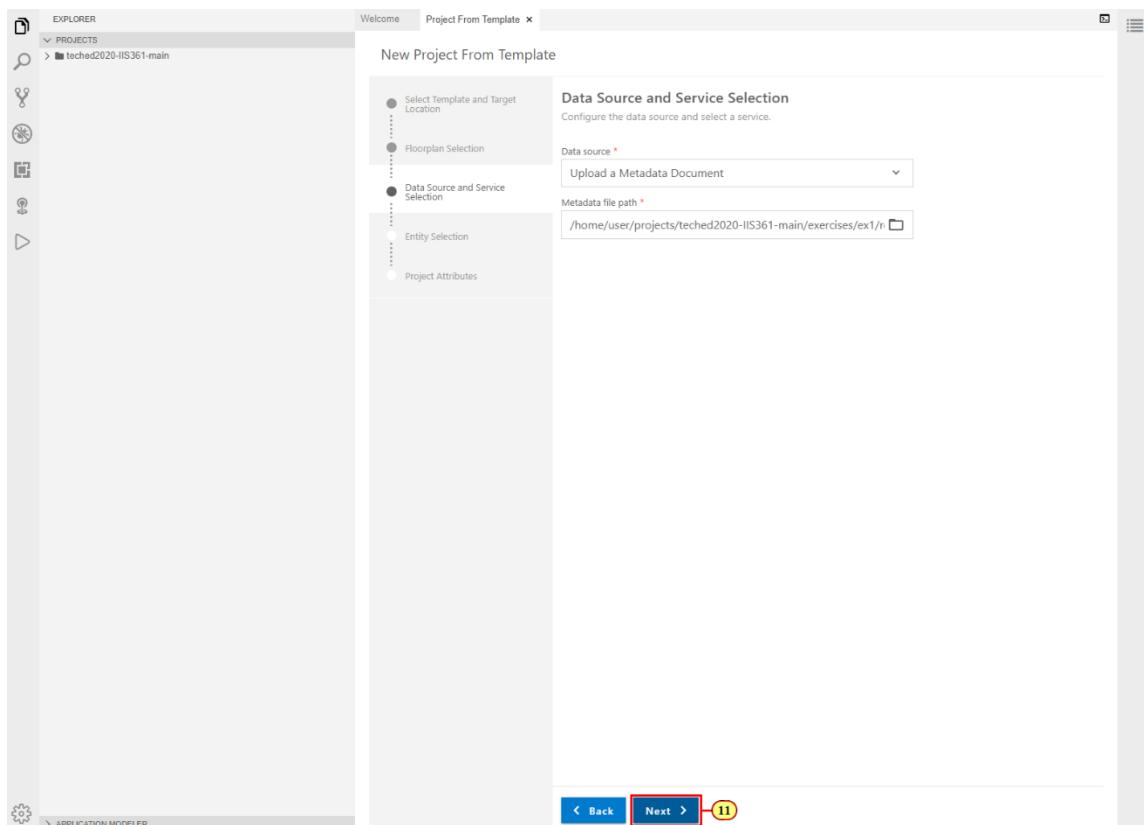


(8) Click **Browse for Files** icon to select the metadata file from the teched sample scenario folder.



(9) Open the folder hierarchy path **home->user->projects->teched2020-IIS361->exercises->ex1->resources** and select **metadata.xml**.

(10) Click **Open**.



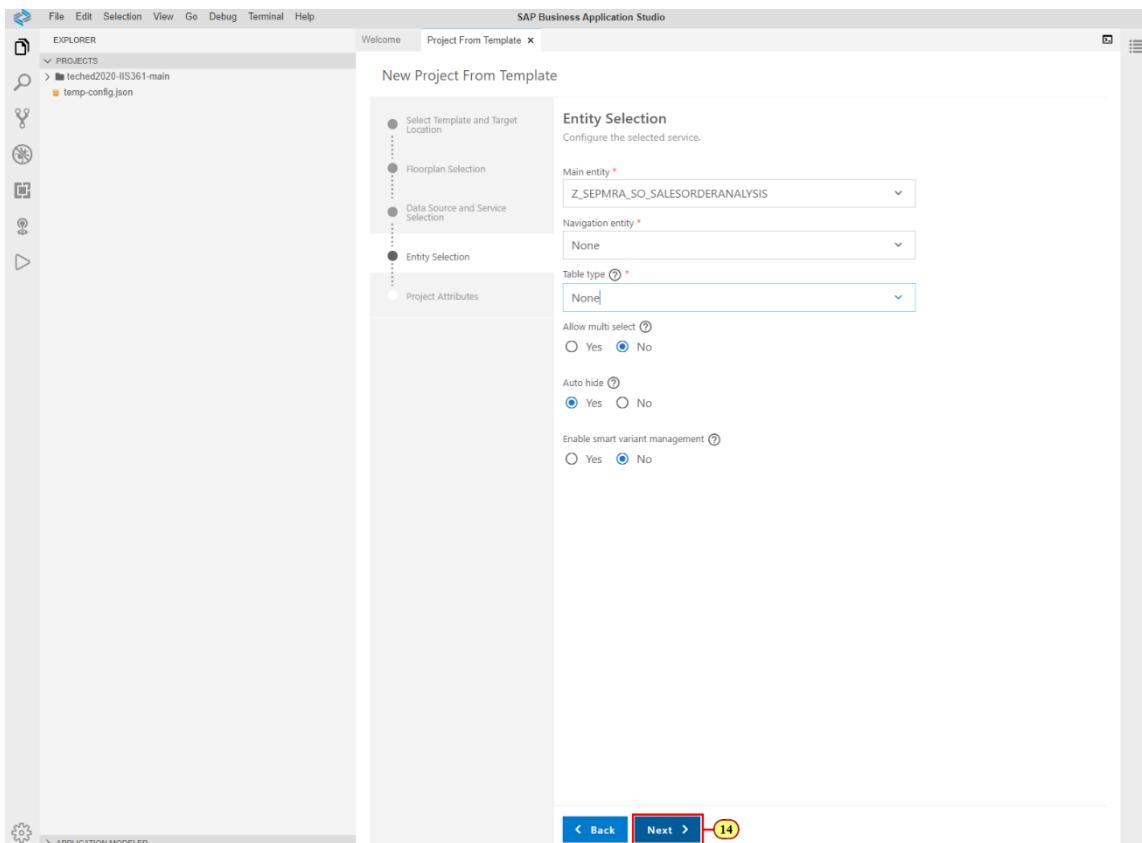
(11) Click **Next**.

### New Project From Template

|                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Select Template and Target Location</li> <li><input checked="" type="radio"/> Floorplan Selection</li> <li><input checked="" type="radio"/> Data Source and Service Selection</li> <li><input checked="" type="radio"/> Entity Selection</li> <li><input type="radio"/> Project Attributes</li> </ul> | <b>Entity Selection</b><br>Configure the selected service.                                                        |
|                                                                                                                                                                                                                                                                                                                                                                               | Main entity *<br><div style="border: 1px solid red; padding: 2px;">Z_SEPMRA_SO_SALESORDERANALYSIS</div>           |
|                                                                                                                                                                                                                                                                                                                                                                               | Navigation entity *<br><div style="border: 1px solid red; padding: 2px;">None</div>                               |
|                                                                                                                                                                                                                                                                                                                                                                               | Table type <small>②</small> *<br><div style="border: 1px solid red; padding: 2px;">None</div>                     |
|                                                                                                                                                                                                                                                                                                                                                                               | Allow multi select <small>②</small><br><input type="radio"/> Yes <input checked="" type="radio"/> No              |
|                                                                                                                                                                                                                                                                                                                                                                               | Auto hide <small>②</small><br><input checked="" type="radio"/> Yes <input type="radio"/> No                       |
|                                                                                                                                                                                                                                                                                                                                                                               | Enable smart variant management <small>②</small><br><input type="radio"/> Yes <input checked="" type="radio"/> No |

(12) In the **Main entity** drop down, select **Z\_SEPMRA\_SO\_SALESORDERANALYSIS** as main entity. The properties of this entity will be used to display data on Analytical List Report page.

- (13) Leave value for drop down **Navigation entity** to **None** since you want to show data of a single instance of the main entity on the object page, too.  
 Select **None** as a table type to accept the default one.

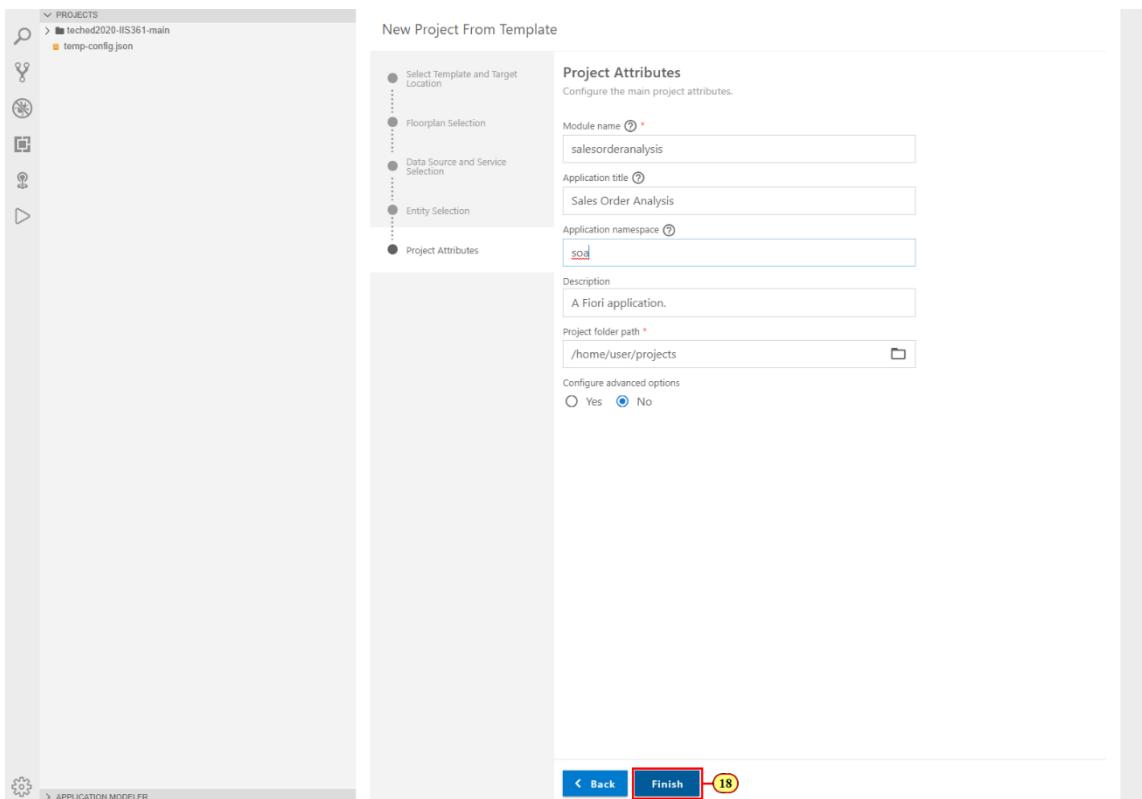


- (14) Click **Next**.

New Project From Template

|                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>● Select Template and Target Location</li> <li>⋮</li> <li>● Floorplan Selection</li> <li>⋮</li> <li>● Data Source and Service Selection</li> <li>⋮</li> <li>● Entity Selection</li> <li>⋮</li> <li>● Project Attributes</li> </ul> | <p><b>Project Attributes</b></p> <p>Configure the main project attributes.</p> <p>Module name <small>?</small> <b>salesorderanalysis</b> <span style="color: red;">15</span></p> <p>Application title <small>?</small> <b>Sales Order Analysis</b></p> <p>Application name <small>?</small> <b>sod</b> <span style="color: red;">16</span></p> <p>Description <span style="color: red;">17</span><br/>A Fiori application.</p> <p>Project folder path <small>*</small><br/><b>/home/user/projects</b></p> <p>Configure advanced options<br/> <input type="radio"/> Yes   <input checked="" type="radio"/> No       </p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- (15) Enter **salesorderanalysis** as module name
- (16) Choose an App Title, for example **Sales Order Analysis**.
- (17) Enter **soa** as a namespace.

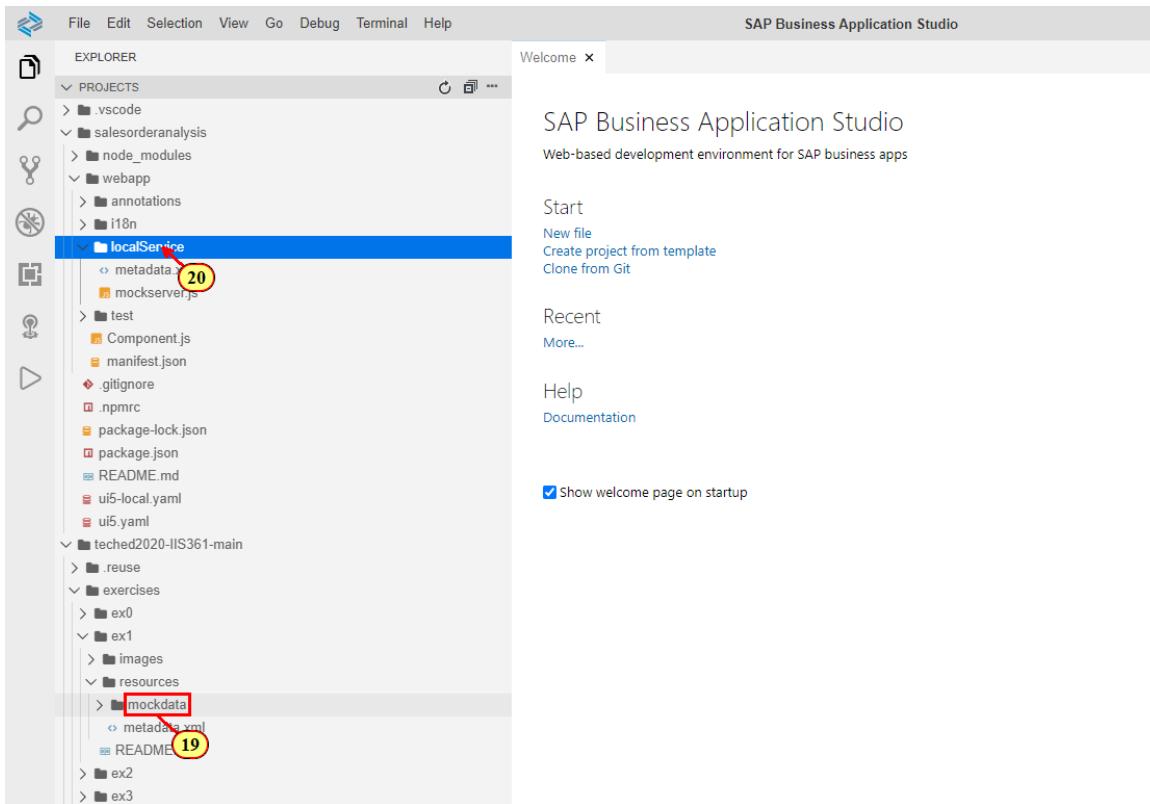


- (18) Click **Finish**. The project gets generated.

## Exercise 1.2 Importing Mock Data Files

As we are working with the mock server in this exercise, you now need to import the sample data files used by this mock server to your project to simulate a real backend server data during the application preview. For this, copy the `mockdata` folder from the sample project.

When you choose to connect to an OData service or SAP system in step (7), this step is not needed.



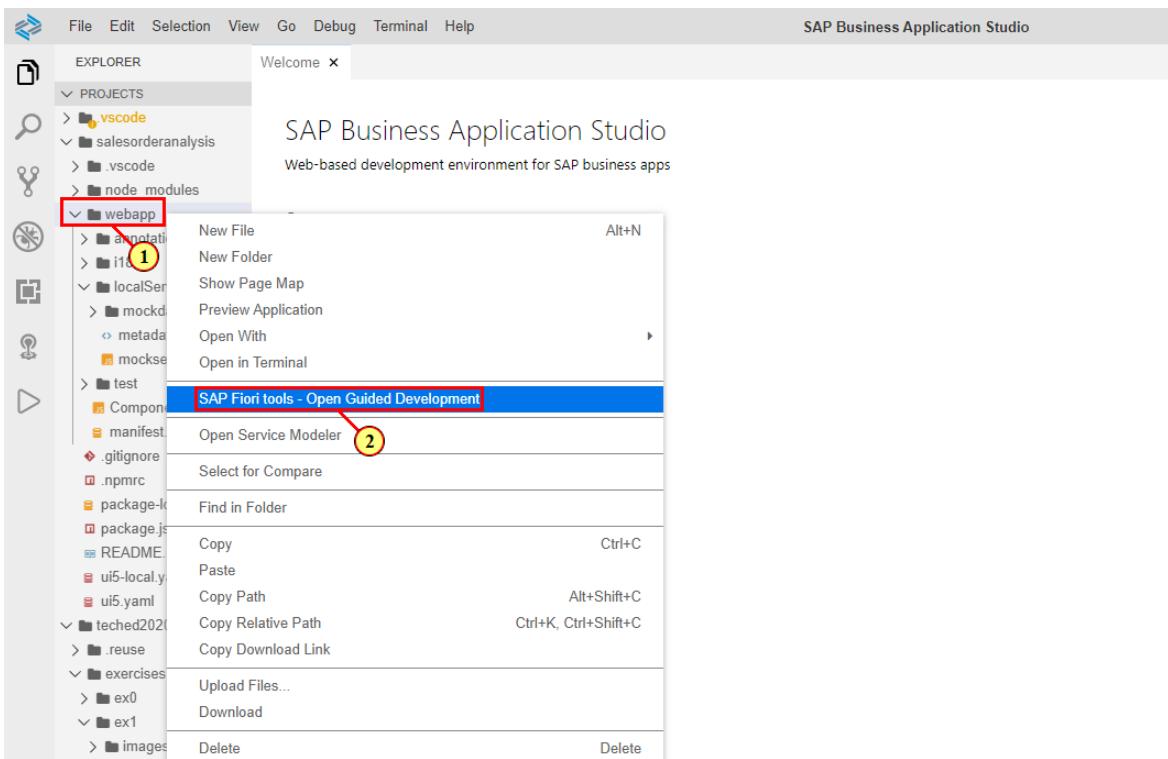
- (19) Expand the folder **teched2020-IIS361->exercises->ex1->resources**.
- (20) Expand the newly created project folder **salesorderanalysis->webapp->localService**. Drag the **mockdata** folder to the localService folder in your generated project.

## Summary

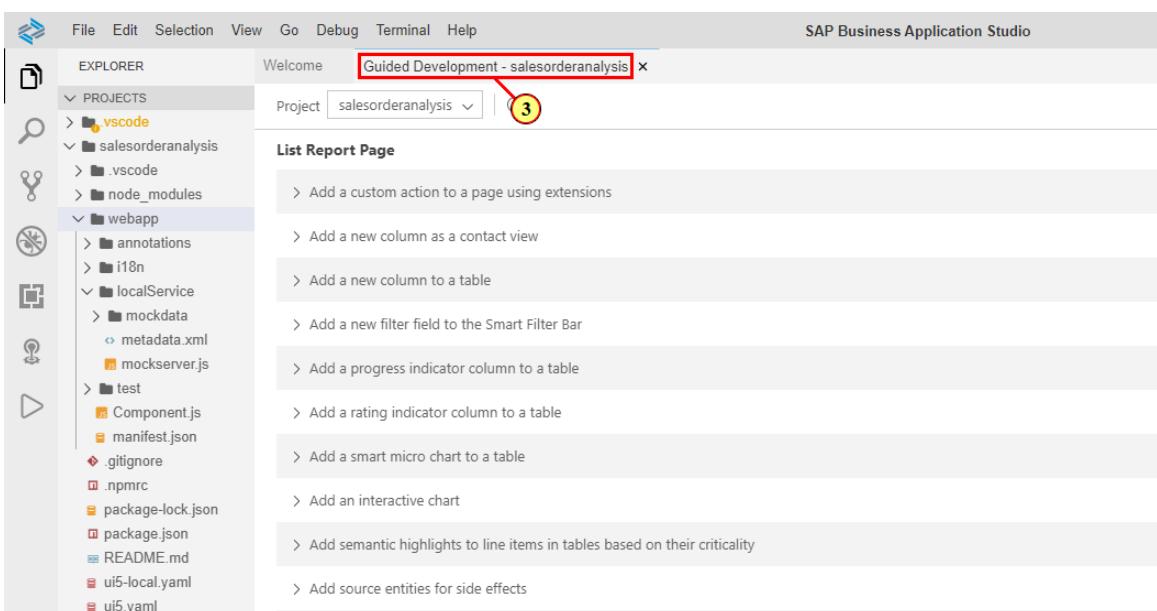
You have successfully generated a Fiori elements application based on the Analytical List Page and Object Page floorplans. In the next exercise, you will configure the content of the Alalytical List Page. Continue to [Exercise 2 – Configure Content Area of Analytical List Page](#)

## Exercise 2 – Configuring Content Area of Analytical List Page

In this exercise, you will define the content area of the Analytical List Page with Fiori Guided Development. For this, you first have to open the Guided Development tool.



- (1) In the **Explorer** pane, right-click on the **webapp** folder.
- (2) Choose **SAP Fiori tools - Open Guided Development**.



(3) (Optional) Double-click on the **Guided Development - salesorderanalysis** tab to get more editing space by temporarily hiding the **Explorer** pane.

## Exercise 2.1 Configuring Table

In this exercise, you will configure the columns displayed in the table of the Analytical List Page. UI annotation ‘LineItem’ is used to represent the table, with DataField records representing the columns. As you will use the Guided Development tool, you do not need to add this annotation manually, just follow the steps below to configure the table and the respective annotation will be added to or updated in the local annotation file when you choose apply.



The screenshot shows the 'Guided Development - salesorderanalysis' tab selected. In the top right corner, there is a search bar with the word 'table' typed into it. A red box highlights the search bar, and a yellow circle with the number '4' is positioned to the right of the search bar, likely indicating the count of results. Below the search bar, there is a list of guides under the heading 'List Report Page'. The guides include: Add a custom action to a page using extensions, Add a new column as a contact view, Add a new column to a table, Add a new filter field to the Smart Filter Bar, Add a progress indicator column to a table, Add a rating indicator column to a table, Add a smart micro chart to a table, Add an interactive chart, Add semantic highlights to line items in tables based on their criticality, Add source entities for side effects, Add source properties for side effects, Add status colors and icons for a column, Add target entities for side effects, and Add target properties for side effects.

(4) To find the guides related to tables, type **table** in the search field



The screenshot shows the same 'Guided Development - salesorderanalysis' tab. The search bar now contains 'table'. Below the search bar, there are several groups of guides. The 'Analytical List Page' group is expanded, showing three guides: 'Add a new column to a table' (with a red box around it and a yellow circle with '1'), 'Add an interactive chart' (with a yellow circle with '5' over it), and 'Enable select all in tables'. Other groups like 'Overview Page' and 'Worklist Page' also have their own lists of guides.

(5) Scroll to the Analytical List Page group and expand the guide **Add a new column to a table**

> **Add a new column to a table**

## Analytical List Page

- ▽ Add a new column to a table

### Description

Follow the steps of this guide to add a new column to a table in your application. This guide will help you configure annotation term **UI.LineItem**, which represents an ordered collection of records representing data fields in a table.

**Start Guide**

6

- ▽ Add an interactive chart
- ▽ Enable select all in tables
- ▽ Set selection limit for tables

### (6) Read the description and click **Start Guide**.

This simple guide contains just one step adding a column (DataField record) to your table (LineItem). You can repeat this step as many times as needed to add all the columns to the table. If the table (LineItem) is not yet defined in your app, it will be created along with the first column.

#### Add a new column to a table

XML Annotation

CDS Annotation

About  
Guide information

Step 1  
Add a new record to the  
UI.LineItem annotation term

Once you have configured the column you would like to add, click the **Apply** button below the code snippet to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity's **UI.LineItem** annotation term manually in the local annotation file under **webapp/annotations** folder.

##### Entity Type Parameters

Select the **Entity Type** for which you would like to configure **UI.LineItem** for adding a new column.

Upon selection, code snippet will be updated using the **UI.LineItem** annotation term if its already defined in the local or server-defined annotation source for your selected entity type.

##### Entity Type \*

Select an entity type for the table

SEPMRA\_C\_ALP\_SalesOrderType

SEPMRA\_C\_ALP\_StatusOrderType

SEPMRA\_C\_ALP\_SupplierVHType

SEPMRA\_C\_ALP\_TotalSalesXPType

SEPMRA\_C\_ALP\_ProductMainCategoryType

SEPMRA\_SO\_ALP\_SLDORDERITEMType

Z\_SEPMRA\_SO\_ALP\_TOTALSalesXPType

**Z\_SEPMRA\_SO\_SALESORDERANALYSISType**

be that you would like to be displayed as a new column in your table

linked entity type by selecting a **Navigation Path** below.

Property \*

Select a property for the new column

High

UI Importance

Apply Copy Reset

```

1 <Annotations>@target="REPLACE_WITH_ENTITY_TYPE">
2   <Annotation Term="UI.LineItem">
3     <Collection>
4       <!-- Existing columns -->
5
6       <!-- New column -->
7       <Record Type="UI.DataField">
8         <PropertyValue Property="Value" Path="REPLACE_WITH_NEW_COLUMN_PROPERTY" />
9         <Annotation Term="UI.Importance" EnumNumber="UI.ImportanceType/High" />
10        </Record>
11
12      </Collection>
13    </Annotation>
14  </Annotations>
15

```

< Back

Next >

Exit Guide

### (7) In the **Entity Type** field, choose your main entity type **Z\_SEPMRA\_SO\_SALESORDERANALYSISType**.

### Add a new column to a table

[XML Annotation](#) [CDS Annotation](#)

**About**  
Guide information

**Step 1**  
Add a new record to the  
UI.LineItem annotation term

Once you have configured the column you would like to add, click the **Apply** button below the code snippet to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity's **UI.LineItem** annotation term manually in the local annotation file under [webapp/annotations folder](#).

**Entity Type Parameters**  
Select the **Entity Type** for which you would like to configure **UI.LineItem** for adding a new column.  
Upon selection, code snippet will be updated using the **UI.LineItem** if its already defined in the local or server-defined annotation source for your selected entity type.

**Entity Type \***

**New Column Parameters**  
Select the **Property** from your chosen entity type that you would like to be displayed as a new column in your table  
You can also choose a property from a differently linked entity type by selecting a **Navigation Path** below.

**Navigation Path**  
 **Property \***  **UI Importance**

**Apply** **Copy** **Reset**

```

1 <Annotations Target="TECHED_Z_SEPMRA_SO_SALESORDERANALYST">
2   <Annotation Term="UI.LineItem">
3     <Collection>
4       <!-- Existing col -->
5       <!-- New column -->
6         <Record Type="UI.DataField">
7           <PropertyValue Property="Value" Path="REPLACE_WITH_NEW_COLUMN_PROPERTY"/>
8           <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High"/>
9         </Record>
10      </Collection>
11    </Annotation>
12  </Annotations>
13
14
15

```

**DeliveryCalendarYear** 

**No annotations found for selected entity type and term UI.LineItem** [Exit Guide](#)

- (8) In the **Property** field, choose **Delivery Calendar Year** as your first column content. The code snippet is adjusted accordingly.

**Add a new column to a table**

XML Annotation CDS Annotation

About Guide information Step 1 Add a new record to the UI.LineItem annotation term

Once you have configured the column you would like to add, click the **Apply** button below the code snippet to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity's **UI.LineItem** annotation term manually in the local annotation file under **webapp/annotations** folder.

Entity Type Parameters

Select the **Entity Type** for which you would like to configure **UI.LineItem** for adding a new column.

Upon selection, code snippet will be updated using the **UI.LineItem** if it's already defined in the local or server-defined annotation source for your selected entity type.

Entity Type \* Z\_SEPMRA\_SO\_SALESORDERANALYSI...

New Column Parameters

Select the **Property** from your chosen entity type that you would like to be displayed as a new column in your table.

You can also choose a property from a differently linked entity type by selecting a **Navigation Path** below.

| Navigation Path          | Property *           | UI Importance |
|--------------------------|----------------------|---------------|
| Select a navigation path | DeliveryCalendarYear | High          |

Apply Copy Reset

```

1 <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.LineItem">
3     <Collection>
4       <!-- Existing columns -->
5       <!-- New column -->
6       <Record Type="UI.DataField">
7         <PropertyValue Property="Value" Path="DeliveryCalendarYear"/>
8         <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High"/>
9       </Record>
10      </Collection>
11    </Annotation>
12  </Annotations>
13
14
15

```

No annotations found for selected entity type and term UI.LineItem

< Back Next > Exit Guide

(9) Click **Apply**. Annotation **UI.LineItem** is added to your local annotation file as configured in the code snippet. This file gets open next to the Guided Development tool.

Note: If your selected entity type was already annotated with a **UI.LineItem**, the configured DataField record (column) would be added to it and a new **UI.LineItem** would not be created.

The screenshot shows the SAP Guided Development interface for the salesorderanalysis application. The current step is "Add a new column to a table". The "XML Annotation" tab is selected. In the "Entity Type Parameters" section, the "Entity Type" is set to "UI.LineItem". In the "New Column Parameters" section, the "Property" is set to "UI.Importance". The "Navigation Path" and "UI Importance" fields are also configured. A large code editor window on the right displays the annotation.xml code, which defines annotations for the UI.LineItem entity type, including a new column "UI.Importance" with properties like Path and EnumMember.

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="sap/opu/odata/IWFND/CATALOGSERVICE/v2/Vocabularies(Te
3     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
6     <edmx:Include Namespace="TECHED_ALP_SO_A_SRV"/>
7   </edmx:Reference>
8   <edmx:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYS
11         <Annotation Term="UI.lineItem">
12           <Collection>
13             <Record Type="UI.DataField">
14               <PropertyValue Property="Value" Path="DeliveryCalend
15                 <Annotation Term="UI.Importance" EnumMember="UI.Impo
16               </Record>
17             </Collection>
18           </Annotation>
19         </Annotations>
20       </Schema>
21     </edmx:DataServices>
22   </edmx:Edmx>

```

Now repeat steps (8) and (9) to add the records (columns) for following properties:

- DeliveryCalendarMonth
- SalesOrder
- SalesOrderItem
- Product
- MainProductCategory
- SoldToParty
- Quantity
- NetAmount

**Add a new column to a table**

XML Annotation CDS Annotation

About Guide information Step 1 Add a new record to the UI.LineItem annotation term

Once you have configured the column you would like to add, click the **Apply** button below the code snippet to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity's **UI.LineItem** annotation term manually in the local annotation file under `weapp/annotations` folder.

Entity Type Parameters Select the **Entity Type** for which you would like to configure **UI.LineItem** for adding a new column.

Upon selection, code snippet will be updated using the **UI.LineItem** if its already defined in the local or server-defined annotation source for your selected entity type.

Entity Type \* `Z_SEPMRA_SO_SALESORDERANALYSIS...`

New Column Parameters Select the **Property** from your chosen entity type that you would like to be displayed as a new column in your table. You can also choose a property from a differently linked entity type by selecting a **Navigation Path** below.

Navigation Path Property \* Select a navigation path NetAmount

UI Importance High

Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SO_A_SRV_Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.LineItem">
3     <Collection>
4       <!-- Existing columns -->
5       <!-- New column -->
6       <Record Type="UI.DataField">
7         <PropertyValue Property="Value" Path="NetAmount"/>
8         <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High"/>
9       </Record>
10      </Collection>
11    </Annotation>
12  </Annotations>
13 </edmx:DataServices>
14 
```

< Back Next > **Exit Guide** ⑩

(10) When the records for all property are added to your LineItem, click **Exit Guide** to get back to the list of available guides.

## Exercise 2.2 Configuring Chart

In this exercise, you will configure the chart to be displayed in the Analytical List Page. Annotation Term "UI.Chart" is used to visualize the data in the chart format. As you will use the Guided Development tool, you do not need to add this annotation manually, just follow the steps below to configure the chart and the respective annotation will be added to or updated in the local annotation file when you choose apply.

Welcome Guided Development - salesorderanalysis x

Project salesorderanalysis v Group by Page Type chart ⑪

List Report Page > Add a smart micro chart to a table > Add an interactive chart

Object Page > Add a custom section to an object page using extensions > Add a new section to a page > Add a smart chart facet to an object page > Add a smart micro chart to a table

Overview Page > Add an analytical card to an overview page

Analytical List Page > Add a new visual filter > Add an interactive chart ⑫ > Add semantic filtering for visual filter

Worklist Page > Add a smart micro chart to a table

annotation.xml x

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="/sap/opu/odata/IWFND/CATALOGSERVICE/v2/Vocabularies(Te
3     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
6     <edmx:Include Namespace="TECHED_ALP_SO_A_SRV"/>
7   </edmx:Reference>
8   <edmx:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SO_A_SRV_Z_SEPMRA_SO_SALESORDERANALYS
11         <Annotation Term="UI.LineItem">
12           <Collection>
13             <Record Type="UI.DataField">
14               <PropertyValue Property="Value" Path="DeliveryCalend
15               <Annotation Term="UI.Importance" EnumMember="UI.Impo
16             </Record>
17             <Record Type="UI.DataField">
18               <PropertyValue Property="Value" Path="DeliveryCalend
19               <Annotation Term="UI.Importance" EnumMember="UI.Impo
20             </Record>
21             <Record Type="UI.DataField">
22               <PropertyValue Property="Value" Path="SalesOrder"/>
23               <Annotation Term="UI.Importance" EnumMember="UI.Impo
24             </Record>
25             <Record Type="UI.DataField">
26               <PropertyValue Property="Value" Path="SalesOrderItem"
27               <Annotation Term="UI.Importance" EnumMember="UI.Impo
28             </Record>
29             <Record Type="UI.DataField">
30               <PropertyValue Property="Value" Path="Product"/>
31               <Annotation Term="UI.Importance" EnumMember="UI.Impo
32             </Record>
33             <Record Type="UI.DataField">
34               <PropertyValue Property="Value" Path="MainProductCat
35               <Annotation Term="UI.Importance" EnumMember="UI.Impo
36             </Record>
37             <Record Type="UI.DataField">
38               <PropertyValue Property="Value" Path="SoldToParty"/>
39               <Annotation Term="UI.Importance" EnumMember="UI.Impo
40             </Record>
41             <Record Type="UI.DataField">
42               <PropertyValue Property="Value" Path="Quantity"/>
43               <Annotation Term="UI.Importance" EnumMember="UI.Impo
44             </Record>
45             <Record Type="UI.DataField">
46               <PropertyValue Property="Value" Path="NetAmount"/>
47               <Annotation Term="UI.Importance" EnumMember="UI.Impo
48             </Record>
49           </Collection>
50         </Annotations>
51       </Schema>
52     </edmx:DataServices>
53   </edmx:Edmx>
54 
```

(11) Filter guides by **chart** in the search field

(12) Expand the guide **Add an interactive chart** > Add an interactive chart in the **Analytical List Page** group.

#### Analytical List Page

> Add a new visual filter

✓ Add an interactive chart

##### Description

You can use this guide to add a chart to a Analytical List report page. Located between filter bar and table, the chart acts as a secondary filter.

Annotations belonging to **UI.Chart** are used to show a visual representation of aggregatable properties.

##### Sample Preview



**Start Guide**

> Add semantic coloring for visual filter

13

#### Worklist Page

> Add a smart micro chart to a table

(13) Click **Start Guide**.

**Add an interactive chart**

XML Annotation CDS Annotation

**About**  
Guide information**Step 1**  
Annotate service entity with a UI.Chart annotation**Step 2**  
Configure a UI.Presentation/Variant annotation term**Annotate service entity with a UI.Chart annotation**

In this step, you will configure the chart to be displayed in the application.

Annotation Term **UI.Chart** is used to visualize the data in Chart format. You can configure chart type as well as different measures and dimensions.

|                                    |                            |
|------------------------------------|----------------------------|
| <b>Entity Type *</b>               | <b>Chart Title</b>         |
| Z_SEPMRA_SO_SALESORDERANALYSI... ▾ | Revenue by Customer        |
| <b>Chart Description</b>           | <b>Chart Type *</b>        |
| Net Revenue by Customer            | Column                     |
| <b>Measures Property *</b>         | <b>Dimensions Property</b> |
| NetAmount                          | SoldToParty                |
| <b>Dimensions Property</b>         |                            |
| DeliveryCalendarYear               |                            |

(14)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| Apply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Copy | Reset |
| <pre>&lt;Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType"&gt;   &lt;Annotation Term="UI.Chart"&gt;     &lt;Record Type="UI.ChartDefinitionType"&gt;       &lt;PropertyValue Property="Title" String="Revenue by Customer"/&gt;       &lt;PropertyValue Property="Description" String="Net Revenue by Customer"/&gt;       &lt;PropertyValue Property="Charttype" EnumMember="UI.Charttype/Column"/&gt;       &lt;PropertyValue Property="Dimensions"&gt;         &lt;Collection&gt;           &lt;PropertyPath&gt;SoldToParty&lt;/PropertyPath&gt;           &lt;PropertyPath&gt;DeliveryCalendarYear&lt;/PropertyPath&gt;         &lt;/Collection&gt;       &lt;/PropertyValue&gt;       &lt;PropertyValue Property="Measures"&gt;         &lt;Collection&gt;           &lt;PropertyPath&gt;NetAmount&lt;/PropertyPath&gt;         &lt;/Collection&gt;       &lt;/PropertyValue&gt;     &lt;/Record&gt;   &lt;/Annotation&gt; &lt;/Annotations&gt;</pre> |      |       |

```

4   </edm:Reference>
5   <edm:Reference Uri="/here/goes/your/serviceurl/metadata">
6     <edm:Include Namespace="TECHED_ALP_SOA_SRV/Z_SEPMRA_SO_SALESORDERANALYSISType">
7   </edm:Reference>
8   <edm:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
11         <Annotation Term="UI.LineItem">
12           <Collection>
13             <Record Type="UI.DataField">
14               <PropertyValue Property="Value" Path="DeliveryCalendarYear"/>
15               <Annotation Term="UI.Importance" EnumMember="UI.Importance/High"/>
16             </Record>
17             <Record Type="UI.DataField">
18               <PropertyValue Property="Value" Path="SalesOrder"/>
19               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
20             </Record>
21             <Record Type="UI.DataField">
22               <PropertyValue Property="Value" Path="SalesOrderItem"/>
23               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Low"/>
24             </Record>
25             <Record Type="UI.DataField">
26               <PropertyValue Property="Value" Path="MainProductCategory"/>
27               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
28             </Record>
29             <Record Type="UI.DataField">
30               <PropertyValue Property="Value" Path="Product"/>
31               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Low"/>
32             </Record>
33             <Record Type="UI.DataField">
34               <PropertyValue Property="Value" Path="SoldToParty"/>
35               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
36             </Record>
37             <Record Type="UI.DataField">
38               <PropertyValue Property="Value" Path="Quantity"/>
39               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
40             </Record>
41             <Record Type="UI.DataField">
42               <PropertyValue Property="Value" Path="NetAmount"/>
43               <Annotation Term="UI.Importance" EnumMember="UI.Importance/High"/>
44             </Record>
45             <Record Type="UI.DataField">
46               <PropertyValue Property="Value" Path="NetAmount"/>
47               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
48             </Record>
49             <Collection>
50               <Annotation>
51             </Annotations>
52           </Schema>
53         </DataServices>
54       </edmx:Edmx>

```

**(14) Enter the following values:**

| Field               | Value                              |
|---------------------|------------------------------------|
| Entity Type         | Z_SEPMRA_SO_SALESORDERANALYSISType |
| Chart Title         | Revenue by Customer                |
| Chart Description   | Net Revenue by Customer            |
| ChartType           | Column                             |
| Measures property   | NetAmount                          |
| Dimensions Property | SoldToParty                        |
| Dimensions Property | DeliveryCalendarYear               |

**Add an interactive chart**

XML Annotation CDS Annotation

**Step 1** Annotate service entity with a UI.Chart annotation

**Step 2** Configure a UI.PresentationVariant annotation term

Annotate service entity with a UI.Chart annotation

In this step, you will configure the chart to be displayed in the application.

Annotation Term **UI.Chart** is used to visualize the data in Chart format. You can configure chart type as well as different measures and dimensions.

**Entity Type \*** Z\_SEPHRA\_SO\_SALESORDERANALYSIS

**Chart Title** Revenue by Customer

**Chart Description** Net Revenue by Customer

**Chart Type \*** Column

**Measures Property \*** NetAmount

**Dimensions Property** SoldToParty

**Dimensions Property** DeliveryCalendarYear

**Apply** Copy Reset

Annotations Target="TECHED\_ALP\_SO\_ASRV.Z\_SEPHRA\_SO\_SALESORDERANALYSISType">  
Annotation Term="UI.Chart">  
    <Record Type="UI.ChartDefinitionType">  
        <PropertyValue Property="Title" String="Revenue by Customer"/>  
        <PropertyValue Property="Description" String="Net Revenue by Customer"/>  
        <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column"/>  
        <PropertyValue Property="Dimensions">  
            <Collection>  
                <PropertyPath>SoldToParty</PropertyPath>  
                <PropertyPath>DeliveryCalendarYear</PropertyPath>  
            </Collection>  
            <PropertyValue Property="Measures">  
                <Collection>  
                    <PropertyPath>NetAmount</PropertyPath>  
                </Collection>  
            </PropertyValue>  
        </Record>  
    </Annotation>  
  </Annotations>

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(15) Click **Apply**. UI.Chart annotation is added to your local annotation file as configured in the code snippet.

## Exercise 2.3 Configuring Presentation Variant

In this exercise, you will configure a UI.PresentationVariant annotation that is used to display the main content of the Analytical List Page. Here you will assign the chart and table created earlier in this exercise as visualization artifacts and define the sorting order. To do so, you will use the **step 2** of the **Add interactive chart** guide.

**Add an interactive chart**

XML Annotation CDS Annotation

**About**  
Guide information**Step 1**  
Annotate service entity with a  
UI.Chart annotation**Step 2**  
Configure a  
UI.PresentationVariant  
annotation term

16

**Annotate service entity with a UI.Chart annotation**

In this step, you will configure the chart to be displayed in the application.

Annotation Term **UI.Chart** is used to visualize the data in Chart format. You can configure chart type as well as different measures and dimensions.**Entity Type \***

Z\_SEPMRA\_SO\_SALESORDERANALYSI...

**Chart Title**

Revenue by Customer

**Chart Description**

Net Revenue by Customer

**Chart Type \***

Column

**Measures Property \***

NetAmount

**Dimensions Property**

SoldToParty

**Dimensions Property**

DeliveryCalendarYear

**Apply****Copy****Reset**

Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
2   <Annotation Term="UI.Chart">
3     <Record Type="UI.ChartDefinitionType">
4       <PropertyValue Property="Title" String="Revenue by Customer"/>
5       <PropertyValue Property="Description" String="Net Revenue by Customer"/>
6       <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column"/>
7       <Property Value="Dimensions">
8         <Collection>
9           <PropertyPath>SoldToParty</PropertyPath>
10          <PropertyPath>DeliveryCalendarYear</PropertyPath>
11        </Collection>
12      </PropertyValue>
13      <Property Value="Measures">
14        <Collection>
15          <PropertyPath>NetAmount</PropertyPath>
16        </Collection>
17      </PropertyValue>
18    </Record>
19  </Annotation>
20 </Annotations>

```

**< Back****Next >****Exit Guide**

```

4   </edm:Reference>
5   <edm:Reference Uri="~/here/goes/your/serviceurl/$metadata">
6     <edm:Include Namespace="TECHED_ALP_SO_A_SRV"/>
7   </edm:Reference>
8   <edm:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPHRA_SO_SALESORDERANALYSI...
11         <Annotation Term="UI.LineItem">
12           <Collection>
13             <Record Type="UI.DataField">
14               <PropertyValue Property="Value" Path="DeliveryCalend...
15               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
16             </Record>
17             <Record Type="UI.DataField">
18               <PropertyValue Property="Value" Path="DeliveryCalend...
19               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
20             </Record>
21             <Record Type="UI.DataField">
22               <PropertyValue Property="Value" Path="SalesOrderItem...
23               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
24             </Record>
25             <Record Type="UI.DataField">
26               <PropertyValue Property="Value" Path="Product"/>
27               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
28             </Record>
29             <Record Type="UI.DataField">
30               <PropertyValue Property="Value" Path="MainProductCat...
31               <Annotation Term="UI.Importance" EnumMembers="UI.Impo...
32             </Record>
33             <Record Type="UI.DataField">
34               <PropertyValue Property="Value" Path="SoldToParty"/>
35               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
36             </Record>
37             <Record Type="UI.DataField">
38               <PropertyValue Property="Value" Path="Quantity"/>
39               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
40             </Record>
41             <Record Type="UI.DataField">
42               <PropertyValue Property="Value" Path="NetAmount"/>
43               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
44             </Record>
45           </Collection>
46         </Annotation>
47       <Annotation Term="UI.Chart">
48         <Record Type="UI.ChartDefinitionType">
49           <PropertyValue Property="Title" String="Revenue by Cust...
50           <PropertyValue Property="Description" String="Net Revenue by Customer"/>
51           <PropertyValue Property="ChartType" EnumMember="UI.Chart"/>
52           <PropertyValue Property="Dimensions">
53             <Collection>
54               <PropertyPath>SoldToParty</PropertyPath>
55               <PropertyPath>DeliveryCalendarYear</PropertyPath>
56             </Collection>
57           </PropertyValue>
58         </Record>
59       </Annotation>
60     </Annotations>
61   </Schema>

```

**(16) Click Step 2: Configure a UI.PresentationVariant annotation term.****Add an interactive chart**

XML Annotation CDS Annotation

**About**  
Guide information**Step 1**  
Annotate service entity with a  
UI.Chart annotation**Step 2**  
Configure a  
UI.PresentationVariant  
annotation term

17

**Configure a UI.PresentationVariant annotation term**In this step, you will configure a **UI.PresentationVariant** annotation. **UI.PresentationVariant** allows you to configure how to display the main entity data, choose the visualization artifacts, sort order, initial expansion level in case of a grouped table, etc.**Entity Type \***

Z\_SEPMRA\_SO\_SALESORDERANALYSI...

**Sort Order Property**

NetAmount

**Sort Order Descending? \***

true

**Include Grand Total? \***

false

**Initial Expansion Level**

1

**Apply****Copy****Reset**

```

1 <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
2   <Annotation Term="UI.PresentationVariant">
3     <Record Type="UI.PresentationVariantType">
4       <PropertyValue Property="Text" String="Default"/>
5       <PropertyValue Property="SortOrder">
6         <Collection>
7           <Record Type="Common.SortOrderType">
8             <PropertyValue Property="Property" PropertyPath="NetAmount"/>
9             <PropertyValue Property="Descending" Bool="true"/>
10            </Record>
11          </Collection>
12        </PropertyValue>
13        <PropertyValue Property="IncludeGrandTotal" Bool="false"/>
14        <PropertyValue Property="InitialExpansionLevel" Int="1"/>
15        <PropertyValue Property="Visualizations">
16          <Collection>
17            <AnnotationPath>@UI.LineItem</AnnotationPath>
18            <AnnotationPath>@UI.Chart</AnnotationPath>
19          </Collection>
20        </PropertyValue>
21      </Record>
22    </Annotation>
23  </Annotations>

```

**< Back****Next >****Exit Guide**

```

4   </edm:Reference>
5   <edm:Reference Uri="~/here/goes/your/serviceurl/$metadata">
6     <edm:Include Namespace="TECHED_ALP_SO_A_SRV"/>
7   </edm:Reference>
8   <edm:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPHRA_SO_SALESORDERANALYSI...
11         <Annotation Term="UI.LineItem">
12           <Collection>
13             <Record Type="UI.DataField">
14               <PropertyValue Property="Value" Path="DeliveryCalend...
15               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
16             </Record>
17             <Record Type="UI.DataField">
18               <PropertyValue Property="Value" Path="DeliveryCalend...
19               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
20             </Record>
21             <Record Type="UI.DataField">
22               <PropertyValue Property="Value" Path="SalesOrderItem...
23               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
24             </Record>
25             <Record Type="UI.DataField">
26               <PropertyValue Property="Value" Path="Product"/>
27               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
28             </Record>
29             <Record Type="UI.DataField">
30               <PropertyValue Property="Value" Path="MainProductCat...
31               <Annotation Term="UI.Importance" EnumMembers="UI.Impo...
32             </Record>
33             <Record Type="UI.DataField">
34               <PropertyValue Property="Value" Path="SoldToParty"/>
35               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
36             </Record>
37             <Record Type="UI.DataField">
38               <PropertyValue Property="Value" Path="Quantity"/>
39               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
40             </Record>
41             <Record Type="UI.DataField">
42               <PropertyValue Property="Value" Path="NetAmount"/>
43               <Annotation Term="UI.Importance" EnumMember="UI.Impo...
44             </Record>
45           </Collection>
46         </Annotation>
47       <Annotation Term="UI.Chart">
48         <Record Type="UI.ChartDefinitionType">
49           <PropertyValue Property="Title" String="Revenue by Cust...
50           <PropertyValue Property="Description" String="Net Revenue by Customer"/>
51           <PropertyValue Property="ChartType" EnumMember="UI.Chart"/>
52           <PropertyValue Property="Dimensions">
53             <Collection>
54               <PropertyPath>SoldToParty</PropertyPath>
55               <PropertyPath>DeliveryCalendarYear</PropertyPath>
56             </Collection>
57           </PropertyValue>
58         </Record>
59       </Annotation>
60     </Annotations>
61   </Schema>

```



(17) Enter the following values:

| Field                   | Value                              |
|-------------------------|------------------------------------|
| Entity Type             | Z_SEPMRA_SO_SALESORDERANALYSISType |
| Sort Order Property     | NetAmount                          |
| Sort Order Descending?  | true                               |
| Include Grand Total?    | false                              |
| Initial Expansion Level | 1                                  |

Add an interactive chart
XML Annotation CDS Annotation

About
Step 1
Step 2

Guide information

Annotate service entity with a UI.Chart annotation

Configure a UI.PresentationVariant annotation term

In this step, you will configure a `UI.PresentationVariant` annotation. `UI.PresentationVariant` allows you to configure how to display the main entity data, choose the visualization artifacts, sort order, initial expansion level in case of a grouped table,...etc.

Entity Type \*
Sort Order Property

Z\_SEPMRA\_SO\_SALESORDERANALYSI... ▾
NetAmount ▾

Sort Order Descending? \*
Include Grand Total? \*

true ▾
false ▾

Initial Expansion Level

Apply Copy Reset

```

<Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
  <Annotation Term="UI.PresentationVariantType">
    <Record Type="UI.PresentationVariantType">
      <PropertyValue Property="Text" String="Default"/>
      <PropertyValue Property="SortOrder">
        <Collection>
          <Record Type="Common.SortOrderType">
            <PropertyValue Property="Property" PropertyPath="NetAmount"/>
            <PropertyValue Property="Descending" Bool="true"/>
          </Record>
        </Collection>
      </PropertyValue>
      <PropertyValue Property="IncludeGrandTotal" Bool="false"/>
      <PropertyValue Property="InitialExpansionLevel" Int="1"/>
      <PropertyValue Property="Visualizations">
        <Collection>
          <AnnotationPath>@UI.LineItem</AnnotationPath>
          <AnnotationPath>@UI.Chart</AnnotationPath>
        </Collection>
      </PropertyValue>
    </Record>
  </Annotation>
</Annotations>

```

< Back
Next >
Exit Guide

```

4   </edmx:Reference>
5     <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
6       <edmx:Include Namespace="TECHED_ALP_SO_SRV"/>
7     </edmx:Reference>
8   </edmx:DataServices>
9   <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10    <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPHRA_SO_SALESORDERANALYSI...>
11      <Annotation Term="UI.LineItem">
12        <Collection>
13          <Record Type="UI.DataField">
14            <PropertyValue Property="Value" Path="DeliveryCalendarYear"/>
15            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
16          </Record>
17          <Record Type="UI.DataField">
18            <PropertyValue Property="Value" Path="DeliveryCalendarYear"/>
19            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
20          </Record>
21          <Record Type="UI.DataField">
22            <PropertyValue Property="Value" Path="SalesOrder"/>
23            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
24          </Record>
25          <Record Type="UI.DataField">
26            <PropertyValue Property="Value" Path="SalesOrderItem"/>
27            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
28          </Record>
29          <Record Type="UI.DataField">
30            <PropertyValue Property="Value" Path="Product"/>
31            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
32          </Record>
33          <Record Type="UI.DataField">
34            <PropertyValue Property="Value" Path="MainProductCategory"/>
35            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
36          </Record>
37          <Record Type="UI.DataField">
38            <PropertyValue Property="Value" Path="SoldToParty"/>
39            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
40          </Record>
41          <Record Type="UI.DataField">
42            <PropertyValue Property="Value" Path="Quantity"/>
43            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
44          </Record>
45          <Record Type="UI.DataField">
46            <PropertyValue Property="Value" Path="NetAmount"/>
47            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
48          </Record>
49        </Collection>
50      </Annotation>
51      <Annotation Term="UI.Chart">
52        <Record Type="UI.ChartDefinitionType">
53          <PropertyValue Property="Title" String="Revenue_by_Customer"/>
54          <PropertyValue Property="Description" String="Net_Revenue_by_Customer"/>
55          <PropertyValue Property="ChartType" EnumMember="UI.ChartDefinitionType_SingleSeries"/>
56          <PropertyValue Property="Dimensions">
57            <Collection>
58              <PropertyValue Property="Path" Value="SoldToParty"/>
59              <PropertyValue Property="Path" Value="DeliveryCalendarYear"/>
60            </Collection>
61          </PropertyValue>

```

(18) Click **Apply**. `UI.PresentationVariant` annotation is added to your local annotation file as configured in the code snippet.

**Add an interactive chart**

XML Annotation CDS Annotation

About Guide information Step 1 Annotate service entity with a UI.Chart annotation Step 2 Configure a UI.PresentationVariant annotation term

Configure a UI.PresentationVariant annotation term

In this step, you will configure a UI.PresentationVariant annotation. UI.PresentationVariant allows you to configure how to display the main entity data, choose the visualization artifacts, sort order, initial expansion level in case of a grouped table,...etc.

Entity Type \* Sort Order Property Z\_SEPMRA\_SO\_SALESORDERANALYSIS... NetAmount

Sort Order Descending? \* Include Grand Total? \* true false

Initial Expansion Level 1

Apply Copy Reset Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.Presentationvariant">
3     <Record Type="UI.PresentationvariantType">
4       <PropertyValue Property="Text" String="Default"/>
5       <PropertyValue Property="SortOrder">
6         <Collection>
7           <Record Type="Common.SortOrderType">
8             <PropertyValue Property="Property" PropertyPath="NetAmount"/>
9             <PropertyValue Property="Descending" Bool="true"/>
10            </Record>
11          </Collection>
12        </PropertyValue>
13        <PropertyValue Property="IncludeGrandTotal" Bool="false"/>
14        <PropertyValue Property="InitialExpansionLevel" Int="1"/>
15        <PropertyValue Property="Visualizations">
16          <Collection>
17            <Annotation Path="@UI.LineItem</AnnotationPath>
18              <AnnotationPath>@UI.Chart</AnnotationPath>
19            </Collection>
20          </Annotation>
21        </Record>
22      </Annotations>
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```

< Back Next > **19** Exit Guide

(19) Click **Exit Guide**.

## Exercise 2.4 Configuring Chart Data Label

At this point, the required content for the Analytical List Page is configured and you could start the preview as described in the [Exercise 2.5 Starting Application Preview](#). But before you do so, let's enhance the chart view with the data labels indicating the measure values. For this the following manifest setting needs to be defined for your Analytical List Page:

```
"chartSettings": {
  "showDataLabel": true
}
```

However, as there is a dedicated guide in the Guided Development tool, there is no need to do this manually.

annotation.xml

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common"/>
3   <edmx:Reference Uri="/sap/opu/odata/INFHD/CATALOGSERVICE;v=2/Vocabularies(Technical)">
4     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="UI"/>
5   </edmx:Reference>
6   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
7     <edmx:Include Namespace="TECHED_ALP_SO_A_SRV"/>
8   </edmx:Reference>
9   <edmx:DataService>
10    <Schema xmlns="http://docs.oasis-open.org/odata/ns edm" Namespace="soa">
11      <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPHRA_SO_SALESORDERANALYS">
12        <Annotation Term="UI.LineItem">
13          <Collection>
14            <Record Type="UI.DataField">
15              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
16              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
17            </Record>
18            <Record Type="UI.DataField">
19              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
20              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
21            </Record>
22            <Record Type="UI.DataField">
23              <PropertyValue Property="Value" Path="SalesOrder"/>
24              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
25            </Record>
26            <Record Type="UI.DataField">
27              <PropertyValue Property="Value" Path="SalesOrderItem"/>
28              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
29            </Record>
30            <Record Type="UI.DataField">
31              <PropertyValue Property="Value" Path="Product"/>
32              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
33            </Record>
34            <Record Type="UI.DataField">
35              <PropertyValue Property="Value" Path="ProductCategory"/>
36              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
37            </Record>
38            <Record Type="UI.DataField">
39              <PropertyValue Property="Value" Path="SoldToParty"/>
40              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
41            </Record>
42            <Record Type="UI.DataField">
43              <PropertyValue Property="Value" Path="Quantity"/>
44              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
45            </Record>
46            <Record Type="UI.DataField">
47              <PropertyValue Property="Value" Path="NetAmount"/>
48              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
49            </Record>
50          </Collection>
51        </Annotation>
52      </Schema>
53    </Annotations>
54  </edmx:DataService>

```

## (20) In Guided Development tool, expand the guide **Enable data label in smart charts and KPI cards** [Enable data label in smart charts and KPI cards](#)

annotation.xml

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common"/>
3   <edmx:Reference Uri="/sap/opu/odata/INFHD/CATALOGSERVICE;v=2/Vocabularies(Technical)">
4     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="UI"/>
5   </edmx:Reference>
6   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
7     <edmx:Include Namespace="TECHED_ALP_SO_A_SRV"/>
8   </edmx:Reference>
9   <edmx:DataService>
10    <Schema xmlns="http://docs.oasis-open.org/odata/ns edm" Namespace="soa">
11      <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPHRA_SO_SALESORDERANALYS">
12        <Annotation Term="UI.LineItem">
13          <Collection>
14            <Record Type="UI.DataField">
15              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
16              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
17            </Record>
18            <Record Type="UI.DataField">
19              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
20              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
21            </Record>
22            <Record Type="UI.DataField">
23              <PropertyValue Property="Value" Path="SalesOrder"/>
24              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
25            </Record>
26            <Record Type="UI.DataField">
27              <PropertyValue Property="Value" Path="SalesOrderItem"/>
28              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
29            </Record>
30            <Record Type="UI.DataField">
31              <PropertyValue Property="Value" Path="Product"/>
32              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
33            </Record>
34            <Record Type="UI.DataField">
35              <PropertyValue Property="Value" Path="ProductCategory"/>
36              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
37            </Record>
38            <Record Type="UI.DataField">
39              <PropertyValue Property="Value" Path="SoldToParty"/>
40              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
41            </Record>
42            <Record Type="UI.DataField">
43              <PropertyValue Property="Value" Path="Quantity"/>
44              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
45            </Record>
46            <Record Type="UI.DataField">
47              <PropertyValue Property="Value" Path="NetAmount"/>
48              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
49            </Record>
50          </Collection>
51        </Annotation>
52      </Schema>
53    </Annotations>
54  </edmx:DataService>

```

## (21) Choose **Start Guide**.

**Note:** As you do not need to make any changes to the annotation file in this exercise, you can close the annotation.xml file to get more space.

Set the showDataLabel property of chart to true

```

1 "chart": {
2   "showDataLabel": true
3 }
4
5

```

(22) In **Page** field, choose the first page in your app  
**AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS.**

Set the showDataLabel property of chart to true

```

1 "chart": {
2   "showDataLabel": true
3 }
4
5

```

**Apply** **Copy** **Reset**

(23) Click **Apply**.

The screenshot shows the SAP Guided Development interface. On the left, there's a sidebar with 'Welcome' and 'Guided Development - salesorderanalysis'. Below it are 'About' and 'Step 1' sections. Step 1 says 'Set the showDataLabel property of chart to true'. The main area has a title 'Enable data label in smart charts and KPI cards'. To the right is a code editor titled 'AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS.json'. The code is as follows:

```

1   {
2     "table": {
3       "qualifier": "",
4       "autohide": true,
5       "condensedTableLayout": true
6     },
7     "filterBar": {
8       "showGoButtonOnFilterBar": true,
9       "smartVariantManagement": false
10    },
11    "keyPerformanceIndicators": {},
12    "$schema": "./schemas/AnalyticalListPage.json",
13    "chart": {
14      "showDataLabel": true
15    }
16  }

```

A red box highlights the line 'showDataLabel": true' at index 14, and a yellow circle with the number '24' is placed near the bottom right of the code editor.

(24) A .json file describing the page settings in a compact and technology independent notation opens to the right and the new showDataLabel property is inserted. Any update to this transient file is automatically synchronized with the webapp/manifest.json of your application on save.

As auto-save is enabled by default, you do not need to save it manually and can close the .json file now.

The screenshot shows the SAP Guided Development interface for a project titled 'Guided Development - salesorderanalysis'. The current step is 'Step 1: Set the showDataLabel property of chart to true'. A code snippet editor displays the following JSON configuration:

```

1 {
2   "chart": {
3     "showDataLabel": true
4   }
5 }

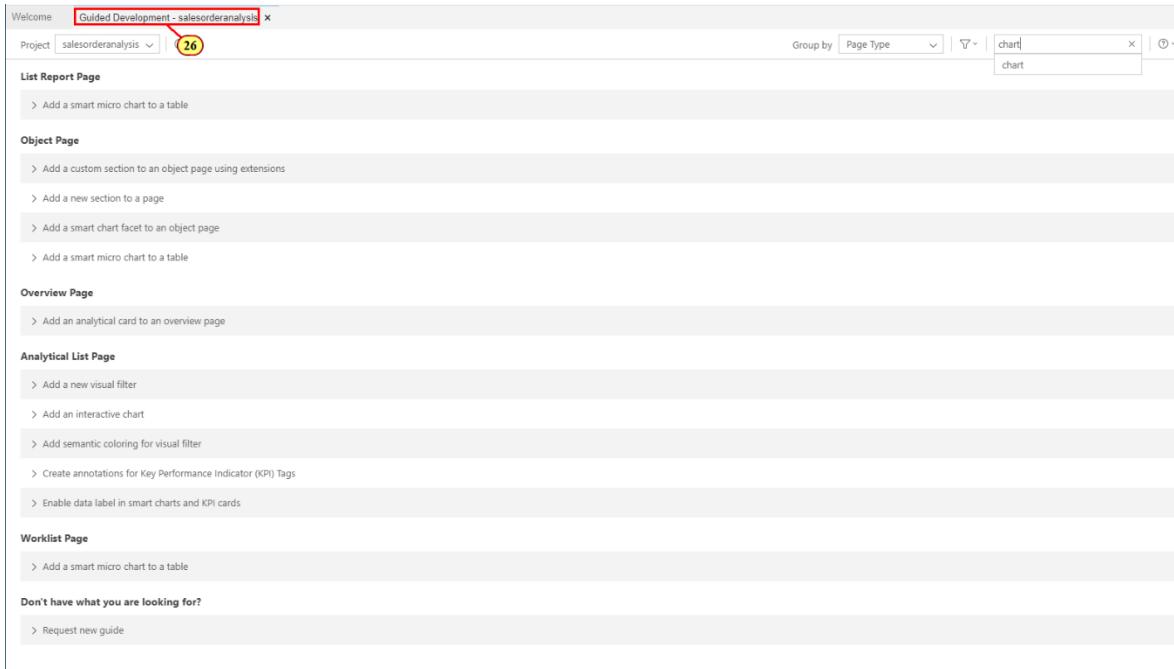
```

Buttons for 'Apply', 'Copy', and 'Reset' are visible above the code editor. A success message indicates: 'Code snippet has been successfully applied'. Navigation buttons '< Back' and 'Next >' are at the bottom, along with an 'Exit Guide' button. A red circle with the number '25' is drawn around the 'Exit Guide' button.

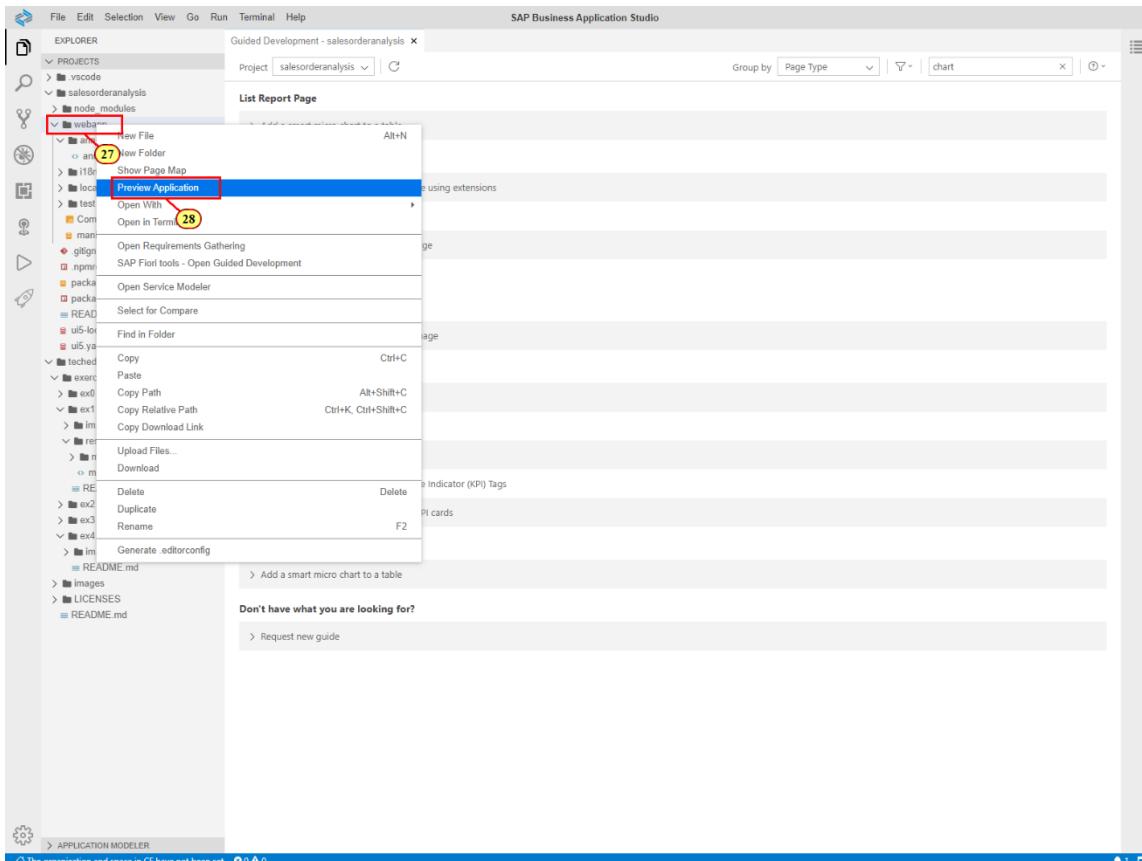
(25) Click **Exit Guide**.

## Exercise 2.5 Starting Application Preview

In this exercise, you will start the preview of the Analytical List Page to view the content you just configured. Before you perform the steps below, make sure that the pop-ups from the SAP Business Application Studio are allowed in your browser.

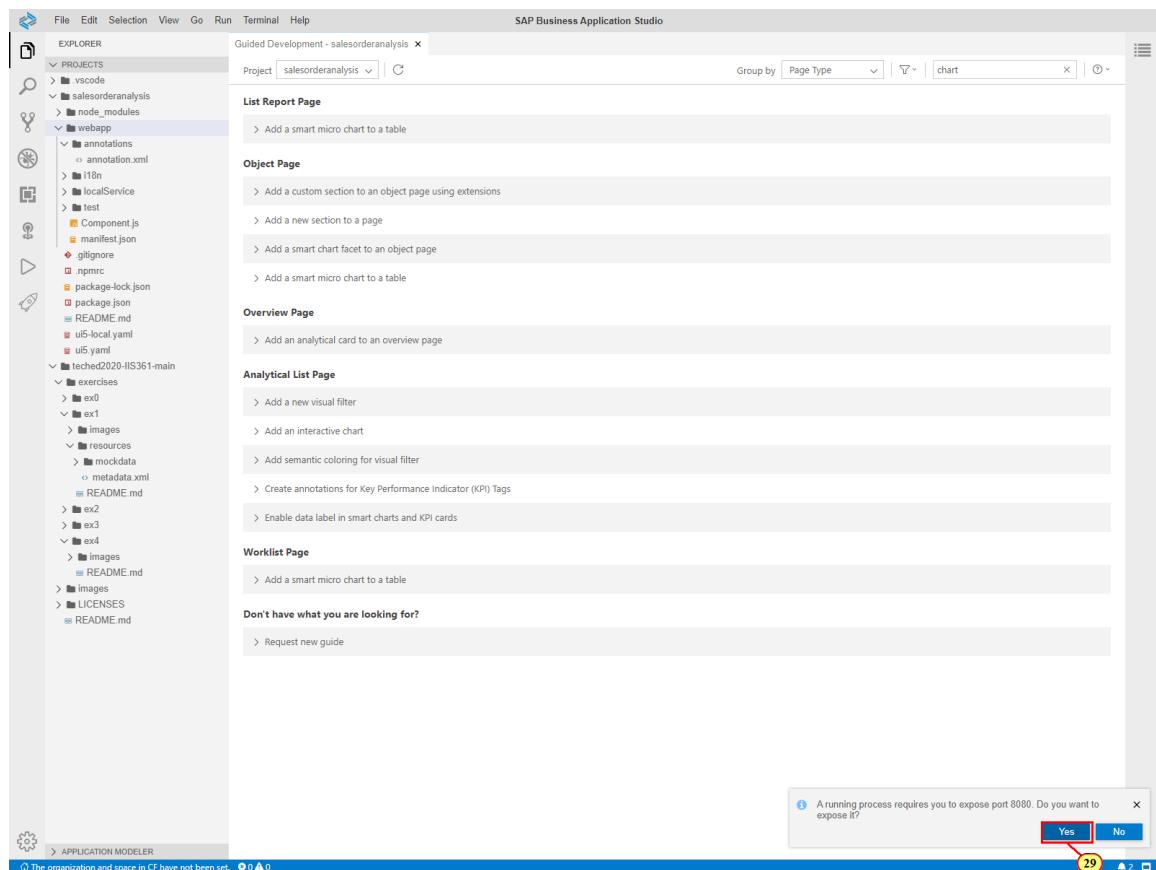


(26) To show the Explorer pane, double-click on the tab Guided Development - salesorderanalysis.

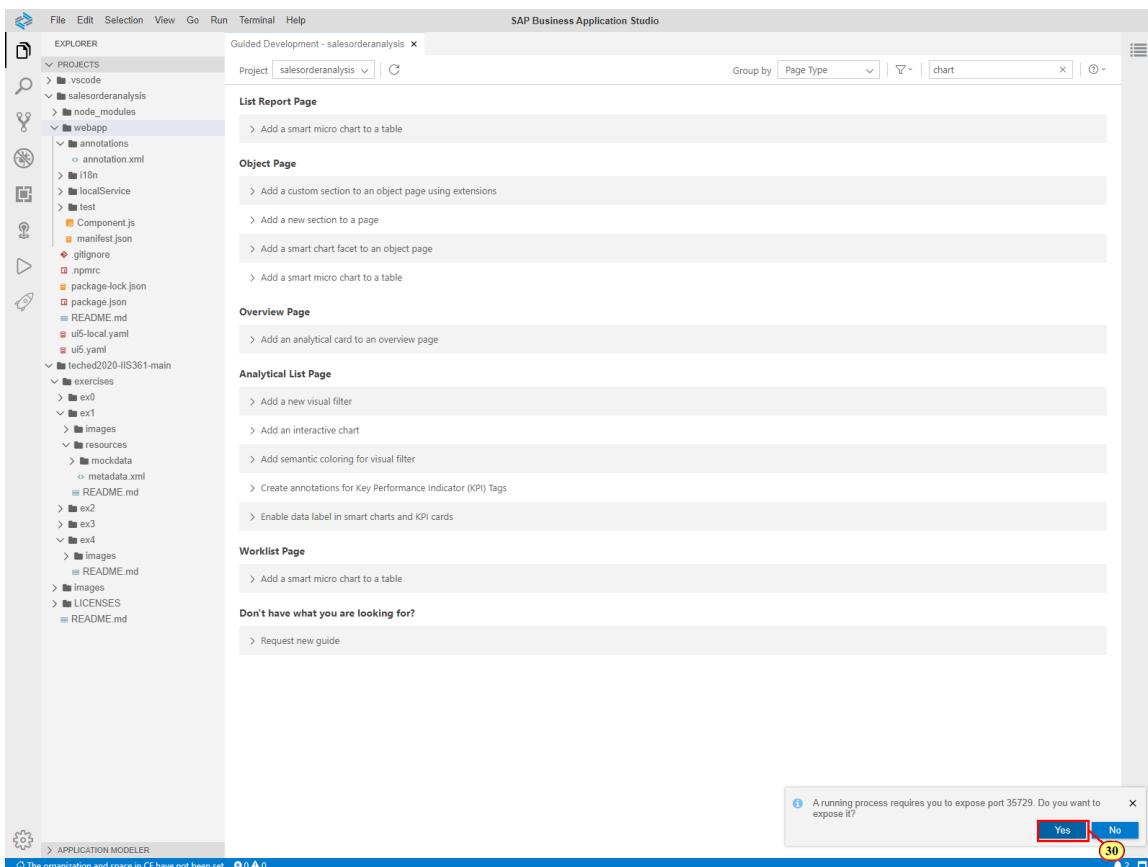


(27) In the Explorer pane, right-click on the webapp folder.

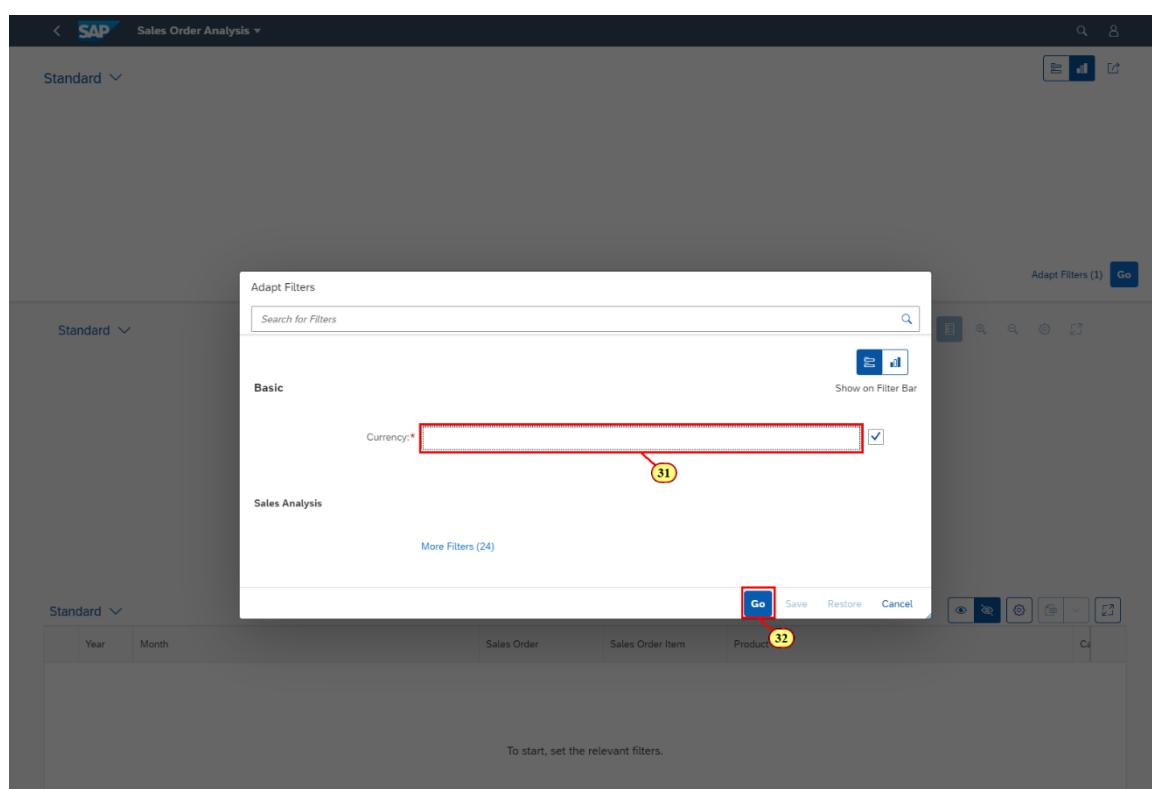
((28) In the context menu, click **Preview Application**.



(29) In the pop-up message, click **Yes** to allow exposing the port.



(30) Click **Yes** again to allow exposing the second port. Application preview will open in the next tab.



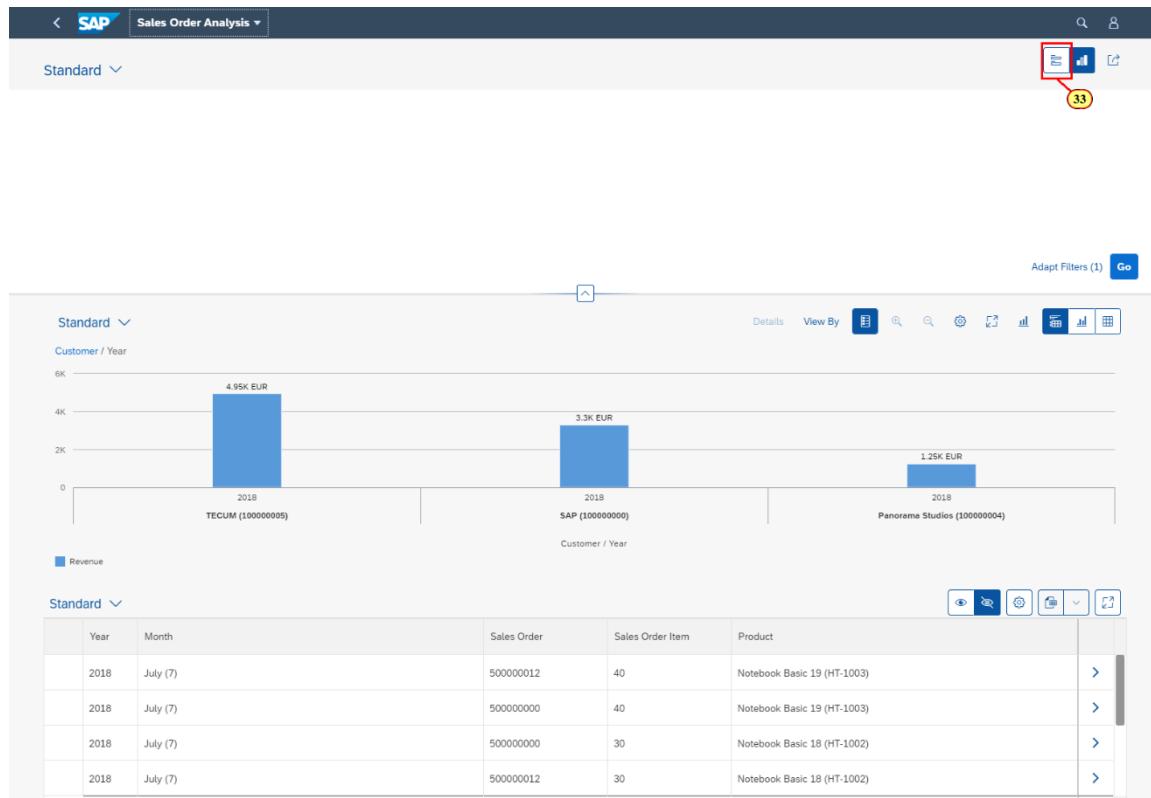
(31) in the Adapt Filters pop-up, enter **EUR** in the **Currency** field.

(32) Click **Go**.

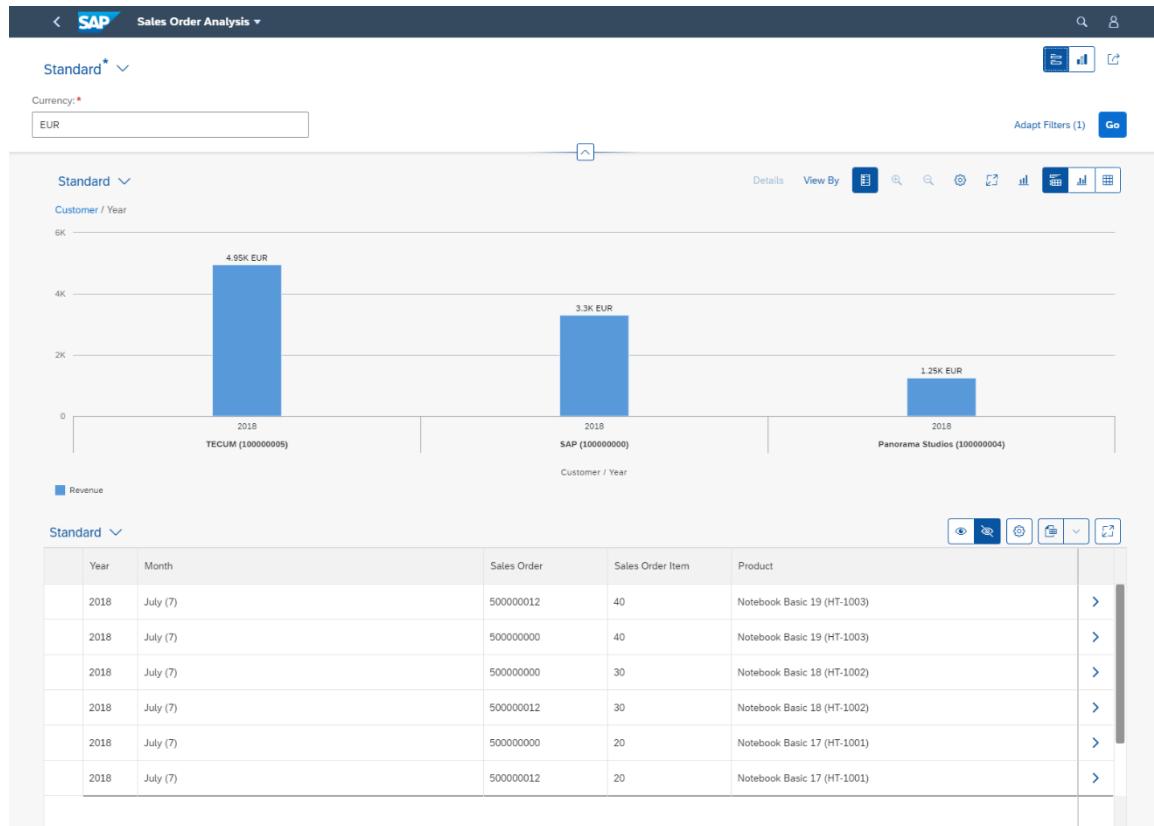
The content area of the page displays the chart and table you created. They display the data pre-filtered by the currency value you entered in the pop-up with the required filter field.

Data labels indicating the measure values are displayed above each chart column.

The filter bar area is empty as at this point no visual filters are defined. You will specify them in the next exercise.



(33) You can click the button **Compact Filter** to view the compact filter bar with the only required field available by default. You will add visual filters and additional compact filter fields in the next exercise.



## Summary

You have successfully annotated the main entity type of your app with UI.LineItem, UI.Chart and UI.PresentationVariant annotations required to display content area of Analytical List Page. Continue to [Exercise 3 - Configuring Filters in Analytical List Page](#).

## Exercise 3 – Configuring Filters in Analytical List Page

In this exercise, you will define the filter area of the Analytical List Page using the Guided Development tool. Open this tool as in [Exercise 2 - Configuring Content Area of Analytical List Page](#).

### Exercise 3.1 Configuring Compact Filter

In this exercise, you will configure a UI.SelectionFields annotation that is used to display the filter fields in the compact filter bar of the Analytical List Page.

The screenshot shows the SAP Guided Development interface. The search bar at the top contains the word "filter". Below the search bar, there is a "Group by" dropdown set to "Page Type" and a "filter" button. The main content area is organized into sections: "List Report Page", "Overview Page", "Analytical List Page", "Worklist Page", and "Don't have what you are looking for?". The "Analytical List Page" section is currently expanded, displaying several options. Two specific links are highlighted with yellow circles and numbers: "1" points to "Add a new filter field to the Smart Filter Bar" and "2" points to "Add a new visual filter".

- (1) In the **Guided Development** tab of SAP Business Application Studio, enter **filter** in the search field.
- (2) Expand the guide **Add a new filter field to the Smart Filter Bar**

    > **Add a new filter field to the Smart Filter Bar** under the **Analytical List Page** group.

Welcome Guided Development - salesorderanalysis x

Project salesorderanalysis v | C Group by Page Type v | ⚡ | filter x | ⚡ |

**List Report Page**

- > Add a new filter field to the Smart Filter Bar
- > Enable select all in tables
- > Enable variant management

**Overview Page**

- > Add a custom filter to an overview page
- > Add a list card to an overview page

**Analytical List Page**

- > Add a custom filter to an analytical list page
- > Add a new filter field to the Smart Filter Bar

**Description**

This guide shows you how to add filter fields to the smart filter bar.

**Start Guide** (3)

- > Add a new visual filter
- > Add an interactive chart
- > Add semantic coloring for visual filter
- > Create annotations for Key Performance Indicator (KPI) Tags
- > Enable select all in tables
- > Enable semantic date range on smart filter bar

**Sample Preview**



**Worklist Page**

- > Enable variant management

**Don't have what you are looking for?**

- > Request new guide

(3) Click **Start Guide**.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

Add a new filter field to the Smart Filter Bar

About Guide information Step 1 Annotate target with UI.SelectionFields

In this step, you will be annotating a target with `UI.SelectionFields`. Additionally, specify the PropertyPath values as shown in the code snippet below.

To use the Apply button, select an Entity type from the dropdown. Then, select the respective property from the property dropdown.

Before selecting the property, if applicable, you can also select the Navigation Path to show properties of target Entity types.

**Entity Type** Select an entity type **Navigation Path** Select a navigation path **Property \*** Select property

Z\_SEPMRA\_SO\_ALP\_SALESORDERANALYSISType

E\_WITH\_ENTITY\_TYPE>  
selectionFields">  
REPLACE\_WITH\_PROPERTY\_PATH</PropertyPath>

**4**

< Back Next > Exit Guide

(4) In the **Entity Type** field, select **Z\_SEPMRA\_SO\_SALESORDERANALYSISType**.

**Add a new filter field to the Smart Filter Bar**

**Step 1**  
Annotate target with UI.SelectionFields

In this step, you will be annotating a target with `UI.SelectionFields`. Additionally, specify the PropertyPath values as shown in the code snippet below.

To use the Apply button, select an Entity type from the dropdown. Then, select the respective property from the property dropdown. Before selecting the property, if applicable, you can also select the Navigation Path to show properties of target Entity Types.

| Entity Type                       | Navigation Path          | Property *           |
|-----------------------------------|--------------------------|----------------------|
| Z_SEPHRA_SO_SALESORDERANALYSIS... | Select a navigation path | DeliveryCalendarDate |

**Annotations**

```

1 <Annotations Target="TECHED_ALP_SO4_SRV_Z_SEPHRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.SelectionFields">
3     <Collection>
4       <PropertyPath>DeliveryCalendarDate</PropertyPath>
5     </Collection>
6   </Annotation>
7 </Annotations>

```

**Buttons:** Apply (highlighted), Copy, Reset

**Message:** No annotations found for selected entity type and term UI.SelectionFields

(5) In the **Property** field, choose **Delivery Calendar Date** as your first column content. The code snippet is adjusted accordingly.

(6) Click **Apply**. Annotation `UI.SelectionFields` is added to your local annotation file as configured in the code snippet.

Add a new filter field to the Smart Filter Bar

About  
Guide information

Step 1  
Annotate target with UI.SelectionFields

Annotate target with UI.SelectionFields

In this step, you will be annotating a target with `UI.SelectionFields`. Additionally, specify the `PropertyPath` values as shown in the code snippet below.

To use the Apply button, select an Entity type from the dropdown. Then, select the respective property from the property dropdown. Before selecting the property, if applicable, you can also select the Navigation Path to show properties of target Entity Types.

| Entity Type                        | Navigation Path          |
|------------------------------------|--------------------------|
| Z_SEPMRA_SO_SALESORDERANALYSISI... | Select a navigation path |

Property \*

OrderDate

Apply Copy Reset Code snippet has been successfully applied

```

1  <Annotations Target="TECHED_ALP_SO_A_SRV_Z_SEPMRA_SO_SALESORDERANALYSISIType">
2    <Annotation Term="UI.SelectionFields">
3      <Collection>
4        <PropertyValue Property="DeliveryCalendarDate"/>
5        <PropertyValue Property="SoldToParty"/>
6        <PropertyValue Property="Product"/>
7        <PropertyValue Property="MainProductCategory"/>
8        <PropertyValue Property="DeliveryCalendarQuarter"/>
9        <PropertyValue Property="OrderDate"/>
10       </Collection>
11     </Annotation>
12   </Annotations>
13 
```

annotation.xml

```

42   <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
43   <Record Type="UI.DataField">
44     <PropertyValue Property="Value" Path="Quantity" />
45     <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
46   </Record>
47   <Record Type="UI.DataField">
48     <PropertyValue Property="Value" Path="NetAmount" />
49     <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
50   </Record>
51   <Collection>
52     <Annotation Term="UI.Chart">
53       <Record Type="UI.ChartDefinitionType">
54         <PropertyValue Property="Title" String="Revenue by Customer" />
55         <PropertyValue Property="Description" String="Net Revenue by Customer" />
56         <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Pie" />
57         <PropertyValue Property="Dimensions">
58           <Collection>
59             <PropertyValue Property="SolToParty"/>
60             <PropertyValue Property="DeliveryCalendarYear"/>
61           </Collection>
62         </PropertyValue>
63         <PropertyValue Property="Measures">
64           <Collection>
65             <PropertyValue Property="NetAmount"/>
66           </Collection>
67         </PropertyValue>
68       </Record>
69     </Annotation>
70   </Collection>
71   <Annotation Term="UI.PresentationVariant">
72     <Record Type="UI.PresentationVariantType">
73       <PropertyValue Property="Text" String="Default" />
74       <PropertyValue Property="SortOrder">
75         <Collection>
76           <Record Type="Common.SortOrderType">
77             <PropertyValue Property="Property" PropertyPath="OrderDate" />
78             <PropertyValue Property="Descending" Bool="true" />
79           </Record>
80         </Collection>
81       </PropertyValue>
82       <PropertyValue Property="IncludeGrandTotal" Bool="false" />
83       <PropertyValue Property="InitialExpansionLevel" Int="1" />
84       <PropertyValue Property="Visualizations">
85         <Collection>
86           <AnnotationPath>UI.LineItem</AnnotationPath>
87           <AnnotationPath>@UI.Chart</AnnotationPath>
88         </Collection>
89       </PropertyValue>
90     </Record>
91   </Annotation>
92   <Annotation Term="UI.SelectionFields">
93     <Collection>
94       <PropertyValue Property="DeliveryCalendarDate"/>
95       <PropertyValue Property="SoldToParty"/>
96       <PropertyValue Property="Product"/>
97       <PropertyValue Property="MainProductCategory"/>
98       <PropertyValue Property="DeliveryCalendarQuarter"/>
99       <PropertyValue Property="OrderDate"/>
100      </Collection>
101    </Annotation>
102  </Annotations>
103 
```

(7) Now repeat steps (5) and (6) to add the filter fields for the following properties:

- SoldToParty
- Product
- MainProductCategory
- DeliveryCalendarQuarter
- Order Date

**Add a new filter field to the Smart Filter Bar**

**Step 1**  
Annotate target with UI.SelectionFields

**Annotate target with UI.SelectionFields**

In this step, you will be annotating a target with **UI.SelectionFields**. Additionally, specify the PropertyPath values as shown in the code snippet below.

To use the Apply button, select an Entity type from the dropdown. Then, select the respective property from the property dropdown. Before selecting the property, if applicable, you can also select the Navigation Path to show properties of target Entity Types.

| Entity Type                        | Navigation Path          |
|------------------------------------|--------------------------|
| Z_SEMPRA_SO_SALESORDERANALYSISI... | Select a navigation path |

**Property \***

OrderDate

**Code snippet has been successfully applied**

```

1 <Annotations Target="TECHED_ALP_SO4_SRV_Z_SEMPRA_SO_SALESORDERANALYSISIType">
2   <Annotation Term="UI.SelectionFields">
3     <Collection>
4       <PropertyPath>DeliveryCalendarDate</PropertyPath>
5       <PropertyPath>OrderDate</PropertyPath>
6     </Collection>
7   </Annotation>
8 </Annotations>

```

**annotation.xml**

```

1 <Annotations Target="TECHED_ALP_SO4_SRV_Z_SEMPRA_SO_SALESORDERANALYSISIType">
2   <Annotation Term="UI.SelectionFields">
3     <Collection>
4       <PropertyPath>DeliveryCalendarDate</PropertyPath>
5       <PropertyPath>SoldToParty</PropertyPath>
6       <PropertyPath>Product</PropertyPath>
7       <PropertyPath>MainProductCategory</PropertyPath>
8       <PropertyPath>DeliveryCalendarQuarter</PropertyPath>
9       <PropertyPath>OrderDate</PropertyPath>
10      </Collection>
11    </Annotations>
12  <Schema>
13    <edmx:DataServices>
14      <edmx:Edmx>

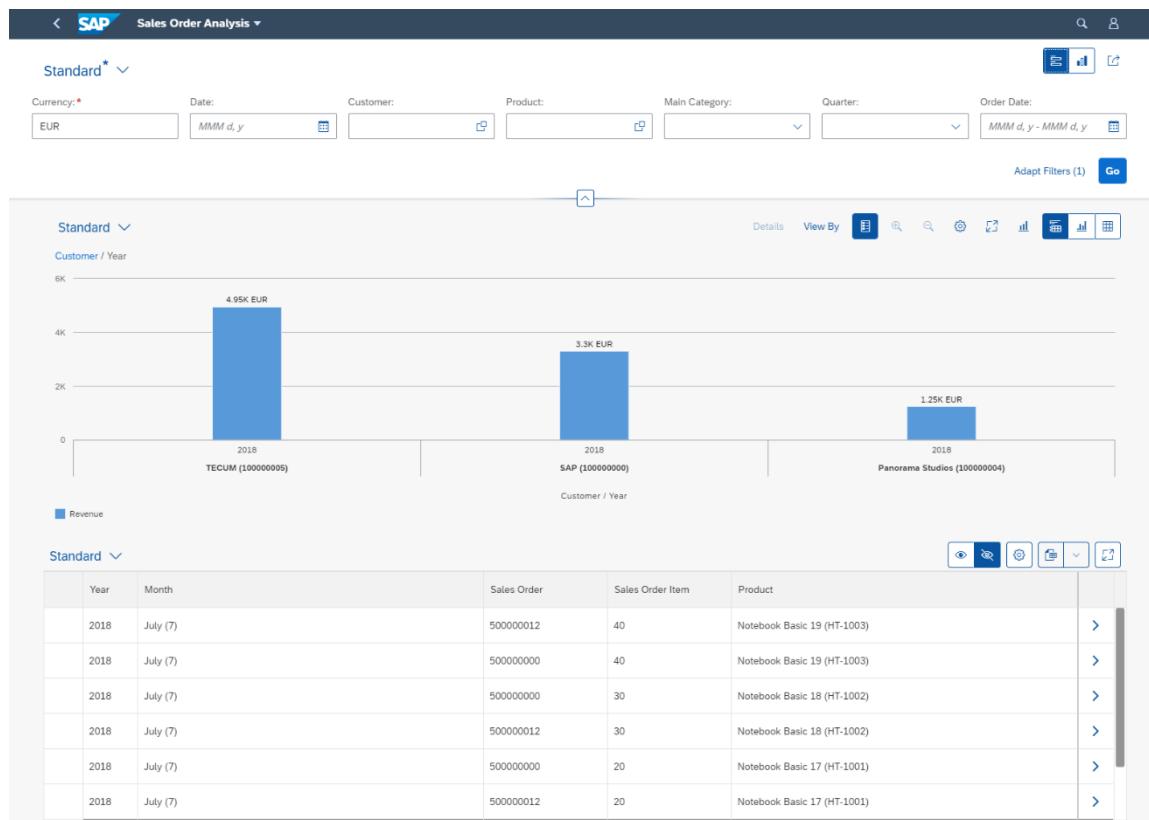
```

< Back | Next > Exit Guide 8

(8) When the fields for all properties are added to your UI.SelectionFields annotation, click **Exit Guide** to get back to the list of available guides.

You can now switch to the tab containing the running app to view the result. If you already stopped the preview after the previous exercise, you can start it again as described in [Exercise 2.5 Starting the Application Preview](#).

**Note:** Do not forget to click the **Compact Filter** button  to view the updated filter bar



## Exercise 3.2 Configuring Semantic Date Range

In this exercise, you will configure the semantic representation for the date range filter fields. Semantic date range representation is supported for fields which are of type : "DateTime", with "Date" display type and have interval selection enabled. For this, the following manifest setting needs to be defined for your Analytical List Page:

```
"filterSettings": {
    "dateSettings":{
        "useDateRange": true
    }
}
```

However, as there is a dedicated guide in the Guided Development tool, there is no need to do this manually.

The screenshot shows the Guided Development tool interface for a project named "salesorderanalysis". The top navigation bar includes "Welcome", "Guided Development - salesorderanalysis", "Project", "salesorderanalysis", and a search/filter bar. The main content area is organized into sections: "List Report Page", "Overview Page", "Analytical List Page", "Worklist Page", and "Don't have what you are looking for?". The "Analytical List Page" section is expanded, showing several guides. One guide, "Enable semantic date range on smart filter bar", is highlighted with a red box and a yellow circle containing the number "9", indicating it is the target for step (9).

- > Add a new filter field to the Smart Filter Bar
- > Enable select all in tables
- > Enable variant management

**Overview Page**

- > Add a custom filter to an overview page
- > Add a list card to an overview page

**Analytical List Page**

- > Add a custom filter to an analytical list page
- > Add a new filter field to the Smart Filter Bar
- > Add a new visual filter
- > Add an interactive chart
- > Add semantic coloring for visual filter
- > Create annotations for Key Performance Indicator (KPI) Tags
- > Enable select all in tables
- > **Enable semantic date range on smart filter bar** ⓘ

**Worklist Page** 9

- > Enable variant management

**Don't have what you are looking for?**

- > Request new guide

(9) In Guided Development tool, expand the guide **Enable semantic date range on smart filter bar** under the **Analytical List Page** group.

Welcome Guided Development - salesorderanalysis x

Project salesorderanalysis v | C Group by Page Type v | ⚡ v | filter x | Ⓜ v

**List Report Page**

- > Add a new filter field to the Smart Filter Bar
- > Enable select all in tables
- > Enable variant management

**Overview Page**

- > Add a custom filter to an overview page
- > Add a list card to an overview page

**Analytical List Page**

- > Add a custom filter to an analytical list page
- > Add a new filter field to the Smart Filter Bar
- > Add a new visual filter
- > Add an interactive chart
- > Add semantic coloring for visual filter
- > Create annotations for Key Performance Indicator (KPI) Tags
- > Enable select all in tables
- > Enable semantic date range on smart filter bar

**Description**

This feature allows users to use semantic date ranges, such as Today or Last Week on the smart filter bar of list report and analytical list report applications.

**Sample Preview**



**Start Guide**

**Worklist Page**

10

- > Enable variant management

**Don't have what you are looking for?**

- > Request new guide

(10) Click **Start Guide**.

The screenshot shows a guide titled 'Enable semantic date range on smart filter bar'. It includes tabs for 'About' and 'Step 1'. Step 1 describes setting the 'useDateRange' property of 'dateSettings' to true. Below this is a code snippet for the 'AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS' page, with line 12 highlighted. The 'Apply' button is also highlighted.

```
1 // @sap/page "AnalyticalListPage_Z_SEPMRA_SO_SALESORDERANALYSIS"
2
3   "filterBar": {
4     "dateSettings": {
5       "useDateRange": true
6     }
7   }
8
9
10
11
12 }
```

- (11) In the **Page** field, choose the first page in your app  
**AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS**.  
(12) Click **Apply**.

The screenshot shows the SAP Application Modeler interface. On the left, there's a sidebar with 'Welcome' and 'Guided Development - salesorderanalysis'. Below that are sections for 'About' (Guide information) and 'Step 1' (Set the useDateRange property of dateSettings to true). A note says to locate and expand the Application Modeler view from the Explorer side bar, open the page config file within the pages folder, update it to match the following code snippet, and click the Apply button to update the page config file.

The main area is a code editor titled 'AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS.json'. It contains JSON code with several annotations:

```

1  {
2    "table": {
3      "qualifier": "",
4      "autoHide": true,
5      "condensedTableLayout": true
6    },
7    "filterBar": {
8      "showCancelButtonOnFilterBar": true,
9      "smartVariantManagement": false,
10     "dateSettings": {
11       "useDateRange": true
12     }
13   },
14   "chart": {
15     "showDataLabel": true
16   },
17   "keyPerformanceIndicators": {},
18   "$schema": "../schemas/AnalyticalListPage.json"
19 }

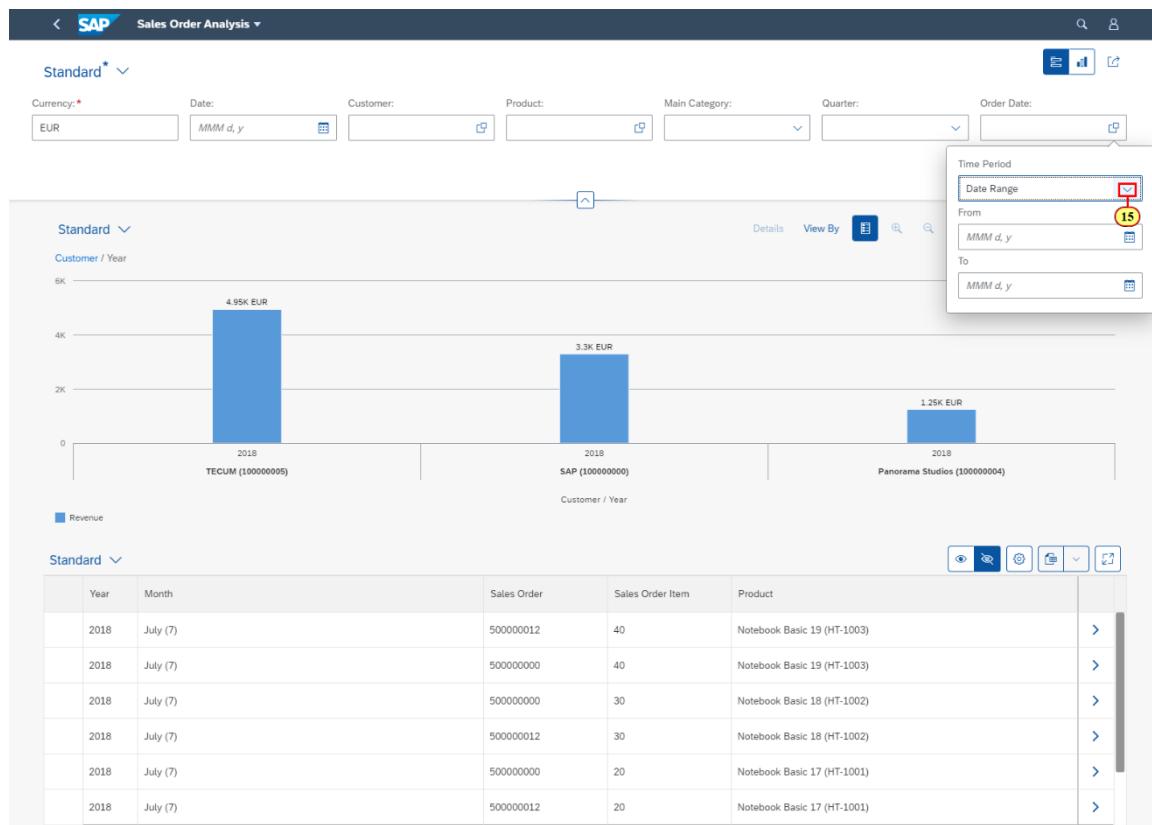
```

Annotations include a red box around the 'useDateRange' property at line 11, a yellow circle around the 'showDataLabel' property at line 15, and another yellow circle around the 'Exit Guide' button at the bottom right of the code editor.

(13) A .json file with page settings in opens to the right and the new date setting is inserted. This update is automatically synchronized with the **webapp/manifest.json** of your application on save. As auto-save is enabled by default, you do not need to save it manually and can close the .json file now.

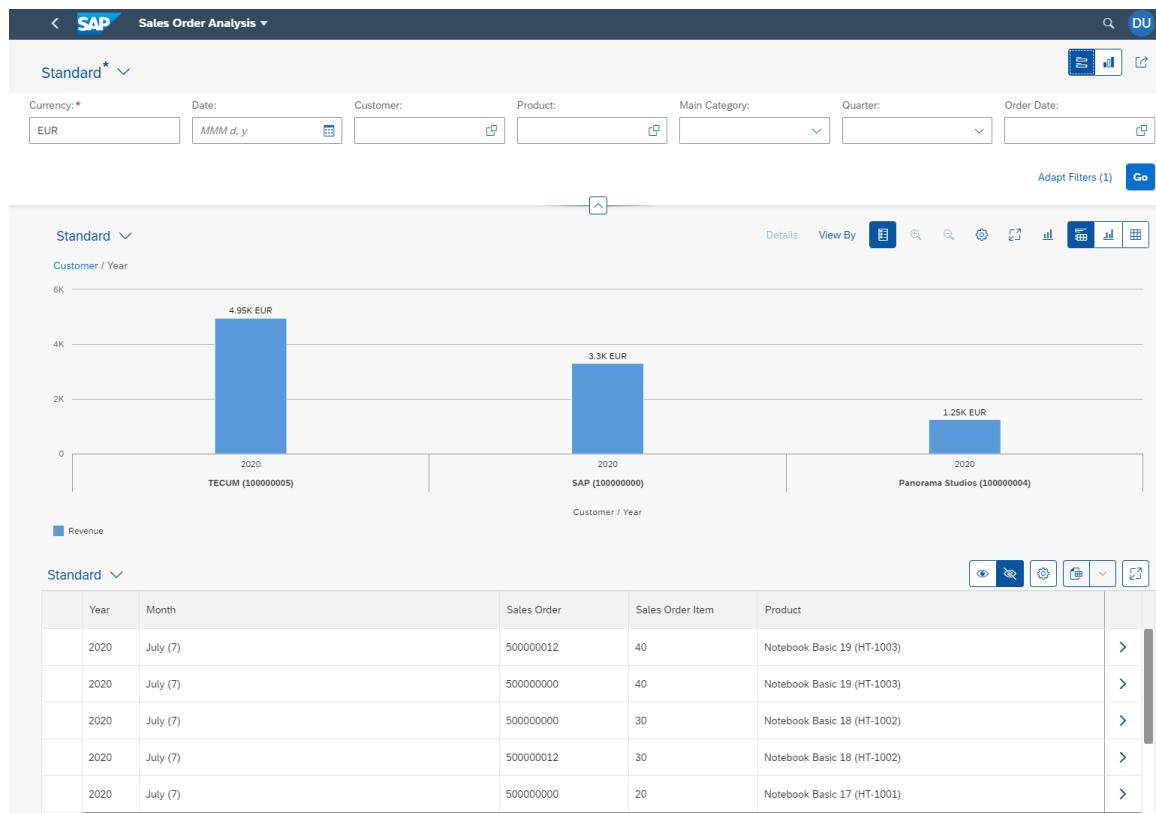
(14) Click **Exit Guide**.

You can now switch to the tab containing the running app to view the result. If you already stopped the preview after the previous exercise, you can start it again as described in [Exercise 2.5 Starting the Application Preview](#).



(15) Open the value help in the **Order Date** filter. In the pop-up, open the drop-down list of the Time Period field and choose a desired date range. To filter this content, choose either last 2 quarters, last 6 months or this year.

(16) Click **Go**. The data will be filtered based on your selection



## Exercise 3.3 Configuring Visual Filter with Line Chart

In this exercise, you will configure a UI.Chart, UI.PresentationVariant and Common.ValueList annotations that are used to display the visual filters. For this you will use the guide Add Visual Filter that consists of 3 steps.

Fiori user experience recommends the filters to be displayed in a Visual format for better drill down and analysis. Visual Filters can be used by an end user as an alternate option to the more conventional compact filters. Visual Filters show the top outliers with respect to measures and thus provide hints to users what are the interesting filter selections. You need to have a ValueHelp entity set to configure a Visual Filter

The screenshot shows the 'Guided Development - salesorderanalysis' page. At the top, there are navigation tabs for 'Welcome', 'Guided Development - salesorderanalysis', 'Project' (set to 'salesorderanalysis'), and a search bar. Below the header, there's a 'Group by' dropdown set to 'Page Type'. The main content area is divided into sections:

- List Report Page**:
  - > Add a new filter field to the Smart Filter Bar
  - > Enable select all in tables
  - > Enable variant management
- Overview Page**:
  - > Add a custom filter to an overview page
  - > Add a list card to an overview page
- Analytical List Page**:
  - > Add a custom filter to an analytical list page
  - > Add a new filter field to the Smart Filter Bar
  - > Add a new visual filter** (highlighted with a red box and yellow circle)
  - > Add an inter*17* chart
  - > Add semantic coloring for visual filter
  - > Create annotations for Key Performance Indicator (KPI) Tags
  - > Enable select all in tables
  - > Enable semantic date range on smart filter bar
- Worklist Page**:
  - > Enable variant management
- Don't have what you are looking for?**:
  - > Request new guide

(17) In **Guided Development** tool, open the guide **Add a new visual filter**

Welcome Guided Development - salesorderanalysis x

Project salesorderanalysis | C

Group by Page Type ▾ | ⚙️ | [filter] x | ⓘ ▾

**List Report Page**

- > Add a new filter field to the Smart Filter Bar
- > Enable select all in tables
- > Enable variant management

**Overview Page**

- > Add a custom filter to an overview page
- > Add a list card to an overview page

**Analytical List Page**

- > Add a custom filter to an analytical list page
- > Add a new filter field to the Smart Filter Bar
- > Add a new visual filter

**Description**

Follow the steps of this guide to add a new visual filter in your Analytical List Page application.

Visual filter is as a chart-like alternative to the more conventional compact filter showing the top outlier with respect to measures and allowing better drill down and analysis.

**Start Guide** (18)

- > Add an interactive chart
- > Add semantic coloring for visual filter
- > Create annotations for Key Performance Indicator (KPI) Tags
- > Enable select all in tables
- > Enable semantic date range on smart filter bar

**Worklist Page**

- > Enable variant management

**Don't have what you are looking for?**

- > Request new guide

**Sample Preview**



(18) Click **Start Guide**.

**Add a new visual filter**

**Step 1** Annotate entity with UI.Chart annotation term

**Step 2** Add UI.PresentationVariant annotation term

**Step 3** Refer modeled Visual Filter to ALP annotations

**Annotate entity with UI.Chart annotation term**

Visual Filter is an interactive chart. In this step, you will be add **UI.Chart** annotation term to specify the corresponding information.

The data displayed in the chart is more aggregated than what is shown in the main content of the page. Therefore, you can use the entity type which is different from that used in the main content of the page.

|                                |                      |                           |
|--------------------------------|----------------------|---------------------------|
| Entity Type *                  | Chart Qualifier *    | Chart Title               |
| SEPMRA_SO_ALP_SLDORDERITEMType | FilterQuantityByDate | Quantity by Delivery Date |
| Chart Description              | Chart Type *         | Dimensions Property       |
| Item Quantity by Delivery Date | Line                 | DeliveryDate              |
| Measures Property *            |                      |                           |
| Quantity                       |                      |                           |

**Apply** **Copy** **Reset**

```

<Annotations Target="TECHED_ALP_SO_SRV.SEPMRA_SO_ALP_SLDORDERITEMType">
  <Annotation Term="UI.Chart" Qualifier="filterQuantityByDate">
    <Record Type="UI.ChartDefinitionType">
      <PropertyValue Property="Title" String="Quantity by Delivery Date"/>
      <PropertyValue Property="Description" String="Item Quantity by Delivery Date"/>
      <PropertyValue Property="ChartType" EnumMember="UI.ChartType/line"/>
      <PropertyValue Property="Dimensions">
        <Collection>
          <PropertyPath>DeliveryDate</PropertyPath>
        </Collection>
      </PropertyValue>
      <PropertyValue Property="Measures">
        <Collection>
          <PropertyPath>Quantity</PropertyPath>
        </Collection>
      </PropertyValue>
    </Record>
  </Annotation>
</Annotations>

```

<b>19</b>

<b>20</b>

(19) In the first step, you define a chart to be displayed in the filter bar, using a 'UI.Chart' annotation. Enter the following values:

| Field               | Value                          |
|---------------------|--------------------------------|
| Entity Type         | SEPMRA_SO_ALP_SLDORDERITEMType |
| Chart Qualifier     | FilterQuantityByDate           |
| Chart Title         | Quantity by Delivery Date      |
| Chart Description   | Item Quantity by Delivery Date |
| Chart Type          | Line                           |
| Dimensions Property | DeliveryDate                   |
| Measures Property   | Quantity                       |

**Note:** The data displayed in the chart is more aggregated than what is shown in the main content of the page. In our case we display the sum of all sales order amounts by day. Therefore, you **use an entity type that is different** from the entity type used in the main content of the page

(20) Click **Apply**. UI.Chart annotation is added to the local annotation file.

**Add a new visual filter**

**Step 1** **Step 2** Add UI.PresentationVariant annotation

**21**

**Annotate entity with UI.Chart annotation term**

Visual Filter is an interactive chart. In this step, you will be add `UI.Chart` annotation term to the specify the corresponding information.

The data displayed in the chart is more aggregated than what is shown in the main content of the page. Therefore, you can use the entity type which is different from that used in the main content of the page.

**Entity Type \*** `SEPMLRA_SO_ALP_SLDORDERITEMType`

**Chart Qualifier \*** `FilterQuantityByDate`

**Chart Title** `Quantity by Delivery Date`

**Chart Description** `Item Quantity by Delivery Date`

**Chart Type \*** `Line`

**Dimensions Property** `DeliveryDate`

**Measures Property \*** `Quantity`

**Annotations Target** `"TECHED_ALP_SOALP_SRV.SEPMLRA_SO_ALP_SLDORDERITEMType"`

**Annotation Term** `"UI.Chart"`

**Qualifier** `"FilterQuantityByDate"`

```

1 <Annotations Target="TECHED_ALP_SOALP_SRV.SEPMLRA_SO_ALP_SLDORDERITEMType">
2   <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
3     <Record Type="UI.ChartDefinitionType">
4       <PropertyValue Property="Title" String="Quantity by Delivery Date"/>
5       <PropertyValue Property="Description" String="Item Quantity by Delivery Date"/>
6       <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
7       <PropertyValue Property="Dimensions">
8         <Collection>
9           <PropertyPath>DeliveryDate</PropertyPath>
10      </Collection>
11    </PropertyValue>
12    <PropertyValue Property="Measures">
13      <Collection>
14        <PropertyPath>Quantity</PropertyPath>
15      </Collection>
16    </PropertyValue>
17  </Record>
18 </Annotation>
19 </Annotations>

```

**Apply** **Copy** **Reset** **Code snippet has been successfully applied**

**annotation.xml**

```

1 <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.V1.edmx" Version="4.0" xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx">
2   <edmx:Include Namespace="com.sap.vocabularies.Common.V1" Alias="Common" />
3   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(Technical)>
4     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
5   </edmx:Reference>
6   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
7     <edmx:Include Namespace="TECHED_ALP_SOALP_SRV" />
8   </edmx:Reference>
9   <edmx:DataService>
10     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
11       <Annotations Target="TECHED_ALP_SOALP_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
12         <Annotation Term="UI.LineItem">
13           <Collection>
14             <Record Type="UI.DataField">
15               <PropertyValue Property="Value" Path="DeliveryCalendar"/>
16               <Annotation Term="UI.Importance" EnumMember="UI.Importance/High"/>
17             </Record>
18             <Record Type="UI.DataField">
19               <PropertyValue Property="Value" Path="DeliveryCalendar"/>
20               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
21             </Record>
22             <Record Type="UI.DataField">
23               <PropertyValue Property="Value" Path="SalesOrder"/>
24               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Low"/>
25             </Record>
26             <Record Type="UI.DataField">
27               <PropertyValue Property="Value" Path="SalesOrderItem"/>
28               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
29             </Record>
30             <Record Type="UI.DataField">
31               <PropertyValue Property="Value" Path="Product"/>
32               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
33             </Record>
34             <Record Type="UI.DataField">
35               <PropertyValue Property="Value" Path="ProductCategory"/>
36               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
37             </Record>
38             <Record Type="UI.DataField">
39               <PropertyValue Property="Value" Path="SoldToParty"/>
40               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
41             </Record>
42             <Record Type="UI.DataField">
43               <PropertyValue Property="Value" Path="Quantity"/>
44               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
45             </Record>
46             <Record Type="UI.DataField">
47               <PropertyValue Property="Value" Path="NetAmount"/>
48               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
49             </Record>
50           </Collection>
51         </Annotation>
52       <Annotation Term="UI.Chart">
53         <Record Type="UI.ChartDefinitionType">
54           <PropertyValue Property="Title" String="Revenue by Customer"/>
55           <PropertyValue Property="Description" String="Net Revenue by Customer"/>
56           <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
57           <PropertyValue Property="Dimensions">
58             <Collection>
59               <PropertyPath>SoldToParty</PropertyPath>
60             </Collection>
61           </Dimensions>
62         </Record>
63       </Annotation>
64     </Annotations>
65   </Schema>
66 </edmx:DataService>

```

**< Back** **Next >** **Exit Guide**

(21) Click **Step 2**.

**Note:** You can also click **Next** at the bottom of the guide to go to the next step.

In that step, you will reference the chart in a presentation variant so that it could be displayed it in the filter bar.

Add a new visual filter

About Step 1 Step 2 Step 3

Add UI.PresentationVariant annotation term

In this step, you will reference the chart created in previous step in a presentation variant to display it in a filter bar.

|                                |                                  |
|--------------------------------|----------------------------------|
| Entity Type *                  | Presentation Variant Qualifier * |
| SEPMRA_SO_ALP_SLDORDERITEMType | FilterQuantityByDate             |

Chart Reference \*

UI.Chart#FilterQuantityByDate

**Annotation.xml**

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/IWFND/CATALOGSERVICE;v=2/Vocabularies(Technical)" />
6     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
7   </edmx:Reference>
8   <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
9     <edmx:Include Namespace="TECHED_ALP_SO_A_SRV" />
10    </edmx:Reference>
11    <edmx:DataService>
12      <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13        <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14          <Annotation Term="UI.LineItem">
15            <Collection>
16              <Record Type="UI.DataField">
17                <PropertyValue Property="Value" Path="DeliveryCalendar" />
18                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
19              </Record>
20              <Record Type="UI.DataField">
21                <PropertyValue Property="Value" Path="DeliveryCalendar" />
22                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
23              </Record>
24              <Record Type="UI.DataField">
25                <PropertyValue Property="Value" Path="SalesOrder" />
26                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
27              </Record>
28              <Record Type="UI.DataField">
29                <PropertyValue Property="Value" Path="SalesOrderItem" />
30                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
31              </Record>
32              <Record Type="UI.DataField">
33                <PropertyValue Property="Value" Path="Product" />
34                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
35              </Record>
36              <Record Type="UI.DataField">
37                <PropertyValue Property="Value" Path="ProductCategory" />
38                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
39              </Record>
40              <Record Type="UI.DataField">
41                <PropertyValue Property="Value" Path="SoldToParty" />
42                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
43              </Record>
44              <Record Type="UI.DataField">
45                <PropertyValue Property="Value" Path="Quantity" />
46                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
47              </Record>
48              <Record Type="UI.DataField">
49                <PropertyValue Property="Value" Path="NetAmount" />
50                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
51              </Record>
52            </Collection>
53          </Annotation>
54        <Annotation Term="UI.Chart">
55          <Record Type="UI.ChartDefinitionType">
56            <PropertyValue Property="Title" String="Revenue_by_Customer" />
57            <PropertyValue Property="Description" String="Net_Revenue" />
58            <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Gauge" />
59            <PropertyValue Property="Dimensions">
60              <Collection>
61                <PropertyPath>SoldToParty</PropertyPath>
62              </Collection>
63            </Annotation>
64          <Record Type="UI.Chart">
65            <PropertyValue Property="Title" String="Revenue_by_Customer" />
66            <PropertyValue Property="Description" String="Net_Revenue" />
67            <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Gauge" />
68            <PropertyValue Property="Dimensions">
69              <Collection>
70                <PropertyPath>SoldToParty</PropertyPath>
71              </Collection>
72            </Annotation>
73          </Record>
74        </Annotation>
75      </Collection>
76    </Record>
77  </Annotations>
78 </Schema>
79 </edmx:DataService>
80 </edmx:Edmx>

```

(22) Enter the following values:

| Field                          | Value                          |
|--------------------------------|--------------------------------|
| Entity Type                    | SEPMRA_SO_ALP_SLDORDERITEMType |
| Presentation Variant Qualifier | FilterQuantityByDate           |
| Chart Reference                | @UI.Chart#FilterQuantityByDate |

**Note:** Here you use the same entity type as in the previous step.

(23) Click **Apply**.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

## Add a new visual filter

About Step 1 Step 2 Step 3

24

Add UI.PresentationVariant annotation term

In this step, you will reference the chart created in previous step in a presentation variant to display it in a filter bar.

Entity Type \* Presentation Variant Qualifier \*

SEPMRA\_SO\_ALP\_SLDORDERITEMType FilterQuantityByDate

Chart Reference \*

UI.Chart#FilterQuantityByDate

Apply Copy Reset

Code snippet has been successfully applied

```
<Annotations Target="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMType">
  <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
    <Record Type="UI.PresentationVariantType">
      <PropertyValue Property="Visualizations">
        <Collection>
          <AnnotationPath>@UI.Chart#FilterQuantityByDate</AnnotationPath>
        </Collection>
      </PropertyValue>
    </Record>
  </Annotation>
</Annotations>
```

annotation.xml x

```
1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
  2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
  3   <edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
  4   </edmx:Reference>
  5   <edmx:Reference Uri="sap/opu/odata/IIWHD/CATALOGSERVICE/v2/vocabularies/TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMType.v1" Alias="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMType" />
  6   <edmx:Include Namespace="com.sap.vocabularies.UI.v1" />
  7   </edmx:Reference>
  8   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
  9     <edmx:Include Namespace="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMType" />
  10    </edmx:Reference>
  11    <edmx:DataServices>
  12      <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
  13        <Annotations Target="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMType">
  14          <Annotation Term="UI.lineItem">
  15            <Collection>
  16              <Record Type="UI.DataField">
  17                <PropertyValue Property="Value" Path="DeliveryCalendar" />
  18                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
  19              </Record>
  20              <Record Type="UI.DataField">
  21                <PropertyValue Property="Value" Path="SalesOrder" />
  22                <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
  23              </Record>
  24              <Record Type="UI.DataField">
  25                <PropertyValue Property="Value" Path="SalesOrderItem" />
  26                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
  27              </Record>
  28              <Record Type="UI.DataField">
  29                <PropertyValue Property="Value" Path="Product" />
  30                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
  31              </Record>
  32              <Record Type="UI.DataField">
  33                <PropertyValue Property="Value" Path="ProductCategory" />
  34                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
  35              </Record>
  36              <Record Type="UI.DataField">
  37                <PropertyValue Property="Value" Path="SoldToParty" />
  38                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
  39              </Record>
  40              <Record Type="UI.DataField">
  41                <PropertyValue Property="Value" Path="Quantity" />
  42                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
  43              </Record>
  44              <Record Type="UI.DataField">
  45                <PropertyValue Property="Value" Path="NetAmount" />
  46                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
  47              </Record>
  48            </Collection>
  49          </Annotation>
  50        </Annotations>
  51      </Schema>
  52    </edmx:DataServices>
  53  </edmx:Reference>
  54  <edmx:Annotation Term="UI.Chart">
  55    <Record Type="UI.ChartDefinitionType">
  56      <PropertyValue Property="Title" String="Revenue by Customer" />
  57      <PropertyValue Property="Description" String="Net Revenue by Customer" />
  58      <PropertyValue Property="chartType" EnumMember="UI.ChartDefinitionType.Bar" />
  59      <PropertyValue Property="Dimensions" />
  60      <Collection>
  61        <ProximityPath>SoldToParty</ProximityPath>
  62      </Collection>
  63    </Record>
  64  </edmx:Annotation>
  65</edmx:Edmx>
```

(24) Click **Step 3** at the top or **Next** at the bottom to get to the last step of the guide.

In that step, you will define the mapping between dimensions in the visual filter and properties in the objects displayed in the main content, so that clicking on a dimension value the visual filter will filter the main content accordingly. In this case, you have to map the date property in **SEPMRA\_SO\_ALP\_SLDORDERITEMType** to the date in **Z\_SEPMRA\_SO\_SALESORDERANALYSISType** for the visual filter to work properly. For this, we use the Common.ValueList annotation.

annotation.xml

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.V1" Alias="Common" />
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/InfoCatalogService;v=2/Vocabularies(Technical)" />
6     <edmx:Include Namespace="com.sap.vocabularies.TECHICAL.V1" Alias="UI" />
7   </edmx:Reference>
8   <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
9     <edmx:Include Namespace="TECHED_ALP_SO_ASRV" />
10  </edmx:Reference>
11  <edmx:DataService>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendarDate" />
18              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="FilterQuantityByDate" />
22              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="DeliveryDate" />
26              <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem" />
30              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="SalesOrder" />
34              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="Product" />
38              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="ProductCategory" />
42              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="SoldToParty" />
46              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="Quantity" />
50              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
51            </Record>
52            <Record Type="UI.DataField">
53              <PropertyValue Property="Value" Path="NetAmount" />
54              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
55            </Record>
56          </Collection>
57        </Annotation>
58      </Collection>
59    </Annotations>
60  </Schema>
61</edmx:DataService>

```

(25) Enter the following values:

Field	Value
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSISType
Entity Type Property	DeliveryCalendarDate
Collection Path	SEPMRA_SO_ALP_SLDORDERITEM
Presentation Variant Qualifier	FilterQuantityByDate
Local Data Property	DeliveryCalendarDate
Value List Property	DeliveryDate

**Note:** Here you annotate the property of your main entity type.

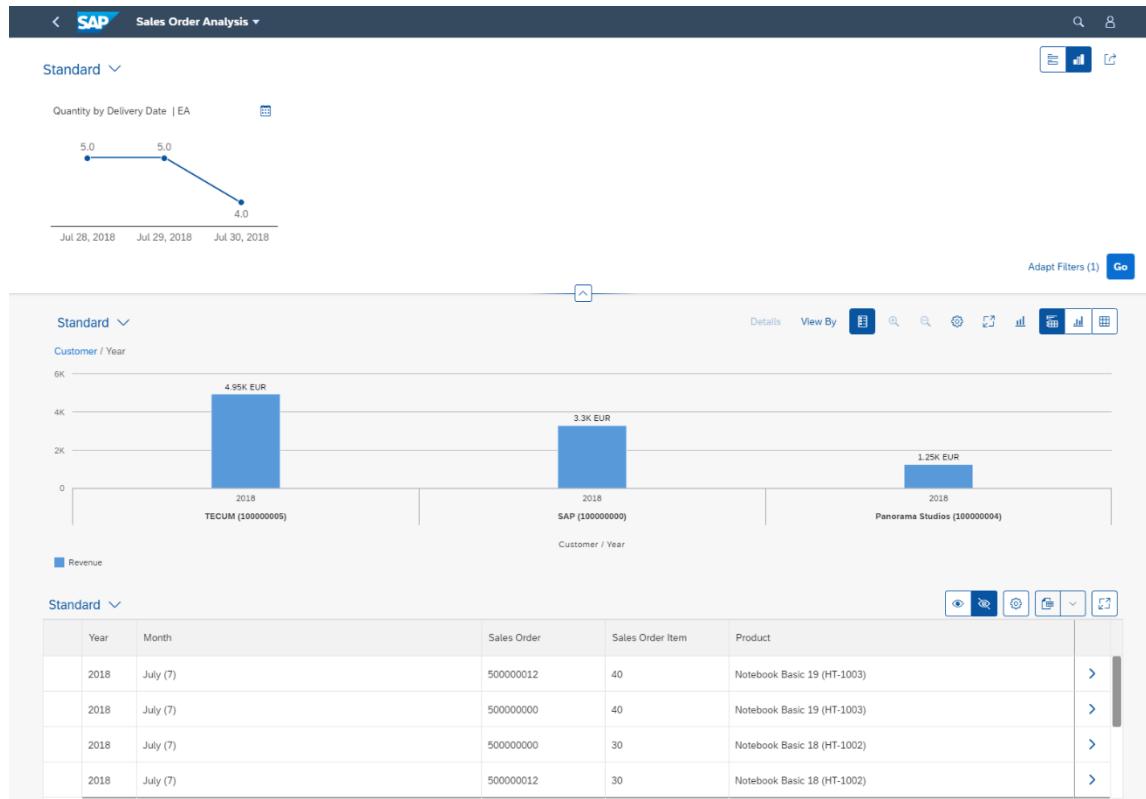
**Note:** Value list Property must contain the property you used as dimension in the chart configured in step 1 of the guide.

(26) Click **Apply**.

The screenshot shows the SAP Fiori Guided Development interface for the salesorderanalysis application. On the left, under 'Step 3', the 'Add a new visual filter' section is active. It includes fields for 'Entity Type' (Z\_SEPMRA\_SO\_SALESORDERANALYSIS), 'Collection Path' (SEPMRA\_SO\_ALP\_SLDORDERITEM), and 'Local Data Property' (DeliveryCalendarDate). A dropdown menu for 'Value List Property' is open, showing 'DeliveryDate'. Below these, there are 'Apply', 'Copy', and 'Reset' buttons, and a note that the code snippet has been successfully applied. On the right, the 'annotation.xml' file is displayed in a code editor, showing the XML structure for the visual filter mapping. The code includes annotations for the target entity and various properties like DeliveryCalendarDate, FilterQuantityByDate, and DeliveryDate.

### (27) Click **Exit Guide**.

At this point your visual filter is configured and you can start the application preview as described in [Exercise 2.5 Starting Application Preview](#). The visual filter is displayed. You can filter the content by selecting any of the points in the line chart and clicking **Go**.



## Exercise 3.4 Configuring Visual Filter with Bar Chart (Optional)

In this exercise, you will go through the similar steps to create one more visual filter, this time as a bar chart.

To start, repeat the steps (17) and (18) above to start the guide **Add a new visual filter**.

**Add a new visual filter**

**Entity Type \*** SEPMRA\_SO\_ALP\_SLDORDERITEMType

**Chart Qualifier \*** FilterQuantityByProduct

**Chart Title** Quantity by Product

**Chart Description** Item Quantity by Product

**Chart Type \*** Bar

**Dimensions Property** Product

**Measures Property \*** Quantity

**Annotation Target** TECHED\_ALP\_SOALP\_SRV\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS

**Annotation Term** UI.LineItem

```

1 <Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <Edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common">
3     <Edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
4   </Edmx:Reference>
5   <Edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(Technical)" Alias="TECHED_ALP_SOALP_SRV">
6     <Edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
7   </Edmx:Reference>
8   <Edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
9     <Edmx:Include Namespace="TECHED_ALP_SOALP_SRV" />
10  </Edmx:Reference>
11  <Edmx:DataService>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SOALP_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar">
18                <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
19              </PropertyValue>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar">
22                <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
23              </PropertyValue>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder" />
26                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem" />
30                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="Product" />
34                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="ProductCategory" />
38                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty" />
42                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity" />
46                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount" />
50                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
51            </Record>
52          </Collection>
53        </Annotation>
54      <Annotation Term="UI.Chart">
55        <Record Type="UI.ChartDefinitionType">
56          <PropertyValue Property="Title" String="Revenue by Customer">
57            <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
58          </PropertyValue>
59          <PropertyValue Property="Description" String="Net Revenue by Customer" />
60          <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
61          <PropertyValue Property="Dimensions">
62            <Collection>
63              <PropertyPath>SoldToParty</PropertyPath>
64            </Collection>
65          </PropertyValue>
66        </Record>
67      </Annotation>
68    </Schema>
69  </Edmx:DataService>
70</Edmx>

```

(28) In **step 1** of the guide, use the following values to create a chart as described in [Exercise 3.3](#) steps (19)-(20).

Field	Value
Entity Type	SEPMRA_SO_ALP_SLDORDERITEMType
Chart Qualifier	FilterQuantityByProduct
Chart Title	Quantity by Product
Chart Description	Item Quantity by Product
Chart Type	Bar
Dimensions Property	Product
Measures Property	Quantity

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< Back to Guides

## Add a new visual filter

About Step 1 Step 2 Step 3

Add UI.PresentationVariant annotation term

In this step, you will reference the chart created in previous step in a presentation variant to display it in a filter bar.

**Entity Type \*** SEPMPA\_SO\_ALP\_SLDORDERTITEMType

**Presentation Variant Qualifier \*** FilterQuantityByProduct

**Chart Reference \***

UI.Chart#FilterQuantityByProduct

```
annotation.xml x
1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/TECHED_ALP_SO_SRV.v1" Alias="TECHED_ALP_SO_SRV" />
4   <edmx:Reference Uri="https://sap.github.io/odata/1WfND/CATALOGSERVICE;v=2/Vocabularies(TechedAlpSoSrv)" />
5   <edmx:Reference Uri="https://sap.github.io/odata/1WfND/CATALOGSERVICE;v=2/Vocabularies(TECHED_ALP_SO_SRV)" />
6   <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
7   <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
8   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/TECHED_ALP_SO_SRV.v1" Alias="TECHED_ALP_SO_SRV" />
9   <edmx:Reference />
10  <edmx:DataServices>
11    <Schema xmlns="http://docs.oasis-open.org/odata/ns edm" Namespace="soa">
12      <Annotations>
13        <Annotation Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALEORDERANALYSIS">
14          <Annotation Term="UI.lineItem">
15            <Collection>
16              <Record Type="UI.DataField">
17                <PropertyValue Property="Value" Path="DeliveryCalendar">
18                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceHigh" />
19                </PropertyValue>
20              </Record>
21              <Record Type="UI.DataField">
22                <PropertyValue Property="Value" Path="DeliveryCalendar">
23                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
24                </PropertyValue>
25              </Record>
26              <Record Type="UI.DataField">
27                <PropertyValue Property="Value" Path="SalesOrder" />
28                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
29              </Record>
30              <Record Type="UI.DataField">
31                <PropertyValue Property="Value" Path="SalesOrderItem" />
32                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
33              </Record>
34              <Record Type="UI.DataField">
35                <PropertyValue Property="Value" Path="Product" />
36                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
37              </Record>
38              <Record Type="UI.DataField">
39                <PropertyValue Property="Value" Path="ProductCategory" />
40                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
41              </Record>
42              <Record Type="UI.DataField">
43                <PropertyValue Property="Value" Path="SoldToParty" />
44                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
45              </Record>
46              <Record Type="UI.DataField">
47                <PropertyValue Property="Value" Path="Quantity" />
48                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
49              </Record>
50              <Record Type="UI.DataField">
51                <PropertyValue Property="Value" Path="NetAmount" />
52                  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
53              </Record>
54            </Collection>
55          </Annotation>
56        <Annotation Term="UI.Chart">
57          <Record Type="UI.ChartDefinitionType">
58            <PropertyValue Property="Title" String="Revenue by Customer" />
59            <PropertyValue Property="Description" String="Net Revenue" />
60            <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine" />
61            <PropertyValue Property="Dimensions" />
62            <Collection>
63              <PropertyPath>SoldToParty</PropertyPath>
64            </Collection>
65          </Record>
66        </Annotation>
67      </Schema>
68    </Annotations>
69  </DataServices>
70</edmx:Edmx>
```

(29) In **step 2** of the guide, use the following values to reference that chart in a presentation variant as in steps (22) - (23) above.

Field	Value
Entity Type	SEPMRA_SO_ALP_SLDORDERITEMType
Presentation Variant Qualifier	FilterQuantityByProduct
Chart Reference	@UI.Chart#FilterQuantityByProduct

**Note:** Here you use the same entity type as in the previous step.

Entity Type \* Z\_SEPMRA\_SO\_SALESORDERANALYSIS... Entity Type Property \* Product

Collection Path \* SEPMRA\_SO\_ALP\_SLDORDERITEM Presentation Variant Qualifier \* FilterQuantityByProduct

Local Data Property \* Product Value List Property \* Product

Annotation.xml (XML code)

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/InfoCatalogService;v=2/Vocabularies(Technical)" />
6     <edmx:Include Namespace="com.sap.vocabularies.UV.v1" Alias="UV" />
7   </edmx:Reference>
8   <edmx:Reference Uri="http://here/goes/your/serviceurl/$metadata" />
9     <edmx:Include Namespace="TECHED_ALP_SOA_SRV" />
10  </edmx:Reference>
11  <edmx:DataService>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar" />
18              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar" />
22              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder" />
26              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem" />
30              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="Product" />
34              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="ProductCategory" />
38              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty" />
42              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity" />
46              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount" />
50              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
51            </Record>
52          </Collection>
53        </Annotation>
54        <Annotation Term="UI.Chart">
55          <Record Type="UI.ChartDefinitionType">
56            <PropertyValue Property="Title" String="Revenue_by_Customer" />
57            <PropertyValue Property="Description" String="Net_Revenue" />
58            <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
59            <PropertyValue Property="Dimensions">
60              <Collection>
61                <PropertyPath>SoldToParty</PropertyPath>

```

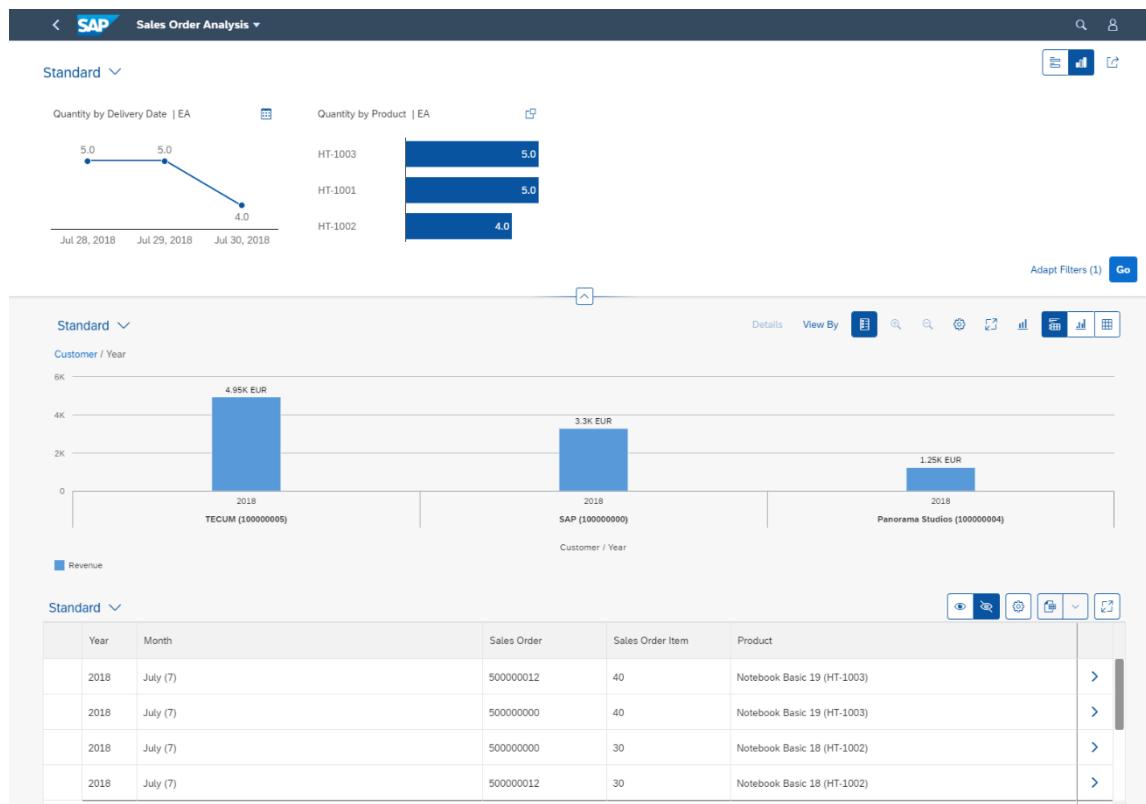
(30) In step 3 of the guide, use the following values to map the dimensions in the chart to the respective property of your main entity type in the annotation Common.ValueList as in steps (25) - (26) above.

Field	Value
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSIS
Entity Type Property	Product
Collection Path	SEPMRA_SO_ALP_SLDORDERITEM
Presentation Variant Qualifier	FilterQuantityByProduct
Local Data Property	Product
Value List Property	Product

**Note:** Here you annotate the property of your main entity type.

**Note:** Value list Property must contain the property you used as dimension in the chart configured in step 1 of the guide.

When you are done with all three steps, your second visual filter is configured and you can start the application preview. Enter EUR as a currency in the pop up and click Go to view the result. The second visual filter is displayed as a bar chart.



## Exercise 3.5 Configuring Semantic Coloring

In this step, you will define the criticality coloring to the visual filter bar based on the sales order items. Criticality annotations allows you to define the improvement direction by specifying different ranges and when the actual values cross those boundaries specified application, visual filter bar charts displays criticality coloring to display the situation

annotation.xml x

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/IWFND/CATALOGSERVICE;v=2/Vocabularies(Technical)" />
6     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
7   </edmx:Reference>
8   <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
9     <edmx:Include Namespace="TECHED_ALP_SOAL_SRV" />
10  </edmx:Reference>
11  <edmx:DataService>
12    <Schema annotation="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SOAL_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar" />
18              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar" />
22              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder" />
26              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem" />
30              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="Product" />
34              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="ProductCategory" />
38              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty" />
42              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity" />
46              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount" />
50              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
51            </Record>
52          </Collection>
53        </Annotation>
54        <Annotation Term="UI.Chart">
55          <Record Type="UI.ChartDefinitionType">
56            <PropertyValue Property="Title" String="Revenue_by_Customer" />
57            <PropertyValue Property="Description" String="Net_Revenue" />
58            <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
59            <PropertyValue Property="Dimensions">
60              <Collection>
61                <PropertyPath>SoldToParty</PropertyPath>

```

(31) In Guided Development, expand the guide **Add semantic coloring for visual filter**

> [Add semantic coloring for visual filter](#)

(annotation.xml)

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1.xml" Alias="Common" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(Technical)" />
6     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata" />
9     <edmx:Include Namespace="TECHED_ALP_SO4_SRV" />
10  </edmx:Reference>
11  <edmx:DataService>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO4_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
18              <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
22              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder"/>
26              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem"/>
30              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="Product"/>
34              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="ProductCategory"/>
38              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty"/>
42              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity"/>
46              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount"/>
50              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
51            </Record>
52          </Collection>
53        </Annotation>
54        <Annotation Term="UI.Chart">
55          <Record Type="UI.ChartDefinitionType">
56            <PropertyValue Property="Title" String="Revenue_by_Customer"/>
57            <PropertyValue Property="Description" String="Net_Revenue"/>
58            <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
59            <PropertyValue Property="Dimensions">
60              <Collection>
61                <PropertyPath>SoldToParty</PropertyPath>

```

**Description**

Follow the steps of this guide to add semantic coloring for visual filters in your Analytical List Page application.

Semantic coloring is based on the defined:

- Critically in DataPoint annotations. The specified value, or the value returned from a path, determines the color
- CriticallyCalculation in DataPoint annotations, along with the improvement direction and various threshold values. This applies only when the criticality is not defined

**Start Guide** 32

> Create annotations for Key Performance Indicator (KPI) Tags

> Enable select all in tables

> Enable semantic date range on smart filter bar

**Worklist Page**

> Enable variant management

**Don't have what you are looking for?**

> Request new guide

**Sample Preview**

(32) Click **Start Guide**.

The screenshot shows the SAP Guided Development interface for the salesorderanalysis application. On the left, there's a navigation bar with 'Welcome' and 'Guided Development - salesorderanalysis'. Below it, a 'Back to Guides' link. The main area has tabs: 'About', 'Step 1', 'Configure criticality configurations using UI.DataPoint annotation term', and 'Step 2', 'Associate Criticality configurations to a chart'. A red box highlights the 'Configure criticality configurations using UI.DataPoint annotation term' tab. To its right is a large code editor window titled 'annotation.xml' with XML code. A red box highlights the 'Annotations' section of the XML code. A red circle labeled '33' is over the 'Annotations' section. Another red circle labeled '34' is over the 'Apply' button in the toolbar below the XML editor.

```

<edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
  <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
  <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
  <edmx:Reference Uri="/sap/opu/odata/InfoCatalogService;v=2/Vocabularies(Teched_ALP_SOA_SRV)" />
  <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
  </edmx:Reference>
  <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
  <edmx:Include Namespace="TECHED_ALP_SOA_SRV" />
</edmx:Reference>
<edmx:DataService>
  <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
    <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
      <Annotation Term="UI.LineItem">
        <Collection>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="DeliveryCalendar"/>
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="DeliveryCalendar"/>
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="SalesOrder" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="SalesOrderItem" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="Product" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="ProductCategory" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="SoldToParty" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="Quantity" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="NetAmount" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance.Maximize" />
          </Record>
        </Collection>
      </Annotation>
    </Annotations>
    <UI.Chart>
      <Record Type="UI.ChartDefinitionType">
        <PropertyValue Property="Title" String="Revenue by Customer" />
        <PropertyValue Property="Description" String="Net Revenue" />
        <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
        <PropertyValue Property="Dimensions">
          <Collection>
            <PropertyPath>SoldToParty</PropertyPath>
          </Collection>
        </PropertyValue>
      </Record>
    </UI.Chart>
  </Schema>
</edmx:DataService>

```

(33) In the **step 1**, configure the DataPoint annotation using the following values:

Field	Value
Entity Type	SEPMRA_SO_ALP_SLDORDERITEMType
Data Point Qualifier	Quantity
Data Point Value	Quantity
Improvement Direction	Maximize
ToleranceRangeLowValue	5
DeviationRangeLowValue	4

(34) Click **Apply**.

The screenshot shows the SAP Guided Development interface for salesorderanalysis. The top navigation bar includes 'Welcome', 'Guided Development - salesorderanalysis x', and a 'Back to Guides' link. The main title is 'Add semantic coloring for visual filter'. A red box highlights 'Step 2 Associate Criticality configurations to a chart'. A yellow circle with the number '35' is placed over the 'Step 2' box.

**Configure criticality configurations using UI.DataPoint annotation term**

In this step, you will define the criticality coloring to the visual filter bar. For this you apply the DataPoint annotation with the property `CriticalityCalculation` on the same entity type as your visual filter and define the improvement direction and ranges. When the actual values crosses the boundaries set in the ranges, the elements of the visual filter chart are semantically colored to reflect the situation.

**Entity Type \***: SEPMRA\_SO\_ALP\_SLDORDERITEMtype

**Data Point Qualifier \***: Quantity

**Data Point Value \***: Quantity

**Improvement Direction \***: Maximize

**Tolerance Range Low Value**: 5

**Deviation Range Low Value**: 4

**Code snippet applied:**

```

1 <Annotations Target="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMtype">
2   <Annotation Term="UI.DataPoint" Qualifier="Quantity">
3     <Record Type="UI.DataPointType">
4       <PropertyValue Property="Value" Path="Quantity"/>
5       <Record Type="UI.CriticalityCalculationType">
6         <PropertyValue Property="ImprovementDirection" EnumMember="UI.ImprovementDirection.Maximize"/>
7         <PropertyValue Property="ToleranceRangeLowValue" Int="5"/>
8         <PropertyValue Property="DeviationRangeLowValue" Int="4"/>
9       </Record>
10      </PropertyValue>
11    </Record>
12  </Annotation>
13 </Annotations>

```

**annotation.xml**

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/Common.v1" Alias="Common" />
3   <edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
4   <edmx:Reference Uri="/sap/opu/odata/InFND/CATALOGSERVICE;v=2/Vocabularies/TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMtype" />
5   <edmx:Include Namespace="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMtype" />
6   <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
7   <edmx:Include Namespace="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMtype" />
8   <edmx:Reference Uri="UI" />
9   <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
10  <edmx:Reference Uri="UI/LineItem" />
11  <edmx:DataServices>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMtype">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
18              <Annotation Term="UI.Importance" EnumMember="UI.Importance.High"/>
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
22              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder"/>
26              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem"/>
30              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="Product"/>
34              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="ProductCategory"/>
38              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty"/>
42              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity"/>
46              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount"/>
50              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
51            </Record>
52          </Collection>
53        </Annotation>
54      </Annotations Target="UI.Chart">
55        <Record Type="UI.ChartDefinitionType">
56          <PropertyValue Property="Title" String="Revenue by Customer"/>
57          <PropertyValue Property="Description" String="Net Revenue by Customer"/>
58          <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Column"/>
59          <PropertyValue Property="Dimensions">
60            <Collection>
61              <PropertyPath>SoldToParty</PropertyPath>
62            </Collection>
63          </Dimensions>
64        </Record>
65      </Annotations Target="UI.Chart">
66    </Collection>
67  </Annotations Target="UI.DataVisualizationType">
68    <Record Type="UI.DataVisualizationType">
69      <PropertyValue Property="Title" String="Revenue by Customer"/>
70      <PropertyValue Property="Description" String="Net Revenue by Customer"/>
71      <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Column"/>
72      <PropertyValue Property="Dimensions">
73        <Collection>
74          <PropertyPath>SoldToParty</PropertyPath>
75        </Collection>
76      </Dimensions>
77    </Record>
78  </Annotations Target="UI.DataVisualizationType">
79  </Collection>
80</Annotations Target="UI.DataVisualizationType">

```

(35) Click on the **step 2** to get to the next step.

The screenshot shows the SAP Guided Development interface for 'Guided Development - salesorderanalysis'. The current step is 'Step 2: Associate Criticality configurations to a chart'. In the configuration area, the 'Data Point Reference' field is highlighted with a red box and circled with the number 36. The 'Annotation.xml' file on the right contains the XML code for the chart annotation.

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.V1" />
4   <edmx:Reference Uri="/sap/opu/odata/InFND/CATALOGSERVICE;v=2/Vocabularies/TECHED_ALP_SOA_SRV" />
5     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
6   <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
7     <edmx:Include Namespace="TECHED_ALP_SO_ASRV" />
8   </edmx:References>
9   <edmx:Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSIS" AnnotationTerm="UI.LineItem">
10    <Collection>
11      <Record Type="UI.DataField">
12        <PropertyValue Property="Value" Path="DeliveryCalendar" />
13        <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
14      </Record>
15      <Record Type="UI.DataField">
16        <PropertyValue Property="Value" Path="DeliveryCalendar" />
17        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
18      </Record>
19      <Record Type="UI.DataField">
20        <PropertyValue Property="Value" Path="SalesOrder" />
21        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
22      </Record>
23      <Record Type="UI.DataField">
24        <PropertyValue Property="Value" Path="SalesOrderItem" />
25        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
26      </Record>
27      <Record Type="UI.DataField">
28        <PropertyValue Property="Value" Path="Product" />
29        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
30      </Record>
31      <Record Type="UI.DataField">
32        <PropertyValue Property="Value" Path="ProductCategory" />
33        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
34      </Record>
35      <Record Type="UI.DataField">
36        <PropertyValue Property="Value" Path="SoldToParty" />
37        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
38      </Record>
39      <Record Type="UI.DataField">
40        <PropertyValue Property="Value" Path="Quantity" />
41        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
42      </Record>
43      <Record Type="UI.DataField">
44        <PropertyValue Property="Value" Path="NetAmount" />
45        <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
46      </Record>
47    </Collection>
48  </Annotation>
49  <Annotation Term="UI.Chart">
50    <Record Type="UI.ChartDefinitionType">
51      <PropertyValue Property="Title" String="Revenue by Customer" />
52      <PropertyValue Property="Description" String="Net Revenue by Customer" />
53      <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line" />
54      <PropertyValue Property="Dimensions">
55        <Collection>
56          <PropertyValue Property="Measure" PropertyPath="Quantity" />
57        </Collection>
58      </PropertyValue>
59      <PropertyValue Property="MeasureAttributes">
60        <Collection>
61          <PropertyValue Property="Measure" PropertyPath="Quantity" />
62          <Annotation Term="@UI.DataPoint#Quantity" />
63        </Collection>
64      </PropertyValue>
65    </Record>
66  </Annotation>
67</edmx:Annotations>
68</edmx:Edmx>

```

(36) In Step 2, re-define the already existing UI.Chart annotation used to display your visual filter ([Exercise 3.3](#)) with the reference to the Data Point annotation defined in the previous step. For your convenience, the newly added properties are highlighted bold:

Field	Value
Entity Type	SEPMRA_SO_ALP_SLDORDERITEMType
Chart Qualifier	FilterQuantityByDate
Chart Title	Quantity by Delivery Date
Chart Description	Item Quantity by Delivery Date
Chart Type	Line
Dimensions Property	DeliveryDate
Measures Property	Quantity
<b>Chart Measures Attributes Property</b>	<b>Quantity</b>
Data Point Qualifier	<b>@UI.DataPoint#Quantity</b>

(37) Click **Apply**.

**Note:** As an alternative to steps 36 and 37, you can update the existing line chart annotation directly in annotation.xml file using the code completion. This is a faster option for experienced users.

- In annotation.xml file, find line chart.
- Add a new line after the last </PropertyValue> tag.
- Use CTRL+Space (Windows) or CMD+Space (Mac) to get a suggestion list.
- Choose <Property MeasureAttributes>

```

annotation.xml x
98     <Annotations Target="TECHED_ALP_SO_ASRV.SEPMRA_SO_ALP_SLDORDERITEMType">
99         <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
100            <Record Type="UI.ChartDefinitionType">
101                <PropertyValue Property="Title" String="Quantity by Delivery Date" />
102                <PropertyValue Property="Description" String="Item Quantity by Delivery Date" />
103                <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line" />
104                <PropertyValue Property="Dimensions">
105                    <Collection>
106                        <PropertyPath>DeliveryDate</PropertyPath>
107                    </Collection>
108                </PropertyValue>
109                <PropertyValue Property="Measures">
110                    <Collection>
111                        <PropertyPath>Quantity</PropertyPath>
112                    </Collection>
113                </PropertyValue>
114            </Record>
115        </Annotation>
116    </Annotations>
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137

```

- e. Use CTRL+Space (Windows) or CMD+Space (Mac) again to add DataPoint.

```

119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137

```

- f. And then again to choose **UI.DataPoint#Quantity** as its value.

- g. Use the code completion again to add the property **Measures** and assign **Quantity** as a value. In the end, your annotation for line chart should look like this:

```

<Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">

<Record Type="UI.ChartDefinitionType">

    <PropertyValue Property="Title" String="Quantity by Delivery Date" />

    <PropertyValue Property="Description" String="Item Quantity by Delivery Date" />

    <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line" />

    <PropertyValue Property="Dimensions">
        <Collection>
            <PropertyPath>DeliveryDate</PropertyPath>
        </Collection>
    </PropertyValue>

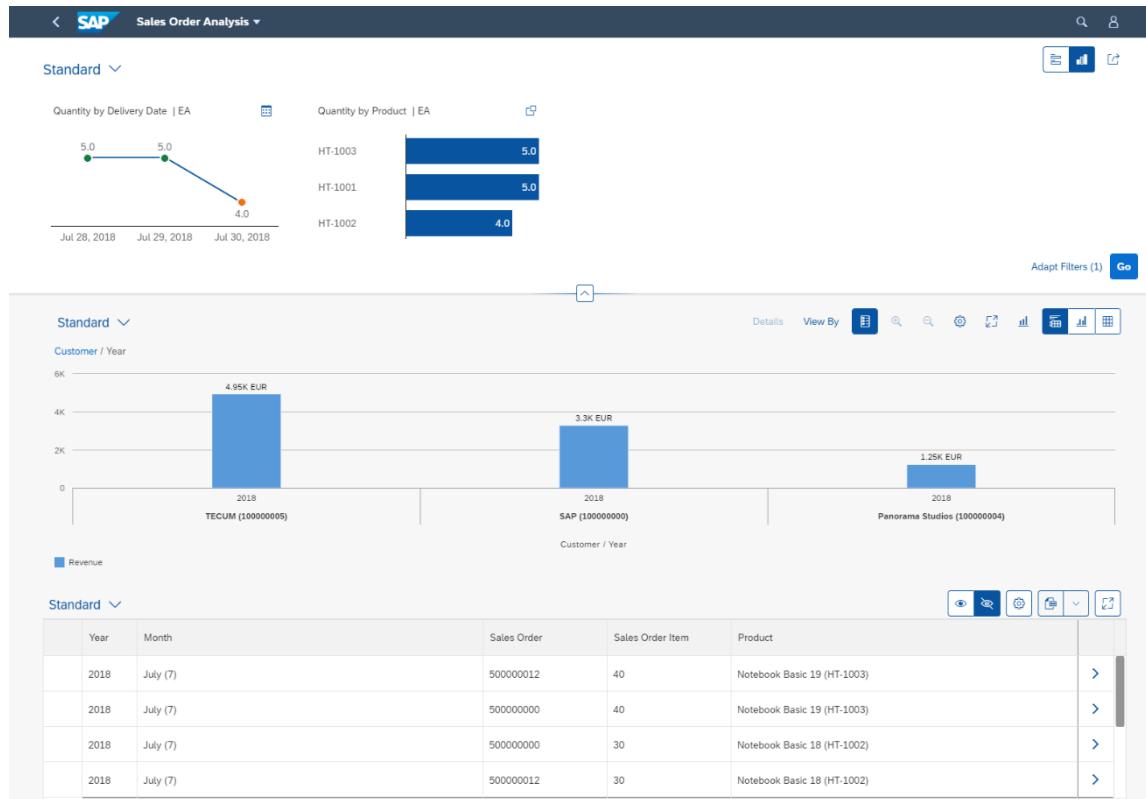
```

```
</PropertyValue>

<PropertyValue Property="Measures">
    <Collection>
        <PropertyPath>Quantity</PropertyPath>
    </Collection>
</PropertyValue>

<PropertyValue Property="MeasureAttributes">
    <Collection>
        <Record Type="UI.ChartMeasureAttributeType">
            <PropertyValue Property="DataPoint" AnnotationPath="@UI.DataPoint#Quantity"/>
            <PropertyValue Property="Measure" PropertyPath="Quantity"/>
        </Record>
    </Collection>
</PropertyValue>
</Record>
</Annotation>
```

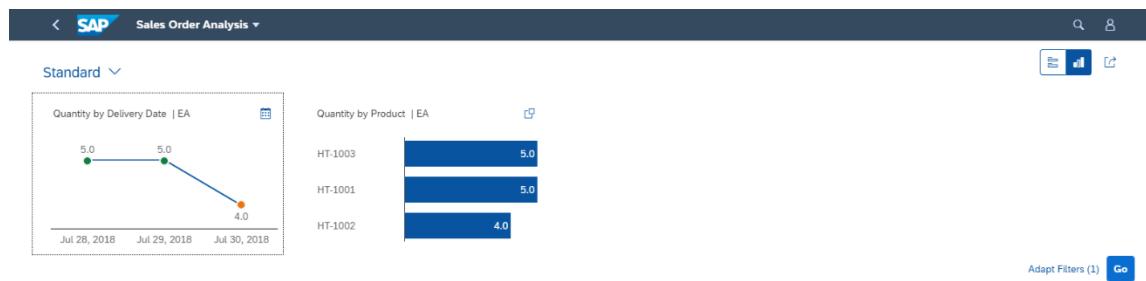
At this point you have configured the semantic coloring for the visual filter with the Line chart. Start the preview to see the changes in your visual filter based on the line chart. The data points are highlighted with semantic colors.



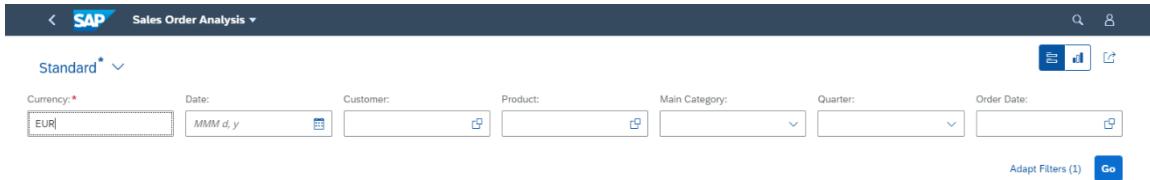
## Exercise 3.6 Using Shortcuts

In this step, you will get acquainted with the shortcuts that are available in Analytical List Page.

When the keyboard focus is on any element in the visual filter panel or on the entire visual filter, pressing **CTRL + Enter** (in Windows) or **CMD + Enter** (In Mac) triggers Go / Search



Switch over to the Compact Filter view. When the keyboard focus is on any filter field on the SmartFilterbar, Press "**Enter**" or "**Return**" to trigger Go / Search



The below table shows the available keyboard shortcuts.

Action	Shortcut (Microsoft Windows)	Shortcut (Mac OS)	Prerequisite	Result
Share	Shift + Ctrl + S	Shift + CMD + S	The focus should be set anywhere on the list report or object page.	If the focus is on the filter bar, the share-ActionSheet opens near the Share button
Go	Enter (or) Return	Enter (or) Return	The focus should be set anywhere on the SmartFilterBar (or) any element in the visual filter panel or on the entire visual filter.	In the SmartFilterBar, the search is triggered while the focus is within one of the filter bar's input fields. (or) If the focus is on any element in the visual filter panel or on the entire visual filter, Go is triggered.
Table settings	Ctrl + ,	Ctrl + ,	The focus should be set on the table.	The same as when a user chooses the Table Settings button.

## Summary

You have learned how to create Visual Filters and define the semantic coloring for its elements. In the next exercise, you will prepare for translation the text you defined for UI elements. Continue to [Exercise 4 - Preparing texts for translation](#).

## Exercise 4 – Preparing texts for translation

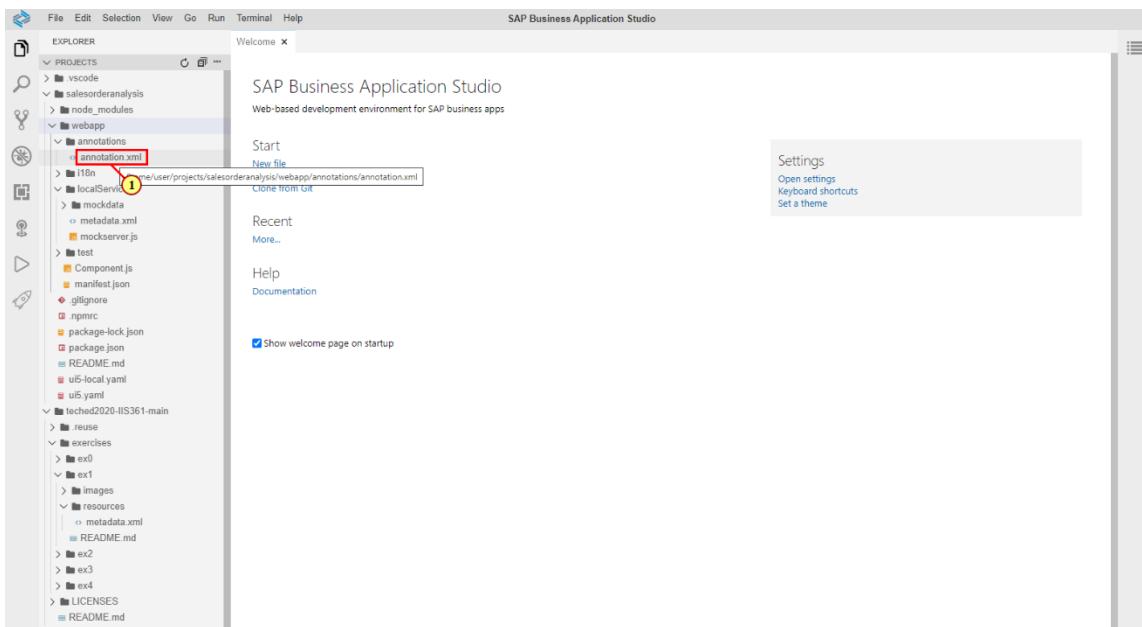
In this exercise, you will generate the translation text keys for the hard-coded string values you used in the previous exercises. For this you will use the i18n support of the XML annotation LSP.

When you work with the annotation file, directly in the code editor or indirectly through the Guided Development tool, its content is validated against the local service metadata, OData vocabularies and i18n properties file of your project. When the text you enter for a language-dependent string, such as chart title or description, annotation LSP shows the warning message indicating that this is a hard coded text and it needs to be substituted with the reference to the translation key in i18n properties file. Such warnings are accompanied with the suggested Quick Fix actions letting you perform several actions with one click:

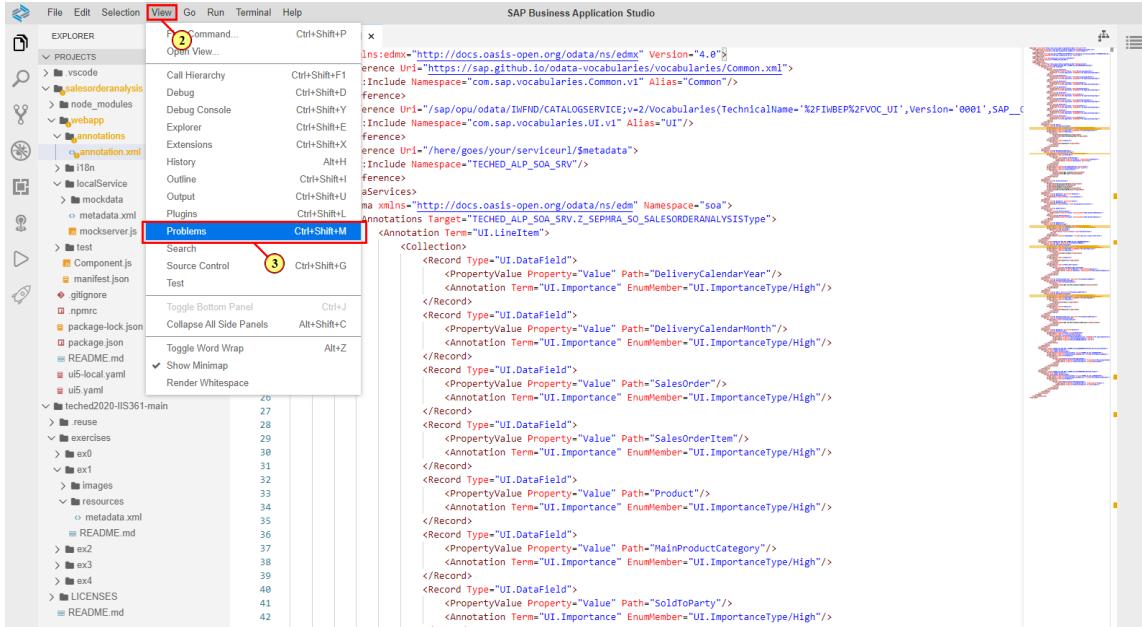
- auto-generate the key for the text string
- store it in i18n properties file
- substitute the hard coded text string in the annotation file with the reference to the generated text key.

You can then navigate to the translation key and update the value any time.

As an option, you can also use the code completion (CTRL+Space) in the local annotation file to select one of the existing text keys in the string values.

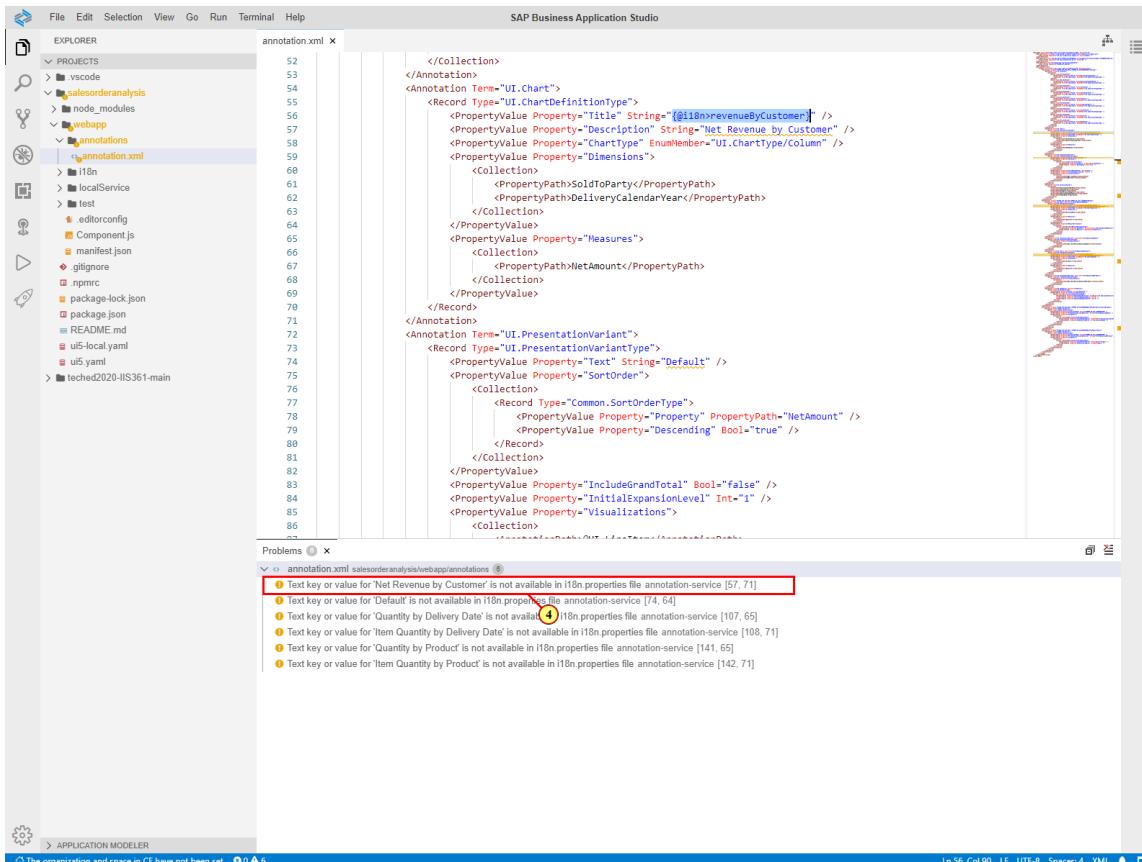


(1) In **Explorer** pane, double-click on **annotation.xml** file to open it.



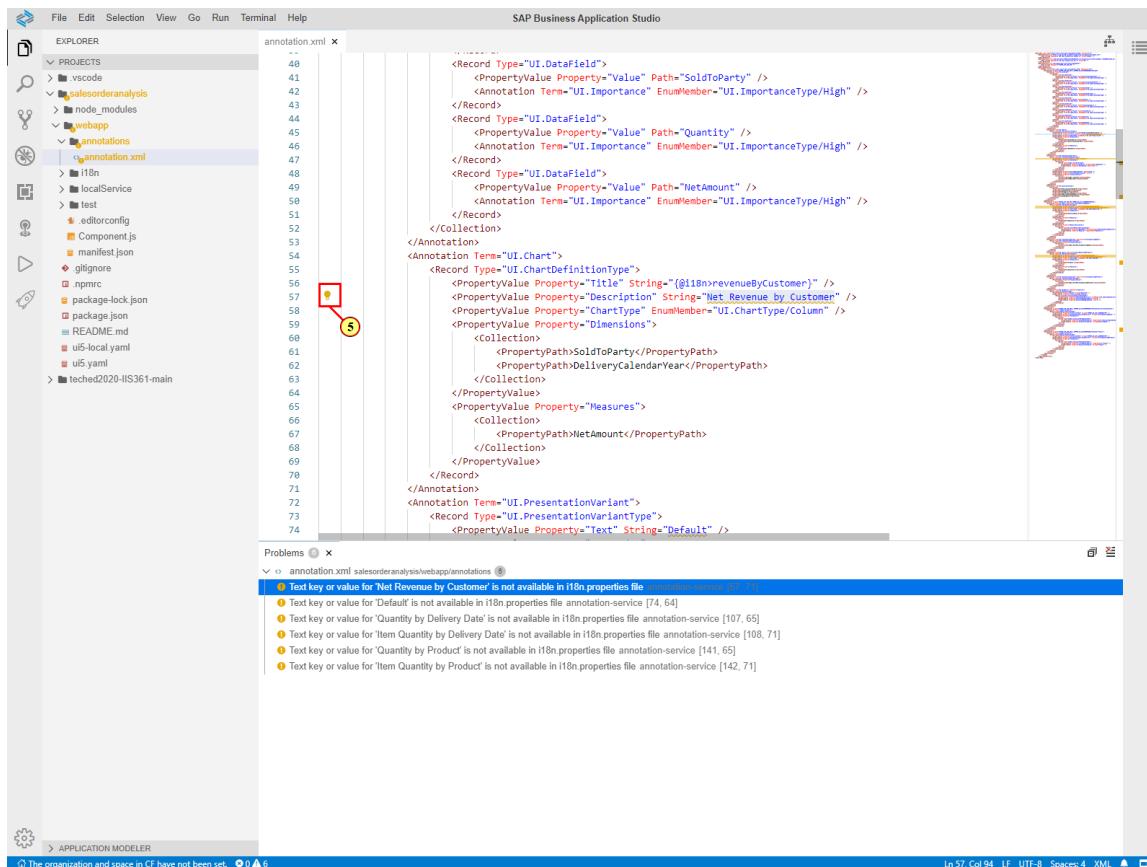
(2) Open View menu.

(3) Choose **Problems**. Problems View opens at the bottom.



(4) Look at the warning messages under **annotation.xml** - all of them are related to the missing text keys.  
Click at one of the messssses.

Annotation file is scrolled to the place related to the message you clicked on.



(5) Click on the **Show Fixes** icon next to it to display suggested Quick Fixes.

An action to generate the text key is suggested.

The screenshot shows the SAP Business Application Studio interface with the annotation.xml file open in the editor. A tooltip is visible, prompting to "Generate a text key 'netRevenueByCustomer' in i18n properties file and substitute 'Net Revenue by Customer' by '{@i18n-netRevenueByCustomer}'". The Problems panel lists several errors:

- Text key or value for 'Net Revenue by Customer' is not available in i18n.properties file annotation-service [57, 71]
- Text key or value for 'Default' is not available in i18n.properties file annotation-service [74, 64]
- Text key or value for 'Quantity by Delivery Date' is not available in i18n.properties file annotation-service [107, 65]
- Text key or value for 'Item Quantity by Delivery Date' is not available in i18n.properties file annotation-service [108, 71]
- Text key or value for 'Item Quantity by Product' is not available in i18n.properties file annotation-service [141, 65]
- Text key or value for 'Item Quantity by Product' is not available in i18n.properties file annotation-service [142, 71]

(6) Click on the action to accept it.

The key is generated in the **i18n.properties** file and the hard-coded string text is substituted with the reference to it.

The screenshot shows the SAP Business Application Studio interface. The left sidebar displays the project structure under 'PROJECTS'. The main area shows the content of the 'annotation.xml' file. The right side features a large tree view of the XML structure. Below the code editor, the 'Problems' view lists several warning messages:

```

annotation.xml 1:1-1:100 [annotation-service]
    ① Text key or value for 'Default' is not available in i18n.properties file annotation-service [74, 64]
    ① Text key or value for 'Quantity by Delivery Date' not available in i18n.properties file annotation-service [107, 65]
    ① Text key or value for 'Item Quantity by Delivery Date' not available in i18n.properties file annotation-service [108, 71]
    ① Text key or value for 'Quantity by Product' is not available in i18n.properties file annotation-service [141, 65]
    ① Text key or value for 'Item Quantity by Product' is not available in i18n.properties file annotation-service [142, 71]

```

(7) You can repeat the steps above for all the remaining warning messages in annotation.xml file.

```

annotation.xml
125     </Record>
126     <Collection>
127         <PropertyValue>
128             <Record>
129                 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
130                     <Record Type="UI.PresentationVariantType">
131                         <Collection>
132                             <AnnotationPath>@UI.Chart#FilterQuantityByDate</AnnotationPath>
133                         <Collection>
134                             <PropertyValue>
135                                 <Record>
136                                     <Annotation Term="UI.Chart" Qualifier="FilterQuantityByProduct">
137   <Record Type="UI.ChartDefinitionType">
138   <PropertyValue Property="Title" String="@i18n>itemQuantityByProduct" />
139   <PropertyValue Property="Description" String="@i18n>itemQuantityByProduct" />
140   <PropertyValue Property="ChartType" EnumMember="ui.ChartType.Var" />
141   <PropertyValue Property="Dimensions">
142   <Collection>
143   <PropertyPath>Product</PropertyPath>
144   <Collection>
145   <PropertyValue>
146   <Record Type="UI.ChartDefinitionType">
147   <PropertyValue Property="Measures">
148   <Collection>
149   <PropertyPath>Quantity</PropertyPath>
150   <Collection>
151   <PropertyValue>
152   <Record>
153   <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByProduct">
154             
```

(8) To view or modify the i18n record in the **i18n.properties** file, **Ctrl+Click/Cmd+Click** at the text reference **[@i18n>itemQuantityByProduct]**

The screenshot shows the SAP Business Application Studio interface. The left sidebar displays a project structure under 'PROJECTS' with items like 'vscode', 'salesorderanalysis', 'webapp', 'annotations', and 'i18n'. The 'annotation.xml' file is currently selected in the center editor area, showing XML code. Below it, the 'i18n.properties' file is also listed. The bottom status bar indicates the file is in 'Plain Text' mode, with line 28, column 1, LF, UTF-8, and spaces:4.

```
annotation.xml  i18n.properties x
11 revenueByCustomer=Revenue by Customer
12
13 #XFLD,69:
14 netRevenueByCustomer=Net Revenue by Customer
15
16 #XFLD,35:
17 default=Default
18
19 #XFLD,75:
20 quantityByDeliveryDate=Quantity by Delivery Date
21
22 #XFLD,90:
23 itemQuantityByDelivery=Item Quantity by Delivery Date
24
25 #XFLD,57:
26 quantityByProduct=Quantity by Product
27
28 #XFLD,72:
29 itemQuantityByProduct=Item Quantity by Product
30
```

You are navigated to the i18n.properties file and your cursor is next to the entry you chose in the annotation file.

The screenshot shows the SAP Business Application Studio interface with the 'annotation.xml' file open in the code editor. The code editor has a vertical line of numbers on the left and syntax highlighting for XML tags. A red box highlights the text reference '@i18n>quantityByProduct' at line 141, column 10. A yellow circle highlights the number '9' in the status bar at the bottom right.

```

<Record Type="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
  <Record Type="UI.PresentationVariantType">
    <PropertyValue Property="Visualizations">
      <Collection>
        <AnnotationPath>@UI.Chart#FilterQuantityByDate</AnnotationPath>
      </Collection>
    </PropertyValue>
  </Record>
</Annotation>
<Annotation Term="UI.Chart" Qualifier="FilterQuantityByProduct">
  <Record Type="UI.ChartDefinitionType">
    <PropertyValue Property="Title" String="@i18n>quantityByProduct" />
    <PropertyValue Property="Description" String="@i18n>itemQuantityByProduct" />
    <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Ban" />
    <PropertyValue Property="Dimensions">
      <Collection>
        <PropertyPath>Product</PropertyPath>
      </Collection>
    </PropertyValue>
    <PropertyValue Property="Measures">
      <Collection>
        <PropertyPath>Quantity</PropertyPath>
      </Collection>
    </PropertyValue>
  </Record>
</Annotation>
<Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByProduct">
  <Record Type="UI.PresentationVariantType">
    <PropertyValue Property="Visualizations">
      <Collection>
    </Collection>
  </Record>
</Annotation>

```

- (9) To view or modify the i18n record without leaving the file, click on the text reference [@i18n>quantityByProduct](#) and press **ALT+F12/Option+Fn+F12**.

```

<annotation>
  <Record Type="UI.PresentationVariantType">
    <PropertyValue Property="Visualizations">
      <Collection>
        <AnnotationPath>@UI.Chart#FilterQuantityByDate</AnnotationPath>
      </Collection>
    </PropertyValue>
  </Record>
</Annotation>
<Annotation Term="UI.Chart" Qualifier="FilterQuantityByProduct">
  <Record Type="UI.ChartDefinitionType">
    <PropertyValue Property="Title" String="@i18n:quantityByProduct" />
  </Record>
</Annotation>

```

I18n.properties Home\user\projects\salesorderanalysis\webapp\i18n - Definitions ()

```

15   #XFLD,35:
16     default=Default
17
18   #XFLD,75:
19   quantityByDeliveryDate=Quantity by Delivery Date
20
21   #XFLD,90:
22   itemQuantityByDelivery=Item Quantity by Delivery Date
23
24   #XFLD,57:
25   quantityByProduct=Quantity by Product
26
27   #XFLD,72:
28   itemQuantityByProduct=Item Quantity by Product
29
30
31
32
33
34
35
36
37
38
39
40
41
42   < PropertyValue Property="Description" String="@i18n:itemQuantityByProduct" />
43   < PropertyValue Property="ChartType" EnumMember="UI.ChartType/Bar" />

```

Problems X

No problems have been detected in the workspace so far.

The organization and space in CF have not been set. 0 0 0

In 141, Col 81 LF UTF-8 Spaces: 4 XML ▲

## Summary

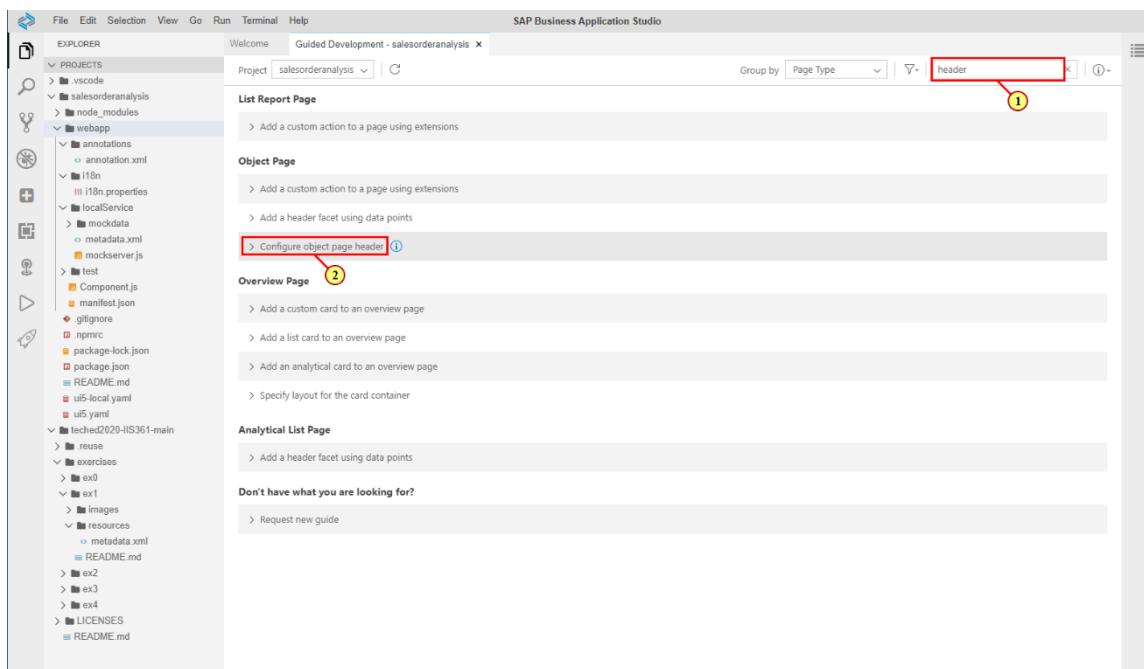
You have successfully substituted the hard coded texts in your annotation file with the references to the generated text keys. Now your Analytical List Page is prepared for translation. Continue to [Bonus Exercise 1 - Configuring the Second Page \(Object Page\)](#).

# Bonus Exercise 1 – Configuring the Second Page (Object Page)

In this exercise, you will define the header and content for the Object page using the Guided Development tool. Open this tool as in [Exercise 2 – Configuring Content Area of Analytical List Page](#).

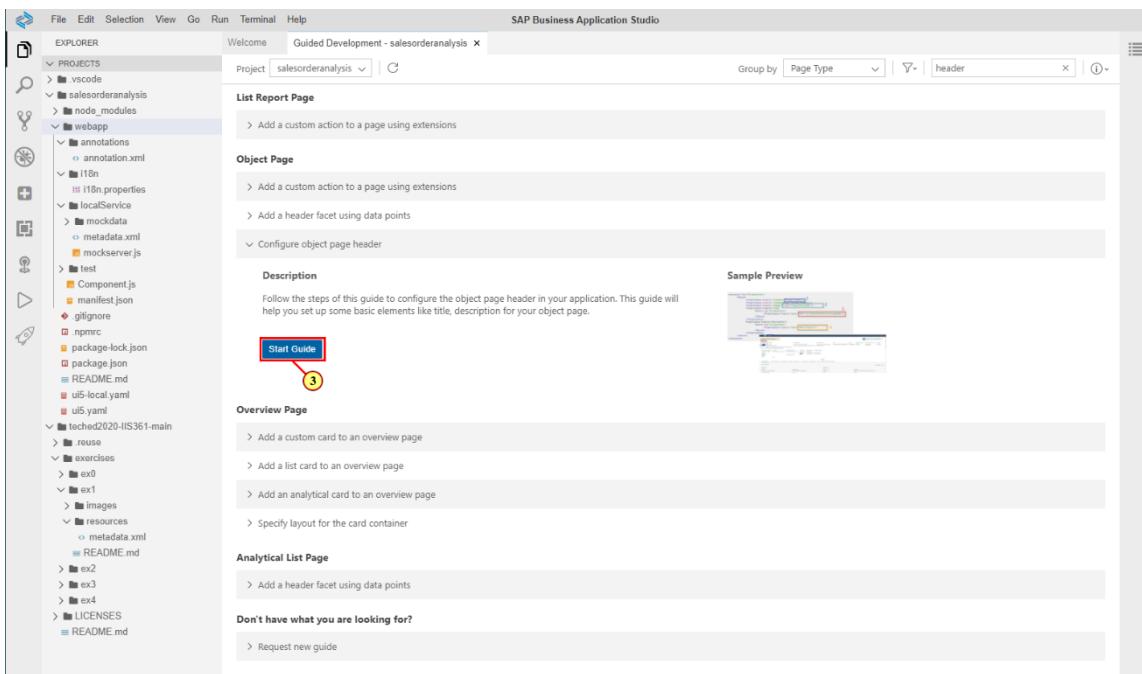
## Bonus Exercise 1.1 Define Header Information

In this exercise, you will define the information that will be displayed in the header of the object page: the ID of the sales order item and an icon. You will also change the title of the object page (type name) and set title of the table of the Analytical List page (type name plural). For this, you will use the guide **Configure object page header**.



(1) In Guided Development tool, enter **header** into the **Search** field.

(2) Expand the guide **Configure object page header** in the **Object Page** group.



### (3) Click Start Guide.

The screenshot shows the 'Configure object page header' guide step 1. It includes tabs for 'About' (Guide information) and 'Step 1' (Annotate entity with UIHeaderInfo annotation term). The main area has sections for 'Annotate entity with UI.HeaderInfo annotation term' and 'Entity Type' (Z\_SEPMRA\_SO\_SALESORDERANALYSIS). The 'Title - Type Name' field is set to 'Sales Order Item' and 'Title - Type Name (Plural)' is 'Sales Order Items'. The 'Object Title' field is set to 'SalesOrderItem' and 'Object Image' is 'sap-icon://sales-order-item'. A red box highlights the 'Entity Type' and 'Title' fields, and a red circle with the number 4 points to the 'Apply' button. Below the form is an XML code editor showing the generated annotation code, with a red circle with the number 5 pointing to the 'Annotation' tag. At the bottom are 'Back', 'Next >', and 'Exit Guide' buttons.

### (4) Enter the following values:

Field	Value
-------	-------

Entity Type	Z_SEPMRA_SO_SALESORDERANALYSISType
Title – Type Name	Sales Order Item
Title – Type Name (Plural)	Sales Order Items
Object Title	SalesOrderItem
Object Image	sap-icon://sales-order-item

(5) Click **Apply**.

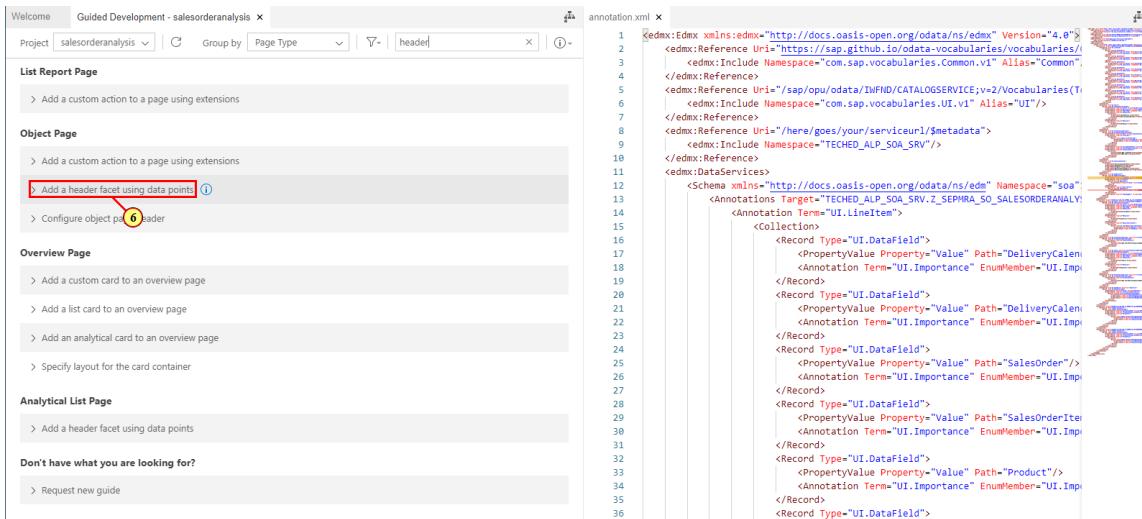
The basic header of the object page is defined and you can exit the guide.

(Optional) Start the application preview as described in the [Exercise 2.5 Starting Application Preview](#).

**Note:** To navigate to the Object page in your application preview, click on the navigation indicator (‘>’) at the end of a table row in the Analytical list page.

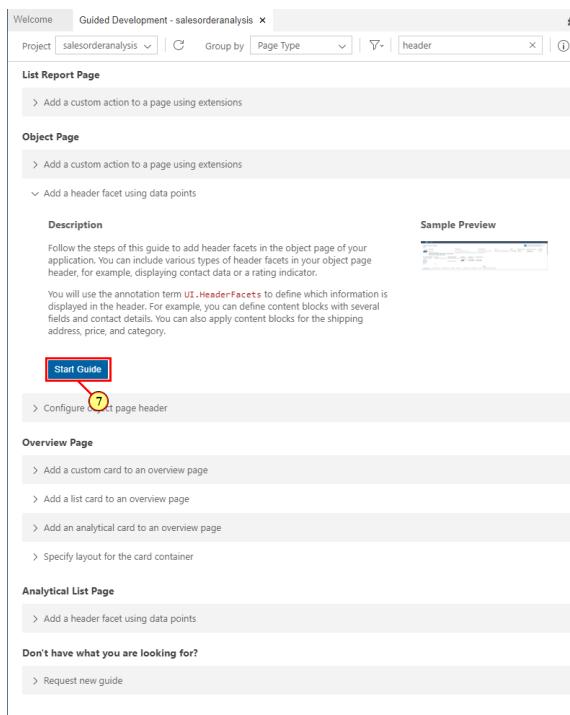
## Bonus Exercise 1.2 Displaying Data Points in Object Page Header

In this exercise, you will add two additional pieces of information to the Object page header: the net amount of the sales order item and its status. For this, you will use the guide **Add a header facet using data points**.



(6) In Guided Development tool, expand the guide **Add a header facet using data points**  
 > **Add a header facet using data points**.

**Note:** You can double-click on the **Guided Development - salesorderanalysis** tab to get more editing space by temporarily hiding the **Explorer** pane.

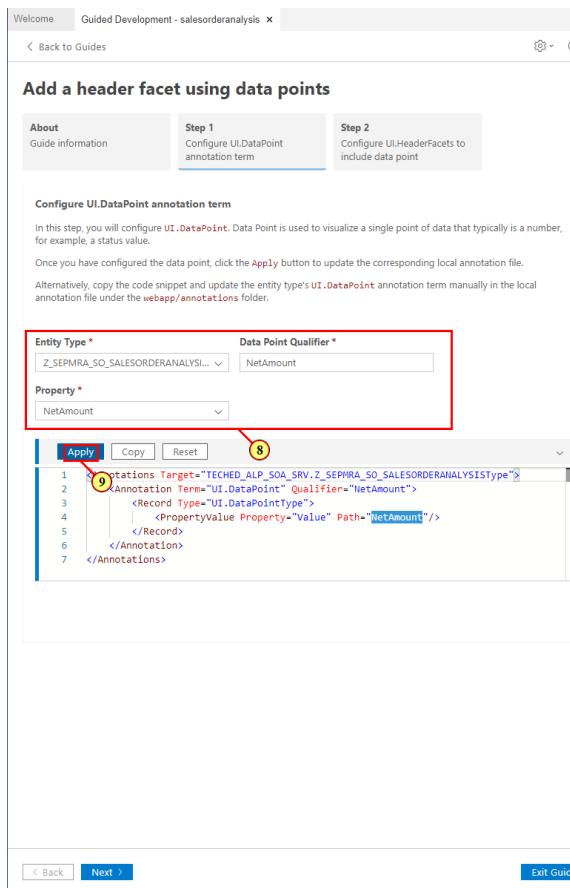


```

annotation.xml x
1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies/T" />
4     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="UI" />
5   </edmx:Reference>
6   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata" />
7     <edmx:Include Namespace="TECHED_ALP_SO_ASRV" />
8   </edmx:Reference>
9   <edmx:DataServices>
10    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa" />
11      <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALY" />
12        <Annotation Term="UI.LineItem">
13          <Collection>
14            <Record Type="UI.DataField">
15              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
16              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
17            </Record>
18            <Record Type="UI.DataField">
19              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
20              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
21            </Record>
22            <Record Type="UI.DataField">
23              <PropertyValue Property="Value" Path="SalesOrder"/>
24              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
25            </Record>
26            <Record Type="UI.DataField">
27              <PropertyValue Property="Value" Path="SalesOrderItem"/>
28              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
29            </Record>
30            <Record Type="UI.DataField">
31              <PropertyValue Property="Value" Path="Product"/>
32              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
33            </Record>
34            <Record Type="UI.DataField">
35              <PropertyValue Property="Value" Path="MainProductCategory"/>
36              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
37            </Record>
38            <Record Type="UI.DataField">
39              <PropertyValue Property="Value" Path="SoldToParty"/>
40              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
41            </Record>
42            <Record Type="UI.DataField">
43              <PropertyValue Property="Value" Path="Quantity"/>
44              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
45            </Record>
46            <Record Type="UI.DataField">
47              <PropertyValue Property="Value" Path="NetAmount"/>
48              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
49            </Record>
50          </Collection>
51        </Annotation>
52      </Schema>
53    </Annotations>
54  </edmx:DataServices>
55 </edmx:Edmx>

```

## (7) Click Start Guide.



```

annotation.xml x
1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common" />
3   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies/T" />
4     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="UI" />
5   </edmx:Reference>
6   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata" />
7     <edmx:Include Namespace="TECHED_ALP_SO_ASRV" />
8   </edmx:Reference>
9   <edmx:DataServices>
10    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa" />
11      <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALY" />
12        <Annotation Term="UI.LineItem">
13          <Collection>
14            <Record Type="UI.DataField">
15              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
16              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
17            </Record>
18            <Record Type="UI.DataField">
19              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
20              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
21            </Record>
22            <Record Type="UI.DataField">
23              <PropertyValue Property="Value" Path="SalesOrder"/>
24              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
25            </Record>
26            <Record Type="UI.DataField">
27              <PropertyValue Property="Value" Path="SalesOrderItem"/>
28              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
29            </Record>
30            <Record Type="UI.DataField">
31              <PropertyValue Property="Value" Path="Product"/>
32              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
33            </Record>
34            <Record Type="UI.DataField">
35              <PropertyValue Property="Value" Path="MainProductCategory"/>
36              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
37            </Record>
38            <Record Type="UI.DataField">
39              <PropertyValue Property="Value" Path="SoldToParty"/>
40              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
41            </Record>
42            <Record Type="UI.DataField">
43              <PropertyValue Property="Value" Path="Quantity"/>
44              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
45            </Record>
46            <Record Type="UI.DataField">
47              <PropertyValue Property="Value" Path="NetAmount"/>
48              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType" />
49            </Record>
50          </Collection>
51        </Annotation>
52      </Schema>
53    </Annotations>
54  </edmx:DataServices>
55 </edmx:Edmx>

```

## (8) In the first step of the guide, enter the following values to define the first data point:

Field	Value
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSISType
Data Point Qualifier	NetAmount
Property	NetAmount

### (9) Click **Apply**.

The screenshot shows the SAP Guided Development interface for 'salesorderanalysis'. The current step is 'Step 1: Configure UI.DataPoint annotation term'. The configuration panel shows the following settings:

- Entity Type:** Z\_SEPMRA\_SO\_SALESORDERANALYSISType
- Data Point Qualifier:** Status
- Property:** SalesOrderOverallStatus

The 'Apply' button is highlighted with a red box and a yellow circle containing the number 10. A snippet message 'snippet has been successfully applied' is displayed next to the button.

The right side of the screen shows the XML code for the annotation file (annotation.xml), which includes annotations for the entity type and its properties.

### (10) Now update the following values to define the second data point:

Field	Value
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSISType
Data Point Qualifier	Status
Property	SalesOrderOverallStatus

### (11) Click **Apply**.

**Add a header facet using data points**

**Step 1**  
Configure UI.DataPoint annotation term

**Step 2**  
Configure UI.HeaderFacets to include data point (12)

**Configure UI.DataPoint annotation term**

In this step, you will configure **UI.DataPoint**. Data Point is used to visualize a single point of data that typically is a number, for example, a status value.

Once you have configured the data point, click the **Apply** button to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity type's **UI.DataPoint** annotation term manually in the local annotation file under the [webapp/annotations](#) folder.

**Entity Type \*** Z\_SEPMRA\_SO\_SALESORDERANALYSIS  
**Data Point Qualifier \*** Status  
**Property \*** SalesOrderOverallStatus

**Annotation XML**

```

1 <Annotations Target="TECHED_ALP_SOA_SRV_Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.DataPoint" Qualifier="Status">
3     <Record Type="UI.DataPointType">
4       <PropertyValue Property="Value" Path="SalesOrderOverallStatus"/>
5     </Record>
6   </Annotation>
7 </Annotations>

```

**Code snippet has been successfully applied**

**Apply** **Copy** **Reset** (12) **Exit Guide**

(12) Click **Step 2**. Here you will reference the data points created in **Step 1** in HeaderFacets to display them in the Object page header.

Welcome Guided Development - salesorderanalysis x

[Back to Guides](#)

## Add a header facet using data points

<b>About</b> Guide information	<b>Step 1</b> Configure UI.DataPoint annotation term	<b>Step 2</b> Configure UI.HeaderFacets to include data point
-----------------------------------	---------------------------------------------------------	------------------------------------------------------------------

**Configure UI.HeaderFacets to include data point**

In this step, you will add a UI.ReferenceFacet that will point to UI.DataPoint created in the previous step.

A ReferenceFacet node is used to reference another node in the annotation file, that defines the information you want to display (a DataPoint in our case).

The HeaderFacets node is the parent for all the ReferenceFacet nodes that you want to display in the header of the object page.

Once you have configured the new column, click the **Apply** button to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity type's **UI.HeaderFacets** annotation term manually in the local annotation file under the `webapp/annotations` folder.

Entity Type *	Data Point Reference *
Z_SEPMRA_SO_SALESORDERANALYS...	UI.DataPoint#NetAmount

13

```

1 Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType"
2   Annotation Term="UI.HeaderFacets" >
3     <Collection>
4       <Record Type="UI.ReferenceFacet">
5         <PropertyValue Property="Target" AnnotationPath="UI.DataPoint#NetAmount" />
6       </Record>
7     </Collection>
8   </Annotations>
9 
```

**annotation.xml** x

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common">
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
4   </edmx:Reference>
5   <edmx:Reference Uri="sap/opu/odata/INFND/CATALOGSERVICE/$metadata" Version="2">
6     <edmx:Include Namespace="com.sap.vocabularies.UL.v1" Alias="UL" />
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata" Version="1">
9     <edmx:Include Namespace="TECHED_ALP_SOA_SRV"/>
10    </edmx:Reference>
11  </edmx:Annotations>
12  <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13    <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
14      <Annotation Term="UI.LineItem">
15        <Collection>
16          <Record Type="UI.DataField">
17            <PropertyValue Property="Value" Path="DeliveryCalen...
18              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
19            </Record>
20          <Record Type="UI.DataField">
21            <PropertyValue Property="Value" Path="DeliveryCalen...
22              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
23            </Record>
24          <Record Type="UI.DataField">
25            <PropertyValue Property="Value" Path="SalesOrder" />
26              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
27            </Record>
28          <Record Type="UI.DataField">
29            <PropertyValue Property="Value" Path="SalesOrderType" />
30              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
31            </Record>
32          <Record Type="UI.DataField">
33            <PropertyValue Property="Value" Path="Product" />
34              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
35            </Record>
36          <Record Type="UI.DataField">
37            <PropertyValue Property="Value" Path="MainProduct" />
38              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
39            </Record>
40          <Record Type="UI.DataField">
41            <PropertyValue Property="Value" Path="SoldToParty" />
42              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
43            </Record>
44          <Record Type="UI.DataField">
45            <PropertyValue Property="Value" Path="Quantity" />
46              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
47            </Record>
48          <Record Type="UI.DataField">
49            <PropertyValue Property="Value" Path="NetAmount" />
50              <Annotation Term="UI.Importance" EnumMember="UI.Imp...
51            </Record>
52        </Collection>
53      </Annotation>
54    <Annotation Term="UI.Chart">
55      <Record Type="UI.ChartDefinitionType">
56        <PropertyValue Property="Title" String="#@i18n>revenueB:&#...
57        <PropertyValue Property="Description" String="#@i18n>...
58        <PropertyValue Property="ChartType" EnumMember="UI.Char...
59        <PropertyValue Property="Dimensions" />
60        <Collection>
61          <PropertyPath>SoldToParty/PropertyPath

Back Next > Exit Guide


```

(13) Enter the following values to reference the first data point:

<b>Field</b>	<b>Value</b>
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSISType
Data Point Qualifier	UI.DataPoint#NetAmount

(14) Click **Apply**.

annotation.xml

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/
3     |<edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/INFIND/CATALOGSERVICE;v=2/Vocabularies(Te
6     |<edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
9     |<edmx:Include Namespace="TECHED_ALP_SO_SRV"/>
10  </edmx:Reference>
11  <edmx:DataServices>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALEORDERANALYSISType">
14        <Annotation Term="UI.HeaderFacets">
15          <Collection>
16            <Record Type="UI.ReferenceFacet">
17              <PropertyValue Property="Value" AnnotationPath="UI.DataPoint#Status" />
18            </Record>
19          </Collection>
20        </Annotation>
21      </Annotations>
22    </Schema>
23  </edmx:DataServices>
24  <Collection>
25    <Record Type="UI.DataField">
26      <PropertyValue Property="Value" Path="DeliveryCalendar"/>
27      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
28    </Record>
29    <Record Type="UI.DataField">
30      <PropertyValue Property="Value" Path="DeliveryCalendar"/>
31      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
32    </Record>
33    <Record Type="UI.DataField">
34      <PropertyValue Property="Value" Path="SalesOrder"/>
35      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
36    </Record>
37    <Record Type="UI.DataField">
38      <PropertyValue Property="Value" Path="SalesOrderItem"/>
39      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
40    </Record>
41    <Record Type="UI.DataField">
42      <PropertyValue Property="Value" Path="Product"/>
43      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
44    </Record>
45    <Record Type="UI.DataField">
46      <PropertyValue Property="Value" Path="MainProductCategory"/>
47      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
48    </Record>
49    <Record Type="UI.DataField">
50      <PropertyValue Property="Value" Path="SoldToParty"/>
51      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
52    </Record>
53    <Record Type="UI.DataField">
54      <PropertyValue Property="Value" Path="Quantity"/>
55      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
56    </Record>
57    <Record Type="UI.DataField">
58      <PropertyValue Property="Value" Path="NetAmount"/>
59      <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
60    </Record>
61  </Collection>
62  <Annotation Term="UI.Chart">
63    <Record Type="UI.ChartDefinitionType">
64      <PropertyValue Property="Title" String="@1@nrevenueB" />
65      <PropertyValue Property="Description" String="@1@none" />
66      <PropertyValue Property="ChartType" EnumMember="UI.ChartType_SoldToParty" />
67      <PropertyValue Property="Dimensions">
68        <Collection>
69          <PropertyValue>SoldToParty</PropertyValue>
70        </Collection>
71      </PropertyValue>
72    </Record>
73  </Annotation>
74</edmx:Edmx>

```

(15) Now choose the second data point to reference it in header too.

(16) Click **Apply**.

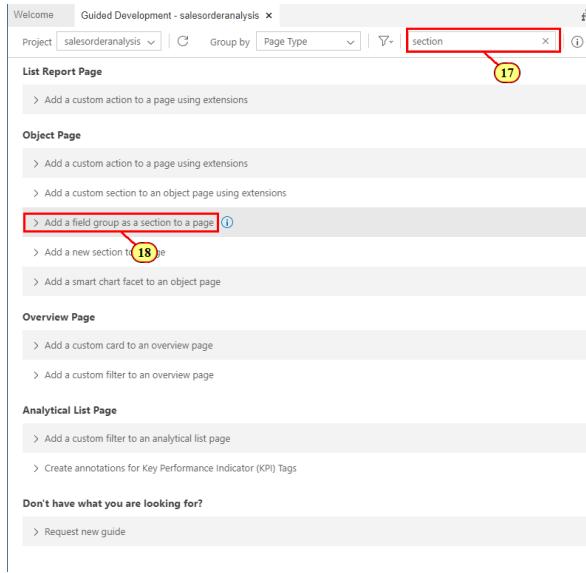
The header of the object page is now configured and you can exit the guide.

(Optional) Start the application preview as described in the [Exercise 2.5 Starting Application Preview](#).

**Note:** You can notice, that the revenue figure is displayed with a currency, even though we did not define it. This is due to annotations already configured for you in the **metadata.xml** file: the **NetAmount** and **Currency** properties are tied together using the **sap:unit** and **sap:semantics** annotations.

## Bonus Exercise 1.3 Adding Field Group Sections to the Object Page

In this exercise, you will define two sections in the ObjectPage displaying information about the sales order item and its related product in a form as field groups. For this, you will use the guide **Add field group as a section to a page**.



annotation.xml x

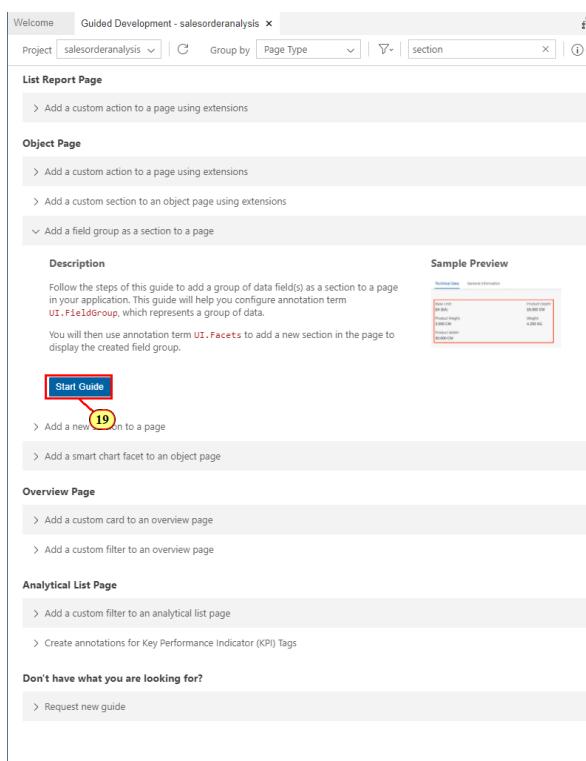
```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1">
3     <edm:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(TechnicalName='UI')">
6     <edm:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
9     <edm:Include Namespace="TECHED_ALP_SO_A_SRV"/>
10  </edmx:Reference>
11  <edmx:DataServices>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPHRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar">
18                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
19              </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar">
22                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
23              </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder"/>
26                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
27              </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem"/>
29                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
29              </Record>
29            <Record Type="UI.DataField">
30              <PropertyValue Property="Value" Path="Product"/>
30                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
30              </Record>
31            <Record Type="UI.DataField">
32              <PropertyValue Property="Value" Path="MainProductCategory"/>
32                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
32              </Record>
33            <Record Type="UI.DataField">
34              <PropertyValue Property="Value" Path="SoldToParty"/>
34                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
34              </Record>
35            <Record Type="UI.DataField">
36              <PropertyValue Property="Value" Path="Quantity"/>
36                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
36              </Record>
37            <Record Type="UI.DataField">
38              <PropertyValue Property="Value" Path="NetAmount"/>
38                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
38              </Record>
39          </Collection>
40        </Annotation>
41      </Annotations>
42    </Schema>
43  </edmx:DataServices>
44
```

(17) In Guided Development tool, enter **section** into the **Search** field.

(18) Expand the guide **Add field group as a section to a page** in the **Object Page** group.

> Add a field group as a section to a page



annotation.xml x

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1">
3     <edm:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(TechnicalName='UI')">
6     <edm:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
9     <edm:Include Namespace="TECHED_ALP_SO_A_SRV"/>
10  </edmx:Reference>
11  <edmx:DataServices>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPHRA_SO_SALESORDERANALYSIS">
14        <Annotation Term="UI.LineItem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar">
18                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
19              </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar">
22                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
23              </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder"/>
26                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
27              </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem"/>
29                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
29              </Record>
29            <Record Type="UI.DataField">
30              <PropertyValue Property="Value" Path="Product"/>
30                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
30              </Record>
31            <Record Type="UI.DataField">
32              <PropertyValue Property="Value" Path="MainProductCategory"/>
32                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
32              </Record>
33            <Record Type="UI.DataField">
34              <PropertyValue Property="Value" Path="SoldToParty"/>
34                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
34              </Record>
35            <Record Type="UI.DataField">
36              <PropertyValue Property="Value" Path="Quantity"/>
36                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
36              </Record>
37            <Record Type="UI.DataField">
38              <PropertyValue Property="Value" Path="NetAmount"/>
38                <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium"/>
38              </Record>
39          </Collection>
40        </Annotation>
41      </Annotations>
42    </Schema>
43  </edmx:DataServices>
44
```

(19) Click **Start Guide**.

**Add a field group as a section to a page**

**About**  
Guide information

**Step 1**  
Configure UI.FieldGroup annotation term to add and group data field(s)

**Step 2**  
Add a new section to display the field group

**Entity Type Parameters**  
Select the Entity Type you would like to use. You will add data from the selected entity type for your new group.

**Entity Type \***  
Z\_SEPMRA\_SO\_SALESORDERANALYSIS...

**New Field Group Parameters**  
Enter a unique Qualifier that can help you identify the newly created UI.FieldGroup annotation term in subsequent steps.

**Qualifier \***  
General

**New Data Field Parameters**  
Select the Property from your chosen entity type that you would like represented as a new data field.  
You can also choose a property from a differently linked entity type by selecting a Navigation Path below.

**Note:** To add more data fields to your field group, fill out this section's fields again and click the Apply button

**Navigation Path**      **Property \***  
Select a navigation path      SalesOrder

**Apply**    **Copy**    **Reset**

```

1 <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.FieldGroup" Qualifier="General">
3     <Record Type="UI.FieldGroupType">
4       <PropertyValue Property="Data">
5         <Collection>
6           <Record Type="UI.DataField">
7             <PropertyValue Property="Value" Path="SalesOrder"/>
8           </Record>
9         </Collection>
10        </PropertyValue>
11      </Record>
12    </Annotation>
13  </Annotations>

```

**annotation.xml**

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common">
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" />
4   </edmx:Reference>
5   <edmx:Reference Uri="sap/opu/odata/IWFND/CATALOGSERVICEv2/Vocabularies(Teched_ALP_SO_SRV)" Alias="TECHED_ALP_SO_SRV">
6     <edmx:Include Namespace="com.sap.vocabularies.TECHED_ALP_SO_SRV" />
7   </edmx:Reference>
8   <edmx:Reference Uri="/Here/goes/your/serviceurl/$metadata">
9     <edmx:Include Namespace="TECHED_ALP_SO_SRV"/>
10  </edmx:Reference>
11  <edmx:DataServices>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
14        <Annotation Term="UI.Lineitem">
15          <Collection>
16            <Record Type="UI.DataField">
17              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
18              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
22              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="SalesOrder"/>
26              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderItem"/>
30              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
31            </Record>
32            <Record Type="UI.DataField">
33              <PropertyValue Property="Value" Path="Product"/>
34              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
35            </Record>
36            <Record Type="UI.DataField">
37              <PropertyValue Property="Value" Path="MainProductCategory"/>
38              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty"/>
42              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity"/>
46              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount"/>
50              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
51            </Record>
52          </Collection>
53        </Annotation>
54        <Annotation Term="UI.Chart">
55          <Record Type="UI.ChartDefinitionType">
56            <PropertyValue Property="Title" String="({@18n>revenueB} {@18n>e)" />
57            <PropertyValue Property="Description" String="({@18n>e)" />
58            <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
59            <PropertyValue Property="Dimensions">
60              <Collection>
61                <PropertyPath>SoldToParty</PropertyPath>

```

(20) In the first step of the guide, you define the field groups. Enter the following values to define the first group:

Field	Value
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSISType
Qualifier	General

annotation.xml

```

1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/Common.v1" Alias="Common"/>
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4   <edmx:Reference Uri="sap/opu/odata/IWFND/CATALOGSERVICE/v2/Vocabularies/>
5     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
6   <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
7     <edmx:Include Namespace="TECHED_ALP_SO4_SRV"/>
8   </edmx:Reference>
9   <edmx:DataService>
10    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
11      <Annotations Target="TECHED_ALP_SO4_SRV_Z_SEPMRA_SO_SALESORDERANALYSType">
12        <Annotation Term="UI.FieldGroup" Qualifier="General">
13          <Record Type="UI.FieldGroupType">
14            <PropertyValue Property="Name">Data</PropertyValue>
15            <Collection>
16              <Record Type="UI.DataField">
17                <PropertyValue Property="Value" Path="DeliveryCalendarDate"/>
18                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
19              </Record>
20              <Record Type="UI.DataField">
21                <PropertyValue Property="Value" Path="SalesOrder"/>
22                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
23              </Record>
24              <Record Type="UI.DataField">
25                <PropertyValue Property="Value" Path="SalesOrderItem"/>
26                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
27              </Record>
28              <Record Type="UI.DataField">
29                <PropertyValue Property="Value" Path="Product"/>
30                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
31              </Record>
32              <Record Type="UI.DataField">
33                <PropertyValue Property="Value" Path="MainProductCategory"/>
34                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
35              </Record>
36              <Record Type="UI.DataField">
37                <PropertyValue Property="Value" Path="SoldToParty"/>
38                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
39              </Record>
40              <Record Type="UI.DataField">
41                <PropertyValue Property="Value" Path="Quantity"/>
42                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
43              </Record>
44              <Record Type="UI.DataField">
45                <PropertyValue Property="Value" Path="NetAmount"/>
46                <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
47              </Record>
48            </Collection>
49          </Annotation>
50        </Annotations>
51      </Schema>
52    </Edmx>
53  </edmx:DataService>
54 </edmx:Edmx>
55 
```

- (21) In the **Property** field, choose **Sales Order**. It will be used as a first field in the group  
(22) Click **Apply**.

Repeat steps (21) and (22) to add the following fields to the first group:

- **DeliveryCalendarDate**
- **GrossAmount**
- **NetAmount**

The screenshot shows the SAP Guided Development interface for a sales order analysis application. The main area displays a configuration guide with two steps:

- Step 1**: Configure UI.FieldGroup annotation term to add and group data field(s).
- Step 2**: Add a new section to display the field group.

A red box highlights Step 2, and a yellow circle with the number 23 points to the "Apply" button below the configuration fields. To the right of the configuration interface is a large code editor window showing the generated annotation XML. The XML code includes annotations for DataPoints, HeaderFacets, and a FieldGroup named "General". The "General" field group contains a collection of DataFields, one of which is set to "NetAmount".

```

<Annotations Target="TECHED_ALP_SOAL_SRV_Z_SEPMRA_SO_SALESORDERANALYSISType">
  <Annotation Term="UI.FieldGroup" Qualifier="General">
    <Record Type="UI.FieldGroupType">
      <PropertyValue Property="Data">
        <Collection>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="NetAmount"/>
          </Record>
        </Collection>
      </PropertyValue>
    </Record>
  </Annotation>
</Annotations>
<Annotations Target="TECHED_ALP_SOAL_SRV_SEPMRA_SO_ALP_SLDORDERITEMType">
  <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
    <Record Type="UI.ChartDefinitionType">
      <PropertyValue Property="Title" String="#@{118}quantityByDeliveryDate" />
      <PropertyValue Property="Description" String="#@{118}itemQuantityByDeliveryDate" />
      <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line" />
      <PropertyValue Property="Dimensions">
        <Collection>
          <Record Type="UI.DimensionType">
            <PropertyValue Property="Name" String="DeliveryDate" />
            <PropertyValue Property="Type" String="Date" />
          </Record>
        </Collection>
      </PropertyValue>
      <PropertyValue Property="Measures">
        <Collection>
          <Record Type="UI.MeasureType">
            <PropertyValue Property="Name" String="Quantity" />
            <PropertyValue Property="Type" String="Count" />
          </Record>
        </Collection>
      </PropertyValue>
    </Record>
  </Annotation>
</Annotations>

```

(23) Click **Step 2** to reference the newly created group in the section. This section will then appear in the content area of the Object page.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

## Add a field group as a section to a page

**About**  
Guide information

**Step 1**  
Configure UI.FieldGroup annotation term to add and group data field(s)

**Step 2**  
Add a new section to display the field group

Once you have configured the new section, click the **Apply** button to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity type's `UI.Facets` annotation term manually in the local annotation file under the `webapp/annotations` folder.

**Entity Type Parameters**  
Select an **Entity Type** for the new section where you would like to include the field group you created in the previous step.

**Entity Type \*** 1  
`Z_SEPMRA_SO_SALESORDERANALYSIS...`

**New Section Parameters**  
Enter the text you would like to use as the **Label** to represent the new section in your application.  
Enter a new ID which will be unique to the new section

<b>Label</b>	<b>ID</b>
General Information	GI

**Field Group Parameters**  
Select the **Field Group** from your chosen entity type that you would like displayed inside the new section.

**Field Group \*** 2  
`UI.FieldGroupGeneral`

3 **Annotations Target="TECHED\_ALP\_SOA\_SRV.Z\_SEPHRA\_SO\_SALESORDERANALYSISType"**

```

1 Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPHRA_SO_SALESORDERANALYSISType"
2   <Annotation Term="UI.Facets">
3     <Collection>
4       <Record Type="UI.ReferenceFacet">
5         <PropertyValue Property="Label" String="General Information"/>
6         <PropertyValue Property="ID" String="GI"/>
7         <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
8       </Record>
9     </Collection>
10    </Annotation>
11  </Annotations>

```

24

4 **Apply** 5 **Copy** 6 **Reset**

**arionment.xml x**

```

114   </Record>
115   <PropertyValue>
116     <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-order"/>
117   </Record>
118 </Annotation>
119 <Annotation Term="UI.DataPoint" Qualifier="NetAmount">
120   <Record Type="UI.DataPointType">
121     <PropertyValue Property="Value" Path="NetAmount"/>
122   </Record>
123 </Annotation>
124 <Annotation Term="UI.DataPoint" Qualifier="Status">
125   <Record Type="UI.DataPointType">
126     <PropertyValue Property="Value" Path="SalesOrderOverallStatus"/>
127   </Record>
128 </Annotation>
129 <Annotation Term="UI.HeaderFacets">
130   <Collection>
131     <Record Type="UI.ReferenceFacet">
132       <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#General"/>
133     </Record>
134     <Record Type="UI.ReferenceFacet">
135       <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#General"/>
136     </Record>
137   </Collection>
138 </Annotation>
139 <Annotation Term="UI.FieldGroup" Qualifier="General">
140   <Record Type="UI.FieldGroupType">
141     <PropertyValue Property="Data">
142       <Collection>
143         <Record Type="UI.DataField">
144           <PropertyValue Property="Value" Path="SalesOrder"/>
145         </Record>
146         <Record Type="UI.DataField">
147           <PropertyValue Property="Value" Path="DeliveryCalendarDate"/>
148         </Record>
149         <Record Type="UI.DataField">
150           <PropertyValue Property="Value" Path="GrossAmount"/>
151         </Record>
152         <Record Type="UI.DataField">
153           <PropertyValue Property="Value" Path="NetAmount"/>
154         </Record>
155       </Collection>
156     </PropertyValue>
157   </Record>
158 </Annotation>
159 <Annotations Target="TECHED_ALP_SOA_SRV.SEPHRA_SO_ALP_SLDORDERITERType">
160   <Annotation Term="UI.Chart" Qualifier="FabletQuantityByDate">
161     <Record Type="UI.ChartDefinitionType">
162       <PropertyValue Property="Title" String="(@l18nQuantityByDeliveryDate"/>
163       <PropertyValue Property="Description" String="(@l18nItemQuantityByDeliveryDate"/>
164       <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
165       <PropertyValue Property="Dimensions">
166         <Collection>
167           <PropertyValue>DeliveryDate</PropertyValue>
168         </Collection>
169       </Dimensions>
170     </Record>
171   </Annotation>
172   <Annotation Term="UI.Chart" Qualifier="FabletQuantityByMeasure">
173     <Record Type="UI.ChartDefinitionType">
174       <PropertyValue Property="Measures">
175         <Collection>
176           <PropertyValue>Quantity</PropertyValue>
177         </Collection>
178       </Measures>
179     </Record>
180   </Annotation>
181 </Annotations>

```

(24) Enter the following values to create a section for the first field group:

Field	Value
Label	General Information
ID	GI
Field Group	UI.FieldGroup#General

(25) Click **Apply**.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

## Add a field group as a section to a page

**About**

Configure UI.FieldGroup annotation term to add and group data field(s)

**Step 1**

Configure UI.FieldGroup annotation term to add and group data field(s)

**Step 2**

Add a new section to display the field group

Once you have configured the new section, click the **(26)** button to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity type's `UI.Facets` annotation term manually in the local annotation file under the `webapp/annotations` folder.

**Entity Type Parameters**

Select an **Entity Type** for the new section where you would like to include the field group you created in the previous step.

**Entity Type \***

Z\_SEPMRA\_SO\_SALESORDERANALYSIS... ▾

**New Section Parameters**

Enter the text you would like to use as the **Label** to represent the new section in your application.

Enter a new **ID** which will be unique to the new section

<b>Label</b>	<b>ID</b>
General Information	GI

**Field Group Parameters**

Select the **Field Group** from your chosen entity type that you would like displayed inside the new section.

**Field Group \***

UI.FieldGroup#General ▾

**Apply** **Copy** **Reset** **(26)** Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.Facets">
3     <Collection>
4       <Record Type="UI.ReferenceFacet">
5         <PropertyValue Property="Label" String="General Information"/>
6         <PropertyValue Property="ID" String="GI"/>
7         <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
8       </Record>
9     </Collection>
10    </Annotation>
11  </Annotations>

```

annotation.xml x

```

114   </Record>
115   <PropertyValue>
116     <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-order-group"/>
117   </Record>
118 </Annotation>
119 <Annotation Term="UI.DataPoint" Qualifier="NetAmount">
120   <Record Type="UI.DataPointType">
121     <PropertyValue Property="Value" Path="NetAmount"/>
122   </Record>
123 </Annotation>
124 <Annotation Term="UI.DataPoint" Qualifier="Status">
125   <Record Type="UI.DataPointType">
126     <PropertyValue Property="Value" Path="SalesOrderOverallStatus"/>
127   </Record>
128 </Annotation>
129 <Annotation Term="UI.HeaderFacets">
130   <Collection>
131     <Record Type="UI.ReferenceFacet">
132       <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#General"/>
133     </Record>
134     <Record Type="UI.ReferenceFacet">
135       <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#General"/>
136     </Record>
137   </Collection>
138 </Annotation>
139 <Annotation Term="UI.FieldGroup" Qualifier="General">
140   <Record Type="UI.FieldGroupType">
141     <PropertyValue Property="Data">
142       <Collection>
143         <Record Type="UI.Datafield">
144           <PropertyValue Property="Value" Path="SalesOrder"/>
145         </Record>
146         <Record Type="UI.Datafield">
147           <PropertyValue Property="Value" Path="DeliveryCalendarDate"/>
148         </Record>
149         <Record Type="UI.Datafield">
150           <PropertyValue Property="Value" Path="GrossAmount"/>
151         </Record>
152         <Record Type="UI.Datafield">
153           <PropertyValue Property="Value" Path="NetAmount"/>
154         </Record>
155       </Collection>
156     </PropertyValue>
157   </Record>
158 </Annotation>
159 <Annotation Term="UI.Facets">
160   <Collection>
161     <Record Type="UI.ReferenceFacet">
162       <PropertyValue Property="Label" String="General Information"/>
163       <PropertyValue Property="ID" String="GI"/>
164       <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
165     </Record>
166   </Collection>
167 </Annotation>
168 <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_ALP_SLORDERITEMType">
169   <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
170     <Record Type="UI.ChartDefinitionType">
171       <PropertyValue Property="Title" String="#@{i18n#quantityByDeliveryDate}"/>
172       <PropertyValue Property="Description" String="#@{i18n#itemQuantityByDeliveryDate}"/>
173       <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
174     </Record>
175   </Annotation>
176 </Annotations>

```

< Back Next >

Exit Guide

(26) Go back to **Step 1** to create a second field group.

The screenshot shows the SAP Guided Development interface for salesorderanalysis. On the left, the 'Add a field group as a section to a page' wizard is displayed with two steps: Step 1 (Configure UI.FieldGroup annotation term to add and group data field(s)) and Step 2 (Add a new section to display the field group). Step 1 is active. The 'About' tab is selected, showing guide information. The 'Step 1' tab is selected, showing configuration details for a new field group. A red box highlights the 'Qualifier' field set to 'Product'. A red box also highlights the 'Property' field set to 'ProductName'. The 'Apply' button is highlighted with a red box and labeled '28'. The 'Navigation Path' dropdown is also highlighted with a red box. The right side of the interface shows the 'annotation.xml' code editor with several annotations and records. Lines 29 and 28 are specifically highlighted with red boxes.

```

114     </Record>
115     <PropertyValue>
116       <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-order" />
117     </Record>
118   </Annotation>
119   <Annotation Term="UI.DataPoint" Qualifier="NetAmount">
120     <Record Type="UI.DataPointType">
121       <PropertyValue Property="Value" Path="NetAmount"/>
122     </Record>
123   </Annotation>
124   <Annotation Term="UI.DataPoint" Qualifier="Status">
125     <Record Type="UI.DataPointType">
126       <PropertyValue Property="Value" Path="SalesOrderOverallStatus"/>
127     </Record>
128   </Annotation>
129   <Annotation Term="UI.HeaderFacets">
130     <Collection>
131       <Record Type="UI.ReferenceFacet">
132         <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#NetAmount" />
133       </Record>
134       <Record Type="UI.ReferenceFacet">
135         <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#SalesOrderOverallStatus" />
136       </Record>
137     </Collection>
138   </Annotation>
139   <Annotation Term="UI.FieldGroup" Qualifier="General">
140     <Record Type="UI.FieldGroupType">
141       <PropertyValue Property="Data">
142         <Collection>
143           <Record Type="UI.DataField">
144             <PropertyValue Property="Value" Path="SalesOrder"/>
145           </Record>
146           <Record Type="UI.DataField">
147             <PropertyValue Property="Value" Path="DeliveryCalendar"/>
148           </Record>
149           <Record Type="UI.DataField">
150             <PropertyValue Property="Value" Path="GrossAmount"/>
151           </Record>
152           <Record Type="UI.DataField">
153             <PropertyValue Property="Value" Path="NetAmount"/>
154           </Record>
155         </Collection>
156       </PropertyValue>
157     </Record>
158   </Annotation>
159   <Annotation Term="UI.Facets">
160     <Collection>
161       <Record Type="UI.ReferenceFacet">
162         <PropertyValue Property="Label" String="General Information" />
163         <PropertyValue Property="ID" String="GI" />
164         <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#GeneralInformation" />
165       </Record>
166     </Collection>
167   </Annotation>
168   <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPHRA_SO_ALP_SLDORDERITEMType">
169     <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
170       <Record Type="UI.ChartDefinitionType">
171         <PropertyValue Property="Title" String="#@{1!#quantityByDeliveryDate!#}" />
172         <PropertyValue Property="Description" String="#@{1!#itemQuantityByDeliveryDate!#}" />
173         <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line" />
174       </Record>
175     </Annotation>

```

(27) Change the value in the **Qualifier** field to **Product** to create a group displaying product information.

(28) Change the value in the **Property** field to **ProductName** to add a new field to the second field group.

(29) Click **Apply**.

Repeat steps (28) and (29) to add the following fields to this group:

- **MainProductCategory**
- **SupplierCompanyName**
- **NetProductPrice**
- **Quantity**

**Add a field group as a section to a page**

**About**  
Guide information

**Step 1**  
Configure UI.FieldGroup annotation term to add and group data field(s)

**Step 2**  
Add a new section to display the field group 30

Alternatively, copy the code snippet and update the entity type's UI.FieldGroup annotation term manually in the local annotation file under the webapp/annotations folder.

**Entity Type Parameters**  
Select the Entity Type you would like to use. You will add data from the selected entity type for your new group.  
Entity Type \*

**New Field Group Parameters**  
Enter a unique Qualifier that can help you identify the newly created UI.FieldGroup annotation term in subsequent steps.  
Qualifier \*

**New Data Field Parameters**  
Select the Property from your chosen entity type that you would like represented as a new data field.  
You can also choose a property from a differently linked entity type by selecting a Navigation Path below.  
Note: To add more data fields to your field group, fill out this section's fields again and click the Apply button

**Navigation Path**      **Property \***  
     

**Code Snippet**  
Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.FieldGroup" Qualifier="Product">
3     <Record Type="UI.FieldGroupType">
4       <PropertyValue Property="Data">
5         <Collection>
6           <Record Type="UI.DataField">
7             <PropertyValue Property="Value" Path="Quantity"/>
8           </Record>
9         </Collection>
10        </PropertyValue>
11      </Record>
12    </Annotation>
13  </Annotations>

```

30 Apply Copy Reset Code snippet has been successfully applied

**annotation.xml**

```

159   <Annotation Term="UI.Facets">
160     <Collection>
161       <Record Type="UI.ReferenceFacet">
162         <PropertyValue Property="Label" String="General Information"/>
163         <PropertyValue Property="ID" String="61"/>
164         <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup"/>
165       </Record>
166     </Collection>
167   </Annotation>
168   <Annotation Term="UI.FieldGroup" Qualifier="Product">
169     <Record Type="UI.FieldGroupType">
170       <PropertyValue Property="Data">
171         <Collection>
172           <Record Type="UI.DataField">
173             <PropertyValue Property="Value" Path="ProductName"/>
174           </Record>
175           <Record Type="UI.DataField">
176             <PropertyValue Property="Value" Path="MainProductCategory"/>
177           </Record>
178           <Record Type="UI.DataField">
179             <PropertyValue Property="Value" Path="SupplierCompanyName"/>
180           </Record>
181           <Record Type="UI.DataField">
182             <PropertyValue Property="Value" Path="NetProductPrice"/>
183           </Record>
184           <Record Type="UI.DataField">
185             <PropertyValue Property="Value" Path="Quantity"/>
186           </Record>
187         </Collection>
188       </PropertyValue>
189     </Record>
190   </Annotation>
191   <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SLDORDERITEMType">
192     <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
193       <Record Type="UI.ChartDefinitionType">
194         <PropertyValue Property="Title" String="[@i18n:quantityByDeliveryDate]"/>
195         <PropertyValue Property="Description" String="[@i18n:itemQuantityByDeliveryDate]"/>
196         <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
197         <PropertyValue Property="Dimensions">
198           <Collection>
199             <Record Type="UI.Dimension">
200               <PropertyValue Property="Name" Value="DeliveryDate"/>
201               <PropertyValue Property="Type" Value="Date"/>
202             </Record>
203           </Collection>
204         </PropertyValue>
205         <PropertyValue Property="Measures">
206           <Collection>
207             <Record Type="UI.Measure">
208               <PropertyValue Property="Name" Value="Quantity"/>
209             </Record>
210           </Collection>
211         </PropertyValue>
212         <PropertyValue Property="MeasureAttributes">
213           <Collection>
214             <Record Type="UI.ChartMeasureAttributeType">
215               <PropertyValue Property="Measure" PropertyPath="Quantity"/>
216               <PropertyValue Property="DataPoint" AnnotationPath="@UI.MeasureAttribute"/>
217             </Record>
218           </Collection>
219         </PropertyValue>
220       </Record>
221     </Annotation>
222     <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
223       <Record Type="UI.PresentationVariantType">

```

(30) Click **Step 2** to reference also the second field group in the section. It will then appear in the content area of the Object page next to the first one.

## Add a field group as a section to a page

**About**

Configure UI.FieldGroup annotation term to add and group data field(s)

**Step 1**

Configure UI.FieldGroup annotation term to add and group data field(s)

Once you have configured the new section, click the **Apply** button to update the corresponding local annotation file.

Alternatively, copy the code snippet and update the entity type's `UI.Facets` annotation term manually in the local annotation file under the `webapp/annotations` folder.

**Entity Type Parameters**

Select an **Entity Type** for the new section where you would like to include the field group you created in the previous step.

**Entity Type \*** (1)

Z\_SEMPRA\_SO\_SALESORDERANALYSI... ▾

**New Section Parameters**

Enter the text you would like to use as the **Label** to represent the new section in your application.

Enter a new ID which will be unique to the new section

<b>Label</b>	<b>ID</b>
Product Information	PI

**Field Group Parameters**

Select the **Field Group** from your chosen entity type that you would like displayed inside the new section.

**Field Group \*** (2)

UI.FieldGroup#Product ▾

**Apply** **Copy** **Reset** (31) Code snippet has been successfully applied

```

1 <Annotations Targets="TECHED_ALP_SO_ASRV.Z_SEMPRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.Facets">
3     <Collection>
4       <Record Type="UI.ReferenceFacet">
5         <PropertyValue Property="Label" String="General Information"/>
6         <PropertyValue Property="ID" String="GI"/>
7         <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
8       </Record>
9       <Record Type="UI.ReferenceFacet">
10        <PropertyValue Property="Label" String="Product Information"/>
11        <PropertyValue Property="ID" String="PI"/>
12        <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Product"/>
13      </Record>
14    </Collection>
15  </Annotation>
16</Annotations>
17 <Annotations Targets="TECHED_ALP_SO_ASRV.Z_SEMPRA_SO_SLDORDERITEMType">
18   <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
19     <Record Type="UI.ChartDefinitionType">
20       <PropertyValue Property="Title" String="#{@l10n}quantityByDeliveryDate"/>
21       <PropertyValue Property="Description" String="#{@l10n}itemQuantityByDeliveryDate"/>
22       <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
23       <PropertyValue Property="Dimensions">
24         <Collection>
25           <PropertyPath>DeliveryDate</PropertyPath>
26         </Collection>
27       </Dimensions>
28     </Record>
29   </Annotation>
30 </Annotations>
31 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
32   <Record Type="UI.PresentationVariantType">
33     <PropertyValue Property="Label" String="General Information"/>
34     <PropertyValue Property="ID" String="GI"/>
35     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
36   </Record>
37 </Annotation>
38 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
39   <Record Type="UI.PresentationVariantType">
40     <PropertyValue Property="Label" String="Product Information"/>
41     <PropertyValue Property="ID" String="PI"/>
42     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Product"/>
43   </Record>
44 </Annotation>
45 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
46   <Record Type="UI.PresentationVariantType">
47     <PropertyValue Property="Label" String="Supplier Company Name"/>
48     <PropertyValue Property="ID" String="SCN"/>
49     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#SupplierCompanyNa"/>
50   </Record>
51 </Annotation>
52 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
53   <Record Type="UI.PresentationVariantType">
54     <PropertyValue Property="Label" String="Main Product Category"/>
55     <PropertyValue Property="ID" String="MPC"/>
56     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#MainProductCatego"/>
57   </Record>
58 </Annotation>
59 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
60   <Record Type="UI.PresentationVariantType">
61     <PropertyValue Property="Label" String="Net Product Price"/>
62     <PropertyValue Property="ID" String="NPP"/>
63     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#NetProductPrice"/>
64   </Record>
65 </Annotation>
66 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
67   <Record Type="UI.PresentationVariantType">
68     <PropertyValue Property="Label" String="Quantity"/>
69     <PropertyValue Property="ID" String="QTY"/>
70     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Quantity"/>
71   </Record>
72 </Annotation>
73 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
74   <Record Type="UI.PresentationVariantType">
75     <PropertyValue Property="Label" String="Delivery Date"/>
76     <PropertyValue Property="ID" String="DD"/>
77     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#DeliveryDate"/>
78   </Record>
79 </Annotation>
80 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
81   <Record Type="UI.PresentationVariantType">
82     <PropertyValue Property="Label" String="Item Quantity"/>
83     <PropertyValue Property="ID" String="IQ"/>
84     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#ItemQuantity"/>
85   </Record>
86 </Annotation>
87 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
88   <Record Type="UI.PresentationVariantType">
89     <PropertyValue Property="Label" String="Dimensions"/>
90     <PropertyValue Property="ID" String="DIMS"/>
91     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Dimensions"/>
92   </Record>
93 </Annotation>
94 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
95   <Record Type="UI.PresentationVariantType">
96     <PropertyValue Property="Label" String="Measure"/>
97     <PropertyValue Property="ID" String="MEAS"/>
98     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Measure"/>
99   </Record>
100 </Annotation>
101 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
102   <Record Type="UI.PresentationVariantType">
103     <PropertyValue Property="Label" String="Measure Attributes"/>
104     <PropertyValue Property="ID" String="MA"/>
105     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#MeasureAttributes"/>
106   </Record>
107 </Annotation>
108 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
109   <Record Type="UI.PresentationVariantType">
110     <PropertyValue Property="Label" String="Delivery Date"/>
111     <PropertyValue Property="ID" String="DD"/>
112     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#DeliveryDate"/>
113   </Record>
114 </Annotation>
115 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
116   <Record Type="UI.PresentationVariantType">
117     <PropertyValue Property="Label" String="Item Quantity"/>
118     <PropertyValue Property="ID" String="IQ"/>
119     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#ItemQuantity"/>
120   </Record>
121 </Annotation>
122 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
123   <Record Type="UI.PresentationVariantType">
124     <PropertyValue Property="Label" String="Dimensions"/>
125     <PropertyValue Property="ID" String="DIMS"/>
126     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Dimensions"/>
127   </Record>
128 </Annotation>
129 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
130   <Record Type="UI.PresentationVariantType">
131     <PropertyValue Property="Label" String="Net Product Price"/>
132     <PropertyValue Property="ID" String="NPP"/>
133     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#NetProductPrice"/>
134   </Record>
135 </Annotation>
136 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
137   <Record Type="UI.PresentationVariantType">
138     <PropertyValue Property="Label" String="Supplier Company Name"/>
139     <PropertyValue Property="ID" String="SCN"/>
140     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#SupplierCompanyNa"/>
141   </Record>
142 </Annotation>
143 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
144   <Record Type="UI.PresentationVariantType">
145     <PropertyValue Property="Label" String="Main Product Category"/>
146     <PropertyValue Property="ID" String="MPC"/>
147     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#MainProductCatego"/>
148   </Record>
149 </Annotation>
150 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
151   <Record Type="UI.PresentationVariantType">
152     <PropertyValue Property="Label" String="Quantity"/>
153     <PropertyValue Property="ID" String="QTY"/>
154     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Quantity"/>
155   </Record>
156 </Annotation>
157 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
158   <Record Type="UI.PresentationVariantType">
159     <PropertyValue Property="Label" String="Delivery Date"/>
160     <PropertyValue Property="ID" String="DD"/>
161     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#DeliveryDate"/>
162   </Record>
163 </Annotation>
164 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
165   <Record Type="UI.PresentationVariantType">
166     <PropertyValue Property="Label" String="Item Quantity"/>
167     <PropertyValue Property="ID" String="IQ"/>
168     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#ItemQuantity"/>
169   </Record>
170 </Annotation>
171 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
172   <Record Type="UI.PresentationVariantType">
173     <PropertyValue Property="Label" String="Dimensions"/>
174     <PropertyValue Property="ID" String="DIMS"/>
175     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Dimensions"/>
176   </Record>
177 </Annotation>
178 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
179   <Record Type="UI.PresentationVariantType">
180     <PropertyValue Property="Label" String="Net Product Price"/>
181     <PropertyValue Property="ID" String="NPP"/>
182     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#NetProductPrice"/>
183   </Record>
184 </Annotation>
185 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
186   <Record Type="UI.PresentationVariantType">
187     <PropertyValue Property="Label" String="Supplier Company Name"/>
188     <PropertyValue Property="ID" String="SCN"/>
189     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#SupplierCompanyNa"/>
190   </Record>
191 </Annotation>
192 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
193   <Record Type="UI.PresentationVariantType">
194     <PropertyValue Property="Label" String="Main Product Category"/>
195     <PropertyValue Property="ID" String="MPC"/>
196     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#MainProductCatego"/>
197   </Record>
198 </Annotation>
199 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
200   <Record Type="UI.PresentationVariantType">
201     <PropertyValue Property="Label" String="Quantity"/>
202     <PropertyValue Property="ID" String="QTY"/>
203     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#Quantity"/>
204   </Record>
205 </Annotation>
206 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
207   <Record Type="UI.PresentationVariantType">
208     <PropertyValue Property="Label" String="Delivery Date"/>
209     <PropertyValue Property="ID" String="DD"/>
210     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#DeliveryDate"/>
211   </Record>
212 </Annotation>
213 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
214   <Record Type="UI.PresentationVariantType">
215     <PropertyValue Property="Label" String="Item Quantity"/>
216     <PropertyValue Property="ID" String="IQ"/>
217     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#ItemQuantity"/>
218   </Record>
219 </Annotation>

```

(31) Change values as follows to create a section for the second field group:

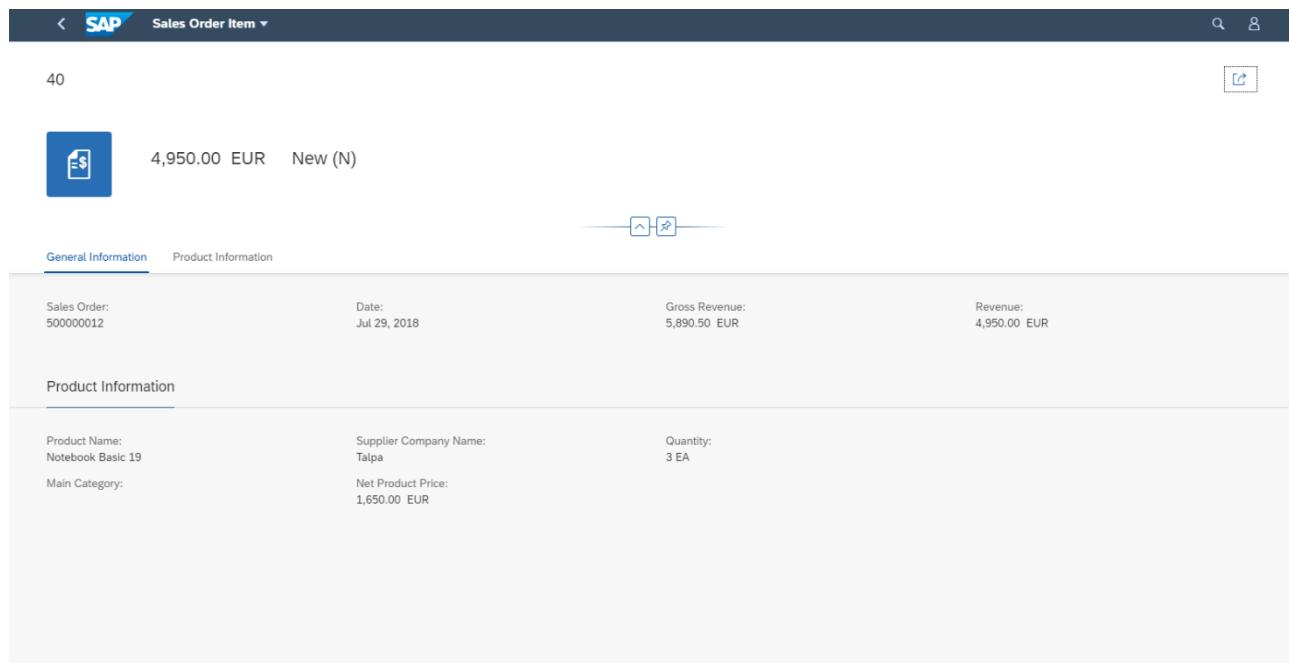
Field	Value
Label	Product Information
ID	PI
Field Group	UI.FieldGroup#Product

(32) Click **Apply**.

The content area of your Object page is now enhanced with two sections, each displaying a field group.

Exit the guide and start the application preview as described in the [Exercise 2.5 Starting Application Preview](#).

**Note:** To navigate to the Object page in your application preview, click on the navigation indicator ( '>' ) at the end of a table row in the Analytical list page.



## Bonus Exercise 1.4 Using Shortcuts

In this exercise, you will get acquainted with the shortcuts that are available on Object page. When the focus is anywhere in the app, press **SHIFT + CTRL + S** (Windows) or **SHIFT + CMD + S** (Mac) to open ShareActionSheet near the **Share** button.

The screenshot shows a SAP Sales Order Item page. At the top, there's a header with the SAP logo and a search bar. Below the header, the number '40' is displayed. On the right side of the header, there are icons for 'Send Email' and 'Save as Tile'. The main content area has two tabs: 'General Information' (selected) and 'Product Information'. Under 'General Information', there are three rows of data: Sales Order (500000012), Gross Revenue (5,890.50 EUR), and Revenue (4,950.00 EUR). Under 'Product Information', there are also three rows: Product Name (Notebook Basic 19), Supplier Company Name (Talpa), and Quantity (3 EA). There are also Main Category and Net Product Price fields.

Sales Order:	Gross Revenue:	Revenue:
500000012	5,890.50 EUR	4,950.00 EUR

Main Category:	Net Product Price:	Quantity:
	1,650.00 EUR	3 EA

## Summary

You have successfully configured the basic content for your Object page.