

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'.

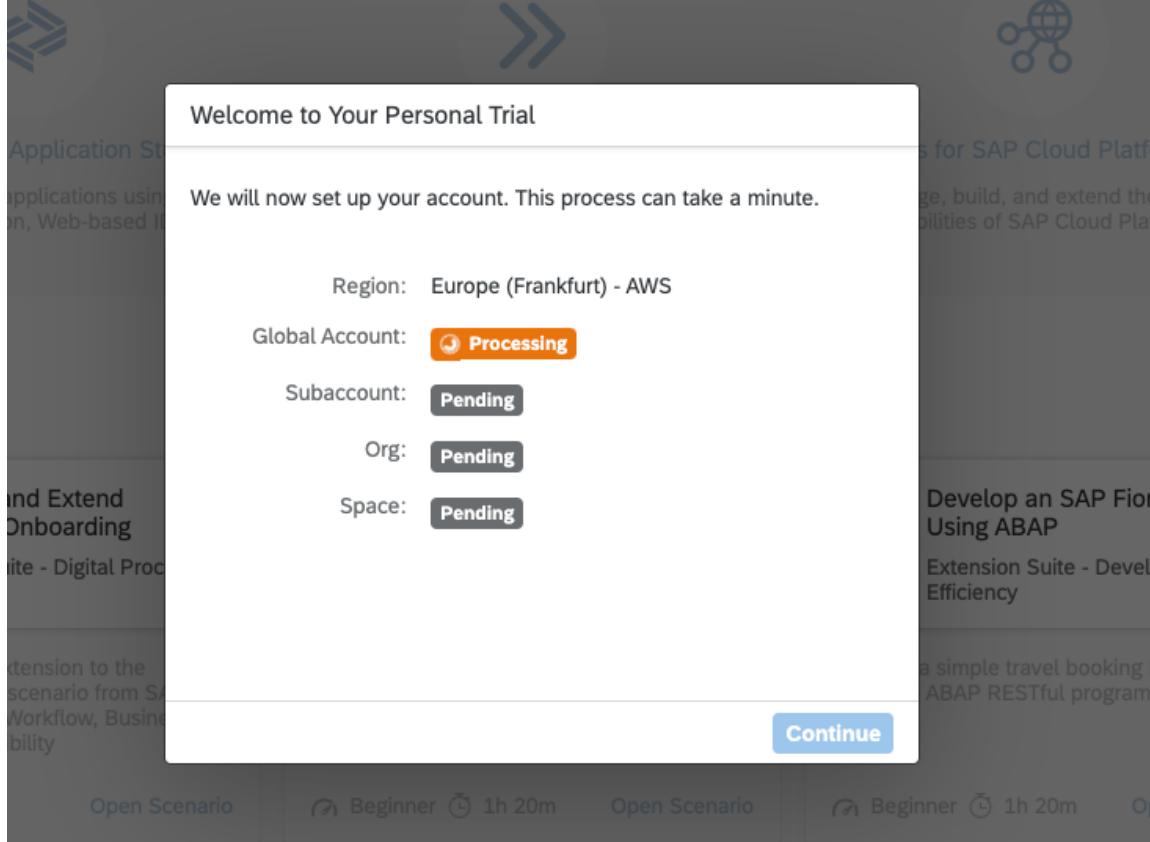
Set up Business Application Studio in an SAP Cloud Platform Trial Account

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.

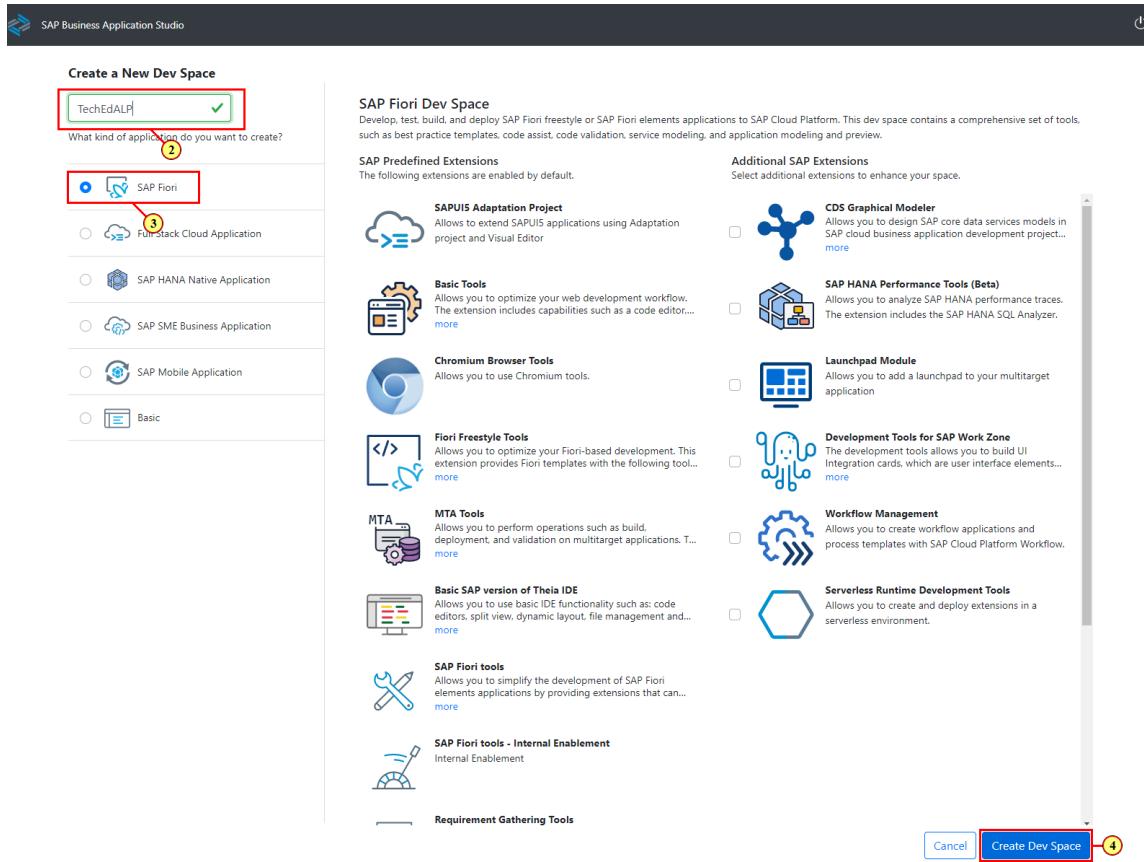
The screenshot shows the SAP Cloud Platform Trial Cockpit. At the top, it says "Welcome to SAP Cloud Platform Trial" and "Enter Your Trial Account". Below that is the "Quick Tool Access" section. It contains three icons: "SAP Business Application Studio" (with a red arrow pointing to it), "CLI for SAP Cloud Platform", and "APIs for SAP Cloud Platform". Each icon has a brief description below it. Below this is the "Starter Scenarios" section, which lists three scenarios with icons, descriptions, and "Open Scenario" buttons.

Starter Scenarios		
Automate and Extend Employee Onboarding 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	Build a Business Application Using CAP for Node.js Extension Suite - Development Efficiency Develop a business application using SAP Cloud Application Programming Model (CAP) Beginner 1h 20m Open Scenario	Develop an SAP Fiori App Using ABAP 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 the "Dev Spaces" section, which includes a brief description and a "Create Dev Space" button. The "Create Dev Space" button is highlighted with a red box and has a small "1" icon next to it, indicating it's the first step in a process.

(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				
 TechEdALP SAP Fiori 5	RUNNING	Created On 11/30/2020 3:42 PM	ID ws-ggnl4	Cancel 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>

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

README.md

IIS361 - Create Analytical SAP Fiori Apps Quickly and Efficiently

- (6) Click on the code button .
(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

Run Task 8

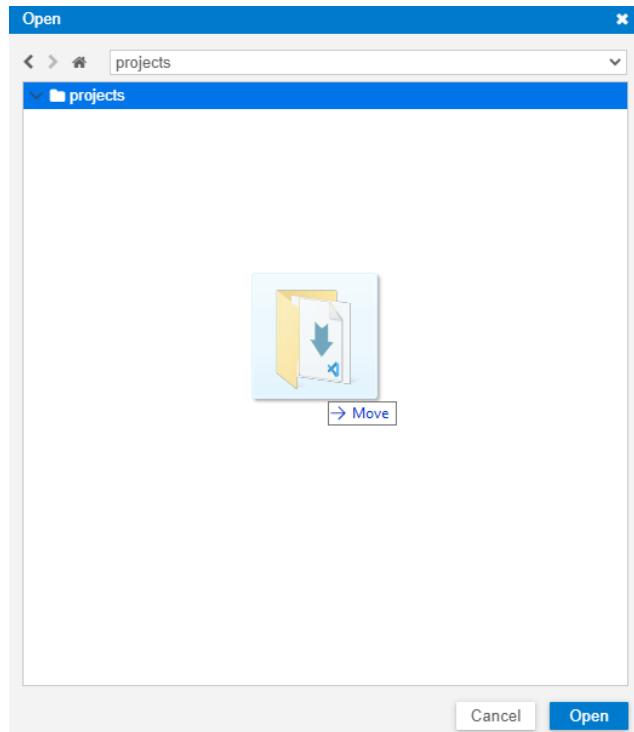
Run Build Task...
Run Test Task...
Run Last Task Ctrl+Shift+K
Show Running Tasks...
Restart Running Task...
Terminate Task...
Attach Task...
Configure Tasks...
More...

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.

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**.



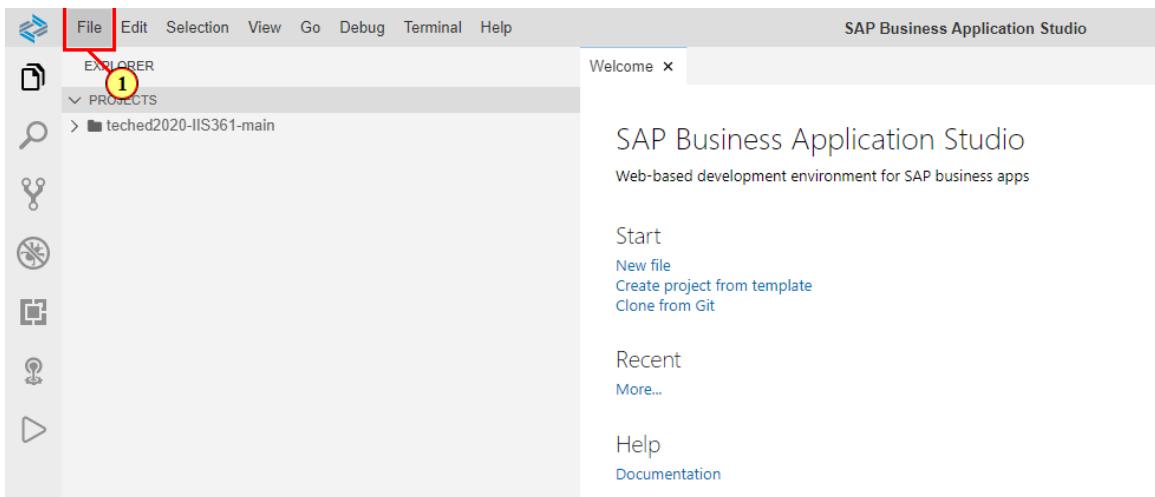
## Summary

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

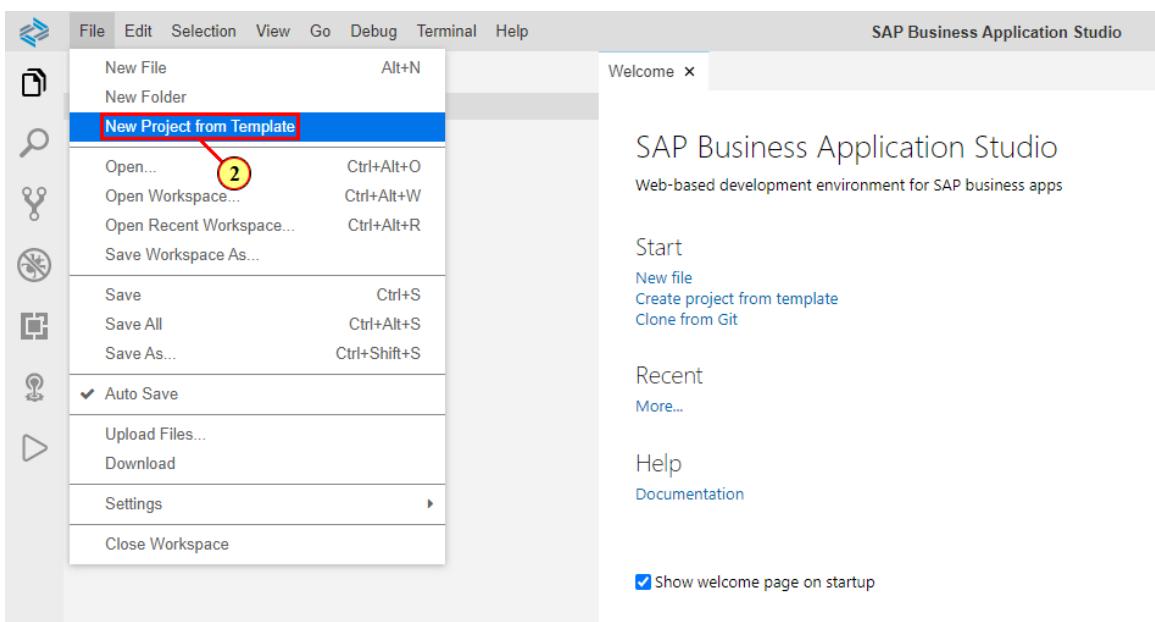
## Exercise 1 - Generating a Fiori elements app

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

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**Adaptation Project**

Adaptation Project Generator

[More Information](#)

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

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

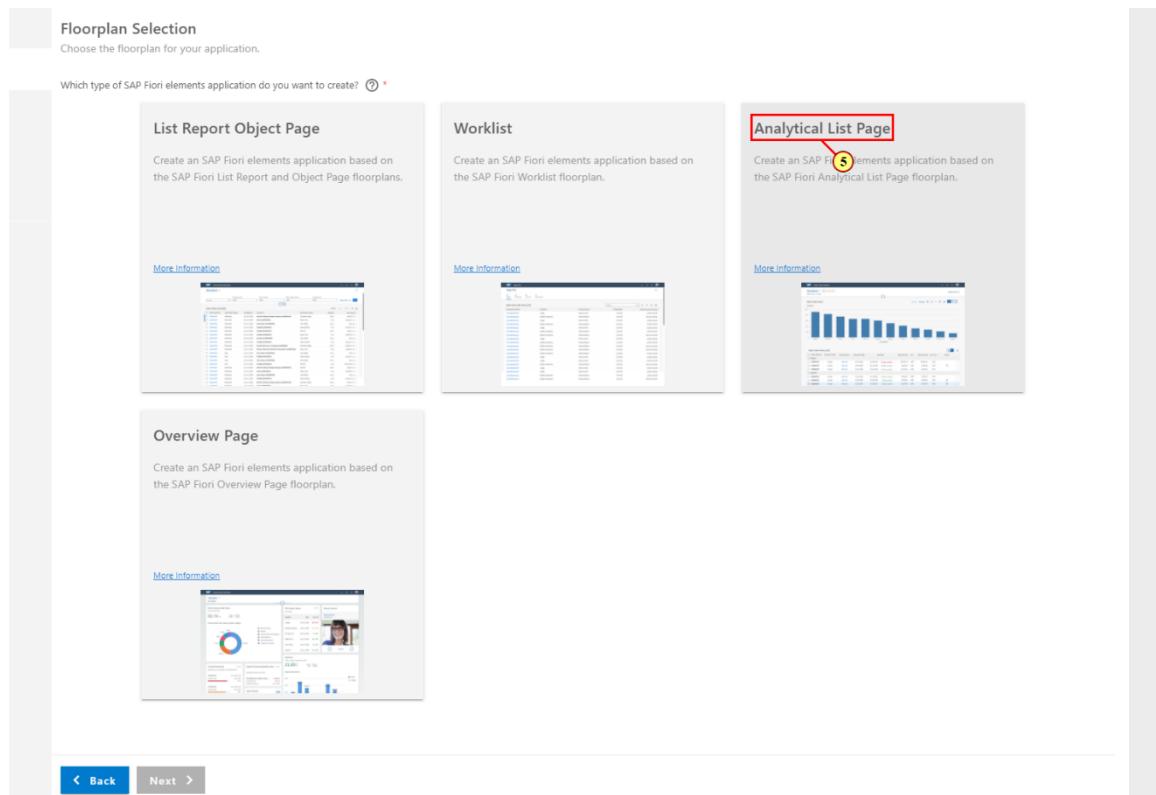
[More Information](#)



**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.

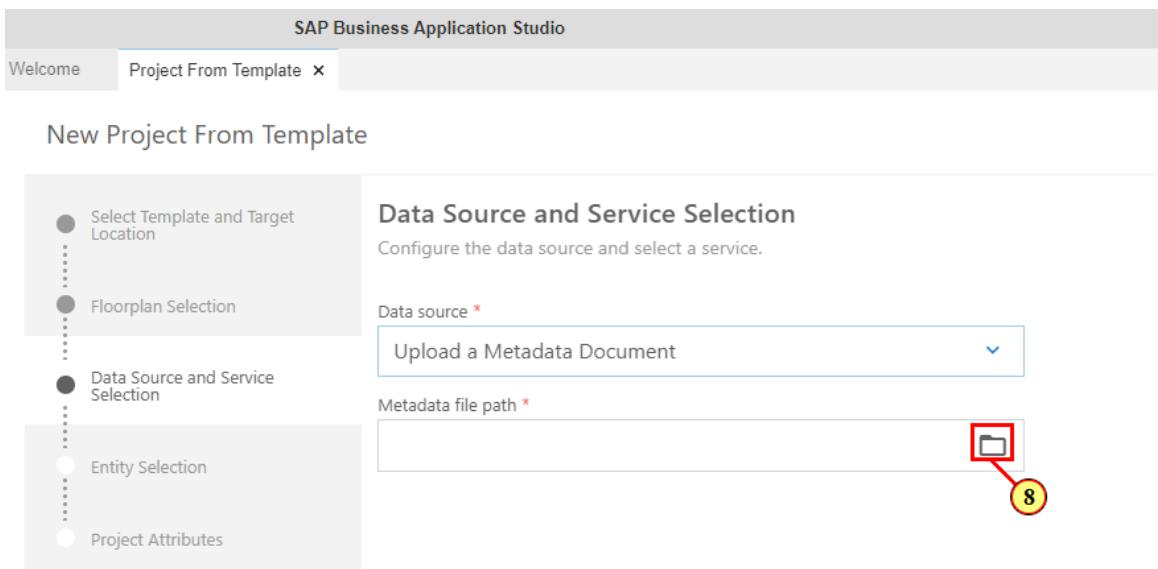
Data source \*

Upload a Metadata Document

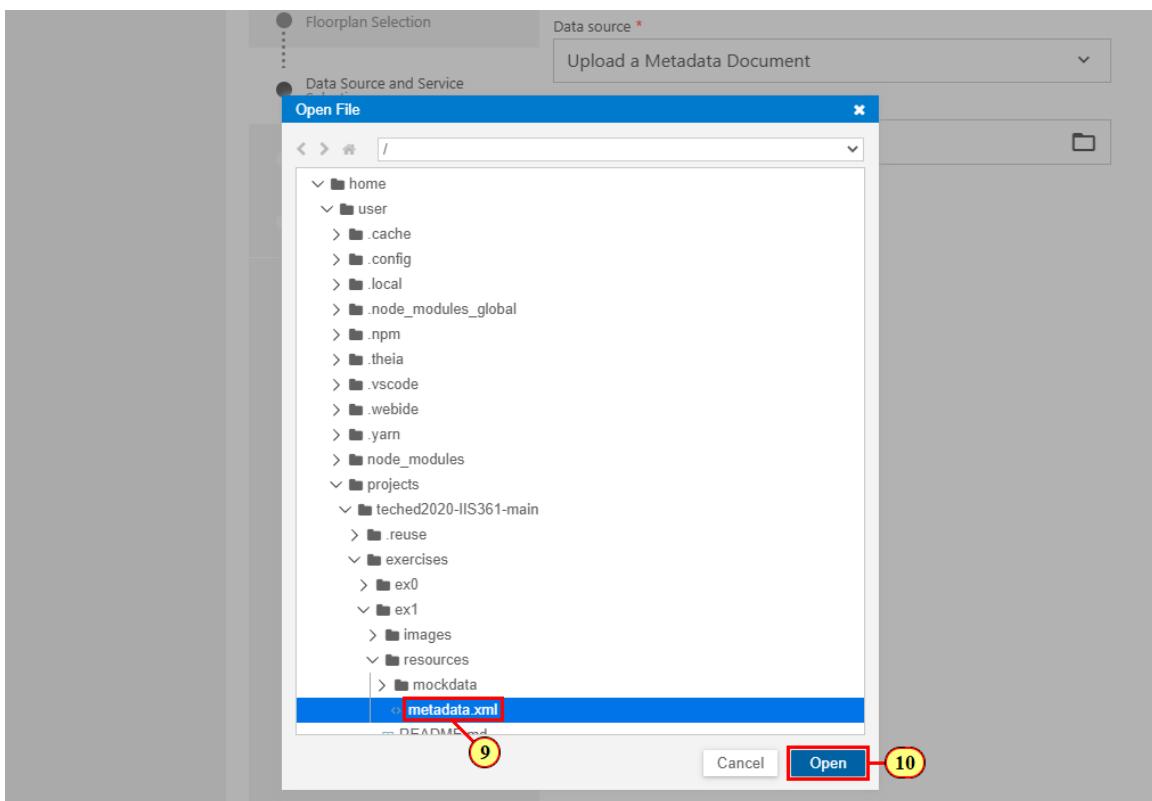
Metadata file path \*

7

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

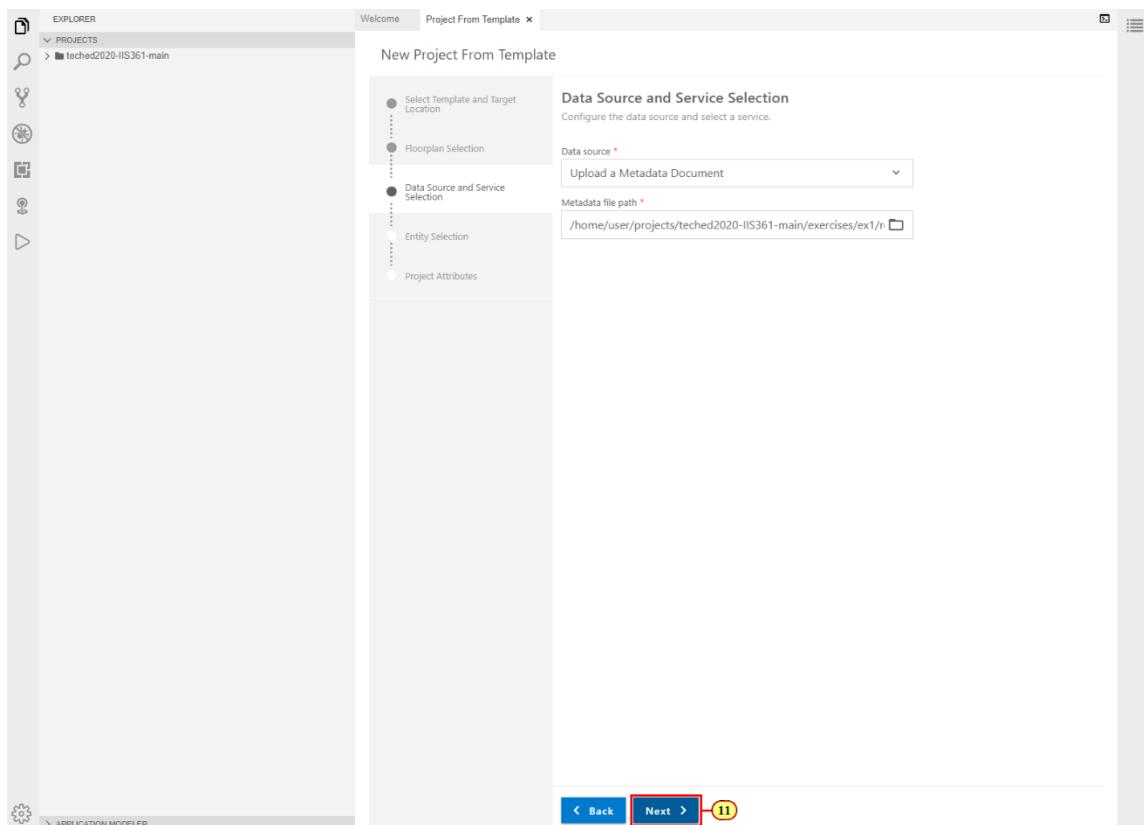


(8) Click **Browse for Files** icon to select the metadata file from the teched sample scenario folder.



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

(10) Click **Open**.



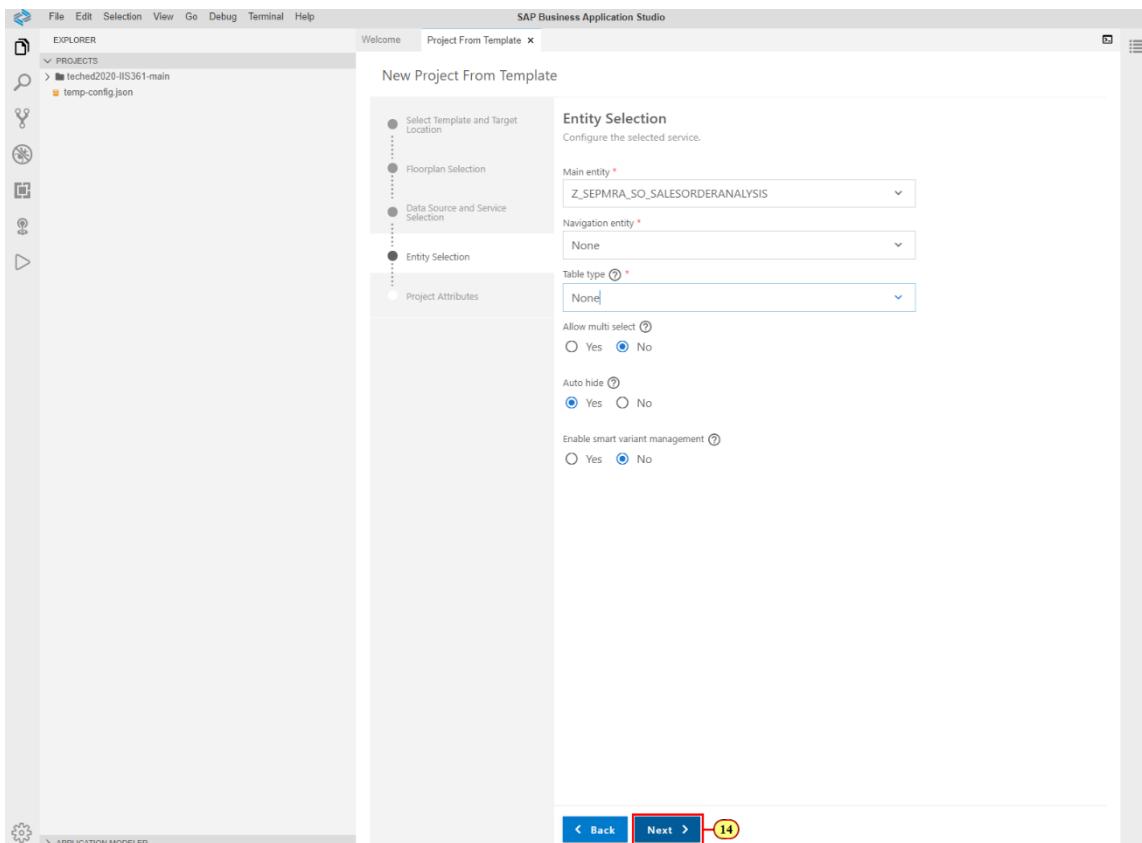
(11) Click **Next**.

### 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.

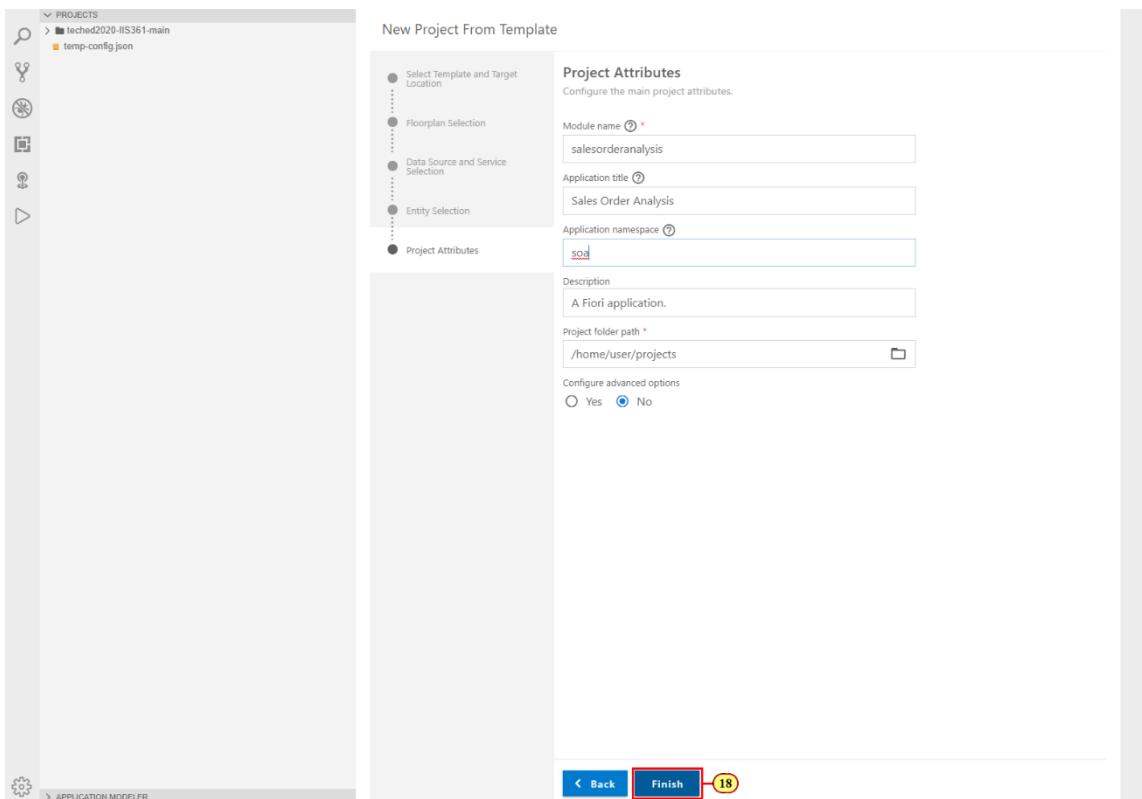


- (14) Click **Next**.

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.

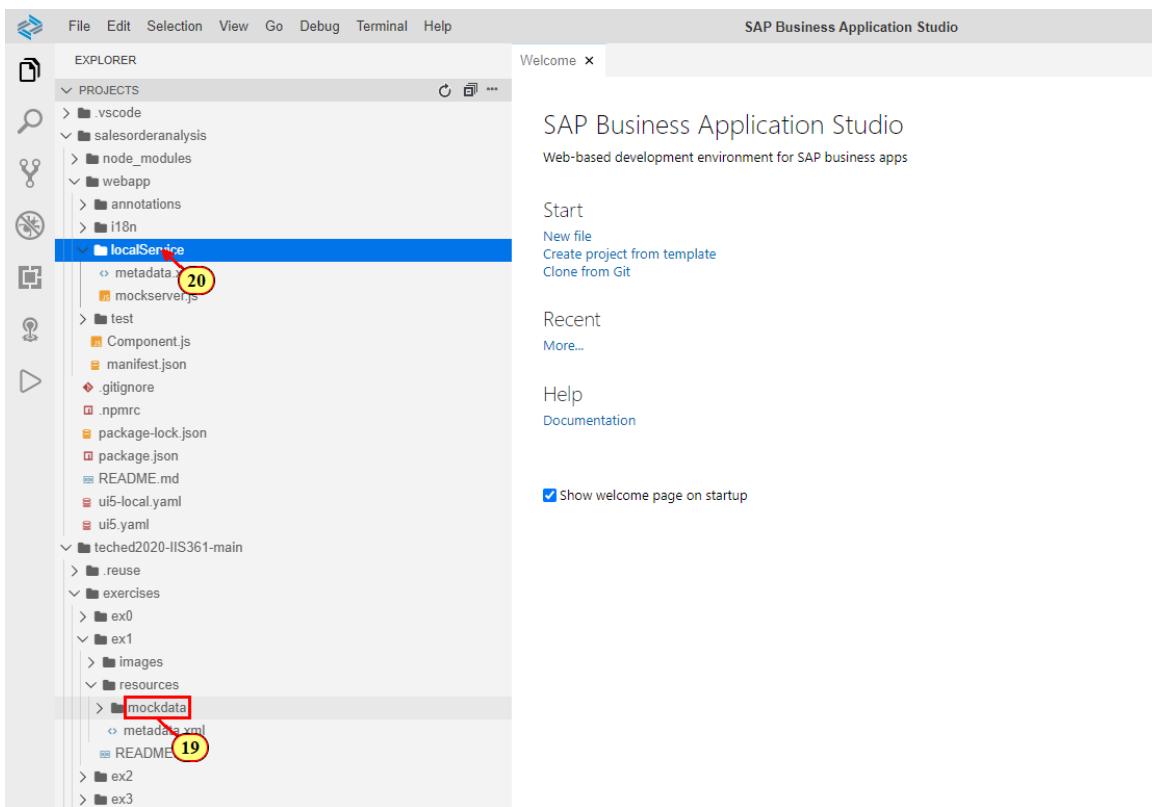


- (18) Click **Finish**. The project gets generated.

## 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.



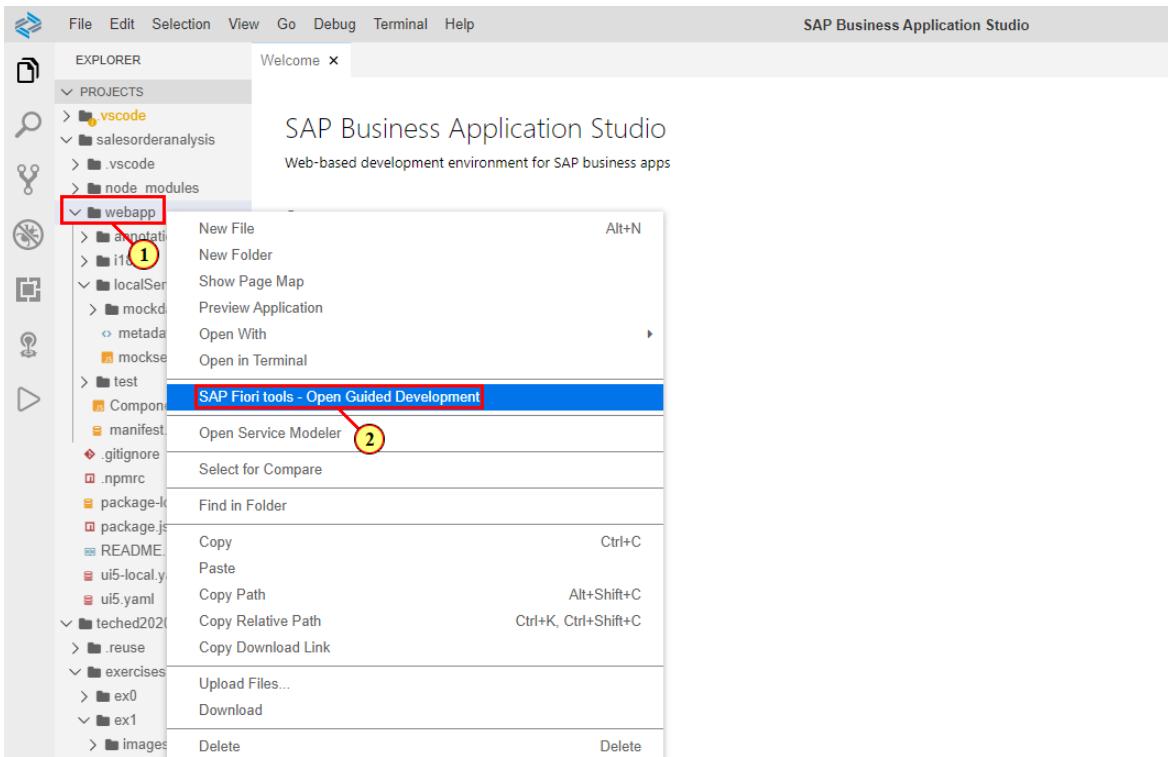
- (19) Expand the folder **teched2020-IIS361->exercises->ex1->resources**.
- (20) Expand the newly created project folder **salesorderanalysis->webapp->localService**. Drag the **mockdata** folder to the localService folder in your generated project.

## Summary

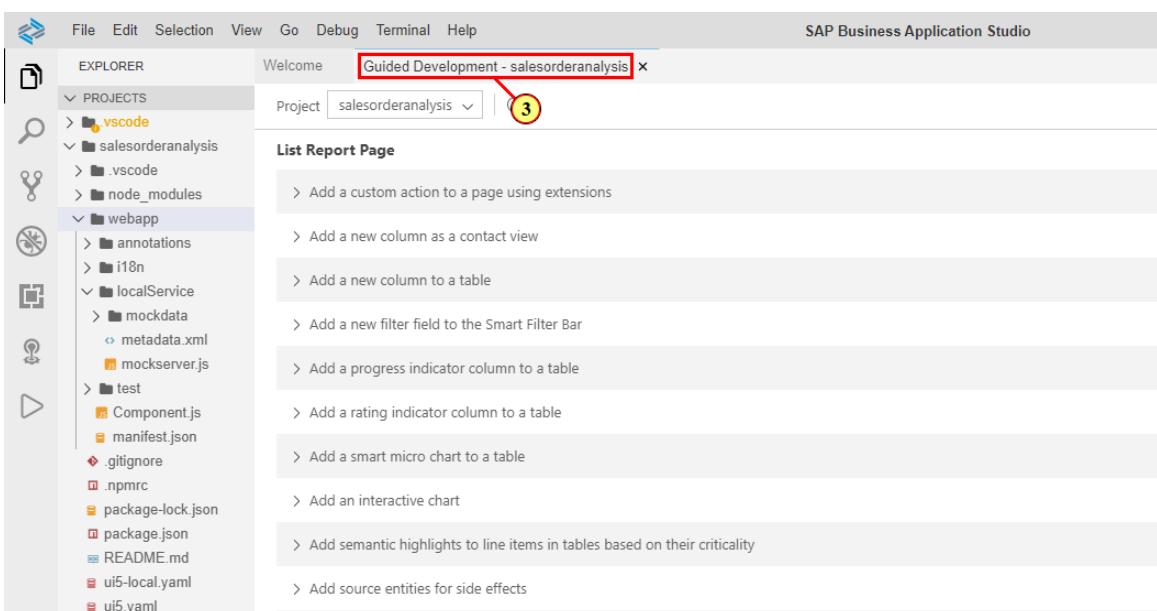
You have successfully generated a Fiori elements application based on the Analytical List Page and Object Page floorplans. In the next exercise, you will configure the content of the Alalytical List Page. Continue to [Exercise 2 – Configure Content Area of Analytical List Page](#)

## 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 yellow circle with the number '4' is drawn around the search bar, indicating the step to type 'table'. Below the search bar, there is a 'Group by' dropdown set to 'Page Type' and a 'Clear' button. The main area displays a list of guides under the heading 'List Report Page', which includes various options for modifying tables.

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

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 yellow circle with the number '4' is drawn around the search bar, indicating the step to type 'table'. Below the search bar, there is a 'Group by' dropdown set to 'Page Type' and a 'Clear' button. The main area displays a list of guides categorized by page type. Under the 'Analytical List Page' group, the guide 'Add a new column to a table' is highlighted with a red box and circled with a yellow circle labeled '5'.

(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  
Z\_SEPMRA\_SO\_ALP\_TOTALSalesXPType  
Z\_SEPMRA\_SO\_ALP\_SALESORDERANALYSITYPE  
Z\_SEPMRA\_SO\_ALP\_SLSOrdStatusVHType  
Z\_SEPMRA\_SO\_ALP\_SupplierVHType  
Z\_SEPMRA\_SO\_ALP\_TotalSalesXPType  
Z\_SEPMRA\_SO\_ALP\_TotalSalesXPTYPE  
Z\_SEPMRA\_SO\_ALP\_SLDORDERITEMType  
Z\_SEPMRA\_SO\_ALP\_TOTALSalesXPTYPE  
Z\_SEPMRA\_SO\_ALP\_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

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
```

**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" and the "Value" is set to "High". 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 a value of "High".

```

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 </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/CATALOGERSERVICE/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

**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.

**Entity Type \*** Z\_SEPMRA\_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

**Annotations Target="TECHED\_ALP\_SOASRV.Z\_SEPMRA\_SO\_SALESORDERANALYSISType"**

```

<Annotations Target="TECHED_ALP_SOASRV.Z_SEPMRA_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>
 <PropertyValue Property="Measures">
 <Collection>
 <PropertyPath>NetAmount</PropertyPath>
 </Collection>
 </PropertyValue>
 </Record>
 </Annotation>
</Annotations>
```

Apply Copy Reset

< Back Next > Exit Guide

(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

(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
1

Apply
Copy
Reset

```
1 <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2 <Annotation Term="UI.PresentationVariantType">
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 </edmox:Reference>
5 <edmox:Reference Uri="/here/goes/your/serviceurl/$metadata">
6 <edmox:Include Namespace="TECHED_ALP_SO_SRV"/>
7 </edmox:Reference>
8 <edmox:DataServices>
9 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10 <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_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_Donut"/>
56 <PropertyValue Property="Dimensions">
57 <Collection>
58 <PropertyValue Property="Path" Value="SoldToParty"/>
59 <PropertyValue Property="Path" Value="DeliveryCalendarYear"/>
60 </Collection>
61 </PropertyValue>
62 </Record>
63 </Annotation>
64 </Collection>
65 </Annotations>
```

(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.

```

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.ImportanceHigh"/>
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.ImportanceLow"/>
25 </Record>
26 <Record Type="UI.DataField">
27 <PropertyValue Property="Value" Path="SalesOrderItem"/>
28 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
29 </Record>
30 <Record Type="UI.DataField">
31 <PropertyValue Property="Value" Path="Product"/>
32 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
33 </Record>
34 <Record Type="UI.DataField">
35 <PropertyValue Property="Value" Path="ProductCategory"/>
36 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
37 </Record>
38 <Record Type="UI.DataField">
39 <PropertyValue Property="Value" Path="SoldToParty"/>
40 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
41 </Record>
42 <Record Type="UI.DataField">
43 <PropertyValue Property="Value" Path="Quantity"/>
44 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
45 </Record>
46 <Record Type="UI.DataField">
47 <PropertyValue Property="Value" Path="NetAmount"/>
48 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
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](#)

```

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.ImportanceHigh"/>
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.ImportanceLow"/>
25 </Record>
26 <Record Type="UI.DataField">
27 <PropertyValue Property="Value" Path="SalesOrderItem"/>
28 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
29 </Record>
30 <Record Type="UI.DataField">
31 <PropertyValue Property="Value" Path="Product"/>
32 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
33 </Record>
34 <Record Type="UI.DataField">
35 <PropertyValue Property="Value" Path="ProductCategory"/>
36 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
37 </Record>
38 <Record Type="UI.DataField">
39 <PropertyValue Property="Value" Path="SoldToParty"/>
40 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
41 </Record>
42 <Record Type="UI.DataField">
43 <PropertyValue Property="Value" Path="Quantity"/>
44 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
45 </Record>
46 <Record Type="UI.DataField">
47 <PropertyValue Property="Value" Path="NetAmount"/>
48 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
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 for a sales order analysis page. On the left, a sidebar displays 'Welcome' and 'Guided Development - salesorderanalysis'. Below this, a section titled 'Enable data label in smart charts and KPI cards' contains an 'About' link and a 'Step 1' section. The 'Step 1' section instructs the user to set the 'showDataLabel' property of the chart to true. A note states: 'In this step, you will set the chart property showDataLabel to true. Locate and expand the Application Modeler view from the Explorer side bar. In this view, look for the project and open the page config file within the pages folder. Update it to match the following code snippet. Alternatively, specify the values below and click the Apply button to update the page config file.' Below this, a code editor window titled 'AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS.json' shows the following JSON code:

```

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. A yellow circle with the number '24' is positioned to the 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.

**Enable data label in smart charts and KPI cards**

**About**  
Guide information

**Step 1**  
Set the `showDataLabel` property of chart to true

**Set the `showDataLabel` property of chart to true**

In this step, you will set the chart property `showDataLabel` to true.  
Locate and expand the Application Modeler view from the Explorer side bar.  
In this view, look for the project and open the page config file within the `pages` folder. Update it to match the following code snippet.  
Alternatively, specify the values below and click the Apply button to update the page config file.

**Page**  
AnalyticalListPage\_Z\_SEPMRA\_SO\_SAL...

**Code Snippet:**

```

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

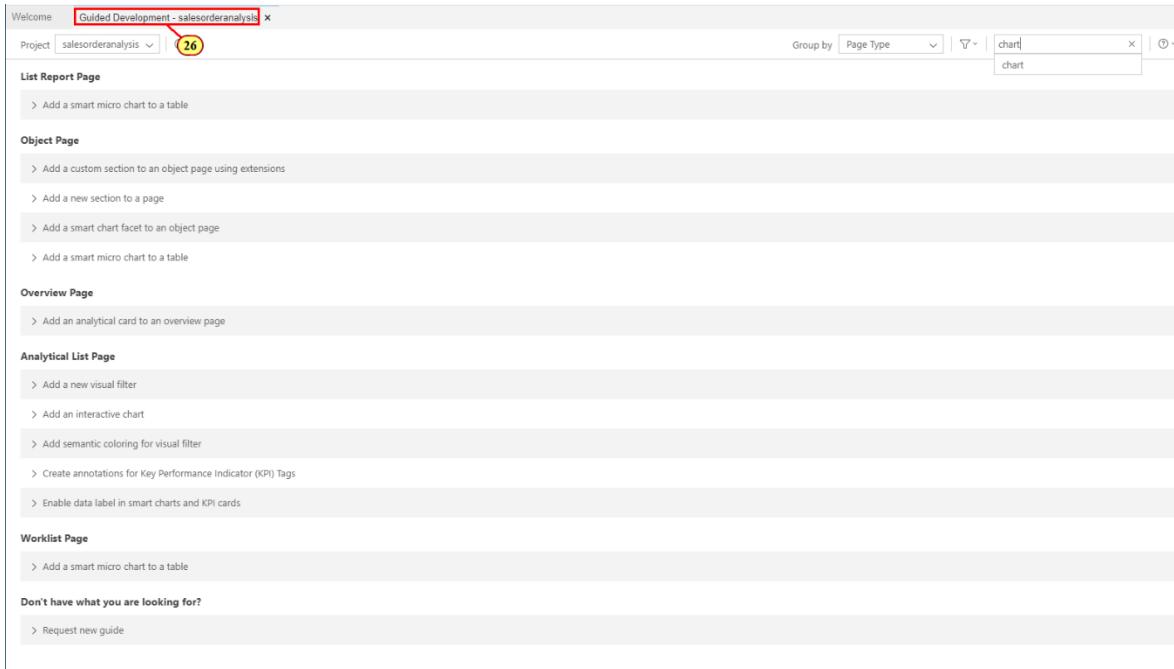
**Buttons:** Apply, Copy, Reset, Code snippet has been successfully applied

**Bottom Navigation:** < Back, Next >, Exit Guide (circled with a yellow circle labeled '25')

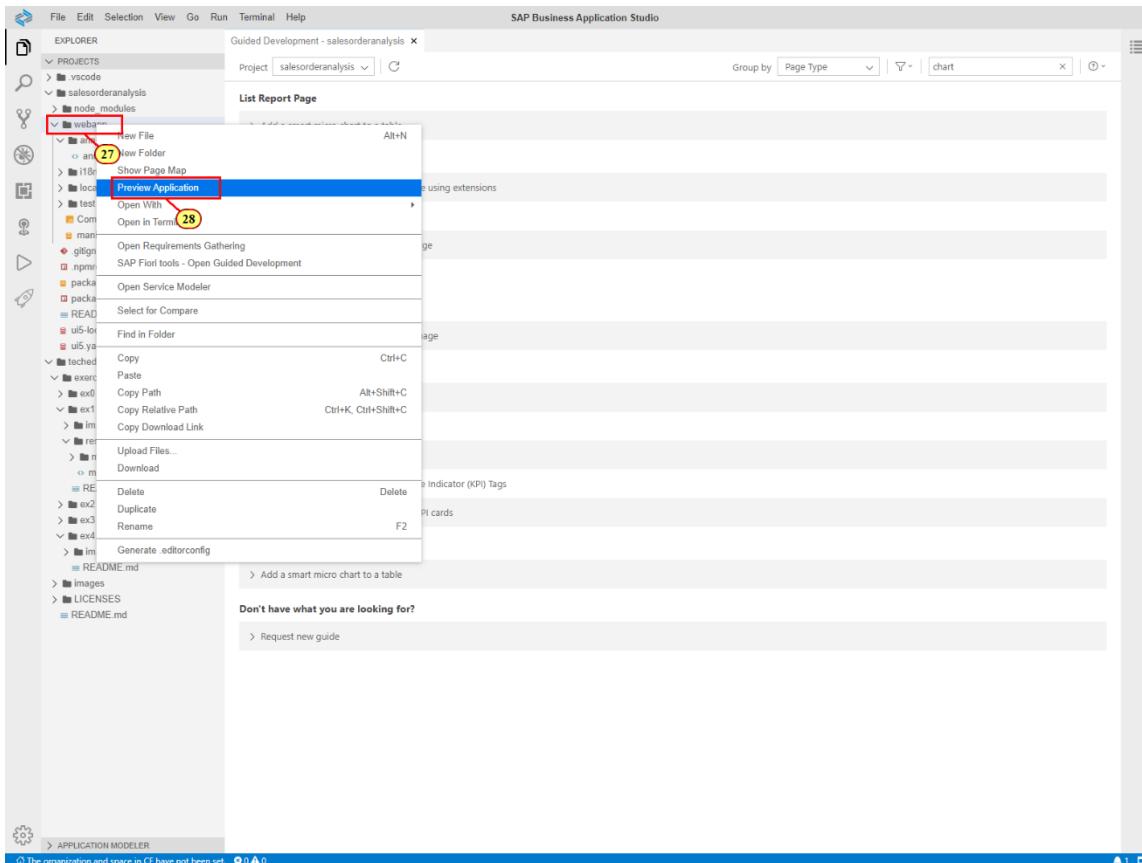
(25) Click **Exit Guide**.

## 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.

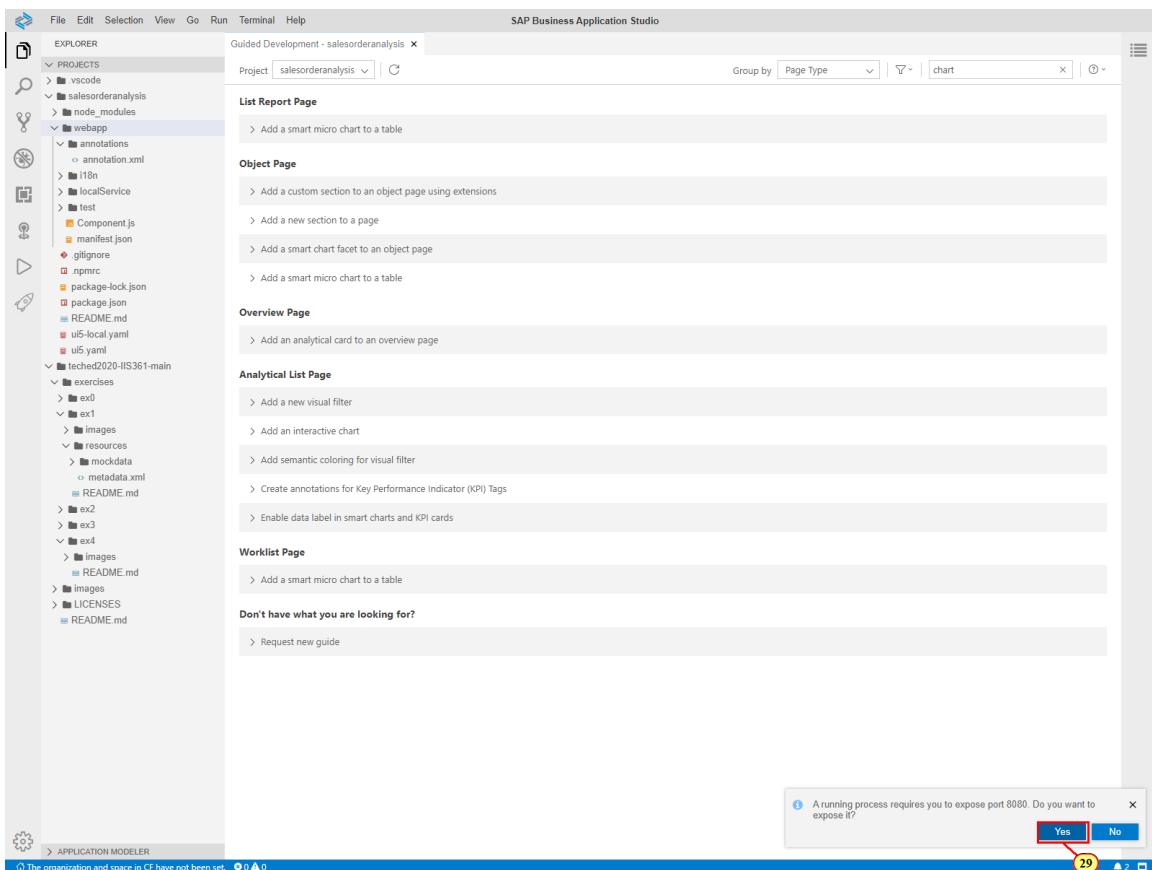


(26) To show the Explorer pane, double-click on the tab Guided Development - salesorderanalysis.

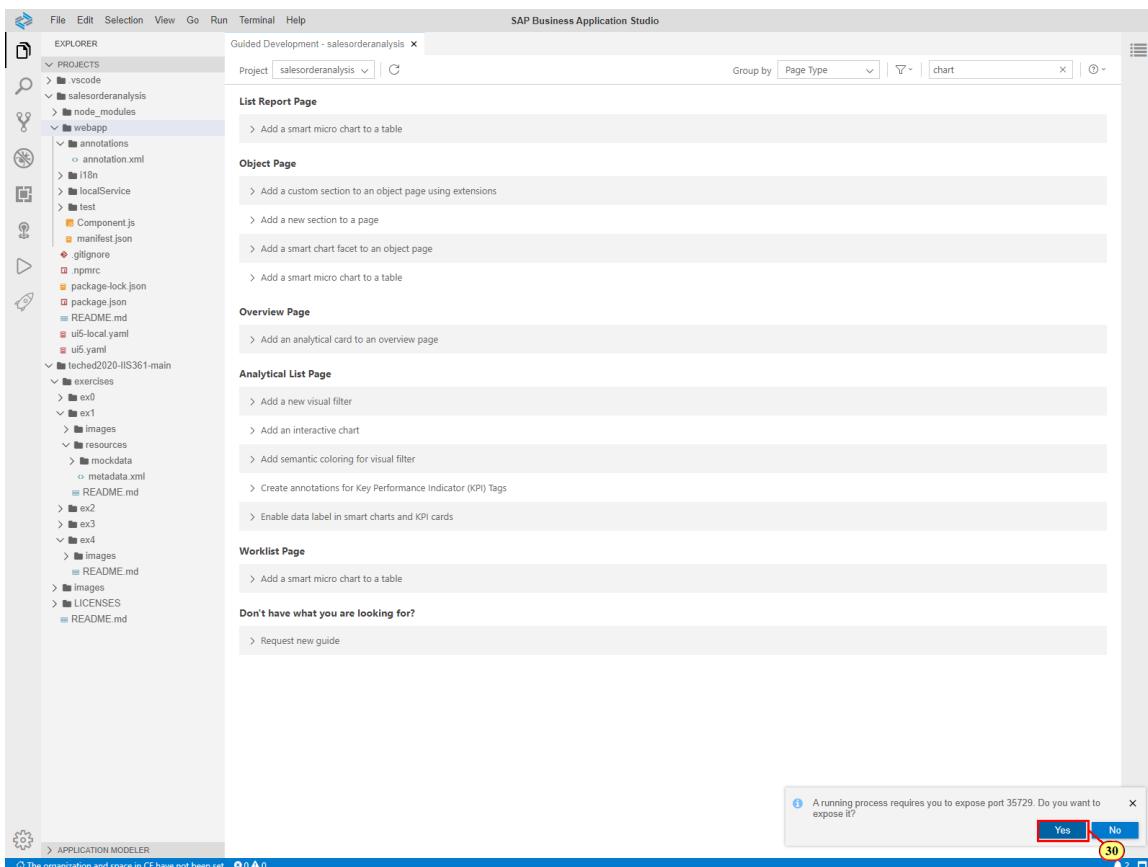


(27) In the Explorer pane, right-click on the webapp folder.

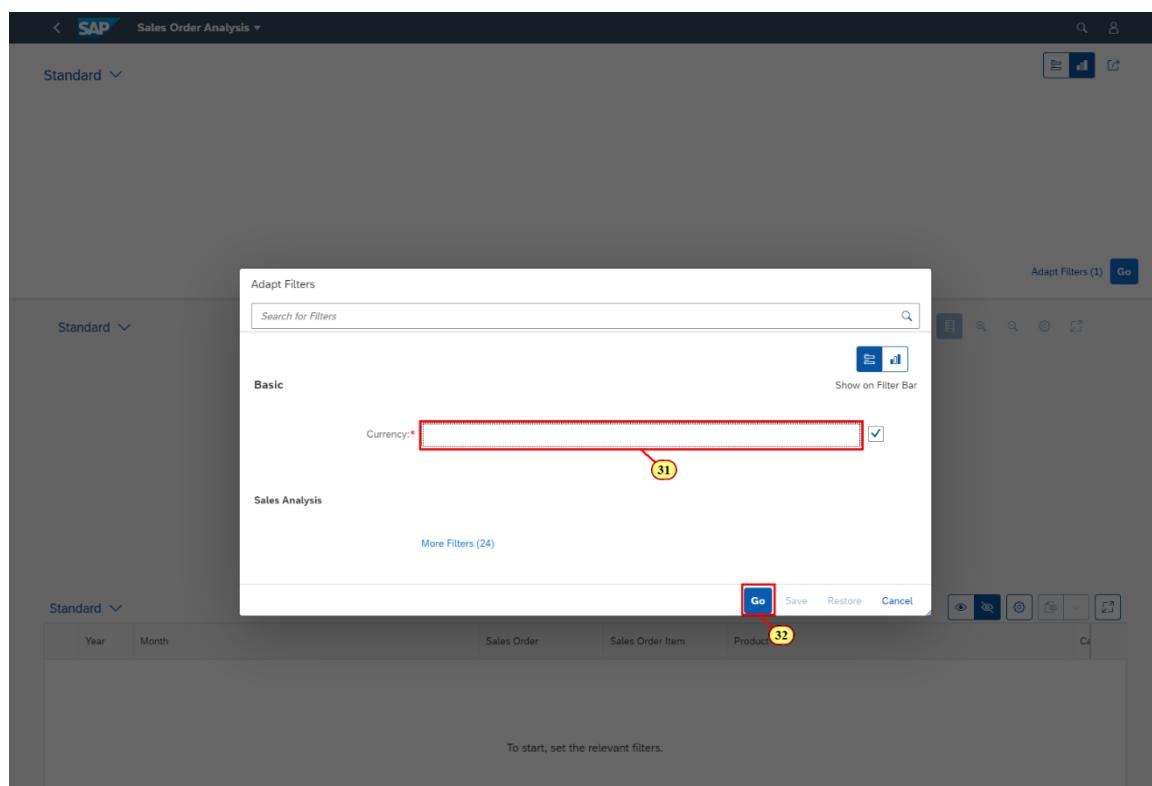
((28) In the context menu, click **Preview Application**.



(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.



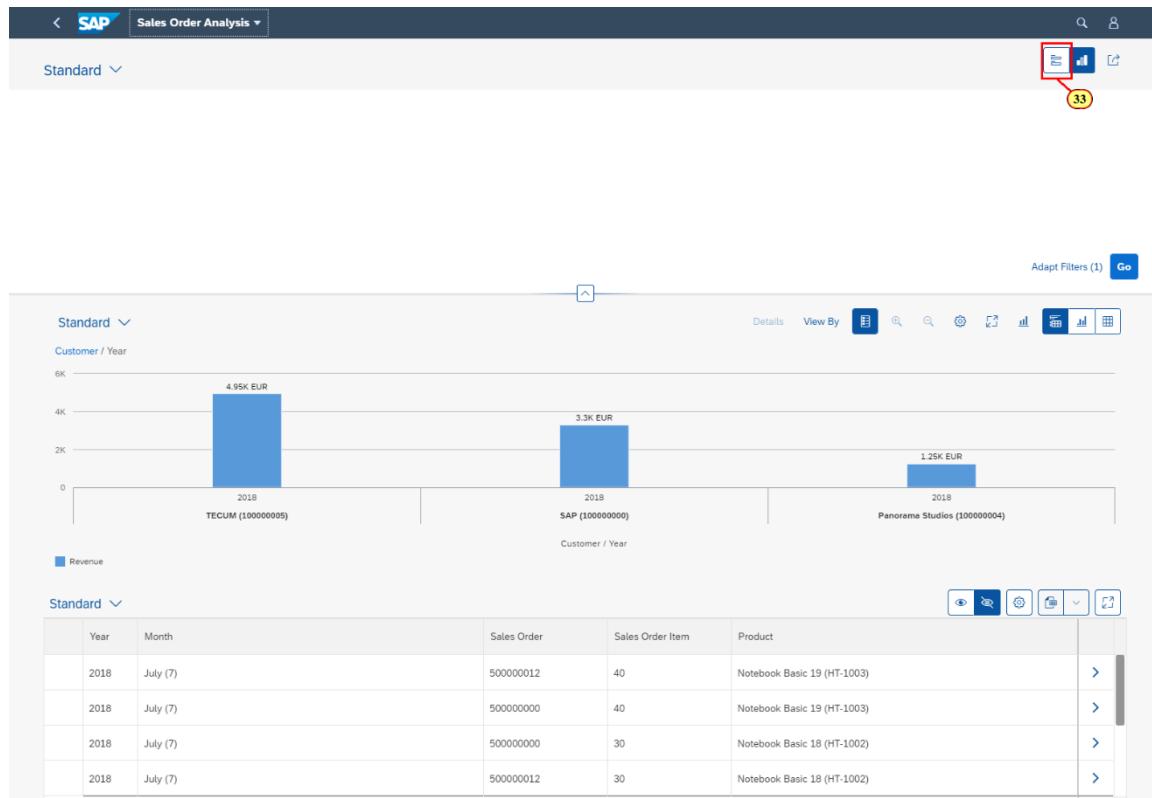
(31) in the Adapt Filters pop-up, enter **EUR** in the **Currency** field.

(32) Click **Go**.

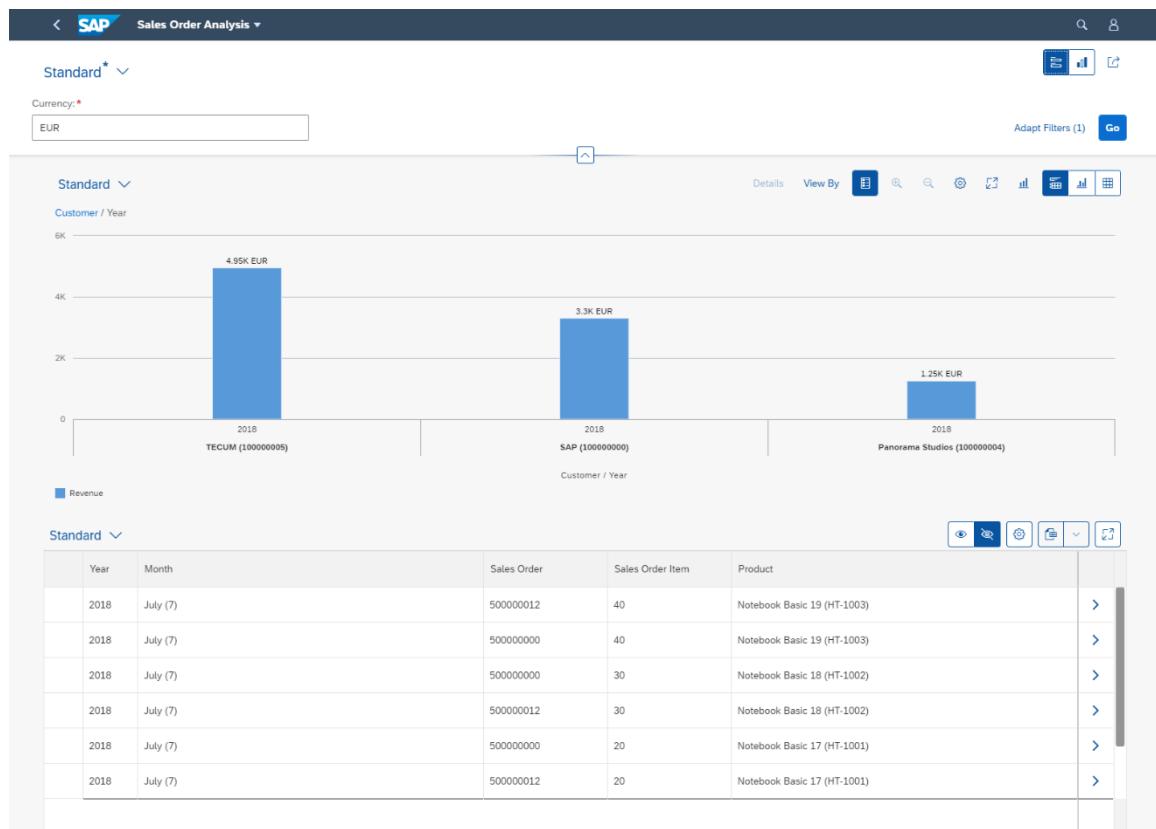
The content area of the page displays the chart and table you created. They display the data pre-filtered by the currency value you entered in the pop-up with the required filter field.

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**.

**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	Property *
Select an entity type	Select a navigation path	Select property
Z_SEPMRA_SO_ALP_SALESORDERANALYSISType		E_WITH_ENTITY_TYPE selectionFields"> REPLACE_WITH_PROPERTY_PATH</PropertyPath>

< 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**

**About** **Step 1**  
Guide Information 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	Property *
Z_SEPHRA_SO_SALESORDERANALYSIS...	Select a navigation path	DeliveryCalendarDate

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

```

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>

```

< Back Next >

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

Exit Guide

(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.

The screenshot shows the SAP Fiori Guided Development interface for the 'salesorderanalysis' application. On the left, there's a navigation bar with 'Welcome' and 'Guided Development - salesorderanalysis'. Below it, a 'Step 1' panel titled 'Add a new filter field to the Smart Filter Bar' provides instructions on how to annotate a target with 'UI.SelectionFields'. It includes fields for 'Entity Type' (Z\_SEPMRA\_SO\_SALESORDERANALYSISI) and 'Navigation Path' (Select a navigation path). The 'Property' dropdown is set to 'OrderDate'. At the bottom of this panel are 'Apply', 'Copy', and 'Reset' buttons, with a message indicating the snippet has been successfully applied.

The main area is titled 'annotation.xml' and displays the XML code. A red box highlights the section of the XML code where step 7 is located. A yellow circle with the number '7' points to the 'OrderDate' property path in the XML. The XML code is as follows:

```

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
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22
23
24
25
26
27
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37
38
39
40
41
42 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
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_Medium" />
50 </Record>
51 </Collection>
52 </Annotation>
53 <Annotation Term="UI.Chart">
54 <Record Type="UI.ChartDefinitionType">
55 <PropertyValue Property="Title" String="Revenue by Customer" />
56 <PropertyValue Property="Description" String="Net Revenue by Customer" />
57 <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Summary" />
58 <PropertyValue Property="Dimensions">
59 <Collection>
60 <PropertyValue Property="SolToParty"/>
61 <PropertyValue Property="DeliveryCalendarYear"/>
62 </Collection>
63 </PropertyValue>
64 <PropertyValue Property="Measures">
65 <Collection>
66 <PropertyValue Property="NetAmount"/>
67 </Collection>
68 </PropertyValue>
69 </Record>
70 </Annotation>
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 ...

```

(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**

**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_SEMPRA_SO_SALESORDERANALYSISI...	Select a navigation path

Property \*

OrderDate

**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>OrderDate</PropertyPath>
6 </Collection>
7 </Annotation>
8 </Annotations>
9

```

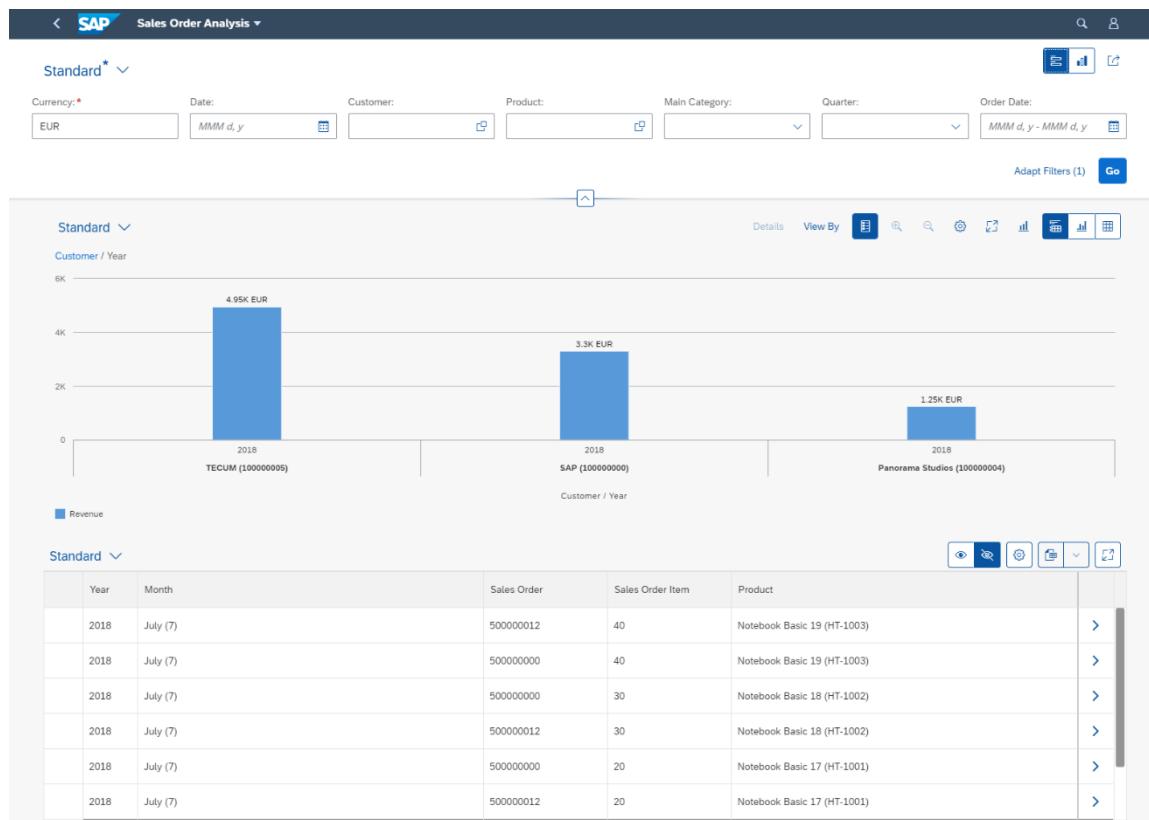
Code snippet has been successfully applied

Apply | Copy | Reset | 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 search/filter options. 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 contains several items, one of which, "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).

(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 SAP Guided Development interface. At the top, there's a navigation bar with 'Welcome' and 'Guided Development - salesorderanalysis'. Below it, a sub-navigation bar has 'About' selected and 'Step 1' highlighted. The main content area is titled 'Enable semantic date range on smart filter bar'. It contains a section for 'About' and 'Step 1', which instructs to set the 'useDateRange' property of 'dateSettings' to true. A code editor shows a configuration snippet:

```
1 AnalyticalListPage_Z_SEPMRA_SO_SAL... v
2
3 "filterBar": {
4 "dateSettings": {
5 "useDateRange": true
6 }
7 }
8
9 }
```

Two steps are numbered: (11) points to the 'Page' dropdown containing 'AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS' and the 'Apply' button; (12) points to the 'useDateRange' property in the code editor.

- (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 it are 'About' and 'Step 1' sections. Step 1 contains a note: 'Set the useDateRange property of dateSettings to true'. A red box highlights this note. Below it is a text area: 'Set the useDateRange property of dateSettings to true. Locate and expand the Application Modeler view from the Explorer side bar. In this view, look for the project and open the page config file within the pages folder. Update it to match the following code snippet. Alternatively, specify the values below and click the Apply button to update the page config file.' A red box highlights the 'useDateRange' property in the code snippet.

**AnalyticalListPage\_Z\_SEPMRA\_SO\_SALESORDERANALYSIS.json**

```

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

```

**Page**

Code snippet has been successfully applied

```

1 {
2 "filterBar": {
3 "dateSettings": [
4 {
5 "useDateRange": true
6 }

```

Buttons: Apply, Copy, Reset

Bottom right: Exit Guide (button 14)

(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](#).

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

SAP Sales Order Analysis

Standard\*

Currency: \* EUR Date: MMM d, y Customer: Product: Main Category: Quarter: Order Date: MMM d, y - MMM d, y

Adapt Filters (1) Go

Standard Customer / Year

Revenue

Year	Month	Sales Order	Sales Order Item	Product
2018	July (7)	50000012	40	Notebook Basic 19 (HT-1003)
2018	July (7)	50000000	40	Notebook Basic 19 (HT-1003)
2018	July (7)	50000000	30	Notebook Basic 18 (HT-1002)
2018	July (7)	50000012	30	Notebook Basic 18 (HT-1002)
2018	July (7)	50000000	20	Notebook Basic 17 (HT-1001)
2018	July (7)	50000012	20	Notebook Basic 17 (HT-1001)

SAP Sales Order Analysis

Standard\*

Currency: \* EUR Date: MMM d, y Customer: Product: Main Category: Quarter: Order Date: MMM d, y - MMM d, y

Time Period

Date Range From: MMM d, y To: MMM d, y

15

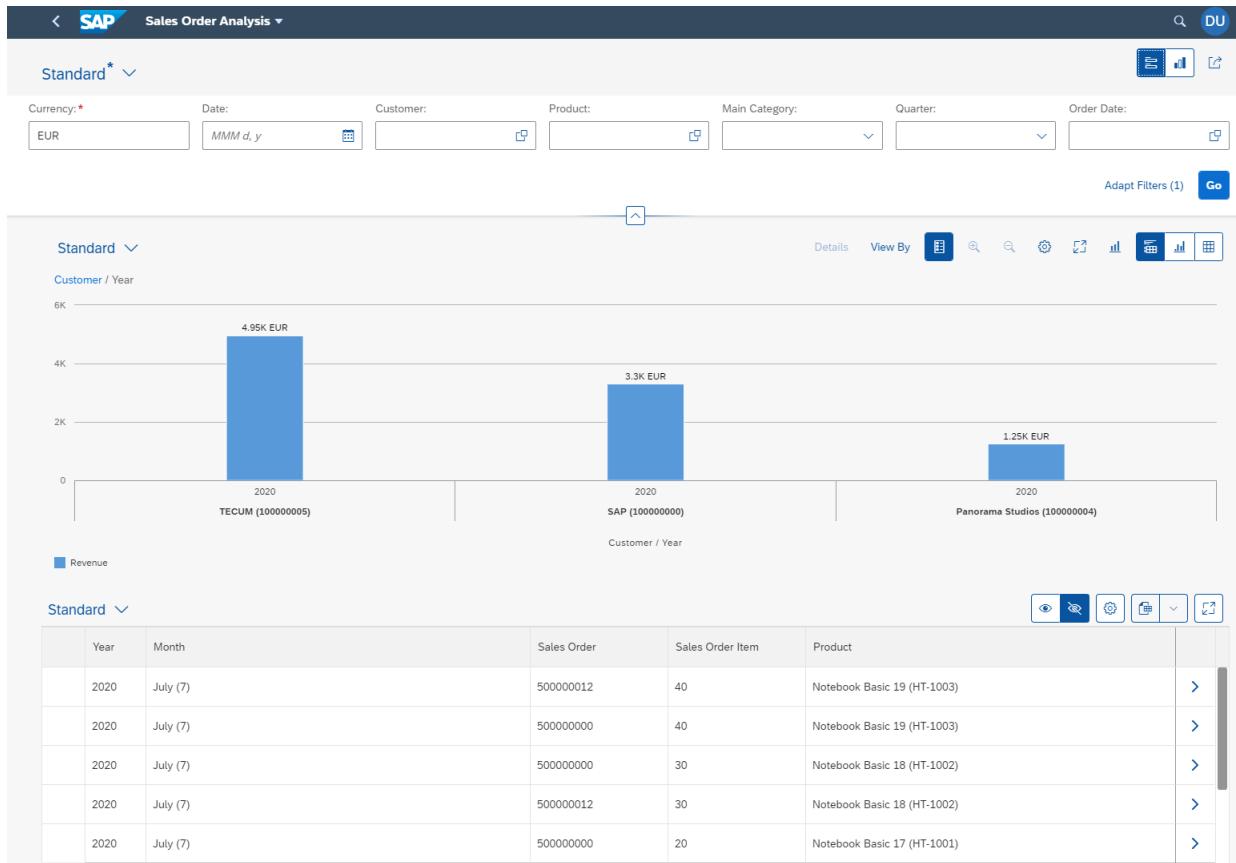
Standard Customer / Year

Revenue

Year	Month	Sales Order	Sales Order Item	Product
2018	July (7)	50000012	40	Notebook Basic 19 (HT-1003)
2018	July (7)	50000000	40	Notebook Basic 19 (HT-1003)
2018	July (7)	50000000	30	Notebook Basic 18 (HT-1002)
2018	July (7)	50000012	30	Notebook Basic 18 (HT-1002)
2018	July (7)	50000000	20	Notebook Basic 17 (HT-1001)
2018	July (7)	50000012	20	Notebook Basic 17 (HT-1001)

(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

Welcome Guided Development - salesorderanalysis X

Project salesorderanalysis C Group by Page Type ▾ Filter ⌂ ⌂

**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 ⓘ** (This item is highlighted with a red box and a yellow circle containing the number 17)
- > Add an inter17chart
- > 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** 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**



The screenshot shows the SAP Fiori Launchpad with the "Analytical List Page" application selected. The application icon is a blue square with a white bar chart. Below the icon, there is a preview of the application's interface, which includes a header with the title "Sales Order Analysis" and a table with several columns and rows of data.

(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.

```

<Annotations Target="TECHED_ALP_SOA_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>

```

(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.

The screenshot shows the SAP Guided Development interface for the salesorderanalysis application. The top navigation bar includes 'Welcome' and 'Guided Development - salesorderanalysis'. Below the bar, a breadcrumb trail shows 'Back to Guides' and the current step: 'Step 1 Add UI.PresentationVariant annotation'.

**Add a new visual filter**

**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

**Step 1** is highlighted in blue, and **Step 2** is highlighted in red. A circled '21' is placed over the 'Step 2' label.

**annotation.xml**

```

1 <edmx:Annotations Target="TECHED_ALP_SOAL_SRV_SEPMRA_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>

```

**Code snippet has been successfully applied**

**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 in the filter bar.

The screenshot shows the SAP Guided Development interface for salesorderanalysis. On the left, under 'Add a new visual filter', the 'Entity Type' is set to 'SEPMRA\_SO\_ALP\_SLDORDERITEMType', 'Presentation Variant Qualifier' is 'FilterQuantityByDate', and 'Chart Reference' is '@UI.Chart#FilterQuantityByDate'. A red box highlights these three fields. To the right, the 'annotation.xml' code is displayed, showing XML nodes for 'Annotations' and 'Record' with 'Annotation Term' values like 'UI.PresentationVariant' and 'UI.Importance'. Two red circles are present: one on the 'Apply' button and another on the 'UI.Importance' term in the XML code.

```

<Annotations Target="TECHED_ALP_SOA_SRV_SEPMRA_SO_ALP_SLDORDERITEMType">
 <Record Type="UI.PresentationVariantType">
 <PropertyValue Property="Visualizations">
 <Collection>
 <AnnotationPath>@UI.Chart#FilterQuantityByDate</AnnotationPath>
 </Collection>
 </PropertyValue>
 </Record>
</Annotations>

```

(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**.

The screenshot shows the SAP Fiori Guided Development interface for a sales order analysis application. The top navigation bar includes 'Welcome', 'Guided Development - salesorderanalysis x', 'Back to Guides', and a help icon. The main content area has a title 'Add a new visual filter' and a sub-section 'Step 3'. A red box highlights 'Step 3' in the breadcrumb. A yellow circle with the number '24' is placed over the 'Step 3' button. Below this, there are sections for 'Entity Type' (SEPMRA\_SO\_ALP\_SLDORDERITEMType) and 'Presentation Variant Qualifier' (FilterQuantityByDate). A dropdown for 'Chart Reference' shows 'UI.Chart#FilterQuantityByDate'. On the right, a code editor titled 'annotation.xml x' displays the XML code for the annotation, with line numbers from 1 to 61. The XML defines annotations for a presentation variant target, mapping properties like 'FilterQuantityByDate' to specific UI fields. A preview pane on the right shows the resulting visual representation of the filter.

```

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/TECH–ALP–SOA_SRV" />
6 <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
7 </edmx:Reference>
8 <edmx:Reference Uri="https://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/edm" Namespace="soa">
13 <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
14 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
15 <Record Type="UI.PresentationVariantType">
16 <PropertyValue Property="Visualizations">
17 <Collection>
18 <AnnotationPath>UI.Chart#FilterQuantityByDate</AnnotationPath>
19 </Collection>
20 </PropertyValue>
21 </Record>
22 </Annotation>
23 </Annotations>
24 </Schema>
25 </Edmx>
26
```

(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\_SALESORDERANALYSISISType** for the visual filter to work properly. For this, we use the **Common.ValueList** annotation.

The screenshot shows the SAP Fiori Guided Development interface for 'salesorderanalysis'. On the left, under 'Step 3', the 'Add a new visual filter' section is displayed. It includes fields for 'Entity Type' (Z\_SEPMRA\_SO\_SALESORDERANALYSIS), 'Entity Type Property' (DeliveryCalendarDate), 'Collection Path' (SEPMRA\_SO\_ALP\_SLDORDERITEM), 'Presentation Variant Qualifier' (FilterQuantityByDate), 'Local Data Property' (DeliveryCalendarDate), and 'Value List Property' (DeliveryDate). A red box highlights the 'Value List Property' field. Below these fields is a button group with 'Apply' (circled in blue), 'Copy', and 'Reset'. The number '25' is circled in blue above the 'Apply' button. To the right of the interface is a code editor showing the 'annotation.xml' file. Line 25 is highlighted in red.

```

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.TECHNICAL.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.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_by_Customer" />
58 <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Column" />
59 <Collection>
60 <PropertyPath>SoldToParty</PropertyPath>
61 </Collection>
62 </Record>
63 </Annotation>
64 </Collection>
65 </Annotations>
66 </Schema>
67 </edmx:DataService>

```

(25) Enter the following values:

Field	Value
Entity Type	Z_SEPMRA_SO_SALESORDERANALYSIS
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**.

**Add a new visual filter**

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

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

**Local Data Property \*** DeliveryCalendarDate **Value List Property \*** DeliveryDate

**Code snippet has been successfully applied**

```

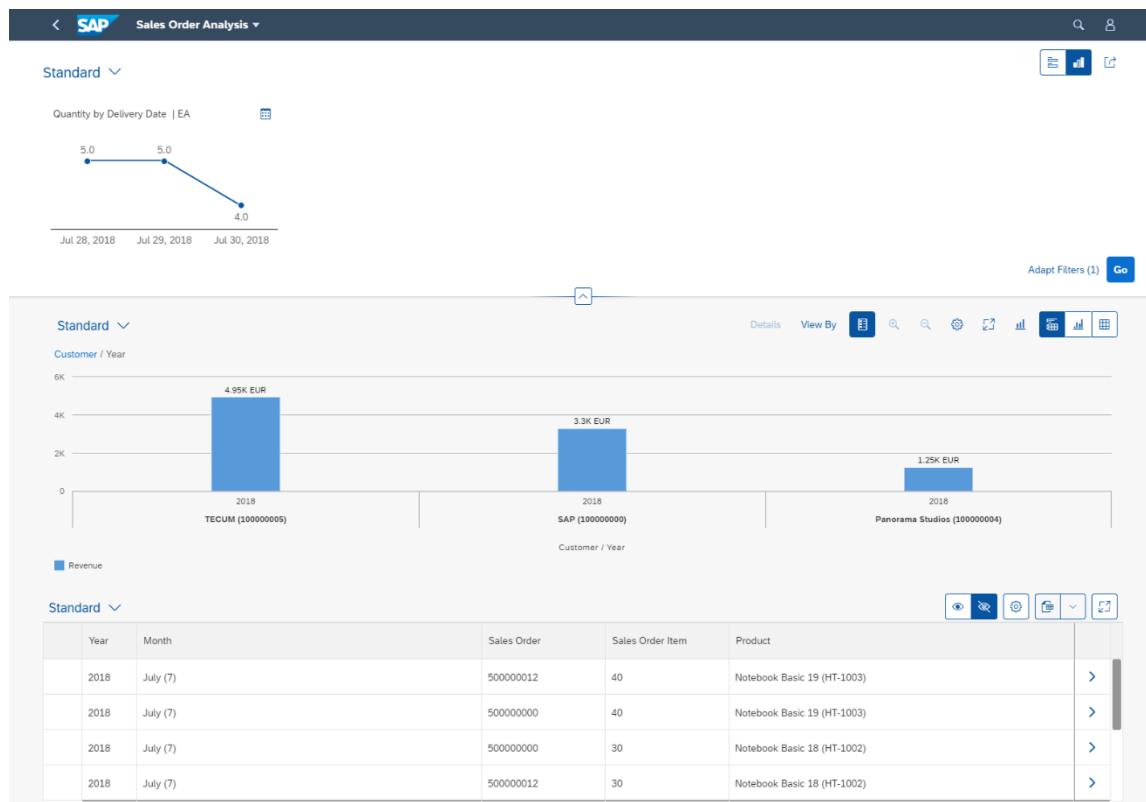
1 <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2 <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common"/>
3 <edmx:Include Namespace="com.sap.vocabularies.Common.V1" Alias="Common"/>
4 </edmx:Reference>
5 <edmx:Reference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

```

**Exit Guide** 27

### (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

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**.

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.xml**

```

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.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)&$.includeNamespace='com.sap.vocabularies.UI.v1' Alias="UI" />
6 <Edmx:Include Namespace="TECHED_ALP_SOAL_SRV" />
7 </Edmx:Reference>
8 <Edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
9 <Edmx:Include Namespace="TECHED_ALP_SOAL_SRV" />
10 </Edmx:Reference>
11 <Edmx:DataService>
12 <Schema xmlns="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.High" />
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.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 by Customer" />
58 <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
59 <PropertyValue Property="Dimensions">
60 <Collection>
61 <PropertyPath>SoldToParty</PropertyPath>

```

(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

The screenshot shows the SAP Fiori Guided Development interface for "salesorderanalysis". The current step is Step 2, titled "Add a new visual filter". The configuration form has three fields highlighted with a red box:

- Entity Type \***: SEPMRA\_SO\_ALP\_SLDORDERITEMType
- Presentation Variant Qualifier \***: FilterQuantityByProduct
- Chart Reference \***: @UI.Chart#FilterQuantityByProduct

A yellow circle labeled "29" points to the "Chart Reference" field. Below the form is a preview pane showing the generated 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/InFND/CATALOGSERVICE;v=2/Vocabularies/TECHED_ALP_SOASRV" />
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_SOASRV" />
10 </edmx:Reference>
11 <edmx:DataService>
12 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
13 <Annotations Target="TECHED_ALP_SOASRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
14 <Annotation Term="UI.LineItem">
15 <Collection>
16 <Record Type="UI.PresentationVariant">
17 <Record Type="UI.PresentationVariantType">
18 <PropertyValue Property="Visualizations">
19 <Collection>
20 <AnnotationPath>@UI.Chart#FilterQuantityByProduct</AnnotationPath>
21 </Collection>
22 </PropertyValue>
23 </Record>
24 </Collection>
25 </Annotation>
26 </Annotations>
27 </Schema>
28 </Edmx:DataService>
29 </edmx:Edmx>
30
31
32
33
34
35
36
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```

At the bottom of the interface are "Back" and "Next" buttons, and an "Exit Guide" link.

(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

```

<Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType/Product">
 <Annotation Term="Common.ValueList">
 <Record Type="Common.ValueListType">
 <PropertyValue Property="CollectionPath" String="SEPMRA_SO_ALP_SLDORDE
 <PropertyValue Property="PresentationVariantQualifier" String="FilterQuant
 <PropertyValue Property="Parameters">
 <Collection>
 <Record Type="Common.ValueListParameterInOut">
 <PropertyValue Property="LocalDataProperty" PropertyPath=
 <PropertyValue Property="ValueListProperty" String="Product">
 </Record>
 </Collection>
 </Annotation>
 </Record>
 </Annotations>

```

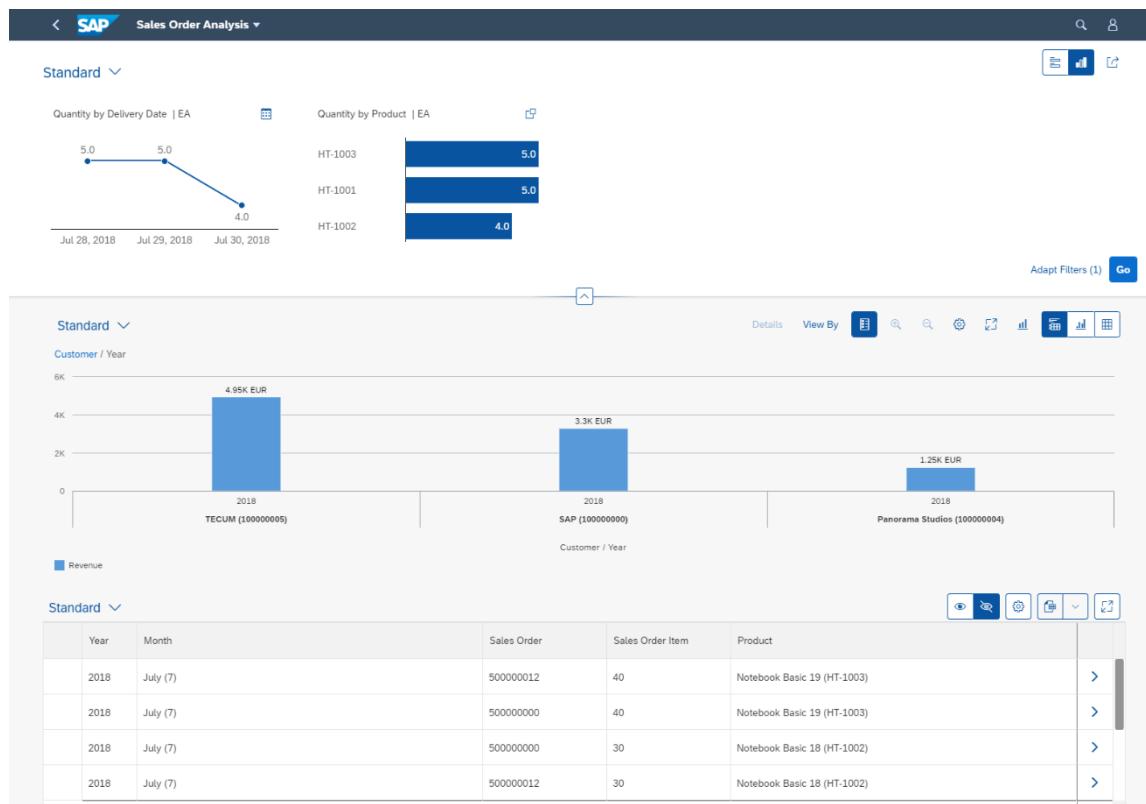
(30) In step 3 of the guide, use the following values to map the dimensions in the chart to the respective property of your main entity type in the annotation Common.ValueList as in steps (25) - (26) above.

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 AnnType="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](#)

Welcome Guided Development - salesorderanalysis x

Project salesorder... Group by Page Type filter X | ① -

**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

**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:

- o Critically in DataPoint annotations. The specified value, or the value returned from a path, determines the color
- o 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

**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/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.Critical" />
19 </Record>
20 <Record Type="UI.DataField">
21 <PropertyValue Property="Value" Path="DeliveryCalendar" />
22 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
23 </Record>
24 <Record Type="UI.DataField">
25 <PropertyValue Property="Value" Path="SalesOrder" />
26 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
27 </Record>
28 <Record Type="UI.DataField">
29 <PropertyValue Property="Value" Path="SalesOrderItem" />
30 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
31 </Record>
32 <Record Type="UI.DataField">
33 <PropertyValue Property="Value" Path="Product" />
34 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
35 </Record>
36 <Record Type="UI.DataField">
37 <PropertyValue Property="Value" Path="ProductCategory" />
38 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
39 </Record>
40 <Record Type="UI.DataField">
41 <PropertyValue Property="Value" Path="SoldToParty" />
42 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
43 </Record>
44 <Record Type="UI.DataField">
45 <PropertyValue Property="Value" Path="Quantity" />
46 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
47 </Record>
48 <Record Type="UI.DataField">
49 <PropertyValue Property="Value" Path="NetAmount" />
50 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Critical" />
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.Column" />
59 <PropertyValue Property="Dimensions">
60 <Collection>
61 <PropertyPath>SoldToParty</PropertyPath>

```

(32) Click **Start Guide**.

The screenshot shows the SAP Guided Development interface for the salesorderanalysis application. The top navigation bar includes 'Welcome' and 'Guided Development - salesorderanalysis'. A sub-navigation bar shows 'About', 'Step 1', and 'Step 2'. The main content area is titled 'Add semantic coloring for visual filter' under 'Step 1: Configure criticality configurations using UI.DataPoint annotation term'. It displays a configuration form with fields: Entity Type (SEPMRA\_SO\_ALP\_SLDORDERITEMType), Data Point Qualifier (Quantity), Data Point Value (Quantity, Improvement Direction: Maximize), Tolerance Range Low Value (5), and Deviation Range Low Value (4). Below the form is a button bar with 'Apply' (circled in red with 33), 'Copy', and 'Reset'. To the right of the form is a large code editor window titled 'annotation.xml' showing the generated XML code for the annotations. The XML code defines an annotation target for the entity type, setting the data point to 'Quantity', the improvement direction to 'Maximize', and the tolerance range low value to 5. The 'Apply' button is highlighted with a red circle and the number 33.

```

<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:Reference Uri="/sap/opu/odata/Infocatalogservice;v=2/Vocabularies(Technical)>
 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
 </edmx:Reference>
 <edmx:Reference Uri="here/goes/your/serviceurl/$metadata">
 <edmx:Include Namespace="TECHED_ALP_SO_A_SRV" />
 </edmx:Reference>
</edmx:Edmx>
<Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
 <Annotations Target="TECHED_ALP_SO_A_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>
</Schema>

```

(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 Fiori Guided Development interface for the salesorderanalysis application. The top navigation bar includes 'Welcome', 'Guided Development - salesorderanalysis', 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="com.sap.vocabularies.UI.v1" Alias="UI" />
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/LineItem" />
9 <edmx:DataServices>
10 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
11 <Annotations Target="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDORDERITEMtype">
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.Low"/>
29 </Record>
30 <Record Type="UI.DataField">
31 <PropertyValue Property="Value" Path="Product"/>
32 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
33 </Record>
34 <Record Type="UI.DataField">
35 <PropertyValue Property="Value" Path="ProductCategory"/>
36 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
37 </Record>
38 <Record Type="UI.DataField">
39 <PropertyValue Property="Value" Path="SoldToParty"/>
40 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
41 </Record>
42 <Record Type="UI.DataField">
43 <PropertyValue Property="Value" Path="Quantity"/>
44 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
45 </Record>
46 <Record Type="UI.DataField">
47 <PropertyValue Property="Value" Path="NetAmount"/>
48 <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low"/>
49 </Record>
50 </Collection>
51 </Annotation>
52 </Collection>
53 </Annotations>
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 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 </Annotation>
66 </Schema>
67 </Annotations>
68 </edmx:DataServices>
69 </edmx:Edmx>

```

**Buttons at the bottom:**

- < Back
- Next >
- Exit Guide

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

**Add semantic coloring for visual filter**

**Step 2** Associate Criticality configurations to a chart

**Data Point Reference \*** `@UI.DataPoint#Quantity`

```

<Annotations Target="TECHED_ALP_SOA_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>
 <PropertyValue PropertyPath="DeliveryDate"/>
 </Collection>
 </PropertyValue>
 <PropertyValue Property="Measures">
 <Collection>
 <PropertyValue PropertyPath="Quantity"/>
 </Collection>
 </PropertyValue>
 <PropertyValue Property="MeasureAttributes">
 <Collection>
 <Record Type="UI.ChartMeasureAttributeType">
 <PropertyValue Property="Measure" PropertyPath="Quantity"/>
 <PropertyValue Property="DataPoint" AnnotationPath="@UI.DataPoint#Quantity"/>
 </Record>
 </Collection>
 </PropertyValue>
 </Record>
 </Annotation>
</Annotations>

```

(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	<code>SEPMRA_SO_ALP_SLDORDERITEMType</code>
Chart Qualifier	<code>FilterQuantityByDate</code>
Chart Title	<code>Quantity by Delivery Date</code>
Chart Description	<code>Item Quantity by Delivery Date</code>
Chart Type	<code>Line</code>
Dimensions Property	<code>DeliveryDate</code>
Measures Property	<code>Quantity</code>
<b>Chart Measures Attributes Property</b>	<b>Quantity</b>
<b>Data Point Qualifier</b>	<b><code>@UI.DataPoint#Quantity</code></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
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130
131
132
133
134

```

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

```

119
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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>

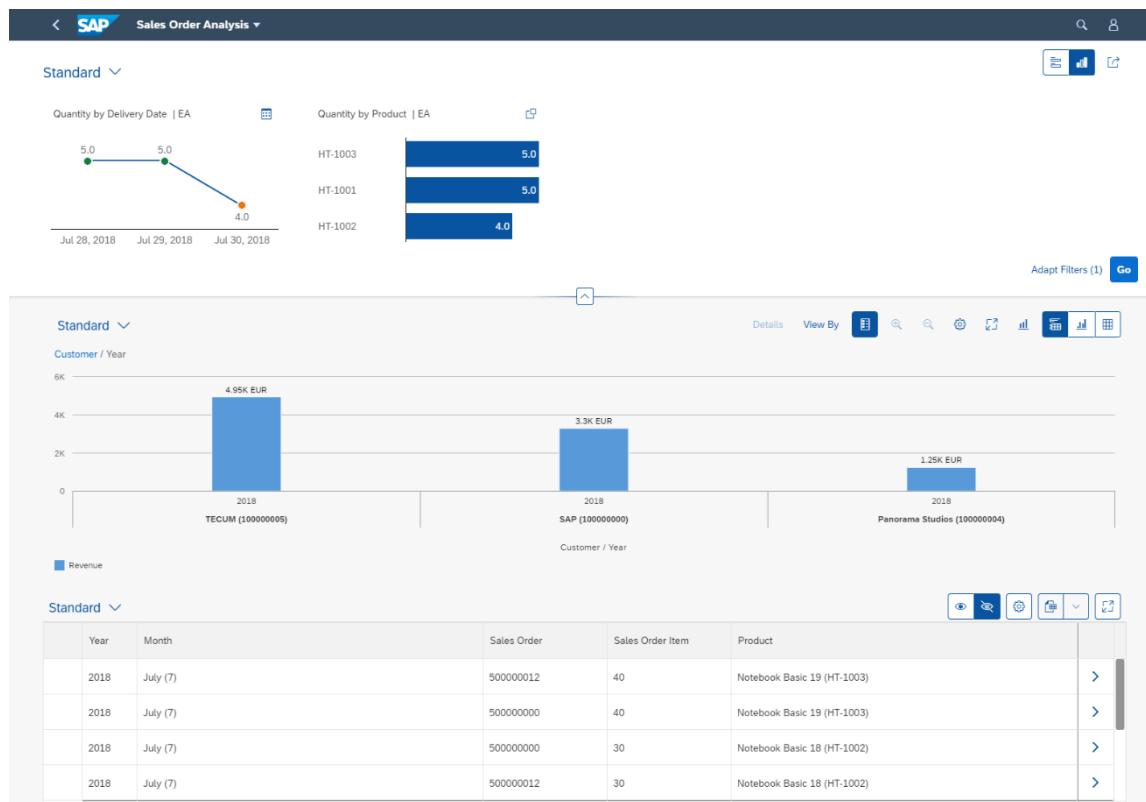
```

```
</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.



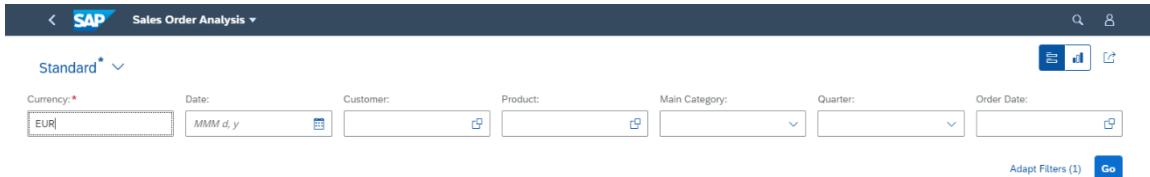
## Exercise 3.6 Using Shortcuts

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.
Export as	Shift + Ctrl + E	Shift + CMD + E	The focus should be set on the table.	The same as when a user chooses Export to Excel → Export As.

## 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

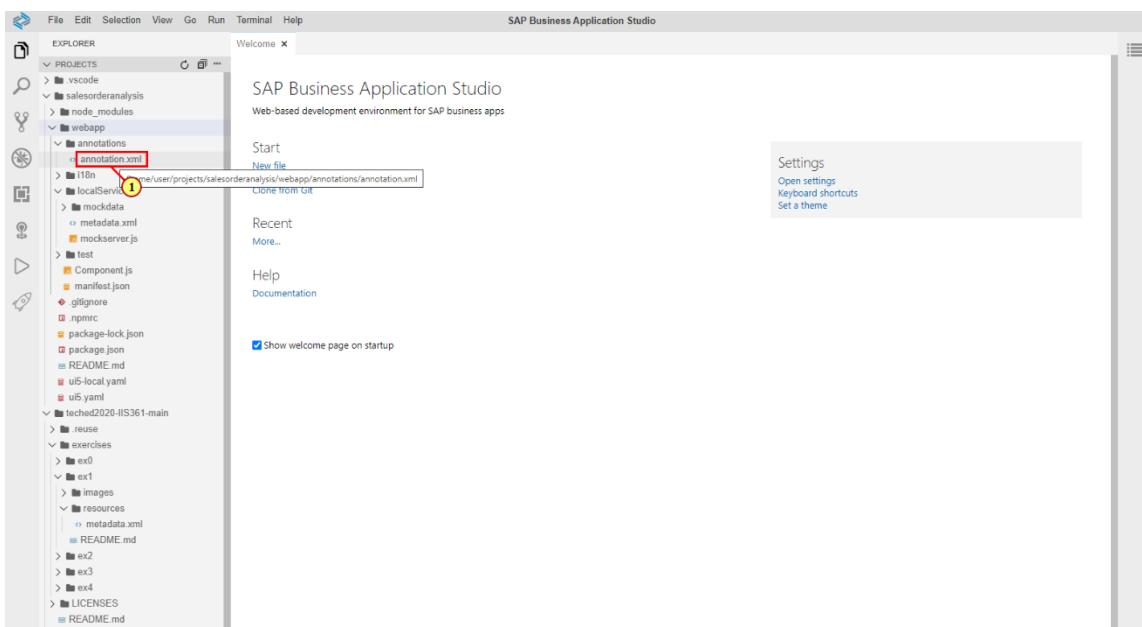
In this exercise, you will generate the translation text keys for the hard-coded string values you used in the previous exercises. For this you will use the i18n support of the XML annotation LSP.

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:

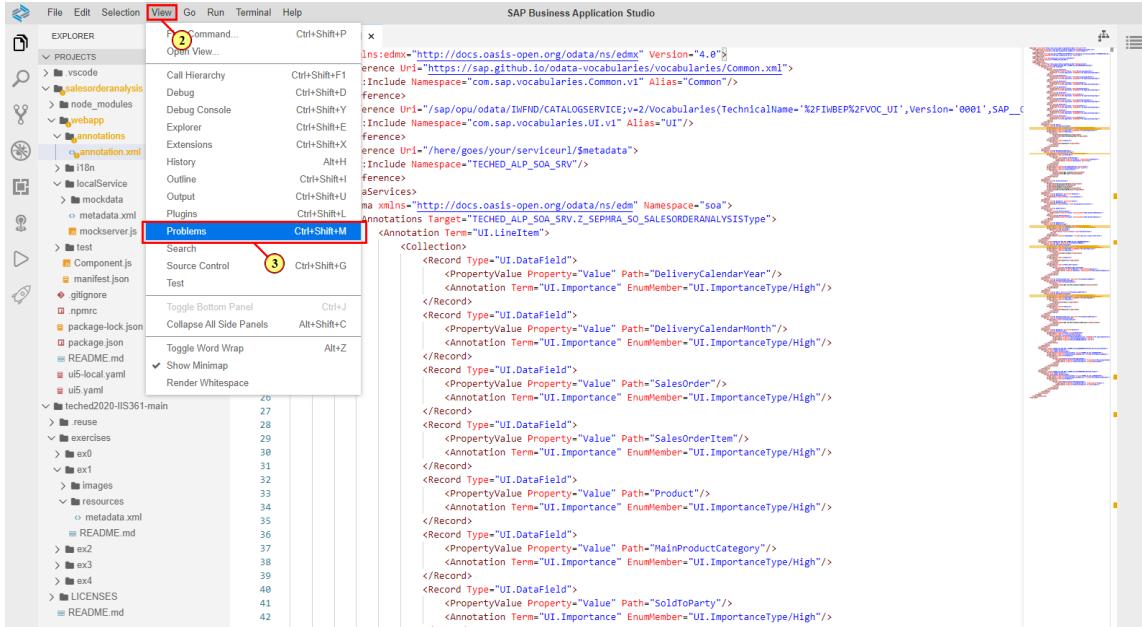
- auto-generate the key for the text string
- store it in i18n properties file
- substitute the hard coded text string in the annotation file with the reference to the generated text key.

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.

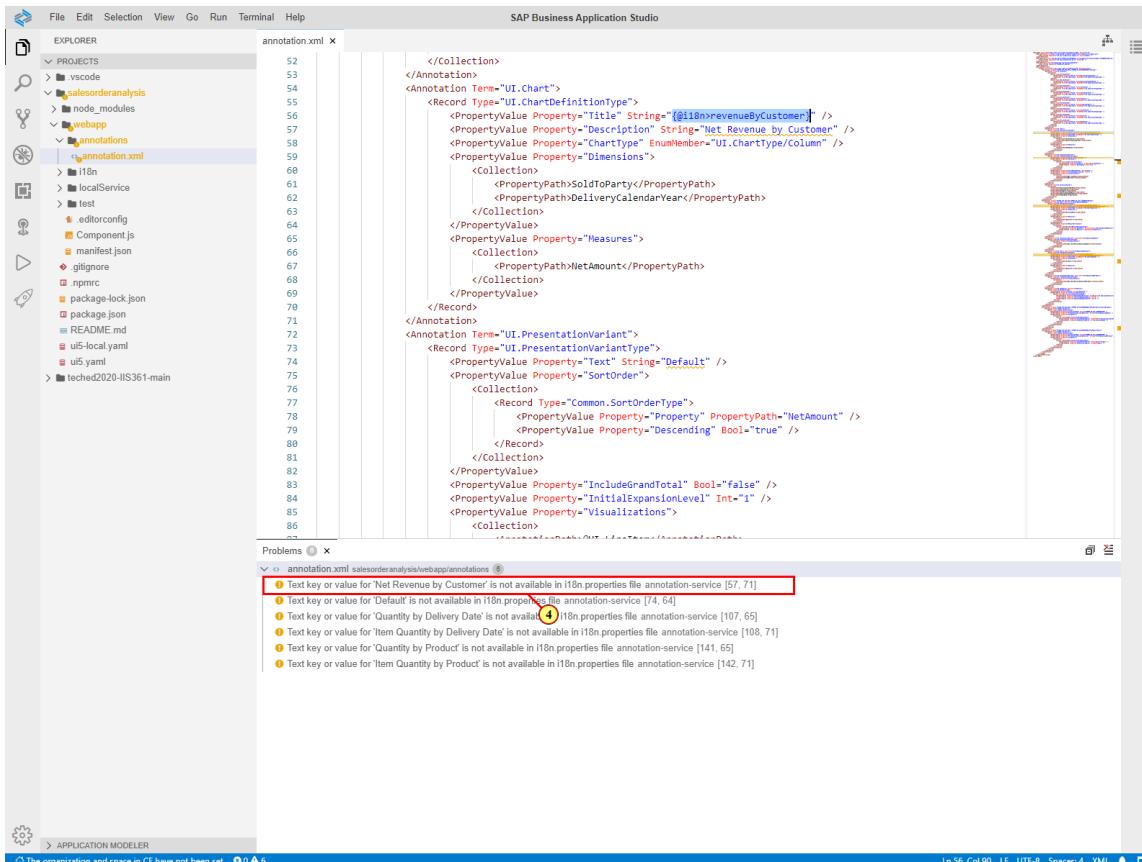


(1) In **Explorer** pane, double-click on **annotation.xml** file to open it.



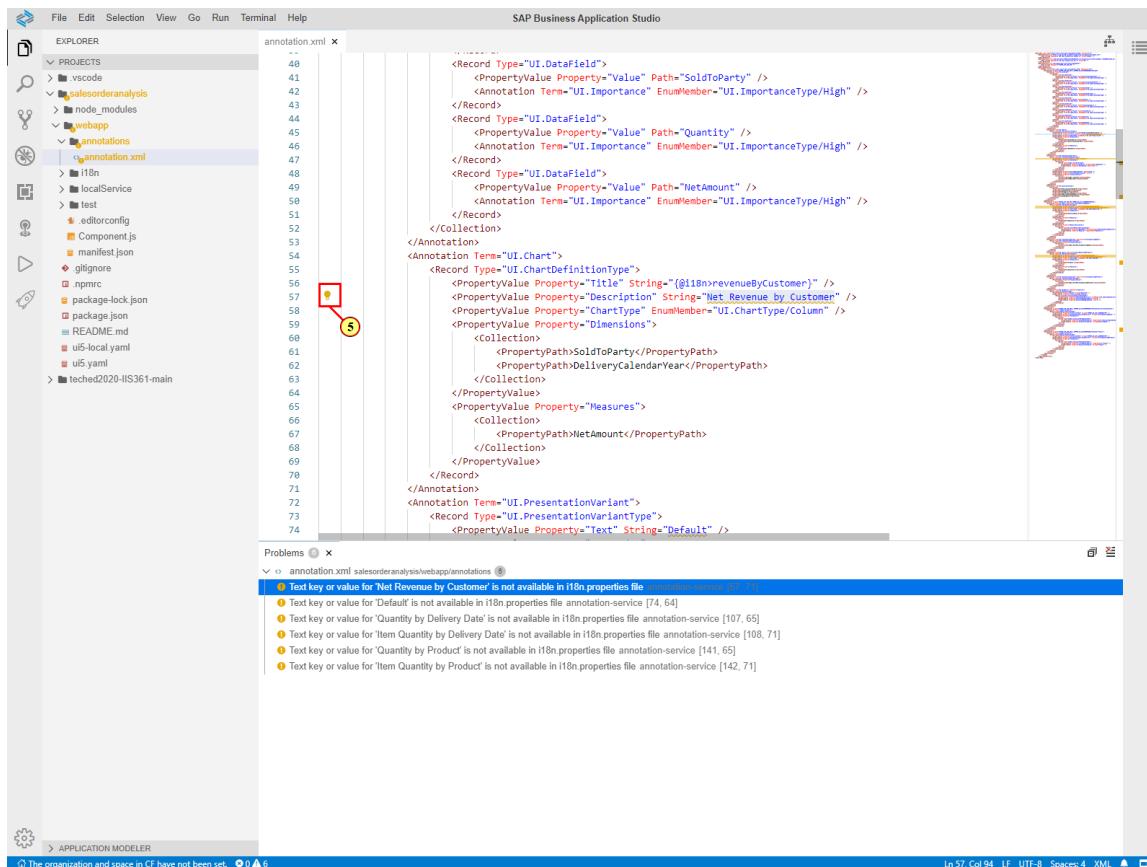
(2) Open View menu.

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



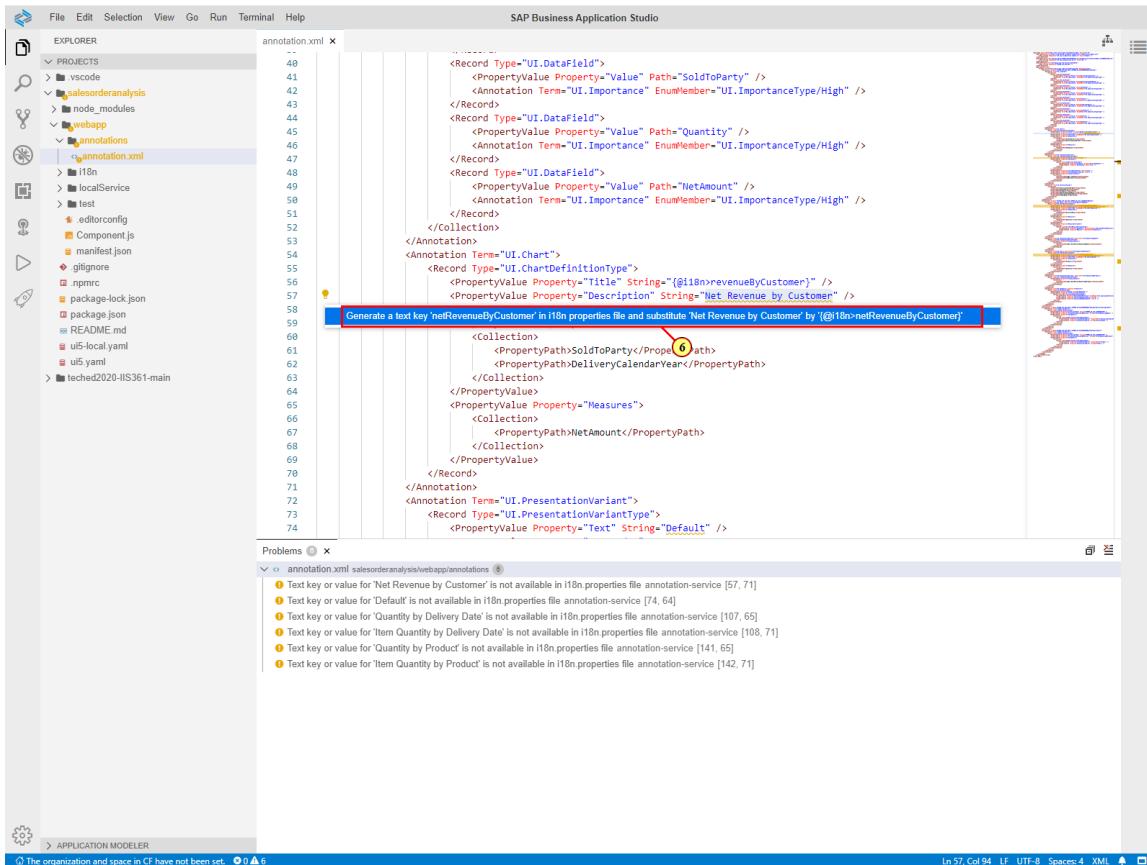
(4) Look at the warning messages under **annotation.xml** - all of them are related to the missing text keys. Click at one of the messsages.

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.



(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.

SAP Business Application Studio

File Edit Selection View Go Run Terminal Help

EXPLORER annotation.xml x

PROJECTS  
  vscode  
  salesorderanalysis  
    node\_modules  
  webapp  
    annotations  
      annotation.xml  
  i18n  
  localService  
  test  
  .editorconfig  
  Component.js  
  manifest.json  
  .gltignore  
  .npmrc  
  package-lock.json  
  package.json  
  README.md  
  ui5-local.yaml  
  ui5.yaml  
teched2020-IIS361-main

annotation.xml x

```
<Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="SoldToParty" />
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High" />
</Record>
<Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="Quantity" />
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High" />
</Record>
<Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="NetAmount" />
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High" />
</Record>
</Collection>
</Annotation>
<Annotation Term="UI.Chart">
 <Record Type="UI.ChartDefinitionType">
 <PropertyValue Property="Title" String="#{i18n>revenueByCustomer}" />
 <PropertyValue Property="Description" String="#{i18n>netRevenueByCustomer}" />
 <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column" />
 <PropertyValue Property="Dimensions">
 <Collection>
 <PropertyPath>SoldToParty</PropertyPath>
 <PropertyPath>DeliveryCalendarYear</PropertyPath>
 </Collection>
 </PropertyValue>
 <PropertyValue Property="Measures">
 <Collection>
 <PropertyPath>NetAmount</PropertyPath>
 </Collection>
 </PropertyValue>
 </Record>
</Annotation>
<Annotation Term="UI.PresentationVariant">
 <Record Type="UI.PresentationVariantType">
 <PropertyValue Property="Text" String="Default" />
 </Record>
</Annotation>
```

Problems x

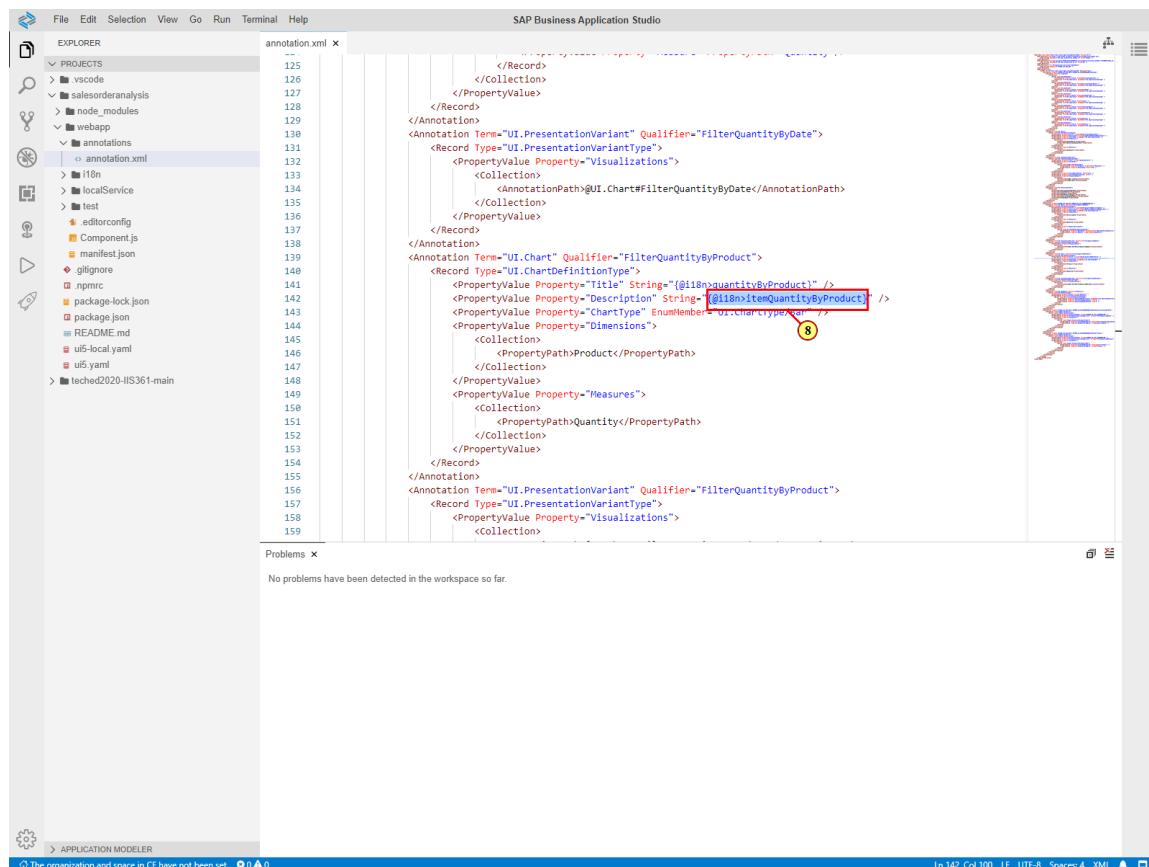
- Text key or value for 'Default' is not available in i18n properties file annotation-service [74, 64]
- Text key or value for 'Quantity by Delivery Date' is not available in i18n properties file annotation-service [107, 65]
- Text key or value for 'Item Quantity by Delivery Date' is not available in i18n properties file annotation-service [108, 71]
- Text key or value for '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]

APPLICATION MODELER

The organization and space in CT have not been set.

In 57 Col 99 LF UTF-8 Spaces:4 XML

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



The screenshot shows the SAP Business Application Studio interface with the 'annotation.xml' file open in the code editor. The code is an XML snippet defining UI presentation variants. A specific line of code is highlighted with a red box and circled with a yellow marker containing the number 8:

```

<Record Type="UI.PresentationVariant" Qualifier="FilterQuantityByProduct">
 <PropertyValue Property="Title" String="{@i18n>itemQuantityByProduct}" />
 <PropertyValue Property="Description" String="[@i18n>itemQuantityByProduct]" />
 <PropertyValue Property="ChartType" EnumMembers="ui:chartType:Var" />
 <PropertyValue Property="Dimensions">
 <Collection>
 <PropertyPath>Product</PropertyPath>
 </Collection>
 </PropertyValue>
 <PropertyValue Property="Measures">
 <Collection>
 <PropertyPath>Quantity</PropertyPath>
 </Collection>
 </PropertyValue>
</Record>

```

(8) To view or modify the i18n record in the **i18n.properties** file, **Ctrl+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. The right side features a 'PROBLEMS' view which is empty. At the bottom, there's a status bar with the message 'The organization and space in CT have not been set.' and some technical details.

```
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.

```

File Edit Selection View Go Run Terminal Help
EXPLORER annotation.xml
PROJECTS
 - vscode
 salesorderanalysis
 - node_modules
 - webapp
 - annotations
 - annotation.xml
 i18n
 - i18n.properties
 localService
 test
 editorconfig
 Component.js
 manifest.json
 .gitignore
 .npmrc
 package-lock.json
 package.json
 README.md
 ui5-local.yaml
 ui5.yaml
 tecched2020-IIS361-main
annotation.xml
125 </Record>
126 </Collection>
127 </PropertyValue>
128 </Record>
129 </Annotation>
130 <Record Type="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
131 <PropertyValue Property="Visualizations">
132 <Collection>
133 <AnnotationPath>@UI.Chart#FilterQuantityByDate</AnnotationPath>
134 </Collection>
135 </PropertyValue>
136 </Record>
137 </Annotations>
138 <Annotation Term="UI.Chart" Qualifier="FilterQuantityByProduct">
139 <Record Type="UI.ChartDefinitionType">
140 <PropertyValue Property="Title" String="@i18n>quantityByProduct" />
141 <PropertyValue Property="Description" String="@i18n>itemQuantityByProduct" />
142 <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Ban" />
143 <PropertyValue Property="Dimensions">
144 <Collection>
145 <PropertyPath>Product</PropertyPath>
146 </Collection>
147 </Dimensions>
148 </Record>
149 </Annotation>
150 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByProduct">
151 <Record Type="UI.PresentationVariantType">
152 <PropertyValue Property="Visualizations">
153 <Collection>
154 </Collection>
155 </Record>
156 </Annotation>
157 <Record Type="UI.PresentationVariant" Qualifier="FilterQuantityByProduct">
158 <PropertyValue Property="Visualizations">
159 <Collection>

```

No problems have been detected in the workspace so far.

APPLICATION MODELER

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

In 158 Col 66 LF UTF-8 Spaces 4 XML ▲

- (9) To view or modify the i18n record without leaving the file, click on the text reference [@i18n>quantityByProduct](#) and press **ALT+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" />
 <PropertyValue Property="Description" String="#i18n>itemQuantityByProduct" />
 <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Bar" />
 </Record>
</Annotation>

```

## Summary

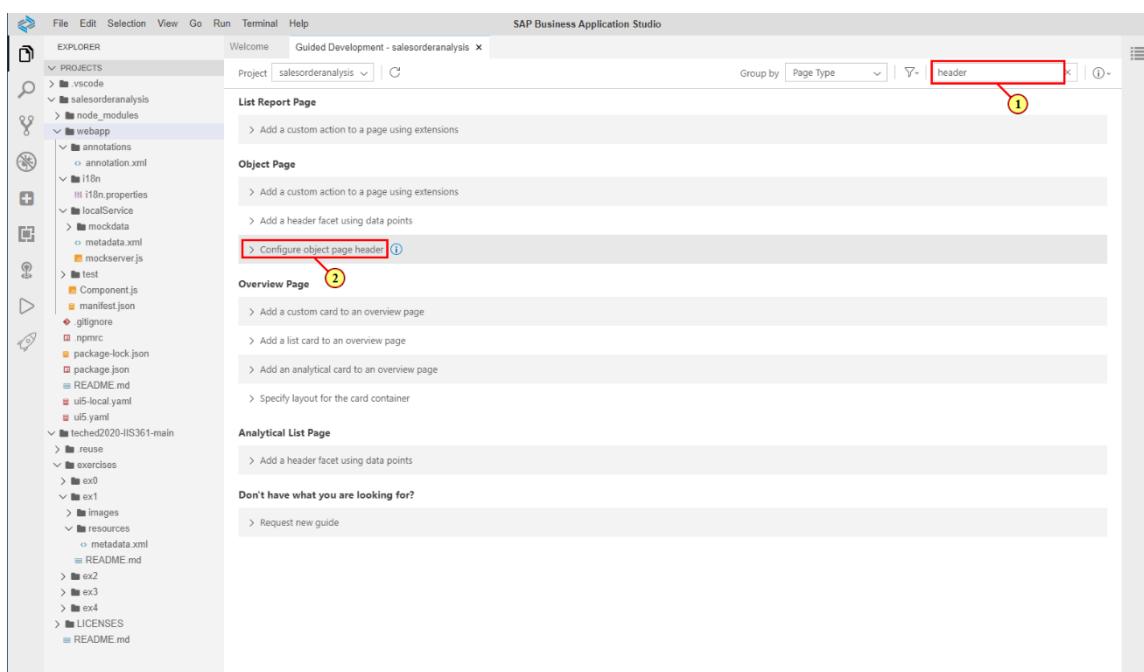
You have successfully substituted the hard coded texts in your annotation file with the references to the generated text keys. Now your Analytical List Page is prepared for translation. Continue to [Exercise 5 - Configuring the Second Page \(Object Page\)](#).

## Exercise 5 – 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](#).

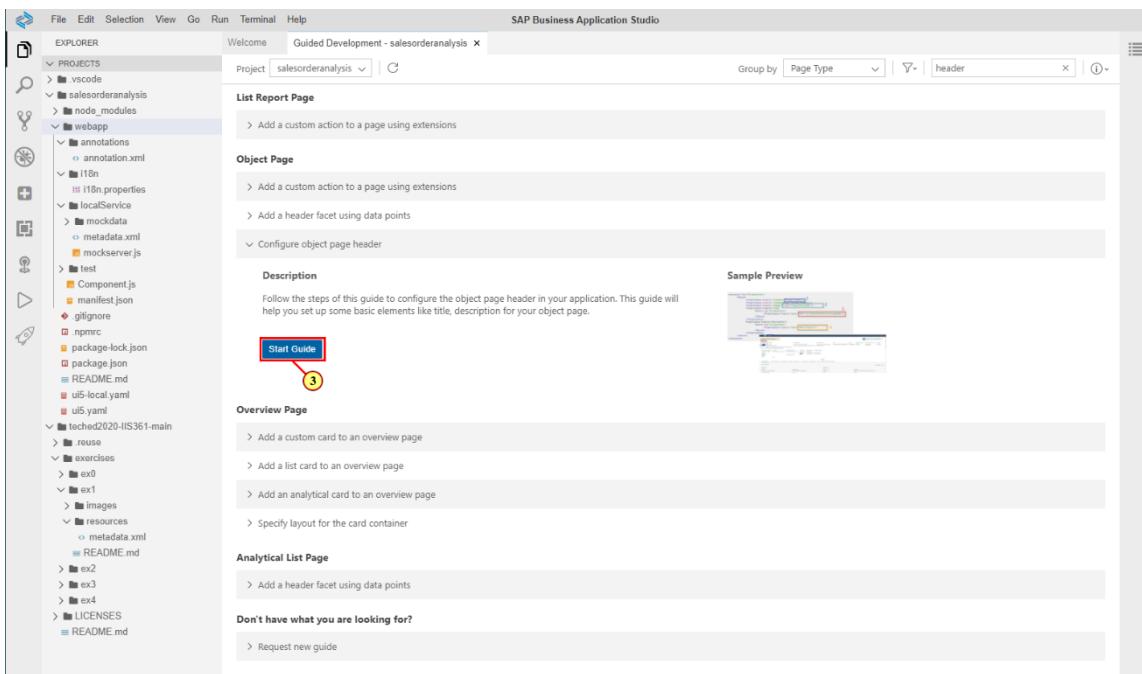
### Exercise 5.1 Define Header Information

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** [> Configure object page header](#) in the **Object Page** group.



## (3) Click Start Guide.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

**Configure object page header**

About Step 1

Guide information Annotate entity with UIHeaderInfo annotation term

Annotate entity with UI.HeaderInfo annotation term

In this step, you will define the information that will be displayed in the header of the object page using `UI.HeaderInfo` annotation term.

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

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

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

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

```
1 <Annotations Target="TECHED_ALP_SO4_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
2 <Annotation Term="UI.HeaderInfo">
3 <Record Type="UI.HeaderInfoType">
4 <PropertyValue Property="TypeName" String="Sales Order Item"/>
5 <PropertyValue Property="TypeNamePlural" String="Sales Order Items"/>
6 <PropertyValue Property="Title">
7 <Record Type="UI.DataField">
8 <PropertyValue Property="Value" Path="SalesOrderItem"/>
9 </Record>
10 <PropertyValue>
11 <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-order-item"/>
12 </PropertyValue>
13 </Record>
14 </Annotation>
15 </Annotations>
```

< Back Next > Exit Guide

## (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.

## Exercise 5.2 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**.

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/
3 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4 </edmx:Reference>
5 <edmx:Reference Uri="/sap/opu/odata/IWFND/CATALOGSERVICE/v2/Vocabularies(
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:DataServices>
12 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
13 <Annotations Target="TECHED_ALP_SO_A_SRV_Z_SEPMRA_SO_SALESORDERANALY
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 </Record>
20 <Record Type="UI.DataField">
21 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
22 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
23 </Record>
24 <Record Type="UI.DataField">
25 <PropertyValue Property="Value" Path="SalesOrder"/>
26 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
27 </Record>
28 <Record Type="UI.DataField">
29 <PropertyValue Property="Value" Path="SalesOrderItem"/>
30 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
31 </Record>
32 <Record Type="UI.DataField">
33 <PropertyValue Property="Value" Path="Product"/>
34 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
35 </Record>
36 <Record Type="UI.DataField">

```

(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.

The screenshot shows the SAP Guided Development interface for the salesorderanalysis project. On the left, there's a sidebar with sections like 'List Report Page', 'Object Page', 'Description', 'Sample Preview', 'Overview Page', 'Analytical List Page', and 'Don't have what you are looking for?'. A 'Start Guide' button is highlighted with a red box and a yellow circle labeled '7'. On the right, the 'annotation.xml' file is displayed with numerous XML code snippets.

```

<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:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(Teched_ALP_SO_ASRV)" />
 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
 <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata" />
 <edmx:Include Namespace="TECHED_ALP_SO_ASRV" />
 <edmx:DataServices>
 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa" />
 <Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSType">
 <Annotation Term="UI.LineItem">
 <Collection>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="SalesOrder"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="SalesOrderItem"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="Product"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="MainProductCategory"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="SoldToParty"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="Quantity"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 <Record Type="UI.DataField">
 <PropertyValue Property="Value" Path="NetAmount"/>
 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/Medium"/>
 </Record>
 </Collection>
 </Annotation>
 </Annotations>
 </Schema>

```

## (7) Click Start Guide.

The screenshot shows the 'Add a header facet using data points' guide. It has three tabs: 'About', 'Step 1', and 'Step 2'. The 'Step 1' tab is active, showing 'Configure UI.DataPoint annotation term'. It includes fields for 'Entity Type' (Z\_SEPMRA\_SO\_SALESORDERANALYSTYPE) and 'Data Point Qualifier' (NetAmount). Below these are dropdowns for 'Property' (NetAmount) and 'Type' (UI.DataPoint). The 'Apply' button is highlighted with a red box and a yellow circle labeled '9'. The XML code on the right shows the annotation term being applied.

```

<Annotations Target="TECHED_ALP_SO_ASRV.Z_SEPMRA_SO_SALESORDERANALYSType">
 <Annotation Term="UI.DataPoint" Qualifier="NetAmount">
 <Record Type="UI.DataPointType">
 <PropertyValue Property="Value" Path="NetAmount"/>
 </Record>
 </Annotation>
</Annotations>

```

## (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**.

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.xml" />
3 <edm:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4 <edmx:Reference Uri="/sap/opu/odata/IWFND/CATALOGSERVICE;v=2/vocabularies/UI.v1.xml" />
5 <edm:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
6 <edmx:Reference Uri="#/here/goes/your/serviceurl/$metadata" />
7 <edm:Include Namespace="TECHED_ALP_SO_A_SRV" />
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_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSISType">
12 <Annotation Term="UI.DataPoint" Qualifier="Status">
13 <Record Type="UI.DataPointType">
14 <PropertyValue Property="Value" Path="SalesOrderOverallStatus"/>
15 </Record>
16 </Annotation>
17 </Annotations>
18 </Schema>
19 </edmx:DataServices>
20 <Collection>
21 <Record Type="UI.DataField">
22 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
23 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
24 </Record>
25 <Record Type="UI.DataField">
26 <PropertyValue Property="Value" Path="SalesOrder"/>
27 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
28 </Record>
29 <Record Type="UI.DataField">
30 <PropertyValue Property="Value" Path="SalesOrderLineItem"/>
31 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
32 </Record>
33 <Record Type="UI.DataField">
34 <PropertyValue Property="Value" Path="Product"/>
35 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
36 </Record>
37 <Record Type="UI.DataField">
38 <PropertyValue Property="Value" Path="MainProductCategory"/>
39 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
40 </Record>
41 <Record Type="UI.DataField">
42 <PropertyValue Property="Value" Path="SoldToParty"/>
43 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
44 </Record>
45 <Record Type="UI.DataField">
46 <PropertyValue Property="Value" Path="Quantity"/>
47 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
48 </Record>
49 <Record Type="UI.DataField">
50 <PropertyValue Property="Value" Path="NetAmount"/>
51 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
52 </Record>
53 </Collection>
54 <Annotation Term="UI.Chart">
55 <Record Type="UI.ChartDefinitionType">
56 <PropertyValue Property="Title" String="#@i18n:revenueB"/>
57 <PropertyValue Property="Description" String="#@i18n:revenueB"/>
58 <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Donut" />
59 <PropertyValue Property="Dimensions">
60 <Collection>
61 <PropertyPath>SoldToParty</PropertyPath>

```

### (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 2**  
Configure UI.HeaderFacets to include data point

**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**

**Annotation XML (Full View)**

```

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/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(TechedAlpSoaSrvZSepmraSoSalesorderAnalysis)" Alias="TECHED_ALP_SOA_SRV" />
6 <edmx:Include Namespace="TECHED_ALP_SOA_SRV" />
7 </edmx:Reference>
8 <edmx:Reference Uri="/here/goes/your/serviceuri/$metadata" />
9 <edmx:Include Namespace="TECHED_ALP_SOA_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_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSType">
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 </Record>
20 <Record Type="UI.DataField">
21 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
22 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
23 </Record>
24 <Record Type="UI.DataField">
25 <PropertyValue Property="Value" Path="SalesOrder"/>
26 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
27 </Record>
28 <Record Type="UI.DataField">
29 <PropertyValue Property="Value" Path="SalesOrderItem"/>
30 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
31 </Record>
32 <Record Type="UI.DataField">
33 <PropertyValue Property="Value" Path="Product"/>
34 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
35 </Record>
36 <Record Type="UI.DataField">
37 <PropertyValue Property="Value" Path="MainProductCategory"/>
38 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
39 </Record>
40 <Record Type="UI.DataField">
41 <PropertyValue Property="Value" Path="SoldToParty"/>
42 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
43 </Record>
44 <Record Type="UI.DataField">
45 <PropertyValue Property="Value" Path="Quantity"/>
46 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
47 </Record>
48 <Record Type="UI.DataField">
49 <PropertyValue Property="Value" Path="NetAmount"/>
50 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow" />
51 </Record>
52 </Collection>
53 </Annotation>
54 </Annotations>
55 <Record Type="UI.ChartDefinitionType">
56 <PropertyValue Property="Title" String="@i18n:revenueB" />
57 <PropertyValue Property="Description" String="@i18n:ne" />
58 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine" />
59 <PropertyValue Property="Dimensions">
60 <Collection>
61 <PropertyPath>SoldToParty</PropertyPath>

```

(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

About 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_SALESORDERANALYSIS...	UI.DataPoint#NetAmount

Apply
Copy
Reset

13

```
1 <Annotations Target="TECHED_ALP_SO_ASRV.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 </Annotation>
9 </Annotations>
```

14

Back
Next >

Exit 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/>
3 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4 </edmx:Reference>
5 <edmx:Reference Uri="sap/opu/odata/INHDF/CATALOGSERVICE/2/Vocabularies(T)">
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_ASRV"/>
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_ASRV.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_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_High" />
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_Low" />
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_Medium" />
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 <Record Type="UI.Chart">
55 <PropertyValue Property="Title" String="#@{118n}revenueB" />
56 <PropertyValue Property="Description" String="#@{118n}revenueB" />
57 <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Donut" />
58 <PropertyValue Property="Dimensions" />
59 <Collection>
60 <PropertyPath>SoldToParty</PropertyPath>
```

(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_Medium" />
28 </Record>
29 <Record Type="UI.DataField">
30 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
31 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
32 </Record>
33 <Record Type="UI.DataField">
34 <PropertyValue Property="Value" Path="SalesOrder"/>
35 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
36 </Record>
37 <Record Type="UI.DataField">
38 <PropertyValue Property="Value" Path="SalesOrderItem"/>
39 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
40 </Record>
41 <Record Type="UI.DataField">
42 <PropertyValue Property="Value" Path="Product"/>
43 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
44 </Record>
45 <Record Type="UI.DataField">
46 <PropertyValue Property="Value" Path="MainProductCategory"/>
47 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
48 </Record>
49 <Record Type="UI.DataField">
50 <PropertyValue Property="Value" Path="SoldToParty"/>
51 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
52 </Record>
53 <Record Type="UI.DataField">
54 <PropertyValue Property="Value" Path="Quantity"/>
55 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
56 </Record>
57 <Record Type="UI.DataField">
58 <PropertyValue Property="Value" Path="NetAmount"/>
59 <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
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_Donut" />
67 <PropertyValue Property="Dimensions">
68 <Collection>
69 <PropertyValue>SoldToParty</PropertyValue>
70 </Collection>
71 </Dimensions>
72 </Record>
73 </Annotation>
74
```

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

(16) Click **Apply**.

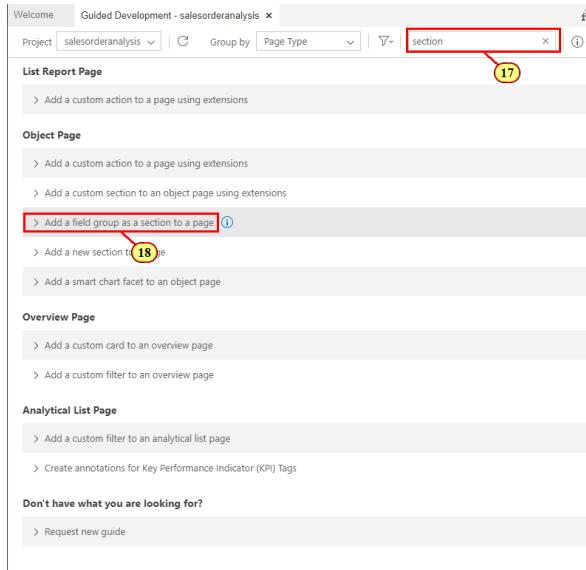
The header of the object page is now configured and you can exit the guide.

(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.

## Exercise 5.3 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**.



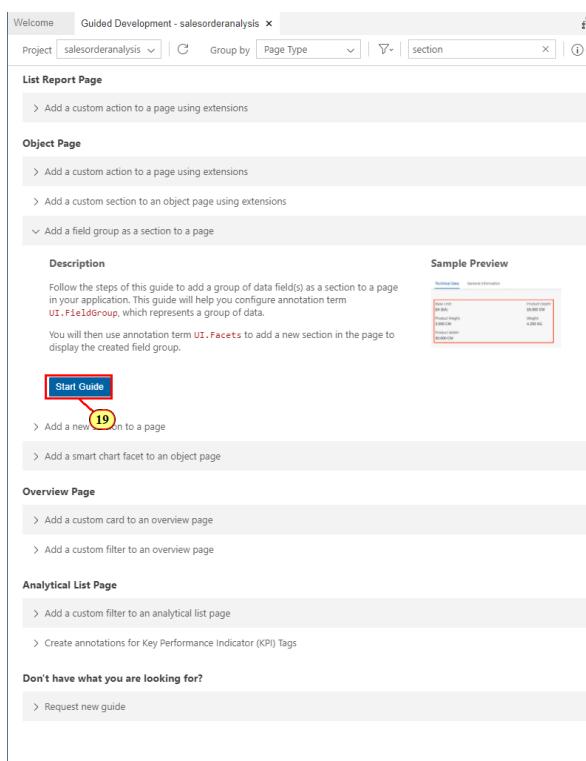
```

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.xml" Alias="Common" />
3 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4 </edmx:Reference>
5 <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(Technical)>" />
6 <edmx:Include Namespace="com.sap.vocabularies.UIC.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: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"/>
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 </Collection>
41 </Annotation>
42 </Schema>
43 </Annotations>
44 </edmx:DataServices>
45
```

(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.xml" Alias="Common" />
3 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4 </edmx:Reference>
5 <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE;v=2/Vocabularies(Technical)>" />
6 <edmx:Include Namespace="com.sap.vocabularies.UIC.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: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"/>
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 </Collection>
41 </Annotation>
42 </Schema>
43 </Annotations>
44 </edmx:DataServices>
45
```

(19) Click **Start Guide**.

Welcome Guided Development - salesorderanalysis x

[Back to Guides](#)

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

**About** Step 1 Configure UI.FieldGroup annotation term to add and group data fields)

**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 \***

**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 *
Select a navigation path	SalesOrder

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

```

Annotations Target="TECHED_ALP_SO_ASRV_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="SalesOrder"/>
 </Record>
 </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/>
3 <Edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4 </Edmx:Reference>
5 <Edmx:Reference Uri="https://sap/opu/odata/v2/vocabularies/TECHED_ALP_SO_ASRV_Z_SEPMRA_SO_SALESORDERANALYSIS.v1" Version="1.0.0">
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_ASRV_Z_SEPMRA_SO_SALESORDERANALYSIS"/>
10 <Edmx:Reference Uri="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa"/>
11 <Annotations Target="TECHED_ALP_SO_ASRV_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.ImportanceHigh"/>
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.ImportanceLow"/>
25 </Record>
26 <Record Type="UI.DataField">
27 <PropertyValue Property="Value" Path="SalesOrderItem"/>
28 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
29 </Record>
30 <Record Type="UI.DataField">
31 <PropertyValue Property="Value" Path="Product"/>
32 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
33 </Record>
34 <Record Type="UI.DataField">
35 <PropertyValue Property="Value" Path="MainProductCategory"/>
36 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
37 </Record>
38 <Record Type="UI.DataField">
39 <PropertyValue Property="Value" Path="SoldToParty"/>
40 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
41 </Record>
42 <Record Type="UI.DataField">
43 <PropertyValue Property="Value" Path="Quantity"/>
44 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
45 </Record>
46 <Record Type="UI.DataField">
47 <PropertyValue Property="Value" Path="NetAmount"/>
48 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceLow"/>
49 </Record>
50 </Collection>
51 </Annotation>
52 </Collection>
53 </Annotations>
54 <Annotation Term="UI.Chart">
55 <Record Type="UI.ChartDefinitionType">
56 <PropertyValue Property="Title" String="#{@118#}revenueB">
57 <PropertyValue Property="Description" String="#{@118#}revenueB">
58 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine"/>
59 <PropertyValue Property="Dimensions">
60 <Collection>
61 <PropertyPath>SoldToParty</PropertyPath>
62 </Collection>
63 </PropertyValue>
64 </Record>
65 </Annotation>
66 <Annotation Term="UI.Chart">
67 <Record Type="UI.ChartDefinitionType">
68 <PropertyValue Property="Title" String="#{@118#}revenueA">
69 <PropertyValue Property="Description" String="#{@118#}revenueA">
70 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine"/>
71 <PropertyValue Property="Dimensions">
72 <Collection>
73 <PropertyPath>SoldToParty</PropertyPath>
74 </Collection>
75 </PropertyValue>
76 </Record>
77 </Annotation>
78 <Annotation Term="UI.Chart">
79 <Record Type="UI.ChartDefinitionType">
80 <PropertyValue Property="Title" String="#{@118#}revenueC">
81 <PropertyValue Property="Description" String="#{@118#}revenueC">
82 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine"/>
83 <PropertyValue Property="Dimensions">
84 <Collection>
85 <PropertyPath>SoldToParty</PropertyPath>
86 </Collection>
87 </PropertyValue>
88 </Record>
89 </Annotation>
90 <Annotation Term="UI.Chart">
91 <Record Type="UI.ChartDefinitionType">
92 <PropertyValue Property="Title" String="#{@118#}revenueD">
93 <PropertyValue Property="Description" String="#{@118#}revenueD">
94 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine"/>
95 <PropertyValue Property="Dimensions">
96 <Collection>
97 <PropertyPath>SoldToParty</PropertyPath>
98 </Collection>
99 </PropertyValue>
100 </Record>
101 </Annotation>
102 <Annotation Term="UI.Chart">
103 <Record Type="UI.ChartDefinitionType">
104 <PropertyValue Property="Title" String="#{@118#}revenueE">
105 <PropertyValue Property="Description" String="#{@118#}revenueE">
106 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine"/>
107 <PropertyValue Property="Dimensions">
108 <Collection>
109 <PropertyPath>SoldToParty</PropertyPath>
110 </Collection>
111 </PropertyValue>
112 </Record>
113 </Annotation>

```

[Back](#) [Next](#) [Exit Guide](#)

(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

**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\_SALESORDERANALYSI... ▾

**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**  
Select a navigation path ▾  
Property \* SalesOrder ▾

**Apply** (21) **Copy** **Reset** (22)

```

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>
7 <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
8 <edmx:Include Namespace="TECHED_ALP_SO4_SRV"/>
9 </edmx:Reference>
10 <edmx:DataService>
11 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
12 <Annotations Target="TECHED_ALP_SO4_SRV.Z_SEPMRA_SO_SALESORDERANALYSI...>
13 <Annotation Term="UI.LineItem">
14 <Collection>
15 <Record Type="UI.DataField">
16 <PropertyValue Property="Value" Path="DeliveryCalendarDate"/>
17 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
18 </Record>
19 <Record Type="UI.DataField">
20 <PropertyValue Property="Value" Path="SalesOrder"/>
21 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
22 </Record>
23 <Record Type="UI.DataField">
24 <PropertyValue Property="Value" Path="SalesOrderItem"/>
25 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
26 </Record>
27 <Record Type="UI.DataField">
28 <PropertyValue Property="Value" Path="Product"/>
29 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
30 </Record>
31 <Record Type="UI.DataField">
32 <PropertyValue Property="Value" Path="MainProductCategory"/>
33 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
34 </Record>
35 <Record Type="UI.DataField">
36 <PropertyValue Property="Value" Path="SoldToParty"/>
37 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
38 </Record>
39 <Record Type="UI.DataField">
40 <PropertyValue Property="Value" Path="Quantity"/>
41 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
42 </Record>
43 <Record Type="UI.DataField">
44 <PropertyValue Property="Value" Path="NetAmount"/>
45 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
46 </Record>
47 <Record Type="UI.DataField">
48 <Collection>
49 <Record Type="UI.DataField">
50 <PropertyValue Property="Value" Path="Dimensions"/>
51 <Annotation Term="UI.Importance" EnumMember="UI.Importance_High"/>
52 </Record>
53 </Collection>
54 </Record>
55 <Annotation Term="UI.Chart">
56 <Record Type="UI.ChartDefinitionType">
57 <PropertyValue Property="Title" String="@i18n:revenueB"/>
58 <PropertyValue Property="Description" String="@i18n:netRevenueB"/>
59 <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Bubble"/>
60 <PropertyValue Property="Dimensions">
61 <Collection>
62 <PropertyValue Path="SoldToParty"/>
63 </Collection>
64 </PropertyValue>
65 </Record>
66 </Annotation>
67 </Collection>
68 </Annotation>
69 </Annotations>
70 </Schema>
71 </edmx:DataService>
72</edmx:Edmx>

```

< Back Next > **Exit Guide**

(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**

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

**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

(23)

**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\_SALESORDERANALYSISI...

**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: Select a navigation path / NetAmount

**Annotation XML**

```

1 <Annotations Target="TECHED_ALP_SO_A_SRV_Z_SEPMRA_SO_SALESORDERANALYSISIType">
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="NetAmount"/>
8 </Record>
9 </Collection>
10 <PropertyValue>
11 </Record>
12 </Annotation>
13 </Annotations>
14
15 <Record>
16 <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-ord">
17 </Record>
18 <Annotation Term="UI.DataPoint" Qualifier="NetAmount">
19 <Record Type="UI.DataPointType">
20 <PropertyValue Property="Value" Path="NetAmount"/>
21 </Record>
22 </Annotation>
23 <Annotation Term="UI.DataPoint" Qualifier="Status">
24 <Record Type="UI.DataPointType">
25 <PropertyValue Property="Value" Path="SalesOrderOverallStatus"/>
26 </Record>
27 </Annotation>
28 <Annotation Term="UI.HeaderFacets">
29 <Collection>
30 <Record Type="UI.ReferenceFacet">
31 <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint">
32 </Record>
33 <Record Type="UI.ReferenceFacet">
34 <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint">
35 </Record>
36 </Collection>
37 </Annotation>
38 <Annotation Term="UI.FieldGroup" Qualifier="General">
39 <Record Type="UI.FieldGroupType">
40 <PropertyValue Property="Data">
41 <Collection>
42 <Record Type="UI.DataField">
43 <PropertyValue Property="Value" Path="SalesOrder"/>
44 </Record>
45 <Record Type="UI.DataField">
46 <PropertyValue Property="Value" Path="DeliveryCalendar"/>
47 </Record>
48 <Record Type="UI.DataField">
49 <PropertyValue Property="Value" Path="GrossAmount"/>
50 </Record>
51 <Record Type="UI.DataField">
52 <PropertyValue Property="Value" Path="NetAmount"/>
53 </Record>
54 </Collection>
55 </Record>
56 </Annotation>
57 </Annotations>
58 <Annotations Target="TECHED_ALP_SO_A_SRV_SEPMRA_SO_ALP_SLDORDERITEHType">
59 <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
60 <Record Type="UI.ChartDefinitionType">
61 <PropertyValue Property="Title" String="#@11n#quantityByDeliveryDate"/>
62 <PropertyValue Property="Description" String="#@11n#itemQuantityByDeliveryDate"/>
63 <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
64 <PropertyValue Property="Dimensions">
65 <Collection>
66 <Record>
67 <PropertyValue>
68 <PropertyPath>DeliveryDate</PropertyPath>
69 </Record>
70 </Collection>
71 </Dimensions>
72 <PropertyValue>
73 <PropertyPath>Measures</PropertyPath>
74 </PropertyValue>
75 <Collection>
76 <Record>
77 <PropertyValue>
78 <PropertyPath>Quantity</PropertyPath>
79 </Record>
80 </Collection>
81 </Collection>
82 </Record>
83 </Annotation>
84 </Annotations>
85
```

(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.

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 \*** `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`

**Annotations**

```

1 Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_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="25"/>
7 <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
8 </Record>
9 </Collection>
10 </Annotation>
11 </Annotations>

```

**annotation xml**

```

114 </Record>
115 <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-order" />
116 </Annotation>
117 <Annotation Term="UI.DataPoint" Qualifier="NetAmount">
118 <Record Type="UI.DataPointType">
119 <PropertyValue Property="Value" Path="NetAmount" />
120 </Record>
121 </Annotation>
122 <Annotation Term="UI.DataPoint" Qualifier="Status">
123 <Record Type="UI.DataPointType">
124 <PropertyValue Property="Value" Path="SalesOrderOverallStatus" />
125 </Record>
126 </Annotation>
127 </Annotation>
128 <Annotation Term="UI.HeaderFacets">
129 <Collection>
130 <Record Type="UI.ReferenceFacet">
131 <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#NetAmount" />
132 </Record>
133 <Record Type="UI.ReferenceFacet">
134 <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#SalesOrderOverallStatus" />
135 </Record>
136 </Collection>
137 </Annotation>
138 <Annotation Term="UI.FieldGroup" Qualifier="General">
139 <Record Type="UI.FieldgroupType">
140 <PropertyValue Property="Data">
141 <Collection>
142 <Record Type="UI.DataField">
143 <PropertyValue Property="Value" Path="SalesOrder" />
144 </Record>
145 <Record Type="UI.DataField">
146 <PropertyValue Property="Value" Path="DeliveryCalendar0" />
147 </Record>
148 <Record Type="UI.DataField">
149 <PropertyValue Property="Value" Path="GrossAmount" />
150 </Record>
151 <Record Type="UI.DataField">
152 <PropertyValue Property="Value" Path="NetAmount" />
153 </Record>
154 </Collection>
155 </PropertyValue>
156 </Record>
157 </Annotation>
158 </Annotations>
159 <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_ALP_SLDORDERITEMType">
160 <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
161 <Record Type="UI.ChartDefinitionType">
162 <PropertyValue Property="Title" String="@(i18n)quantityByDeliveryDate" />
163 <PropertyValue Property="Description" String="@(i18n)itemQuantityByDeliveryDate" />
164 <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line" />
165 <PropertyValue Property="Dimensions">
166 <Collection>
167 <PropertyValue Property="DeliveryDate" />
168 </Collection>
169 </Dimensions>
170 <Collection>
171 <PropertyValue Property="Measures">
172 <Collection>
173 <PropertyValue Property="Quantity" />
174 </Collection>
175 </Measures>
176 </Collection>
177 </Record>
178 </Annotation>
179 </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**  
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 **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 \*** 26  
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 \*** 27  
UI.FieldGroup#General

**Apply** **Copy** **Reset** 28 Code snippet has been successfully applied

```
1 <Annotations Target="TECHED_ALP_SO_ASRV.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>
```

**annotation.xml**

```
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 <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_SO_ASRV.Z_SEPHRA_SO_SALESORDERITEMType">
169 <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
170 <Record Type="UI.ChartDefinitionType">
171 <PropertyValue Property="Title" String="@{i18n}quantityByDeliveryDate"/>
172 <PropertyValue Property="Caption" String="@{i18n}itemQuantityByDate"/>
173 <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
174 <PropertyValue Property="YAxisLabel" String="Quantity"/>
175 </Record>
176 </Annotation>
177 </Annotations>
```

< Back Next > Exit Guide

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

```

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="#@18n:quantityByDeliveryDate" />
172 <PropertyValue Property="Description" String="#@18n: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 \***  
Select a navigation path    
Property Path

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

```

1 <Annotations Target="TECHED_ALP_SO_ASRV.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>

```

Back Next > Exit Guide

**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_ASRV.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.DimensionAttributeType">
200 <PropertyValue Property="Name" Value="DeliveryDate"/>
201 </Record>
202 </Collection>
203 </PropertyValue>
204 <PropertyValue Property="Measures">
205 <Collection>
206 <Record Type="UI.MeasureAttributeType">
207 <PropertyValue Property="Name" Value="Quantity"/>
208 </Record>
209 </Collection>
210 </PropertyValue>
211 <PropertyValue Property="MeasureAttributes">
212 <Collection>
213 <Record Type="UI.ChartMeasureAttributeType">
214 <PropertyValue Property="Measure" PropertyPath="Quantity"/>
215 <PropertyValue Property="DataPoint" AnnotationPath="@UI.MeasureAttributeType/Value"/>
216 </Record>
217 </Collection>
218 </PropertyValue>
219 </Record>
220 </Annotation>
221 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
222 <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.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

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

<b>About</b>	<b>Step 1</b> Configure UI.FieldGroup annotation term to add and group data field(s)	<b>Step 2</b> 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 \*** 

Z\_SEPMRA\_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 \*** 

UI.FieldGroup#Product 

**Apply** **Copy** **Reset**  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 <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 </Collection>
14 </Annotation>
15 </Annotations>
16 <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
17 <Record Type="UI.PresentationVariantType">
18 <PropertyValue Property="Measure" PropertyPath="Quantitative"/>
19 <PropertyValue Property="DataPoint" AnnotationPath="@UI

```

**Annotation.xml**

```

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```

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

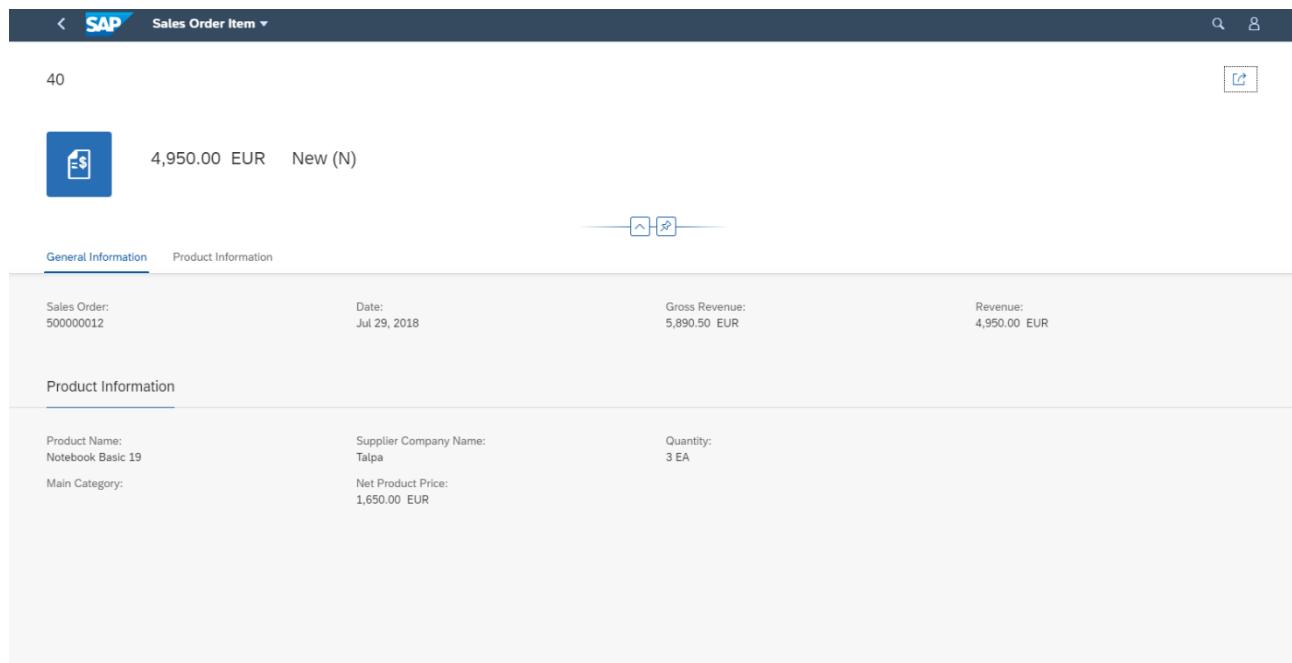
Field	Value
Label	Product Information
ID	PI
Field Group	UI.FieldGroup#Product

(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.



## Exercise 5.4 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 Share-ActionSheet 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' (which is 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.