

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'.

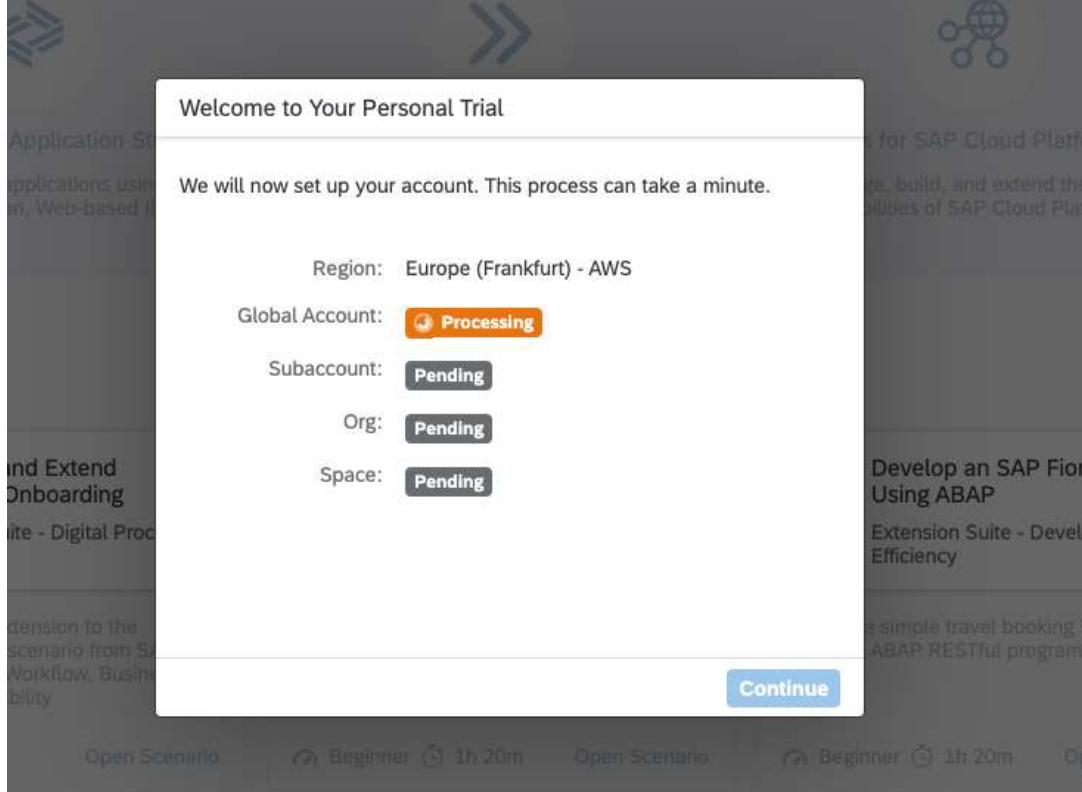
Set up Business Application Studio in an SAP Cloud Platform Trial Account

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

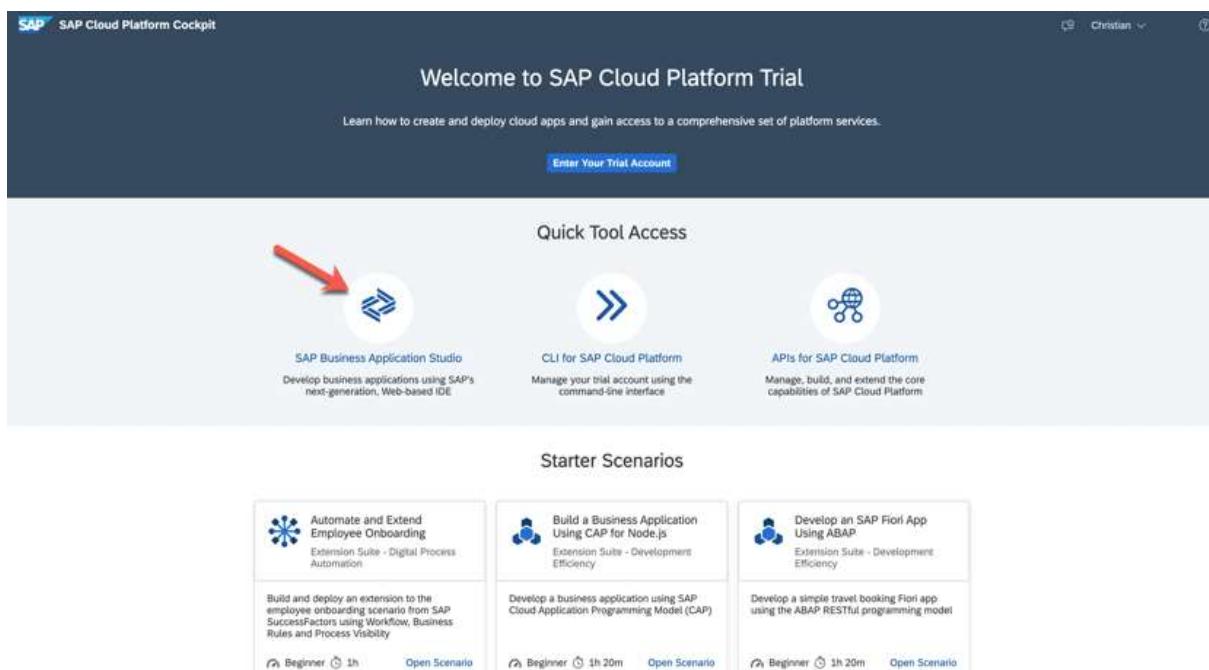
In your subaccount,

- 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.

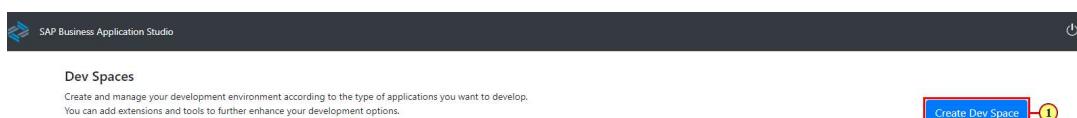
Access SAP Business Application Studio

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



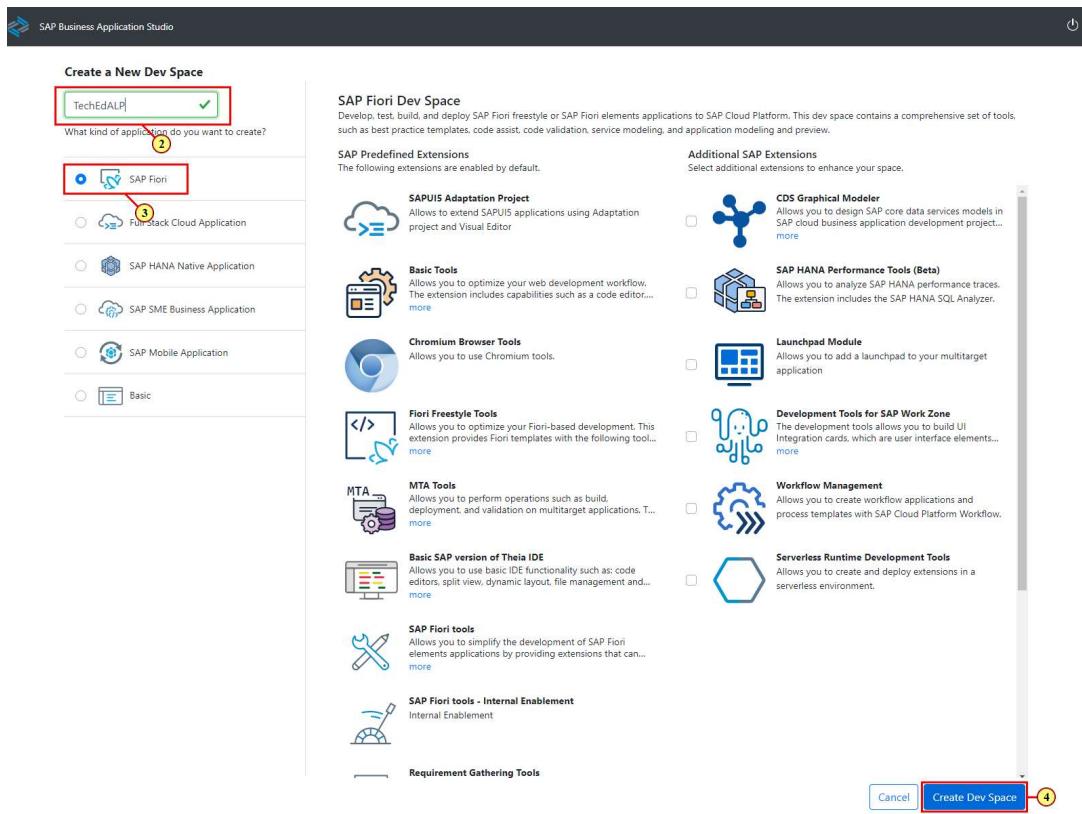
The screenshot shows the SAP Cloud Platform Trial interface. At the top, it says "Welcome to SAP Cloud Platform Trial" and "Enter Your Trial Account". Below this is the "Quick Tool Access" section, which includes icons for SAP Business Application Studio (with a red arrow pointing to it), CLI for SAP Cloud Platform, and APIs for SAP Cloud Platform. Underneath is the "Starter Scenarios" section, which lists three scenarios: Automate and Extend Employee Onboarding, Build a Business Application Using CAP for Node.js, and Develop an SAP Fiori App Using ABAP.

Create Dev Space



The screenshot shows the SAP Business Application Studio interface. At the top, it says "SAP Business Application Studio". Below this is the "Dev Spaces" section, which contains instructions: "Create and manage your development environment according to the type of applications you want to develop. You can add extensions and tools to further enhance your development options." To the right of the instructions is a blue "Create Dev Space" button with a red box around it and a red number "1" indicating a notification.

(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**.

The screenshot shows the SAP Business Application Studio interface displaying the list of created development spaces. The 'TechEdALP' dev space is listed and highlighted with a red box and a circled '5'.

- (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](#).

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.
Open Workspace

New Terminal Ctrl+`

- Run Task 8
- Run Build Task...
- Run Test Task...
- Run Last Task Ctrl+Shift+K
- Show Running Tasks...
- Restart Running Task...
- Terminate Task...
- Attach Task...
- Configure Tasks...

More...

Studio
business apps

Help Documentation

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

```
user: projects $ git clone https://github.com/SAP-samples/teched2020-IIS361.git
```

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

SAP-samples / teched2020-IIS361

Code Issues Pull requests Actions Projects Security Insights

main · 7 branches · 0 tags

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

Open with GitHub Desktop

Download ZIP

MN-public Updated screenshot for ex5

.reuse

LICENSES

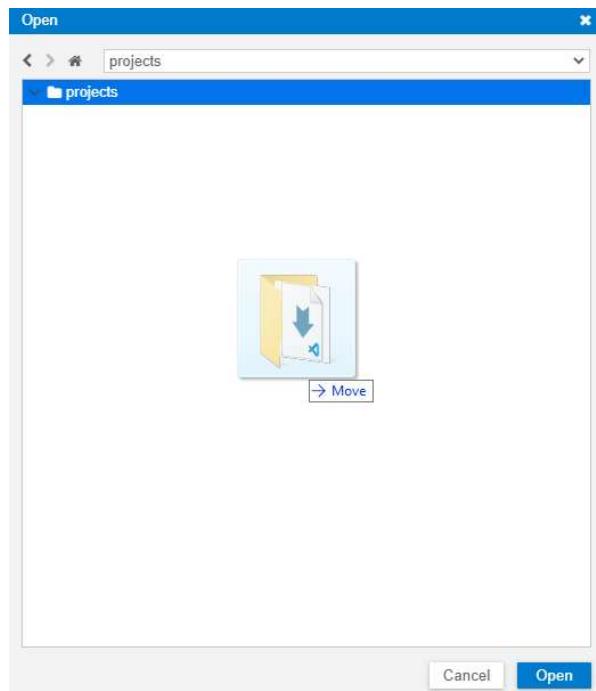
exercises

README.md

README.md

IIS361 - Create Analytical SAP Fiori Apps Quickly and Efficiently

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



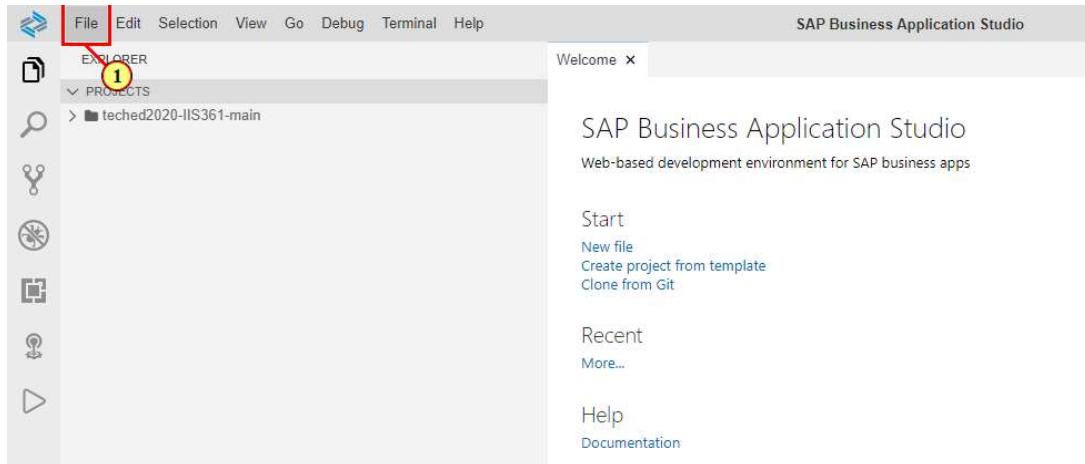
Summary

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

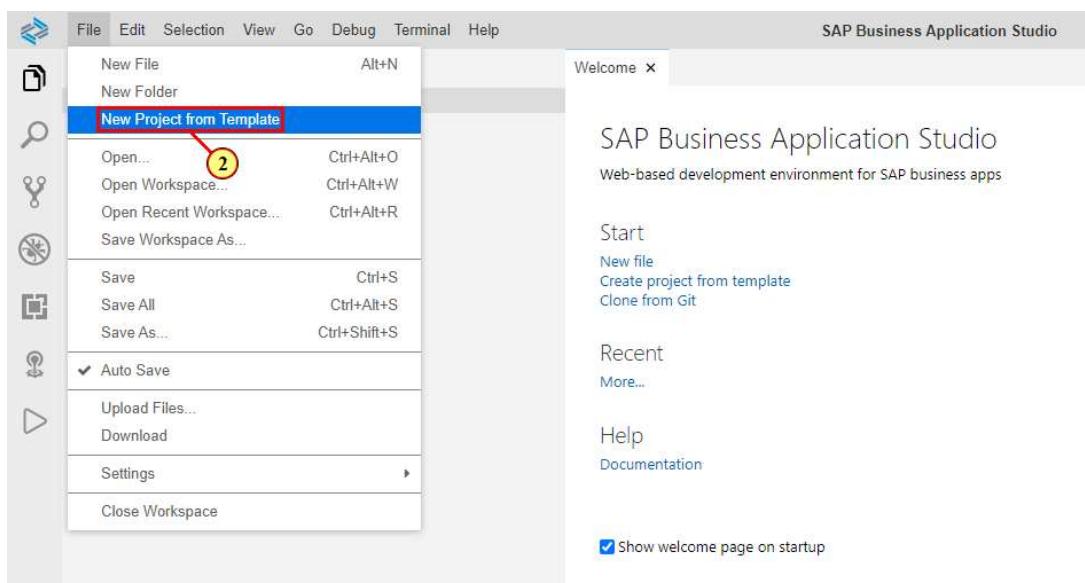
Exercise 1 - Generating a Fiori elements app

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

Exercise 1.1 Using the UI Generator



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



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

Select Template and Target Location

Select the template that best fits the type of application you want to develop.
The template will be generated in the folder specified below and it will contain the relevant files and configurations that will help you create a project quickly and easily.

Specify a target folder path ② *

/home/user/projects

Templates ③ *

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 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 ② *

/home/user/projects

Templates ③ *

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

[More Information](#)**SAP Fiori freestyle SAPUI5 application**

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

[More Information](#)**Next > ④**

(4) Click **Next**.

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.

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

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

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

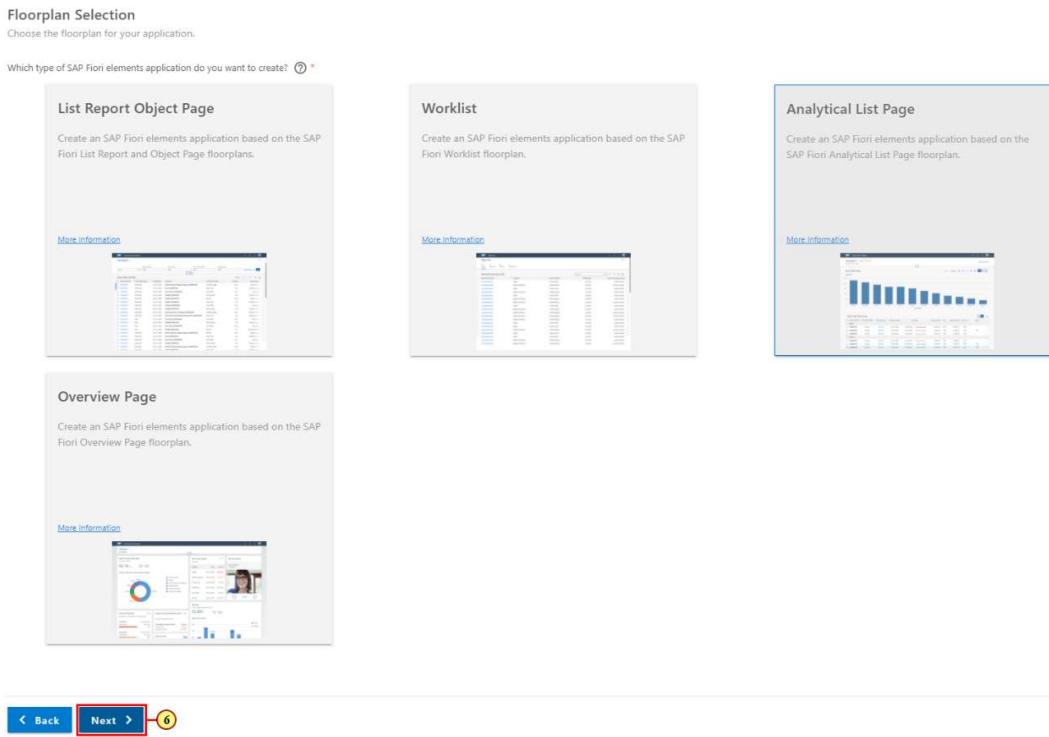
More Information

More Information

More Information

< Back Next >

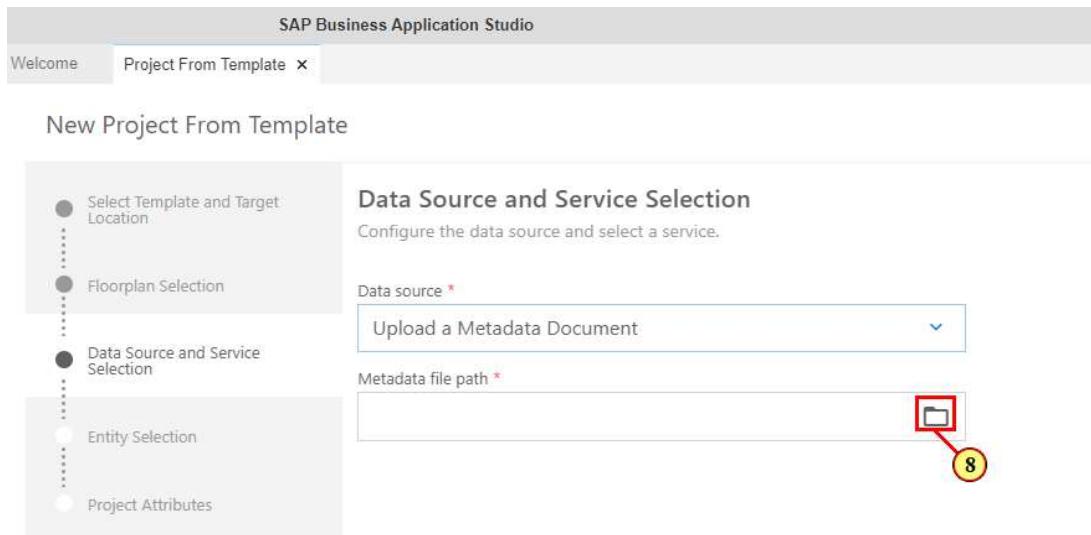
(5) In the template selection, click on the tile **Analytical List Page**.



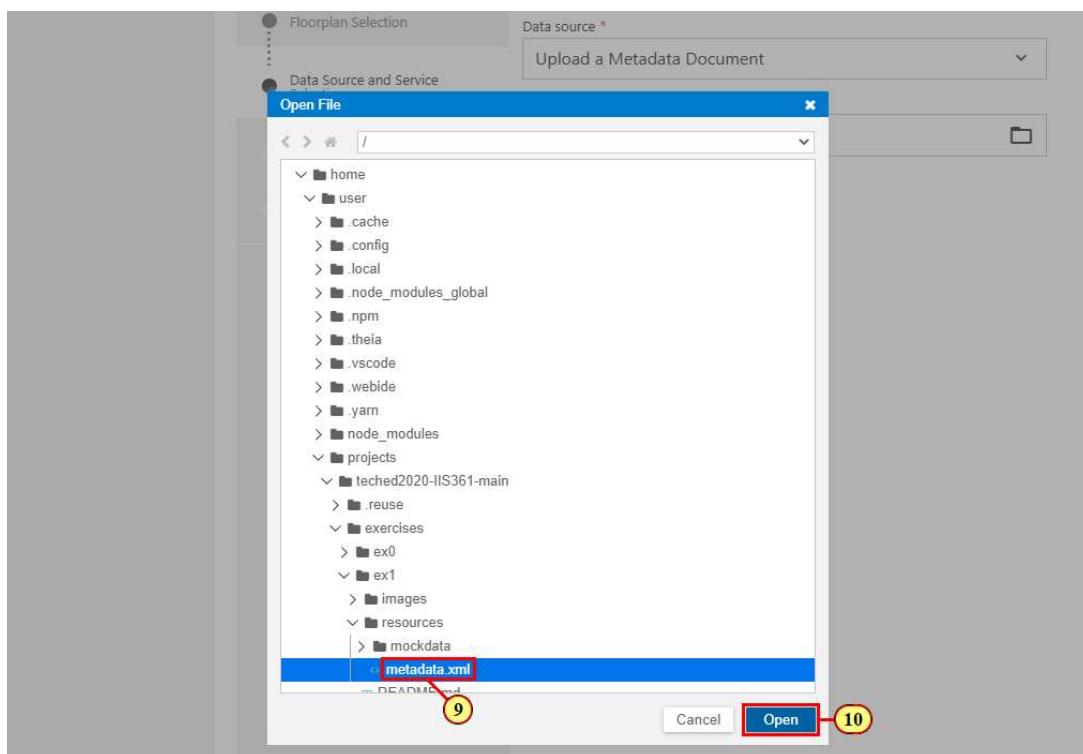
(6) Click Next.

The screenshot shows the 'Data Source and Service Selection' step of the 'New Project From Template' wizard in SAP Business Application Studio. The left sidebar shows the steps: Select Template and Target Location, Floorplan Selection, Data Source and Service Selection (highlighted), Entity Selection, and Project Attributes. The main area shows the 'Data Source and Service Selection' configuration screen. A red box highlights the 'Data source *' dropdown, which contains the option 'Upload a Metadata Document'. A yellow circle with the number '6' points to this dropdown.

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

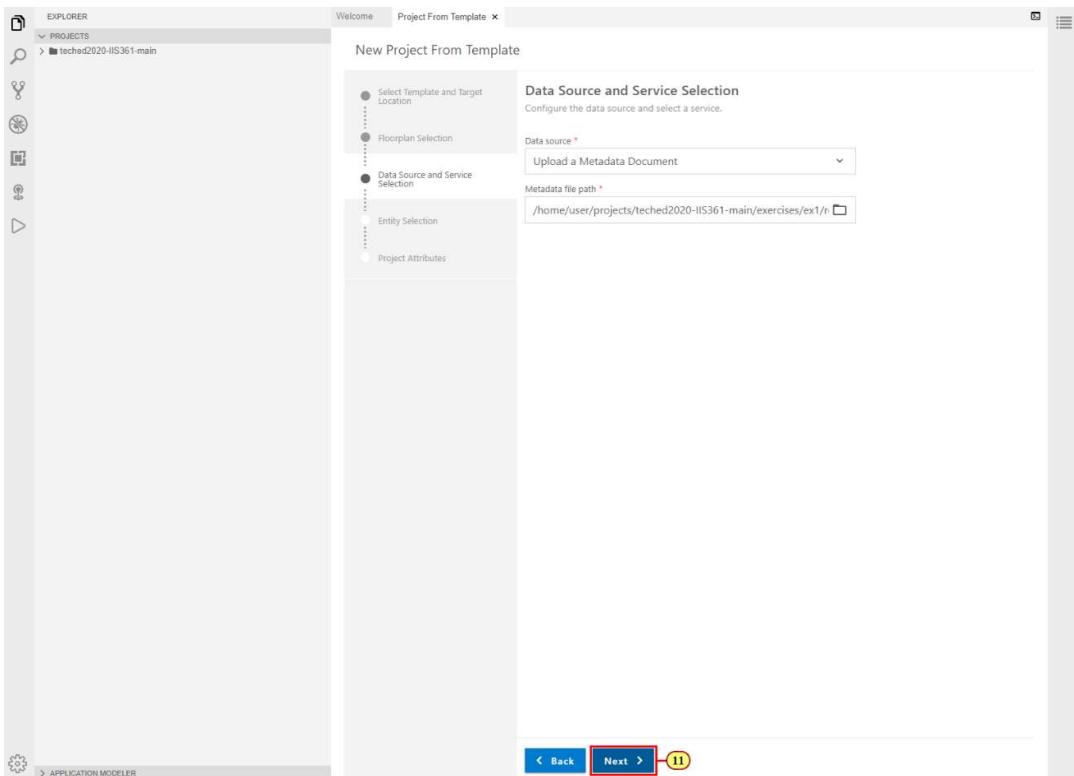


(8) Click **Browse for Files** icon to select the metadata file from the tecched sample scenario folder.



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

(10) Click **Open**.



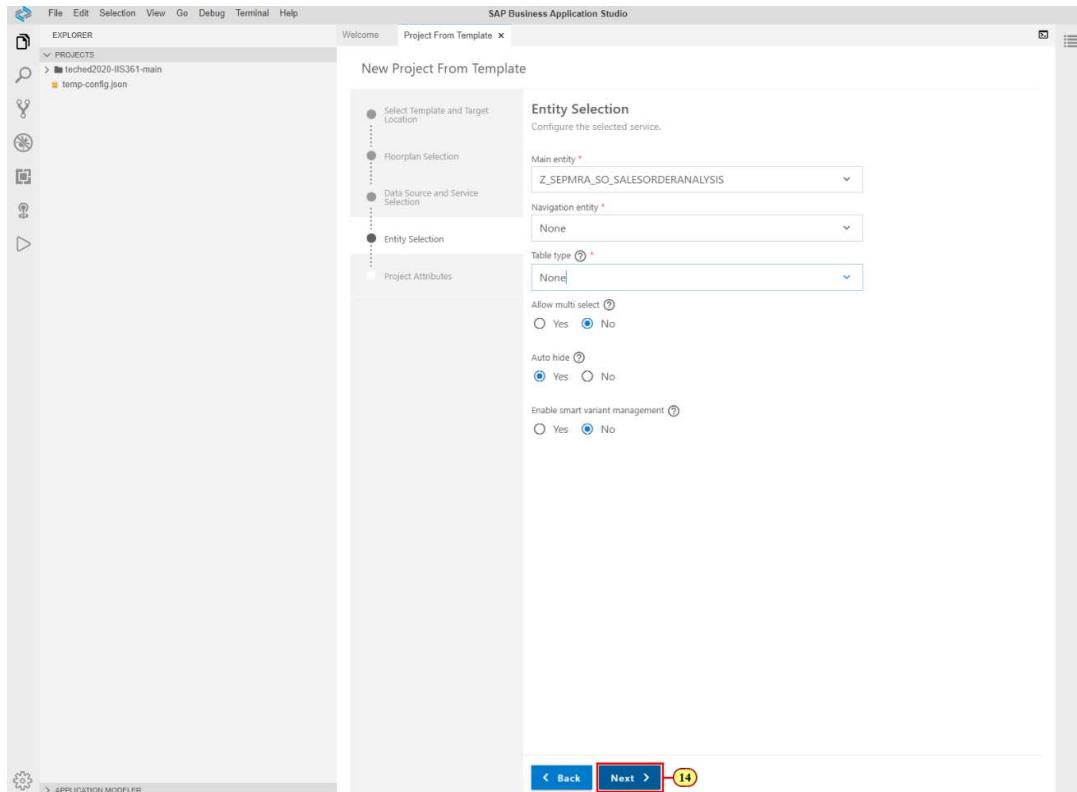
(11) Click **Next**.

New Project From Template

| | |
|---|---|
| Select Template and Target Location Floorplan Selection Data Source and Service Selection Entity Selection Project Attributes | Entity Selection Configure the selected service. Main entity * Z_SEPMRA_SO_SALESORDERANALYSIS 12 Navigation entity * None Table type None 13 Allow multi select <input type="radio"/> Yes <input checked="" type="radio"/> No Auto hide <input checked="" type="radio"/> Yes <input type="radio"/> No Enable smart variant management <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.



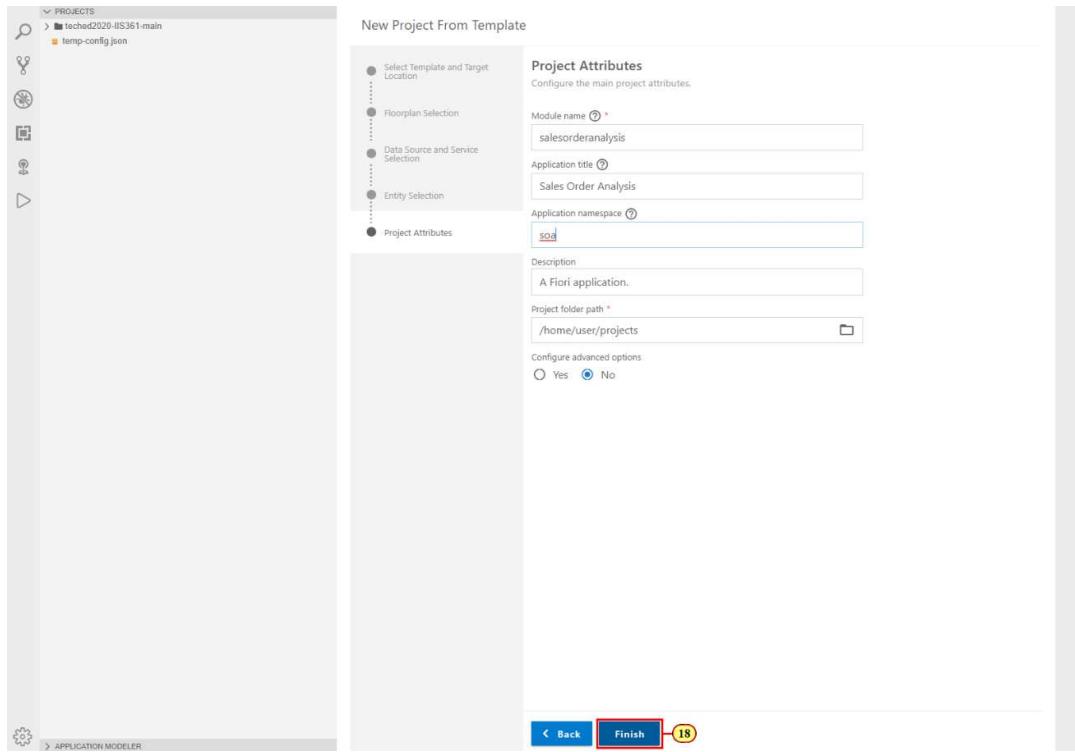
- (14) Click **Next**.

New Project From Template

Project Attributes
Configure the main project attributes.

| | | |
|----------------------------|---|----|
| Module name ② * | salesorderanalysis | 15 |
| Application title ③ | Sales Order Analysis | |
| Application name ④ | soa | 16 |
| Description ⑤ | A Fiori application. | 17 |
| Project folder path * | /home/user/projects | |
| Configure advanced options | <input type="radio"/> Yes <input checked="" type="radio"/> No | |

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

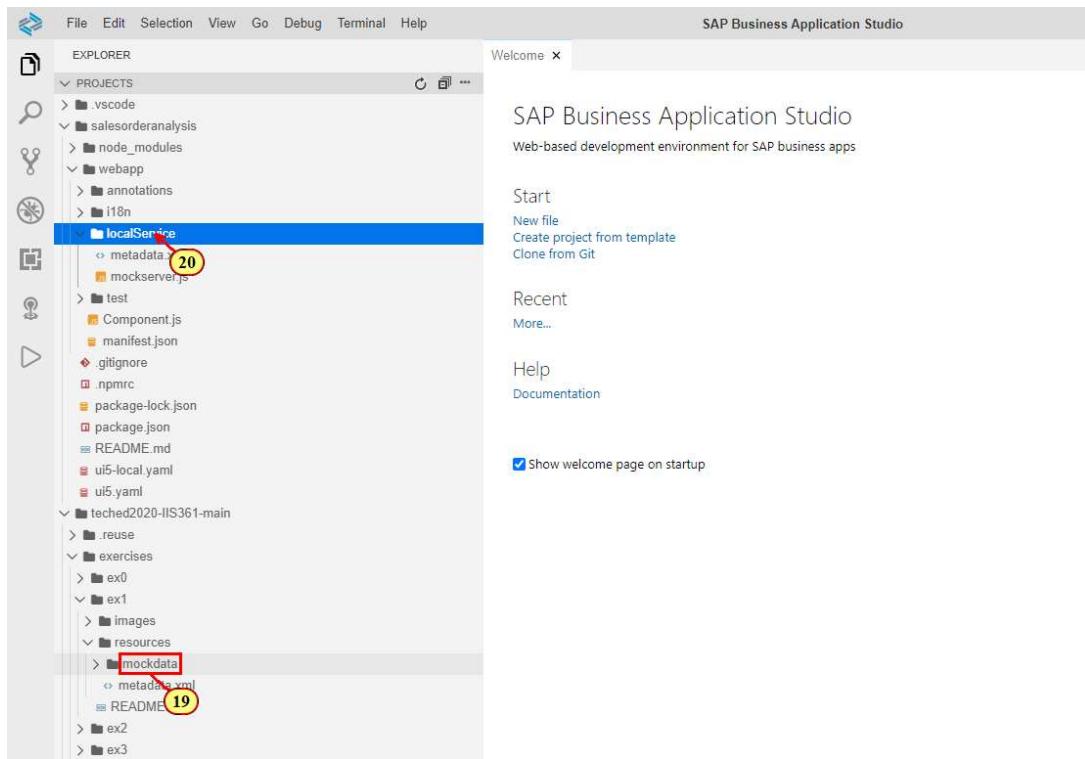


- (18) Click **Finish**. The project gets generated.

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.



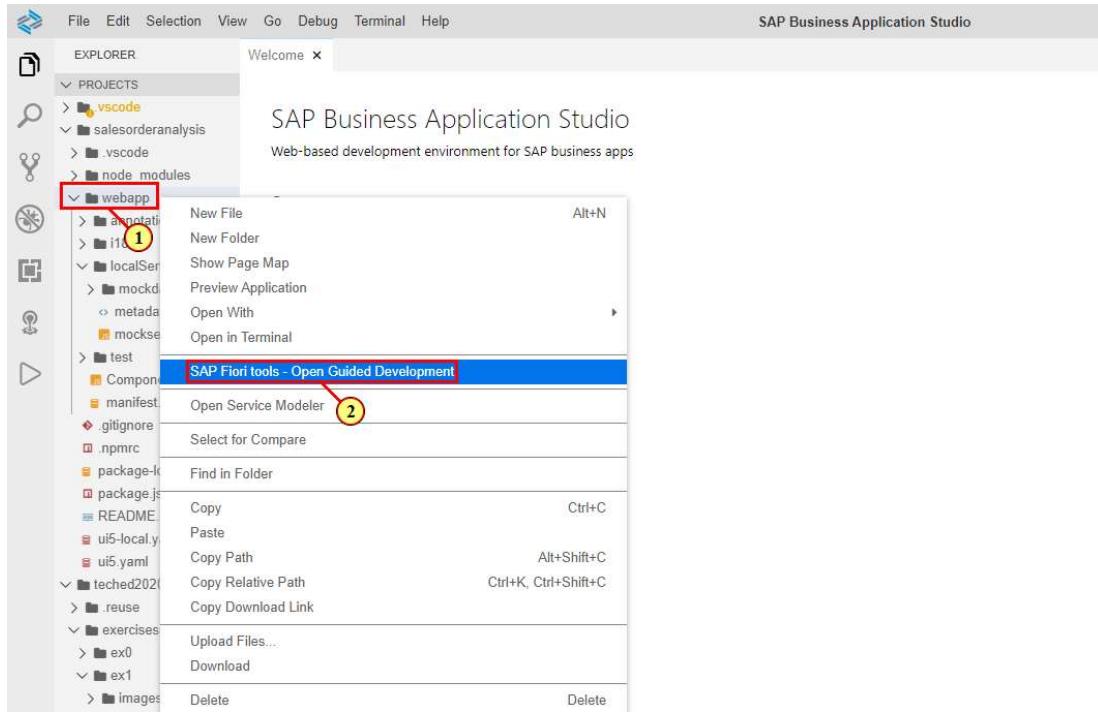
- (19) Expand the folder **teched2020-IIS361->exercises->ex1->resources**.
 (20) Expand the newly created project folder **salesorderanalysis->webapp->localService**. Drag the **mockdata** folder to the localService folder in your generated project.

Summary

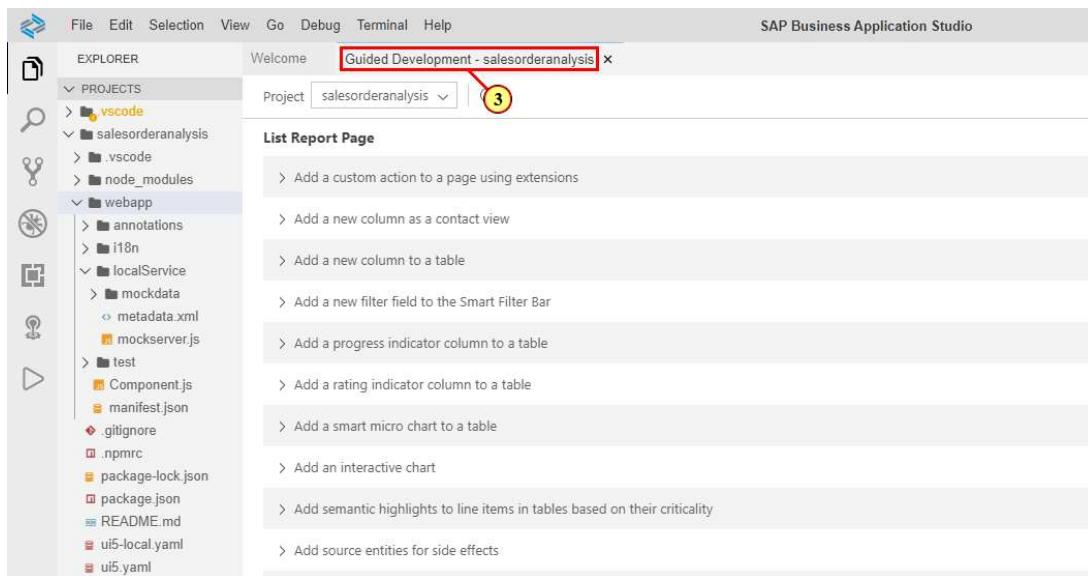
You have successfully generated a Fiori elements application based on the Analytical List Page and Object Page floorplans. In the next exercise, you will configure the content of the Alalytical List Page. Continue to [Exercise 2 – Configure Content Area of Analytical List Page](#)

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 navigation bar. A search bar at the top right contains the text 'table'. A red box highlights the search bar, and a yellow circle with the number '4' is positioned above it, indicating a step. Below the search bar, there is a list of guides under the 'List Report Page' section, which includes various options for modifying tables and lists.

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



This screenshot shows the same guided development interface as the previous one, but with the 'Analytical List Page' group expanded. Within this group, the guide 'Add a new column to a table' is highlighted with a red box and a yellow circle with the number '5', indicating the next step. Other guides in the list include 'Enable table to auto load data', 'Re-order columns in a table', 'Set selection limit for tables', 'Set the table type of tables', 'Add a list card to an overview page', 'Add a table card to an overview page', 'Specify layout for the card container', 'Add an interactive chart', 'Enable select all in tables', and 'Set selection limit for tables'. The 'Worklist Page' group is also visible at the bottom.

(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

› 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 | Step 1 |
|-------------------|---|
| Guide information | 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 selecting, 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 *

Select an entity type for the table

- SEPMRA_C_ALP_SalesOrderType
- SEPMRA_C_ALP_StatusVHType
- SEPMRA_C_ALP_SupplierVHType
- SEPMRA_C_ALP_TotalSalesKPIType
- SEPMRA_J_ProductMainCategoryType
- SEPMRA_SO_ALP_SLOORDITEMType
- Z_SEPMRA_SO_ALP_TOTALSALESKPIType
- Z_SEPMRA_SO_SALESORDERANALYSIS**

Z_SEPMRA_SO_SALESORDERANALYSIS

7

Apply Copy Reset

1 `<Annotations target="REPLACE_WITH_ENTITY_TYPE">`

2 `<Annotation Term="UI.LineItem">`

3 `<Collection>`

4 `<!-- Existing columns -->`

5 `<!-- New column -->`

6 `<Record Type="UI.DataField">`

7 `<PropertyValue Property="Value" Path="REPLACE_WITH_NEW_COLUMN_PROPERTY"/>`

8 `<Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High"/>`

9 `</Record>`

10 `</Collection>`

11 `</Annotation>`

12 `</Annotations>`

13

14

15

Back

Next >

Exit Guide

(7) In the Entity Type field, choose your main entity type **Z_SEPMRA_SO_SALESORDERANALYSIS**.

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 *

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

Select a navigation path

Property *

Select a property for the new column

UI Importance

High

```

Apply Copy Reset

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

```

The code snippet shows the XML structure for adding a new column. Step 8 is highlighted with a yellow circle.

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 its already defined in the local or server-defined annotation source for your selected entity type.

Entity Type *

Z_SEPMRA_SO_SALESORDERANALYS...

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

```

1 Annotations Targets="TECHED_ALP_SO_ASRV.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      </Collection>
13    </Annotations>
14  </Annotation>
15 </Annotations>

```

Apply **Copy** **Reset**

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

(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 Fiori Guided Development interface for 'Guided Development - salesorderanalysis'. The current step is 'Add a new column to a table'. The left pane contains a 'About' section with 'Step 1' instructions: 'Add a new record to the UI.LineItem annotation term'. Below this, there's a note about the XML annotation file being under 'webapp/annotations'. The right pane shows the XML code for 'annotation.xml'.

```

1 <Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE/v2/Vocabularies/TECHED_ALP_SOA_SRV.svc" Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
3     <edmx:Reference Uri="UI/LineItem" Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/here/goes/your/serviceuri/$metadata">
6     <edmx:Include Namespace="TECHED_ALP_SOA_SRV"/>
7   </edmx:Reference>
8   <edmx:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPHRA_SO_SALESORDERANALYS">
11         <Annotation Term="UI.LineItem">
12           <Collection>
13             <Record Type="UI.DataField">
14               <PropertyValue Property="Value" Path="DeliveryCalendarMonth">
15                 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High"/>
16               </PropertyValue>
17             </Record>
18           </Collection>
19         </Annotation>
20       </Annotations>
21     </Schema>
22   </edmx:DataServices>
23 </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 `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 * `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_SOASRVR_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    </Annotations>
12  </edm:Edm>

```

Exit Guide ⑩

(11) 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 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 ⑬ for visual filter

Worklist Page

- > Add a smart micro chart to a table

annotation.xml x

```

1 <Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edm:Reference Uri="/sap/opu/odata/InPND/CATALOGSERVICE;v=2/vocabularies/Te...
3     <edm:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
4   </edm:Reference>
5   <edm:Reference Uri="/here/goes/your/serviceurl/$metadata">
6     <edm:Include Namespace="TECHED_ALP_SOASRVR" />
7   </edm:Reference>
8   <edm:DataService>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SOASRVR_Z_SEPMRA_SO_SALESORDERANALYSIS...
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       </Annotations>
53     </edm:DataService>
54   </Edmx>

```

(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

13

> Add semantic coloring for visual filter

Worklist Page

> Add a smart micro chart to a table

(13) Click **Start Guide**.

Add an interactive chart

XML Annotation CDS Annotation

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

Apply Copy Reset 14

```

Annotations Target="TECHED_ALP_SO4_SRV.Z_SEPMRA_SO_SALESORDERANALYSISISType">
  <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>

```

< Back Next > Exit Guide

(14) Enter the following values:

| Field | Value |
|---------------------|------------------------------------|
| Entity Type | SEPMRA_SO_SALESORDERANALYSISISType |
| 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

About Guide information 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 * **Chart Title**
Z_SEPMRA_SO_SALESORDERANALYS... Revenue by Customer

Chart Description **Chart Type ***
Net Revenue by Customer Column

Measures Property * **Dimensions Property**
NetAmount SoldToParty

Dimensions Property
DeliveryCalendarYear

Annotations

```

1 <Annotations Target="TECHED_ALP_SO4_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS1Type">
2   <Annotation Term="UI.Chart">
3     <Record Type="UI.ChartDefinitionType">
4       <PropertyValue Property="Title" String="Revenue by Customer"/>
5       <PropertyValue Property="Description" String="Net Revenue by Customer"/>
6       <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column"/>
7       <PropertyValue Property="Dimensions">
8         <Collection>
9           <PropertyPath>SoldToParty</PropertyPath>
10          <PropertyPath>DeliveryCalendarYear</PropertyPath>
11        </Collection>
12      </PropertyValue>
13      <PropertyValue Property="Measures">
14        <Collection>
15          <PropertyPath>NetAmount</PropertyPath>
16        </Collection>
17      </PropertyValue>
18    </Record>
19  </Annotation>
20 </Annotations>

```

Apply Copy Reset

15

< Back Next > Exit Guide

(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_SALESORDERANALYS...

Chart Title Revenue by Customer

Chart Description Chart Type *

Net Revenue by Customer Column

Measures Property * NetAmount

Dimensions Property * SoldToParty

Dimensions Property DeliveryCalendarYear

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

```
<Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
  <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>
      <Collection>
        <PropertyPath>Measures</PropertyPath>
        <Collection>
          <PropertyPath>NetAmount</PropertyPath>
        </Collection>
      </Collection>
    </Record>
  </Annotation>
</Annotations>
```

Exit Guide

```

4   </edm:Reference>
5     <edm:Include Namespace="TECHED_ALP_SO_A_SRV"/>
6   </edm:Reference>
7   <edm:DataServices>
8     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
9       <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
10      <Annotation Term="UI.LineItem">
11        <Collection>
12          <Record Type="UI.DataField">
13            <PropertyValue Property="Value" Path="DeliveryCalendarYear"/>
14            <Annotation Term="UI.Importance" EnumMember="UI.Importance/High"/>
15          </Record>
16          <Record Type="UI.DataField">
17            <PropertyValue Property="Value" Path="SalesOrderItem"/>
18            <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
19          </Record>
20          <Record Type="UI.DataField">
21            <PropertyValue Property="Value" Path="SalesOrder"/>
22            <Annotation Term="UI.Importance" EnumMember="UI.Importance/Low"/>
23          </Record>
24          <Record Type="UI.DataField">
25            <PropertyValue Property="Value" Path="Product"/>
26            <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
27          </Record>
28          <Record Type="UI.DataField">
29            <PropertyValue Property="Value" Path="MainProductCategory"/>
30            <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
31          </Record>
32          <Record Type="UI.DataField">
33            <PropertyValue Property="Value" Path="SoldToParty"/>
34            <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
35          </Record>
36          <Record Type="UI.DataField">
37            <PropertyValue Property="Value" Path="Quantity"/>
38            <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
39          </Record>
40          <Record Type="UI.DataField">
41            <PropertyValue Property="Value" Path="NetAmount"/>
42            <Annotation Term="UI.Importance" EnumMember="UI.Importance/High"/>
43          </Record>
44        </Collection>
45      </Annotation>
46    </Annotations>
47  </Schema>
48</DataServices>
49<edm:DataServices>
50   <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
51     <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
52       <Annotation Term="UI.Chart">
53         <Record Type="UI.ChartDefinitionType">
54           <PropertyValue Property="Title" String="Revenue by Customer"/>
55           <PropertyValue Property="Description" String="Net Revenue by Customer"/>
56           <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column"/>
57           <PropertyValue Property="Dimensions">
58             <Collection>
59               <PropertyPath>SoldToParty</PropertyPath>
60               <PropertyPath>DeliveryCalendarYear</PropertyPath>
61             </Collection>
62           </PropertyValue>
63         </Record>
64       </Annotation>
65     </Annotations>
66   </Schema>
67 </DataServices>
68</edm:DataServices>
69
```

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

XML Annotation CDS Annotation

About Guide information

Step 1 Annotate service entity with a UI.Chart annotation

Step 2 Configure a UI.PresentationVariant annotation term

17

Configure a UI.PresentationVariant annotation term

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

Entity Type * Z_SEPMRA_SO_SALESORDERANALYS...

Sort Order Property NetAmount

Sort Order Descending? true

Include Grand Total? * false

Initial Expansion Level 1

Apply **Copy** **Reset**

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

Exit Guide

```

4   </edm:Reference>
5     <edm:Reference Uri="~/here/goes/your/serviceurl/$metadata">
6       <edm:Include Namespace="TECHED_ALP_SO_A_SRV"/>
7     </edm:Reference>
8   <edm:DataServices>
9     <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
10       <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
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="SalesOrderItem"/>
19               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
20             </Record>
21             <Record Type="UI.DataField">
22               <PropertyValue Property="Value" Path="SalesOrder"/>
23               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Low"/>
24             </Record>
25             <Record Type="UI.DataField">
26               <PropertyValue Property="Value" Path="Product"/>
27               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
28             </Record>
29             <Record Type="UI.DataField">
30               <PropertyValue Property="Value" Path="MainProductCategory"/>
31               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
32             </Record>
33             <Record Type="UI.DataField">
34               <PropertyValue Property="Value" Path="SoldToParty"/>
35               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
36             </Record>
37             <Record Type="UI.DataField">
38               <PropertyValue Property="Value" Path="Quantity"/>
39               <Annotation Term="UI.Importance" EnumMember="UI.Importance/Medium"/>
40             </Record>
41             <Record Type="UI.DataField">
42               <PropertyValue Property="Value" Path="NetAmount"/>
43               <Annotation Term="UI.Importance" EnumMember="UI.Importance/High"/>
44             </Record>
45           </Collection>
46         </Annotation>
47       </Annotations>
48     </Schema>
49   </DataServices>
50   <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
51     <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSITType">
52       <Annotation Term="UI.Chart">
53         <Record Type="UI.ChartDefinitionType">
54           <PropertyValue Property="Title" String="Revenue by Customer"/>
55           <PropertyValue Property="Description" String="Net Revenue by Customer"/>
56           <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column"/>
57           <PropertyValue Property="Dimensions">
58             <Collection>
59               <PropertyPath>SoldToParty</PropertyPath>
60               <PropertyPath>DeliveryCalendarYear</PropertyPath>
61             </Collection>
62           </PropertyValue>
63         </Record>
64       </Annotation>
65     </Annotations>
66   </Schema>
67 </DataServices>
68</edm:DataServices>
69
```

(17) Enter the following values:

| Field | Value |
|-------------------------|----------------------------------|
| Entity Type | 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 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 * Z_SEPMRA_SO_SALESORDERANALYS... | Sort Order Property NetAmount |
| Sort Order Descending? * true | Include Grand Total? * false |
| Initial Expansion Level 1 | |
| <input type="button" value="Apply"/> <input type="button" value="Copy"/> <input type="button" value="Reset"/> | |

```

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="PropertyPath" PropertyPath="NetAmount"/>
9             <PropertyValue Property="Descending" Bool="true"/>
10          </Collection>
11        </PropertyValue>
12      <PropertyValue Property="IncludeGrandTotal" Bool="false"/>
13      <PropertyValue Property="InitialExpansionLevel" Int="1"/>
14      <PropertyValue Property="Visualizations">
15        <Collection>
16          <AnnotationPath>UI.LineItem</AnnotationPath>
17          <AnnotationPath>UI.Chart</AnnotationPath>
18        </Collection>
19      </PropertyValue>
20    </Record>
21  </Annotation>
22 </Annotations>

```

Exit Guide

(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 * **Z_SEPMRA_SO_SALESORDERANALYSIS** Sort Order Property **NetAmount**

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

Initial Expansion Level **1**

Apply Copy Reset Code snippet has been successfully applied

```

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

```

<Record Type="UI.ChartDefinitionType">
 <PropertyValue Property="Title" String="Revenue by Customer"/>
 <PropertyValue Property="Description" String="Net Revenue"/>
 <PropertyValue Property="ChartType" EnumMember="UI.ChartType">Line</PropertyValue>
 <PropertyValue Property="Dimensions">
 <Collection>
 <AnnotationPath>SoldToParty</AnnotationPath>
 </Collection>
 </PropertyValue>
</Record>

Exit Guide **19**

(19) Click **Exit Guide**.

Exercise 2.4 Configuring Chart Data Label

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

```

"chartSettings": {
  "showDataLabel": true
}

```

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

```

<annotation>
  <edmx:Edm xmlns:edmx="http://docs.oasis-open.org/odata/ns/edm" Version="4.0">
    <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common"/>
    <edmx:Reference Uri="/sap/opu/odata/INFOD/CATALOGSERVICE/v2/Vocabularies(Te)">
      <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="UI"/>
    </edmx:Reference>
    <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
      <edmx:Include Namespace="TECHED_ALP_SOAS_SRV"/>
    </edmx:Reference>
    <edmx:DataService>
      <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
        <Annotations Target="TECHED_ALP_SOAS_SRV_2_SEPIRA_SO_SALESORDERANALYS">
          <Annotation Term="UI.LineItem">
            <Collection>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="DeliveryCalendar"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="DeliveryCalendar"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SalesOrderItem"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SalesOrderItem"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="Product"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="ProductCategory"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SoldToParty"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="NetAmount"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
            </Collection>
          </Annotation>
        </Schema>
      </edmx:DataService>
    </edmx:Edm>
  </annotation>

```

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

```

<annotation>
  <edmx:Edm xmlns:edmx="http://docs.oasis-open.org/odata/ns/edm" Version="4.0">
    <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common"/>
    <edmx:Reference Uri="/sap/opu/odata/INFOD/CATALOGSERVICE/v2/Vocabularies(Te)">
      <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="UI"/>
    </edmx:Reference>
    <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
      <edmx:Include Namespace="TECHED_ALP_SOAS_SRV"/>
    </edmx:Reference>
    <edmx:DataService>
      <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
        <Annotations Target="TECHED_ALP_SOAS_SRV_2_SEPIRA_SO_SALESORDERANALYS">
          <Annotation Term="UI.LineItem">
            <Collection>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="DeliveryCalendar"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="DeliveryCalendar"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SalesOrderItem"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SalesOrderItem"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="Product"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="ProductCategory"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SoldToParty"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="NetAmount"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
              </Record>
            </Collection>
          </Annotation>
        </Schema>
      </edmx:DataService>
    </edmx:Edm>
  </annotation>

```

(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.

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

Select a page

AnalyticalListPage_Z_SEPMRA_SO_SALESORDERANALYSIS

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

(22) In **Page** field, choose the first page in your app
AnalyticalListPage_Z_SEPMRA_SO_SALESORDERANALYSIS.

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...

Apply

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

(23) Click **Apply**.

Enable data label in smart charts and KPI cards

About 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_SALESORDERANALYSIS.json

```

1  {
2      "table": {
3          "qualified": "",
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 }
```

Apply Copy Reset Code snippet has been successfully applied

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

< Back Next > Exit Guide

(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 Step 1

Guide information 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 has been successfully applied

```

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

Apply Copy Reset

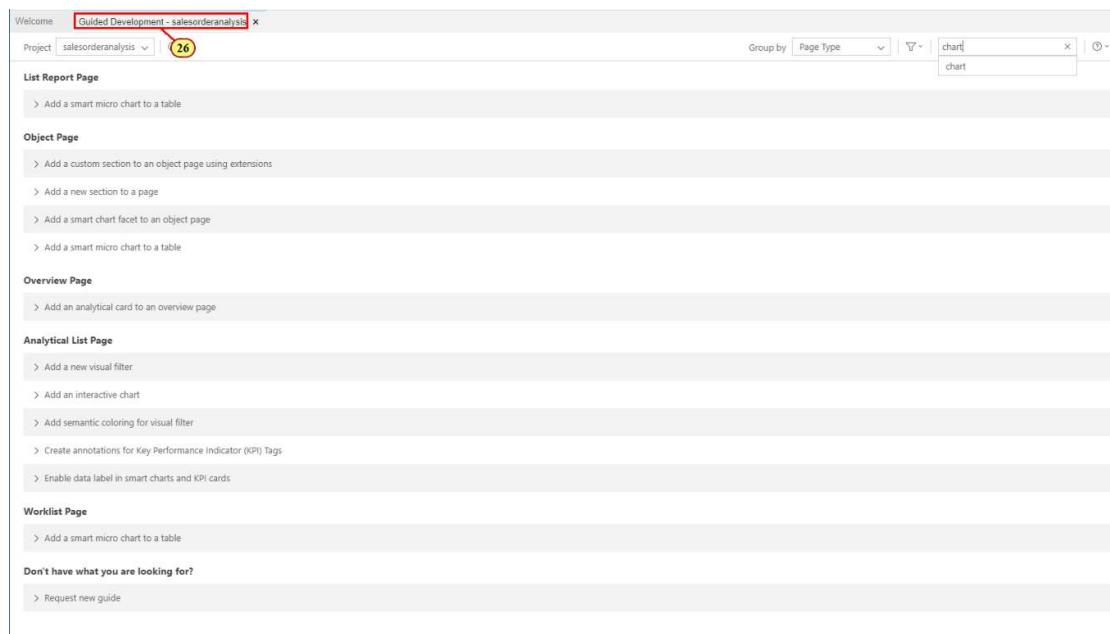
< Back Next >

25 Exit Guide

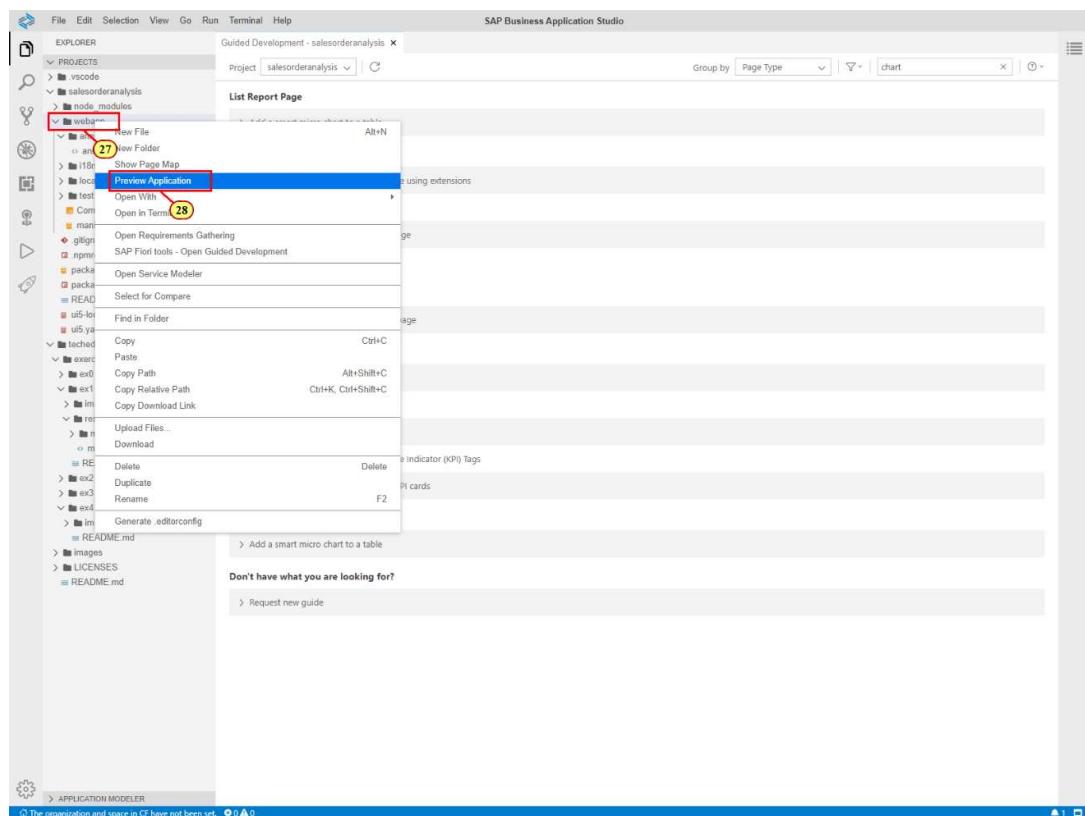
(25) Click **Exit Guide**.

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.

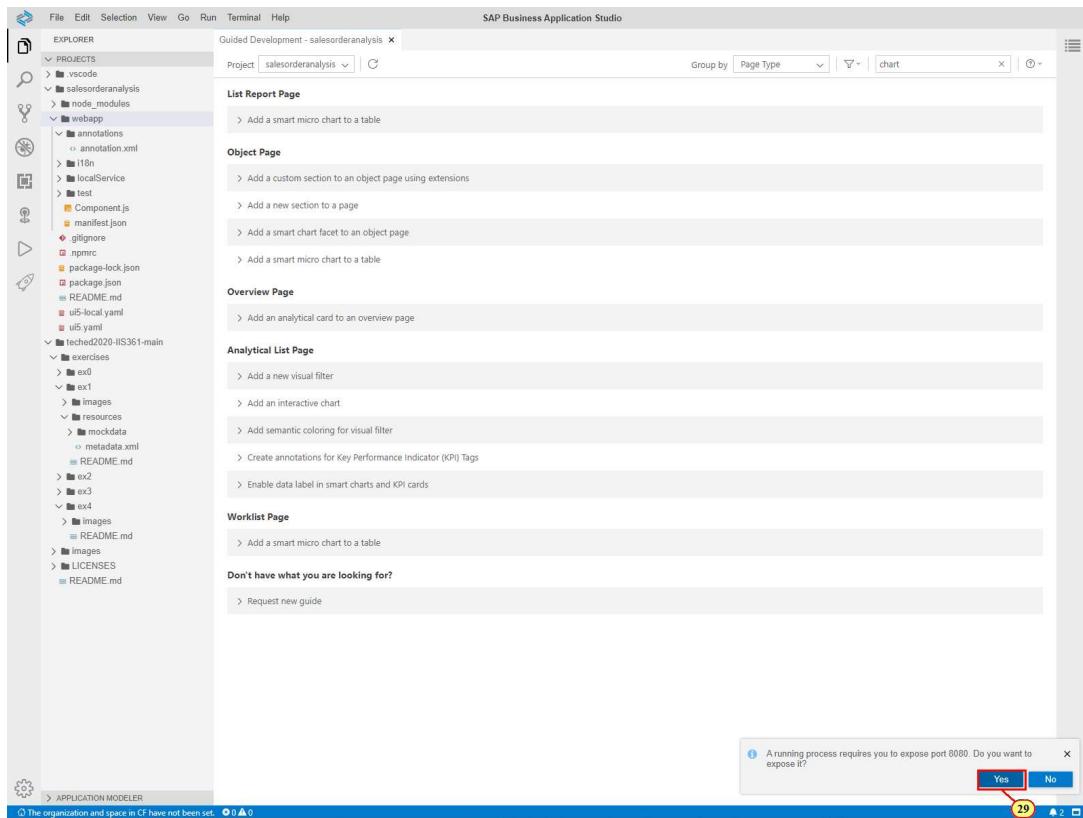


(26) To show the Explorer pane, double-click on the tab Guided Development - salesorderanalysis.

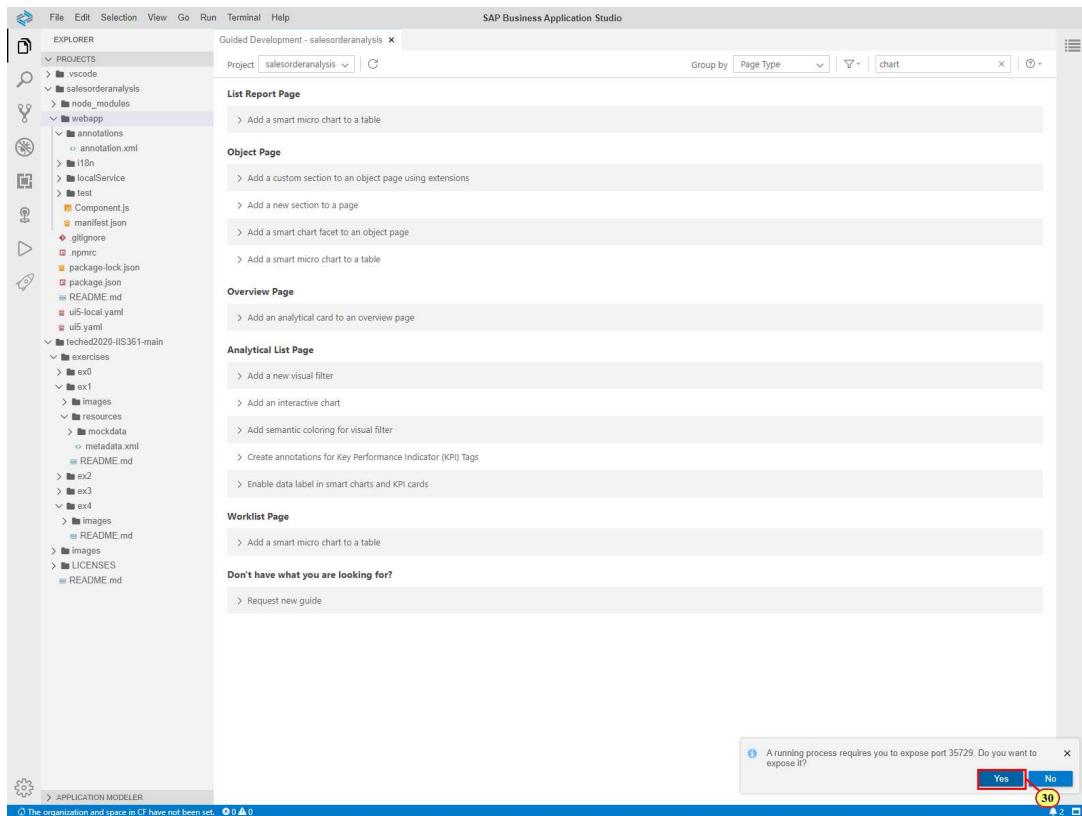


(27) In the Explorer pane, right-click on the webapp folder.

((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.

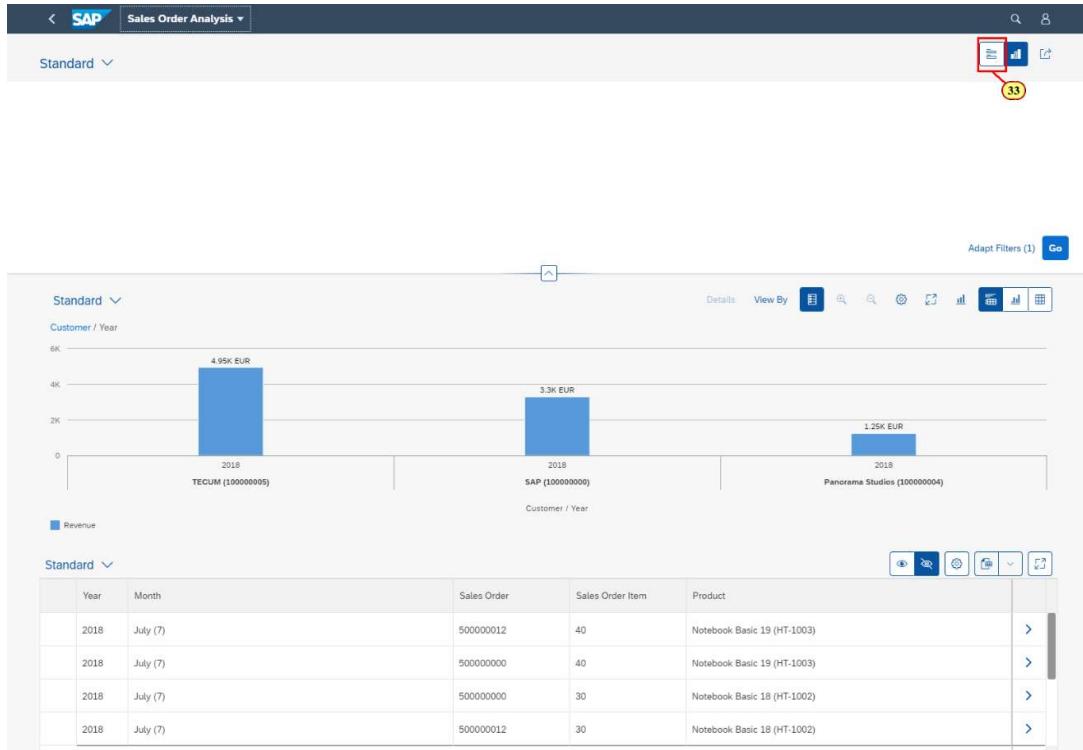
(31) in the Adapt Filters pop-up, enter **EUR** in the **Currency** field.

(32) Click **Go**.

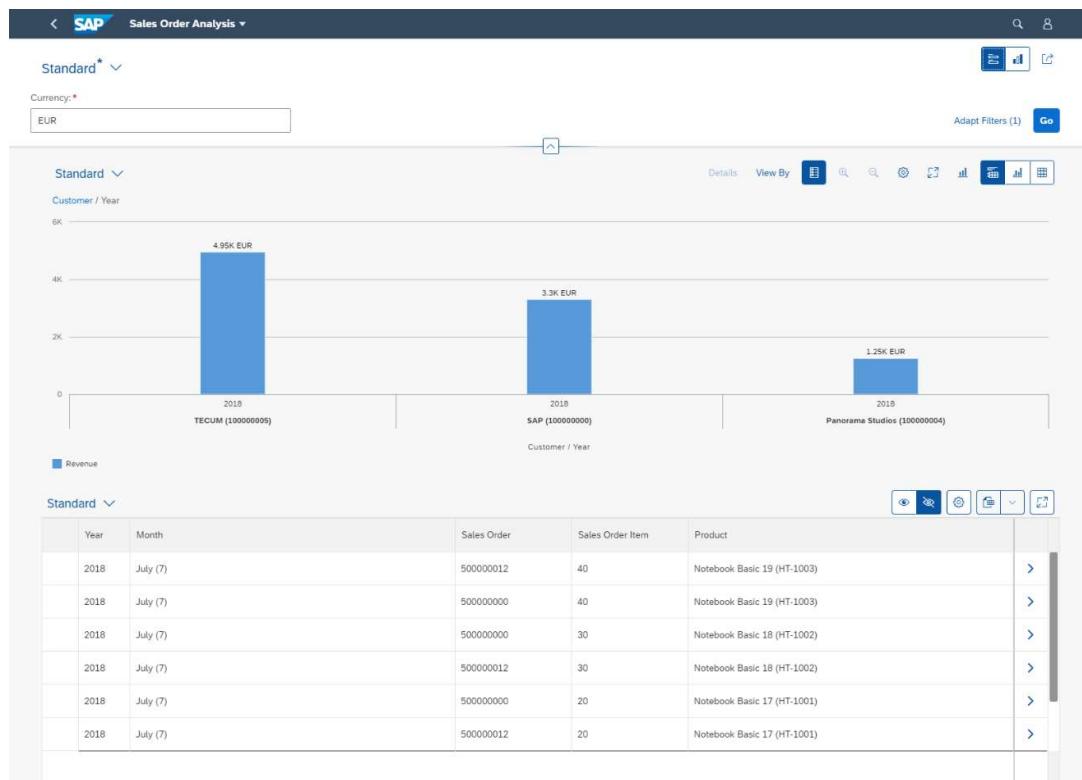
The content area of the page displays the chart and table you created. They display the data pre-filtered by the currency value you entered in the pop-up with the required filter field.

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

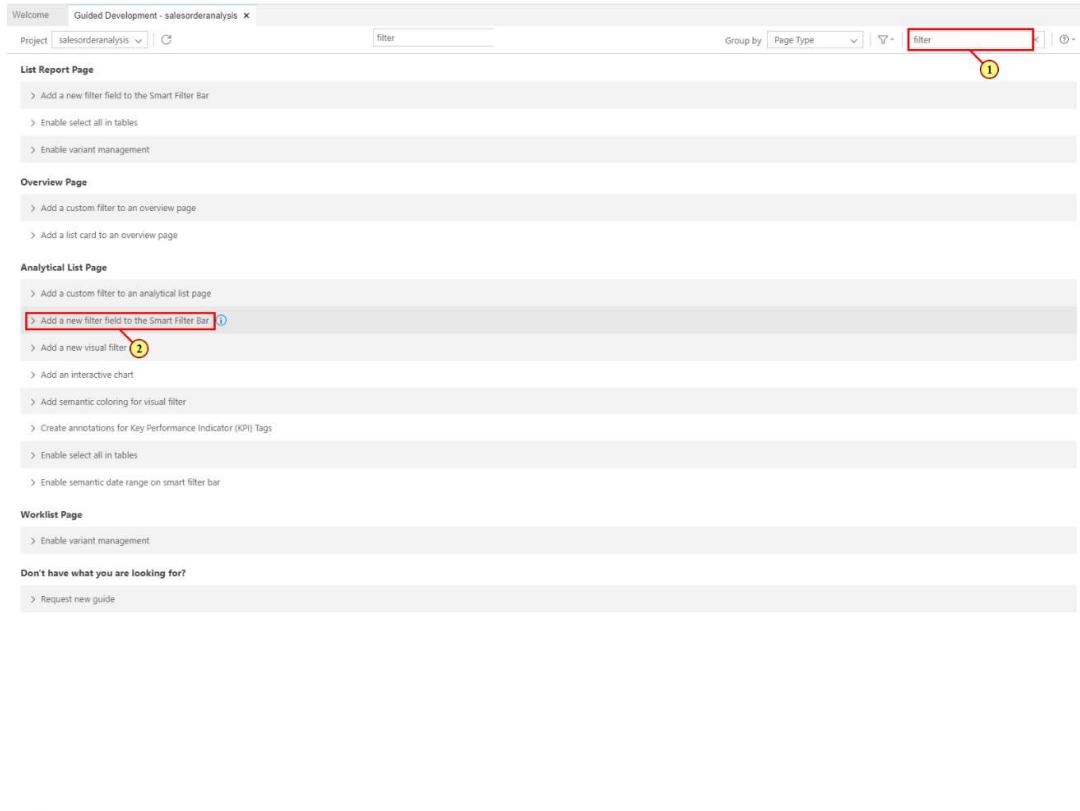
You have successfully annotated the main entity type of your app with UI.LineItem, UI.Chart and UI.PresentationVariant annotations required to display content area of Analytical List Page. Continue to [Exercise 3 - Configuring Filters in Analytical List Page](#).

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 Comact 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.



- (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 ▾ | ⚡ | 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 | Sample Preview |
|---|---|
| This guides shows you how to add filter fields to the smart filter bar. |  |

Start Guide (3)

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

Worklist Page

- > Enable variant management

Don't have what you are looking for?

- > Request new guide

(3) Click **Start Guide**.

Welcome Guided Development - salesorderanalysis X

< Back to Guides

Add a new filter field to the Smart Filter Bar

About 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 * |
|---|--------------------------|-----------------|
| Select an entity type | Select a navigation path | Select property |
| SEPMRA_C_ALP_SalesOrderType | E_WITH_ENTITY_TYPE | selectionFields |
| SEPMRA_C_ALP_ShortStatusVType | | |
| SEPMRA_C_ALP_SupplierVType | | |
| SEPMRA_C_ALP_TotalSalesXPType | | |
| SEPMRA_J_ProductMainCategoryType | | |
| SEPMRA_SO_ALP_SLODGERITEMType | | |
| Z_SEPMRA_SO_ALP_TOTALSalesXPType | | |
| Z_SEPMRA_SO_SALESORDERANALYSISType | | |

(4)

< Back Next > Exit Guide

(4) In the **Entity Type** field, select **Z_SEPMRA_SO_SALESORDERANALYSISType**.

Welcome Guided Development - salesorderanalysis X

< Back to Guides

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_SEPMRA_SO_SALESORDERANALYS... | Select a navigation path | DeliveryCalendarDate |

Apply Copy Reset

```

1 Annotations Target="TECHED_ALP_SO_A_SRV_2_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.SelectionFields">
3     <Collection>
4       <PropertyPath>DeliveryCalendarDate</PropertyPath>
5     </Collection>
6   </Annotation>
7 </Annotations>

```

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

Exit Guide

(5) In the **Property** field, choose **Delivery Calendar Year** 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. On the left, there's a sidebar with 'About' and 'Step 1' sections. Step 1 is titled 'Annotate target with UI.SelectionFields'. It includes a note: 'In this step, you will be annotating a target with UI.SelectionFields. Additionally, specify the PropertyPath values as shown in the code snippet below.' Below this, there's a table for 'Entity Type' and 'Navigation Path', with 'Z_SEPMRA_SO_SALESORDERANALYSIS' selected. A dropdown for 'Property' is set to 'OrderDate'. At the bottom of the left pane are 'Apply', 'Copy', and 'Reset' buttons, and a message: 'Code snippet has been successfully applied'. On the right, the 'annotation.xml' file is displayed with line numbers. A red box highlights the section starting with '<Annotation Term="UI.SelectionFields">'. A yellow circle with the number '7' is placed near the end of this highlighted section.

```

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

Step 1

Annotate target with UI.SelectionFields

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

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

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

Property *

OrderDate

Annotation XML

```

1 <Annotations Target="TECHED_ALP_SO4_SRV.Z_SEPMRA_SO_SALESORDERANALYSISIType">
2   <Annotation Term="UI.SelectionFields">
3     <Collection>
4       <PropertyPath>DeliveryCalendarDate</PropertyPath>
5       <PropertyPath>OrderDate</PropertyPath>
6     </Collection>
7   </Annotation>
8 </Annotations>

```

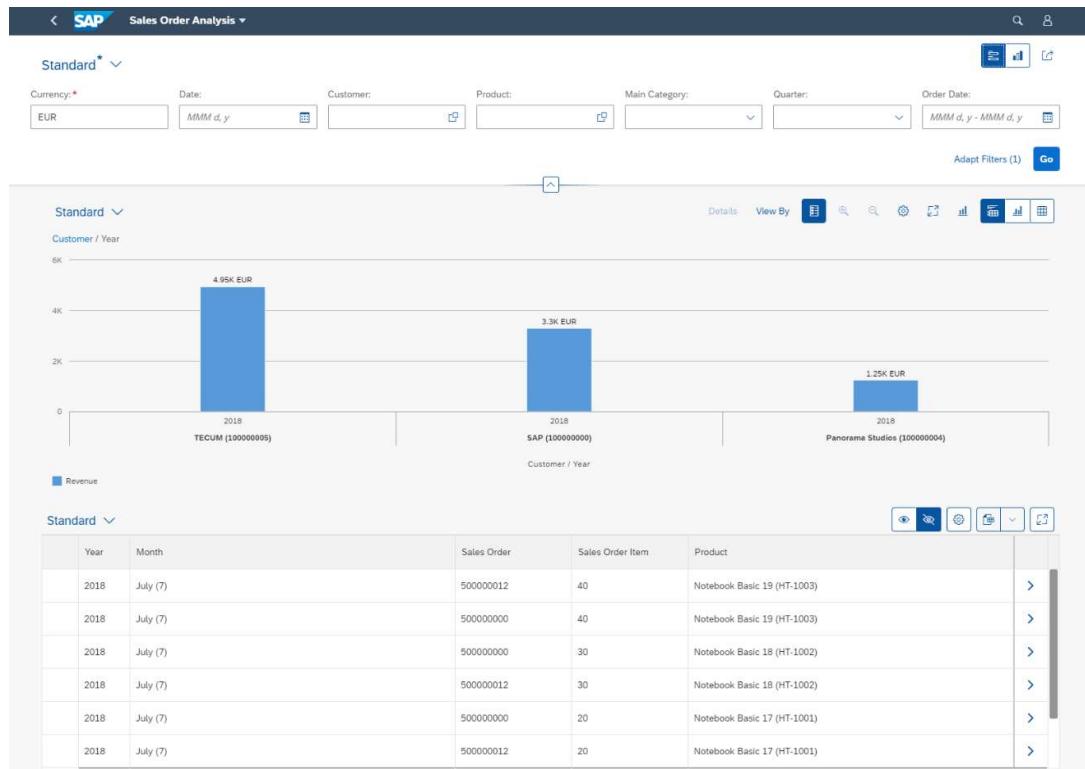
Code snippet has been successfully applied

Exit Guide 8

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

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

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



Exercise 3.2 Configuring Semantic Date Range

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

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

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

The screenshot shows the Guided Development interface for a project named "salesorderanalysis". The top navigation bar includes "Welcome", "Guided Development - salesorderanalysis", and a "Project" dropdown set to "salesorderanalysis". A search bar contains the text "filtered". The main content area is organized into sections:

- List Report Page**:
 - > Add a new filter field to the Smart Filter Bar
 - > Enable select all in tables
 - > Enable variant management
- Overview Page**:
 - > Add a custom filter to an overview page
 - > Add a list card to an overview page
- Analytical List Page**:
 - > Add a custom filter to an analytical list page
 - > Add a new filter field to the Smart Filter Bar
 - > Add a new visual filter
 - > 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** (circled with a red oval containing the number 9)
- Worklist Page**:
 - > Enable variant management
- Don't have what you are looking for?**:
 - > Request new guide

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

Welcome Guided Development - salesorderanalysis X

Project: salesorderanalysis ▾ | 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
- > 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.

Start Guide 10

Worklist Page

- > Enable variant management

Don't have what you are looking for?

- > Request new guide

Sample Preview

(10) Click **Start Guide**.

(11) In the **Page** field, choose the first page in your app
AnalyticalListPage_Z_SEPMRA_SO_SALESORDERANALYSIS.
 (12) Click **Apply**.

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2020-11-30

The screenshot shows the SAP Guided Development interface. On the left, there's a sidebar with 'Welcome' and 'Guided Development - salesorderanalysis'. Below that are 'About', 'Guide information', and 'Step 1'. Step 1 has a sub-section titled 'Enable semantic date range on smart filter bar' with the instruction 'Set the useDateRange property of dateSettings to true'. Below this, it says '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 'Page' dropdown shows 'AnalyticalListPage_Z_SEPMRA_SO_SALESORDERANALYSIS.json'. At the bottom of the sidebar are 'Apply', 'Copy', and 'Reset' buttons, with a note 'Code snippet has been successfully applied'. The main area contains a code editor with the following JSON snippet:

```

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

```

A red box highlights the line 'useDateRange: true' at index 11. A yellow circle labeled '13' is placed over the 'chart' section. At the bottom right of the code editor is a blue 'Exit Guide' button with a red circle containing the number '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: * Date: Customer: Product: Main Category: Quarter: Order Date:

EUR MMM d, y Customer: Main Category: Quarter: Order Date: Adapt Filters (1) Go

Standard Customer / Year

Revenue

Customer / Year

Year Month Sales Order Sales Order Item Product

| Year | Month | Sales Order | Sales Order Item | Product |
|------|----------|-------------|------------------|-----------------------------|
| 2018 | July (7) | 500000012 | 40 | Notebook Basic 19 (HT-1003) |
| 2018 | July (7) | 500000000 | 40 | Notebook Basic 19 (HT-1003) |
| 2018 | July (7) | 500000000 | 30 | Notebook Basic 18 (HT-1002) |
| 2018 | July (7) | 500000012 | 30 | Notebook Basic 18 (HT-1002) |
| 2018 | July (7) | 500000000 | 20 | Notebook Basic 17 (HT-1001) |
| 2018 | July (7) | 500000012 | 20 | Notebook Basic 17 (HT-1001) |

SAP Sales Order Analysis

Standard*

Currency: * Date: Customer: Product: Main Category: Quarter: Order Date:

EUR MMM d, y Customer: Main Category: Quarter: Order Date: Time Period Date Range From To

Standard Customer / Year

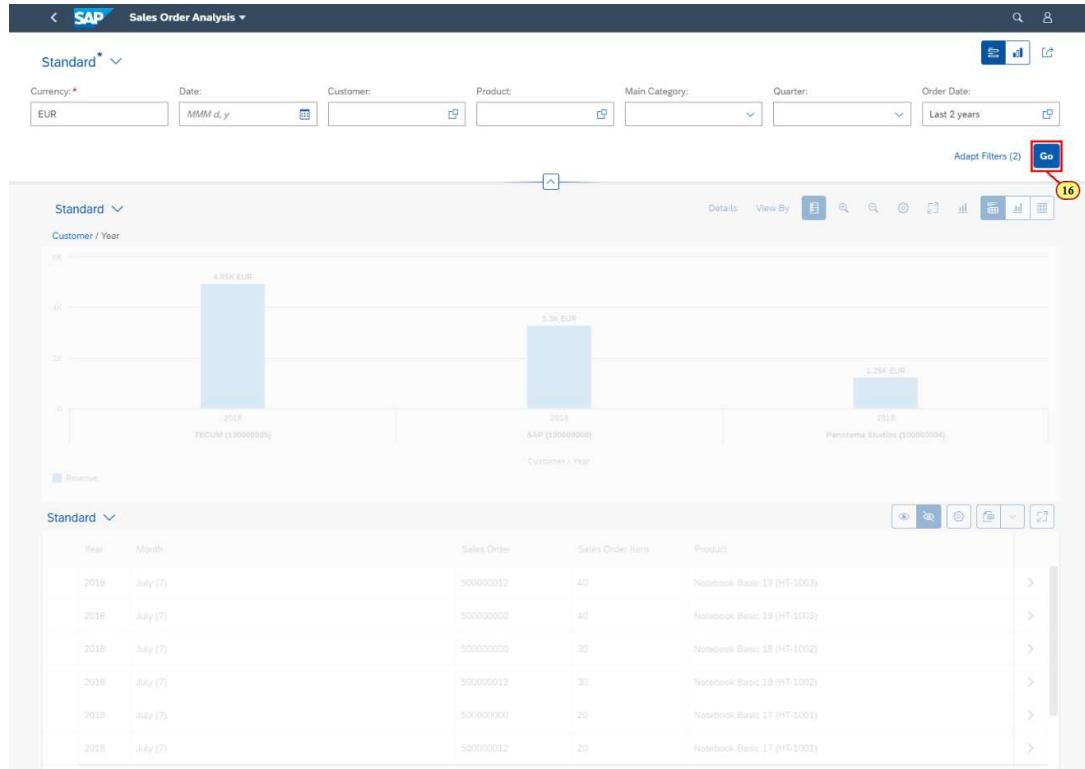
Revenue

Customer / Year

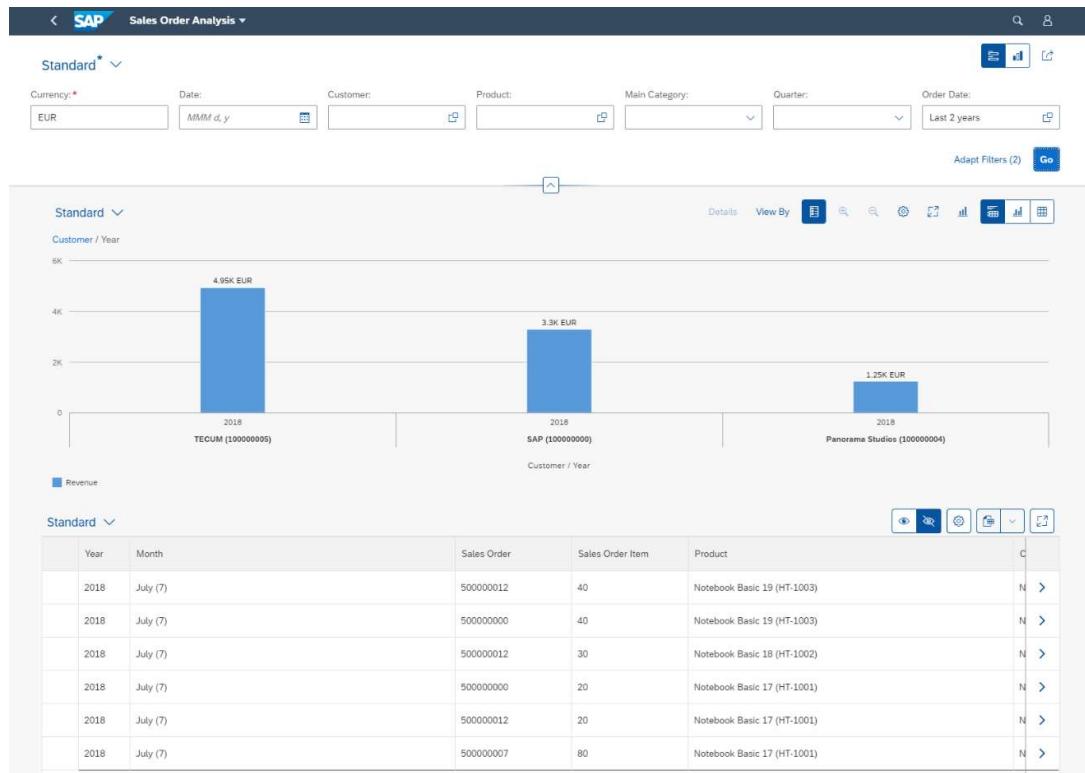
Year Month Sales Order Sales Order Item Product

| Year | Month | Sales Order | Sales Order Item | Product |
|------|----------|-------------|------------------|-----------------------------|
| 2018 | July (7) | 500000012 | 40 | Notebook Basic 19 (HT-1003) |
| 2018 | July (7) | 500000000 | 40 | Notebook Basic 19 (HT-1003) |
| 2018 | July (7) | 500000000 | 30 | Notebook Basic 18 (HT-1002) |
| 2018 | July (7) | 500000012 | 30 | Notebook Basic 18 (HT-1002) |
| 2018 | July (7) | 500000000 | 20 | Notebook Basic 17 (HT-1001) |
| 2018 | July (7) | 500000012 | 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.



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



Exercise 3.3 Configuring Visual Filter with Line Chart

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

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

The screenshot shows the 'Guided Development - salesorderanalysis' page in the SAP Fiori Launchpad. The top navigation bar includes 'Welcome', 'Project: salesorderanalysis', and a search bar. On the right, there are filters for 'Page Type' and 'filter'. 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, with the fourth item, 'Add a new visual filter ①', highlighted by a red box and a yellow circle containing the number 17.

(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 ⌂

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 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

(18) Click **Start Guide**.

The screenshot shows the SAP Fiori Guided Development interface for 'salesorderanalysis'. The current step is 'Step 1: Annotate entity with UI.Chart annotation term'. The configuration form includes fields for Entity Type (SEPMRA_SO_ALP_SLDORDERITEMType), Chart Qualifier (FilterQuantityByDate), and Chart Title (Quantity by Delivery Date). Below this, there are fields for Chart Description (Item Quantity by Delivery Date) and Chart Type (Line). The Dimensions Property is set to DeliveryDate, and the Measures Property is set to Quantity. At the bottom of the form are 'Apply', 'Copy', and 'Reset' buttons. A red box highlights the entire configuration area.

```

<1> <2> <3> <4> <5> <6> <7> <8> <9> <10> <11> <12> <13> <14> <15> <16> <17> <18> <19> <20>
<Annotations Target="TECHED_ALP_SO_ASRV.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>DeliveryDate</PropertyValue>
        </Collection>
      </PropertyValue>
      <PropertyValue Property="Measures">
        <Collection>
          <PropertyValue>Quantity</PropertyValue>
        </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 Fiori Guided Development interface for the salesorderanalysis application. The title bar says "Welcome Guided Development - salesorderanalysis". Below it, a breadcrumb navigation shows "Back to Guides". The main area is titled "Add a new visual filter" and has a sub-section "Annotate entity with UI.Chart annotation term". A step indicator shows "Step 1" is completed. A red box highlights the "Step 1" button. A callout bubble labeled "(21)" points to the "Step 1" button.

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

Annotations Target: TECHED_ALP_SOAL_SRV.2_SEPMRA_SO_ALP_SLDORDERITEMType

Annotation Term: UI.Chart Qualifier: "FilterQuantityByDate"

Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SOAL_SRV.2_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 Da">
6       <PropertyValue Property="CharType" EnumMember="UI.ChartType/Line"/>
7       <PropertyValues Property="Dimensions">
8         <Collection>
9           <PropertyPath>DeliveryDate</PropertyPath>
10        </Collection>
11      </PropertyValues>
12      <PropertyValue Property="Measures">
13        <Collection>
14          <PropertyPath>Quantity</PropertyPath>
15        </Collection>
16      </PropertyValue>
17    </Record>
18  </Annotation>
19 </Annotations>

```

Exit Guide

(21) Click Step 2.

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

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

SoldToParty
 At the bottom left are 'Back' and 'Next' buttons, and at the bottom right is an 'Exit Guide' button.

(22) Enter the following values:

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

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

(23) Click **Apply**.

Welcome Guided Development - salesorderanalysis x

< Back to Guides

Add a new visual filter

About Step 1 Step 2 Step 3 (24)

Add UI.PresentationVariant annotation term

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

Entity Type * **Presentation Variant Qualifier ***

SEPMRA_SO_ALP_SLDORDERITEMType ▾ FilterQuantityByDate

Chart Reference *

UI.Chart#FilterQuantityByDate ▾

Apply Copy Reset Code snippet has been successfully applied

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

annotation.xml

```
edm:Edmx xmlns:edm="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0"
  <edm:Reference Uri="https://sap.github.io/data-vocabularies/vocabularies/Common.v1" Alias="Common" />
  <edm:Include Namespace="com.sap.vocabularies.Common.v1" />
  <edm:Reference Uri="sap/opu/odata/InFND/CATALOGSERVICE/$metadata" />
  <edm:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
  <edm:Reference Uri="Here/goes/your/serviceurl/$metadata" />
  <edm:Include Namespace="TECHED_ALP_SOA_SRV" />
</edm:Reference>
<edm:DataServices>
  <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
    <Annotations Target="TECHED_ALP_SOA_SRV.Z_SEPMRA_SO_SALESORDERANALYS">
      <Annotation Term="UI.LineItem">
        <Collection>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="DeliveryCalendar" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="DeliveryCalendar" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="SalesOrderNumber" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="SalesOrderItem" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_High" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="Product" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="SoldToParty" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="Quantity" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_Medium" />
          </Record>
          <Record Type="UI.DataField">
            <PropertyValue Property="Value" Path="NetAmount" />
            <Annotation Term="UI.Importance" EnumMember="UI.Importance_Low" />
          </Record>
        </Collection>
      </Annotation>
    </Annotations>
    <Annotation Term="UI.Chart">
      <Record Type="UI.ChartDefinitionType">
        <PropertyValue Property="Title" String="Revenue by Customer" />
        <PropertyValue Property="Description" String=".Net Revenue" />
        <PropertyValue Property="ChartType" EnumMember="UI.ChartType_Donut" />
        <PropertyValue Property="Dimensions">
          <Collection>
            <PropertyPath>SoldToParty</PropertyPath>
```

< Back Next > [Exit Guide](#)

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

Welcome Guided Development - salesorderanalysis x

< Back to Guides

Add a new visual filter

About Step 1 Step 2 Step 3

Refer modeled Visual Filter to ALP annotations

In this step, you will define the mapping between the dimension in the Visual Filter created in previous steps and the respective property of the main entity type.

| | |
|--------------------------------|----------------------------------|
| Entity Type * | Entity Type Property * |
| Z_SEMPRA_SO_SALESORDERANALYSIS | DeliveryCalendarDate |
| Collection Path * | Presentation Variant Qualifier * |
| SEMPRA_SO_ALP_SLDDORDERTITEM | FilterQuantityByDate |
| Local Data Property * | Value List Property * |
| DeliveryCalendarDate | DeliveryDate |

25

26 Annotations Target="TECHED_ALP_SOA_SRV_Z_SEMPRA_SO_SALESORDERANALYSISType/DeliveryDate" AnnotationTerm="Common.ValueListType"

```

<Annotations Target="TECHED_ALP_SOA_SRV_Z_SEMPRA_SO_SALESORDERANALYSISType/DeliveryDate" AnnotationTerm="Common.ValueListType">
    <Record Type="Common.ValueListType">
        <PropertyValue Property="CollectionPath" String="SEMPRA_SO_ALP_SLDDORDERTITEM" />
        <PropertyValue Property="PresentationVariantQualifier" String="FilterQuantityByDate" />
        <PropertyValue Property="Parameters">
            <Collection>
                <Record Type="Common.ValueListParameterInOut">
                    <PropertyValue Property="LocalDataProperty" PropertyPath="DeliveryCalendarDate" />
                    <PropertyValue Property="ValueListProperty" String="DeliveryDate" />
                </Record>
            </Collection>
        </PropertyValue>
    </Record>
</Annotations>

```

annotation.xml x

```

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" />
3     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
4   </edmx:Reference>
5   <edmx:Reference Uri="sap/opu/odata/InFD/CATALOGSERVICE/v2/Vocabularies(Technical)_SRV" />
6     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceurl/#metadata" />
9     <edmx:Include Namespace="TECHED_ALP_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_SEMPRA_SO_SALESORDERANALYSISType/DeliveryDate" AnnotationTerm="Common.ValueListType">
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.ImportanceMedium" />
19            </Record>
20            <Record Type="UI.DataField">
21              <PropertyValue Property="Value" Path="FilterQuantityByDate" />
22              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
23            </Record>
24            <Record Type="UI.DataField">
25              <PropertyValue Property="Value" Path="DeliveryDate" />
26              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
27            </Record>
28            <Record Type="UI.DataField">
29              <PropertyValue Property="Value" Path="SalesOrderID" />
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">
37              <PropertyValue Property="Value" Path="SalesOrderItem" />
38              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
39            </Record>
40            <Record Type="UI.DataField">
41              <PropertyValue Property="Value" Path="SoldToParty" />
42              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
43            </Record>
44            <Record Type="UI.DataField">
45              <PropertyValue Property="Value" Path="Quantity" />
46              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
47            </Record>
48            <Record Type="UI.DataField">
49              <PropertyValue Property="Value" Path="NetAmount" />
50              <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium" />
51            </Record>
52          </Collection>
53        </Annotation>
54        <Annotation Term="UI.Chart">
55          <Record Type="UI.ChartDefinitionType">
56            <PropertyValue Property="Title" String="Revenue - Revenue by Customer" />
57            <PropertyValue Property="Description" String="Net Revenue" />
58            <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine" />
59            <PropertyValue Property="Dimensions">
60              <Collection>
61                <Property Path="SoldToParty" />
62              </Collection>
63            </PropertyValue>
64          </Record>
65        </Annotation>
66      </Collection>
67    </Annotations>
68  </Schema>
69</DataServices>
70</Edmx>

```

< Back Next >

Exit Guide

(25) Enter the following values:

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

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

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

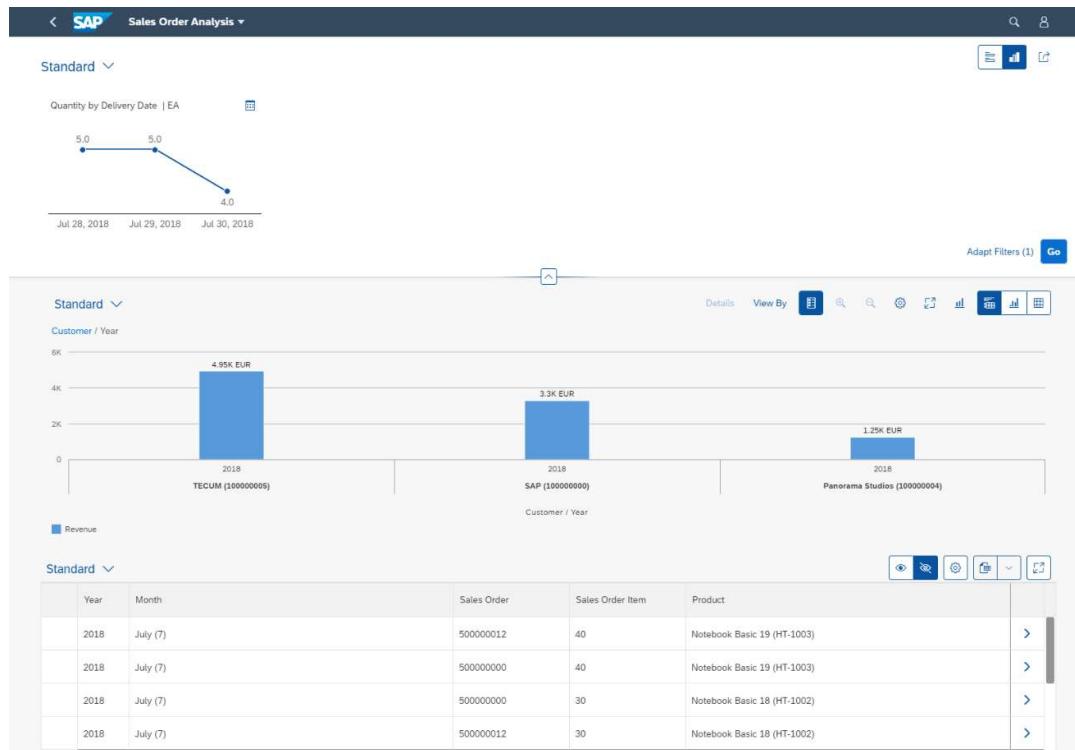
(26) Click **Apply**.

The screenshot shows the SAP Fiori Launchpad with the following details:

- Header:** Welcome | Guided Development - salesorderanalysis X
- Left Navigation:** Back to Guides
- Section:** Add a new visual filter
- Step Progress:** Step 1, Step 2, Step 3 (Step 3 is active)
- Form Fields:**
 - Entity Type *: Z_SEMPRA_SO_SALESORDERANALYSIS...
 - Entity Type Property *: DeliveryCalendarDate
 - Collection Path *: SEMPRA_SO_ALP_SLDORDERITEM
 - Presentation Variant Qualifier *: FilterQuantityByDate
 - Local Data Property *: Value List Property *
 - Value List Property *: DeliveryDate
- Buttons:** Apply, Copy, Reset
- Message:** Code snippet has been successfully applied
- Code Preview:** Shows the XML code for the annotations applied to the entity type.

(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**.

The screenshot shows the SAP Fiori Guided Development interface for 'salesorderanalysis'. The current step is 'Step 1' of 'Add a new visual filter'. The configuration panel includes fields for 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), and Measures Property (Quantity). Below the configuration is a preview of the generated annotation XML code, which is highlighted with a red box. The XML code defines a chart with the title 'Quantity by Product' and description 'Item Quantity by Product', using a bar chart type for dimensions and product as the measures. The code also specifies a chart qualifier 'FilterQuantityByProduct'.

```

<Annotations Target="TECHED_ALP_SOALP.SEPMRA_SO_ALP_SLDORDERITEMType">
  <Annotation Term="UI.Chart" Qualifier="FilterQuantityByProduct">
    <Record Type="UI.ChartDefinitionType">
      <PropertyValue Property="Title" String="Quantity by Product"/>
      <PropertyValue Property="Description" String="Item Quantity by Product"/>
      <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Bar"/>
      <PropertyValues Property="Dimensions">
        <Collection>
          <PropertyPath>Product</PropertyPath>
        </Collection>
      </PropertyValues>
      <PropertyValues Property="Measures">
        <Collection>
          <PropertyPath>Quantity</PropertyPath>
        </Collection>
      </PropertyValues>
    </Record>
  </Annotation>
</Annotations>

```

(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' of 'Add a new visual filter'. The configuration form includes fields for 'Entity Type' (SEPMRA_SO_ALP_SLDORDERITEMType), 'Presentation Variant Qualifier' (FilterQuantityByProduct), and 'Chart Reference' (@UI.Chart#FilterQuantityByProduct). A red box highlights the 'Entity Type' field. Below the form is a code editor window showing the generated annotation XML. A yellow circle labeled '29' points to the 'Entity Type' field in the configuration form.

```

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

```

(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.

The screenshot shows the SAP Fiori Guided Development interface for salesorderanalysis. In Step 3, the user is mapping dimensions to chart properties. The configuration form has the following settings:

| | |
|----------------------------------|--------------------------------|
| 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 |

The annotation XML in the code editor is as follows:

```

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

```

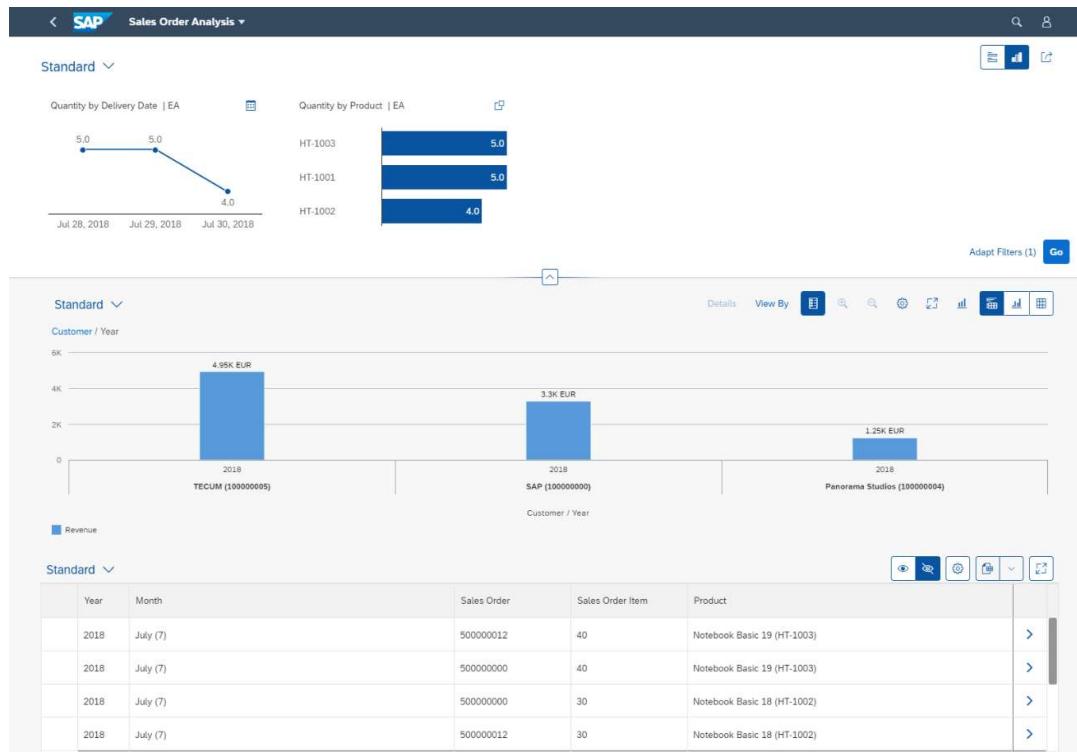
(30) In **step 3** of the guide, use the following values to map the dimensions in the chart to the respective property of your main entity type in the annotation Common.ValueList as in steps (25) - (26) above.

| 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

The screenshot shows the SAP Guided Development interface. On the left, there is a sidebar with sections like 'List Report Page', 'Overview Page', 'Analytical List Page', 'Worklist Page', and 'Don't have what you are looking for?'. Under 'Analytical List Page', there is a guide titled 'Add semantic coloring for visual filter' with a red box and a yellow circle containing the number '31' over it. To the right of the sidebar is a large code editor window displaying an XML file named 'annotation.xml'. The XML code is related to OData annotations for a sales order analysis service.

```

<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="https://sap.github.io/odata-vocabularies/vocabularies/TECHED_ALP_SOASRV.v2" Alias="TECHED_ALP_SOASRV" />
  <edmx:Reference Uri="here/goes/your/serviceurl/$metadata" />
  <edmx:Annotations Target="TECHED_ALP_SOASRV.Z_SEPHRA_SO_SALESORDERANALYSIS">
    <Annotation Term="UI.ListItem">
      <Collection>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="DeliveryCalendar" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="DeliveryCalendar" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="SalesOrderItem" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="Product" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="ProductCategory" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="SoldToParty" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="Quantity" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
        </Record>
        <Record Type="UI.DataField">
          <PropertyValue Property="Value" Path="NetAmount" />
          <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
        </Record>
      </Collection>
    </Annotation>
    <Annotation Term="UI.Chart">
      <Collection>
        <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.Pie" />
          <PropertyValue Property="Dimensions" />
        </Record>
      </Collection>
    </Annotation>
  </Annotations>
</edmx:Edmx>

```

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

> Add semantic coloring for visual filter

Annotation XML (Right Panel):

```

1 <edmx:Edm 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 Uri="sap/opu/odata/IWFND/CATALOGSERVICE;v=2/Vocabularies/UI.v1" Alias="UI" />
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_SOAS_SRV" />
8   </edmx:Reference>
9   <edmx:DataServices>
10    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
11      <Annotations Target="TECHED_ALP_SOAS_SRV.I_SEPHRA_SO_SALESORDERANALYSIS">
12        <Annotation Term="UI.LineItem">
13          <Collection>
14            <Record Type="UI.DataField">
15              <PropertyValue Property="Value" Path="DeliveryCalendar" />
16              <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
17            </Record>
18            <Record Type="UI.DataField">
19              <PropertyValue Property="Value" Path="DeliveryCalendar" />
20              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
21            </Record>
22            <Record Type="UI.DataField">
23              <PropertyValue Property="Value" Path="SalesOrder" />
24              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Low" />
25            </Record>
26            <Record Type="UI.DataField">
27              <PropertyValue Property="Value" Path="SalesOrderItem" />
28              <Annotation Term="UI.Importance" EnumMember="UI.Importance.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    </Schema>
54  </Annotations>
55  <Annotation Term="UI.Chart">
56    <Record Type="UI.ChartDefinitionType">
57      <PropertyValue Property="Title" String="Revenue by Customer" />
58      <PropertyValue Property="Description" String="Net Revenue by Customer" />
59      <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
60      <PropertyValue Property="Dimensions">
61        <Collection>
62          <PropertyValue>SoldToParty</PropertyValue>
63        </Collection>
64      </Dimensions>
65    </Record>
66  </Annotation>
67</edmx:DataServices>
68</edmx:Edm>

```

Start Guide (Left Panel):

(32) Click Start Guide.

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.

```

<Annotations Target="TECHED_ALP_SO_SRV.SEPMRA_SO_ALP_SLDORDERITEMType">
  <Annotation Term="UI.DataPoint" Qualifier="Quantity">
    <Record Type="UI.DataPointType">
      <PropertyValue Property="Value" Path="Quantity"/>
      <Record Type="UI.CriticalityCalculationType">
        <PropertyValue Property="ImprovementDirection" EnumMember="UI.ImprovementDirectionType.Maximize"/>
        <PropertyValue Property="ToleranceRangeLowValue" Int="5"/>
        <PropertyValue Property="DeviationRangeLowValue" Int="4"/>
      </Record>
    </Record>
  </Annotation>
</Annotations>

```

(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 'salesorderanalysis'. The title bar says 'Guided Development - salesorderanalysis X'. Below it, a navigation bar has 'Back to Guides'.

Add semantic coloring for visual filter

Step 2 is highlighted with a red box and a yellow circle containing the number 35.

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

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

annotation.xml

```

1 <Annotations Target="TECHED_ALP_SOALP_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="CriticalityCalculation" EnumMember="UI.Impor...
7         <PropertyValue Property="ToleranceRangeLowValue" Int="5" />
8         <PropertyValue Property="DeviationRangeLowValue" Int="4" />
9       </Record>
10      </PropertyValue>
11    </Record>
12  </Annotation>
13 </Annotations>

```

... (lines 14-61 show continuation of the XML code)

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

```

<Annotations Target="TECHED_ALP_SO_SRV.SEPMRA_SO_ALP_SLDORDERITEMType">
  <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
    <Record Type="UI.ChartDefinitionType">
      <PropertyValue Property="Title" String="Quantity by Delivery Date"/>
      <PropertyValue Property="Description" String="Item Quantity by Delivery Date"/>
      <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
      <PropertyValue Property="Dimensions">
        <Collection>
          <PropertyPath>DeliveryDate</PropertyPath>
        </Collection>
      </PropertyValue>
      <PropertyValue Property="Measures">
        <Collection>
          <PropertyPath>Quantity</PropertyPath>
        </Collection>
      </PropertyValue>
      <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 | 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 |
| Chart Measures Attributes Property | Quantity |
| Data Point Qualifier | @UI.DataPoint#Quantity |

(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
...
<Annotations Target="TECHED_ALP_SO_ASRV_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>
            <Property Value="Actions">
                <Record Type="UI.ChartMeasureAttributeType">
                    <PropertyValue Property="MeasureAttributes">
                        <Collection>
                            <Record Type="UI.ChartMeasureAttributeType">
                                <PropertyValue Property="DataPoint">
                                    <Record Type="UI.DataPointType">
                                        <PropertyValue Property="Measure" Value="Quantity" />
                                        <PropertyValue Property="Role" Value="Value" />
                                        <PropertyValue Property="UseSequentialColorLevels" Value="True" />
                                    </Record>
                                </PropertyValue>
                            </Record>
                        </Collection>
                    </PropertyValue>
                </Record>
            </Property>
            <Annotation Term="UI.Hidden" />
            <Annotation Term="UI.Importance" />
            <Annotation Term="UI.RecommendationState" />
            <Annotation Term="Analytics.AccumulativeMeasure" />
            <Annotation Term="Analytics.RolledUpPropertyCount" />
        </Annotation>
        <Annotation Term="Common.Application" />
        <Annotation Term="Common.ErrorResolution" />
        <Record Type="UI.ChartDefinitionType">
            <PropertyValue Property="Title" String="Quantity by Product" />
        </Record>
    </Annotation>
</Annotations>

```

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

```

...
<Annotations Target="TECHED_ALP_SO_ASRV_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>
            <Property Value="Actions">
                <Record Type="UI.ChartMeasureAttributeType">
                    <PropertyValue Property="MeasureAttributes">
                        <Collection>
                            <Record Type="UI.ChartMeasureAttributeType">
                                <PropertyValue Property="DataPoint">
                                    <Record Type="UI.DataPointType">
                                        <PropertyValue Property="Measure" Value="Quantity" />
                                        <PropertyValue Property="Role" Value="Value" />
                                        <PropertyValue Property="UseSequentialColorLevels" Value="True" />
                                    </Record>
                                </PropertyValue>
                            </Record>
                        </Collection>
                    </PropertyValue>
                </Record>
            </Property>
            <Annotation Term="UI.Hidden" />
            <Annotation Term="UI.Importance" />
            <Annotation Term="UI.RecommendationState" />
            <Annotation Term="Analytics.AccumulativeMeasure" />
            <Annotation Term="Analytics.RolledUpPropertyCount" />
        </Annotation>
        <Annotation Term="Common.Application" />
        <Annotation Term="Common.ErrorResolution" />
        <Record Type="UI.ChartDefinitionType">
            <PropertyValue Property="Title" String="Quantity by Product" />
        </Record>
    </Annotation>
</Annotations>

```

- 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 Property="Measures">

            <Collection>

                <PropertyPath>Quantity</PropertyPath>

            </Collection>

        </PropertyValue>

    </Record>

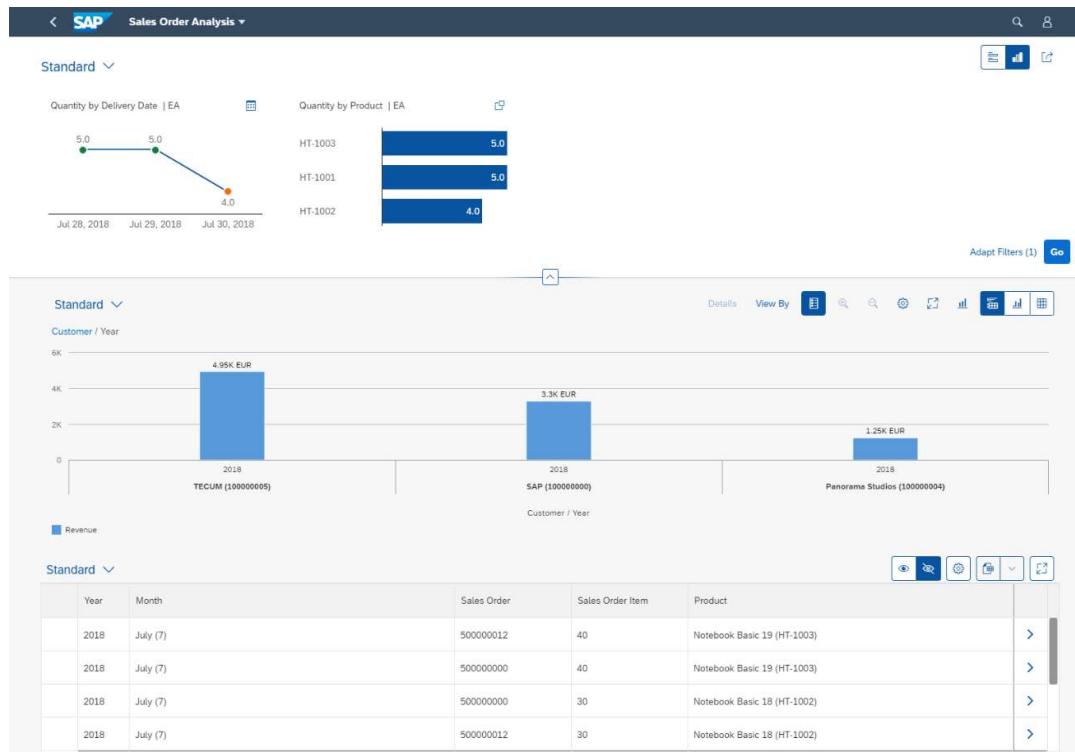
```

```
</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.



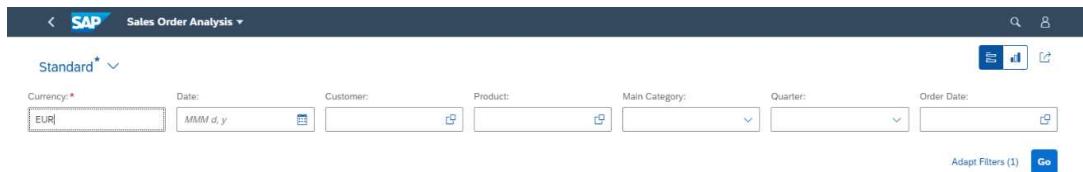
Exercise 3.6 Using Shortcuts

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



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

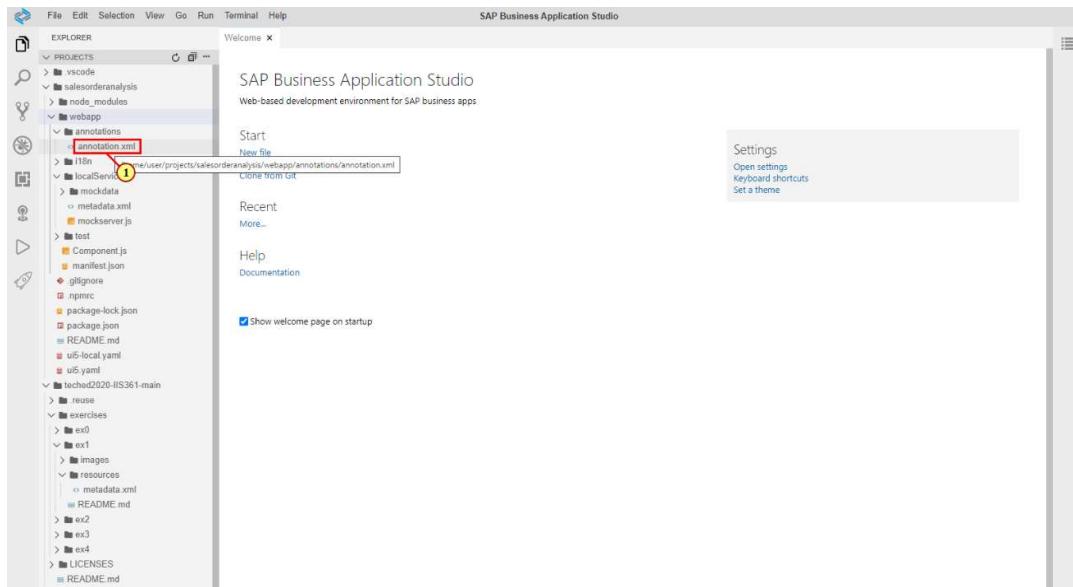
In this exercise, you will generate the translation text keys for the hard-coded string values you used in the previous exercises. For this you will use the i18n support of the XML annotation LSP.

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:

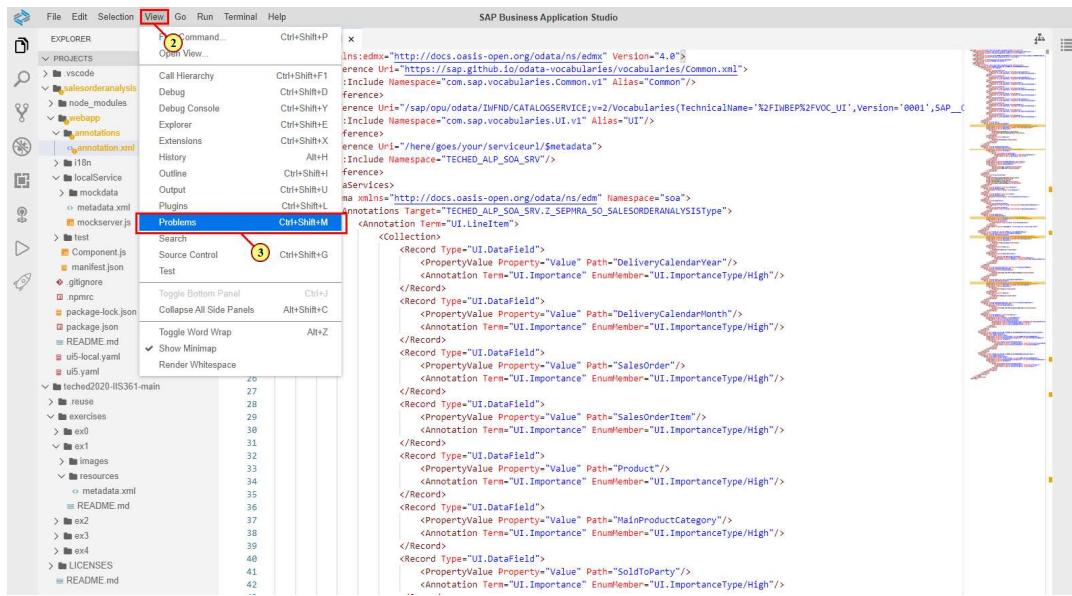
- auto-generate the key for the text string
- store it in i18n properties file
- substitute the hard coded text string in the annotation file with the reference to the generated text key.

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.

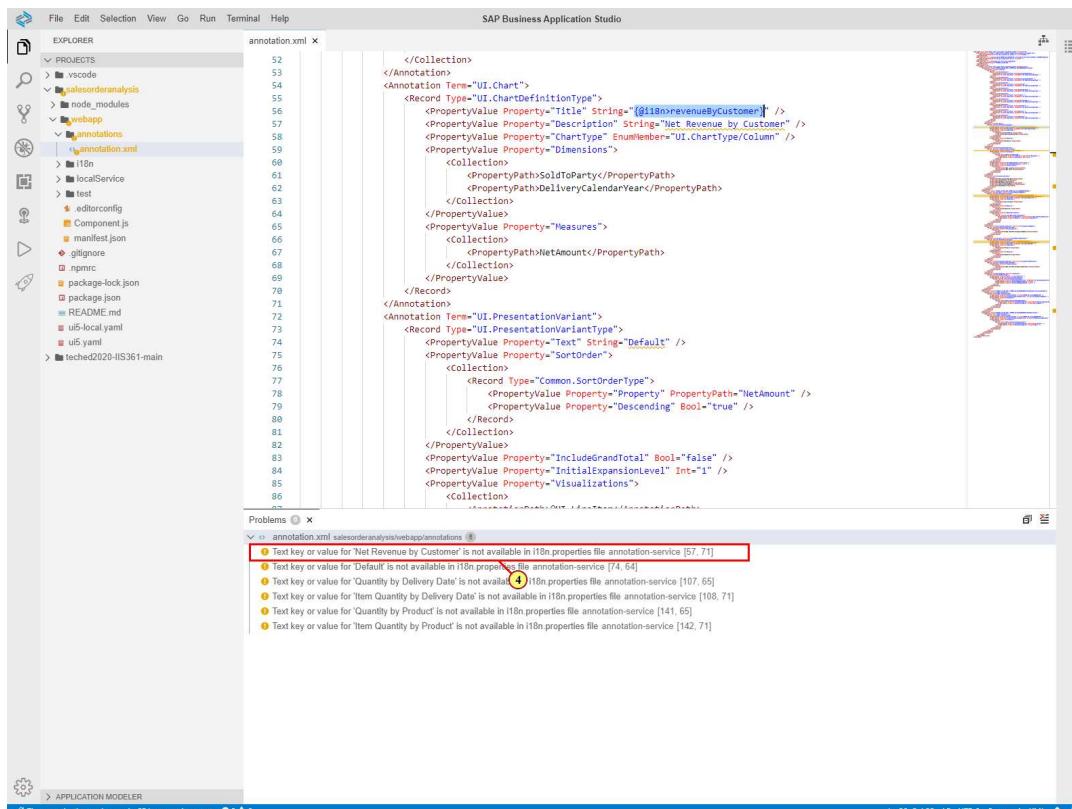


(1) In **Explorer** pane, double-click on **annotation.xml** file to open it.



(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.

The screenshot shows the SAP Business Application Studio interface. The left sidebar displays a project structure with files like annotation.xml, node_modules, and .gitignore. The main area shows the XML content of annotation.xml, which defines various UI annotations such as DataFields, Charts, and PresentationVariants. The bottom-left corner shows the 'Problems' view, which lists several errors related to missing text keys for annotations like 'Net Revenue by Customer' and 'Delivery Date'. A yellow circle highlights the 'Show Fixes' icon next to one of the error messages.

```

<Annotation Term="UI.Chart">
    <Record Type="UI.ChartDefinitionType">
        <PropertyValue Property="Title" String="#{i18n>revenueByCustomer}" />
        <PropertyValue Property="Description" String="Net Revenue by Customer" />
        <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Column" />
        <PropertyValue Property="Dimensions">
            <Collection>
                <PropertyValue>${soldToParty}</PropertyValue>
                <PropertyValue>${partyPathDeliveryCalendarYear}</PropertyValue>
            </Collection>
        </PropertyValue>
        <PropertyValue Property="Measures">
            <Collection>
                <PropertyValue>${netAmount}</PropertyValue>
            </Collection>
        </PropertyValue>
    </Record>
</Annotation>
<Annotation Term="UI.PresentationVariant">
    <Record Type="UI.PresentationVariantType">
        <PropertyValue Property="Text" String="Default" />
    </Record>
</Annotation>

```

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

An action to generate the text key is suggested.

The screenshot shows the SAP Business Application Studio interface. The left sidebar displays a project structure with files like `annotation.xml`, `i18n`, `localService`, and `test`. The main editor window shows the `annotation.xml` file content:

```

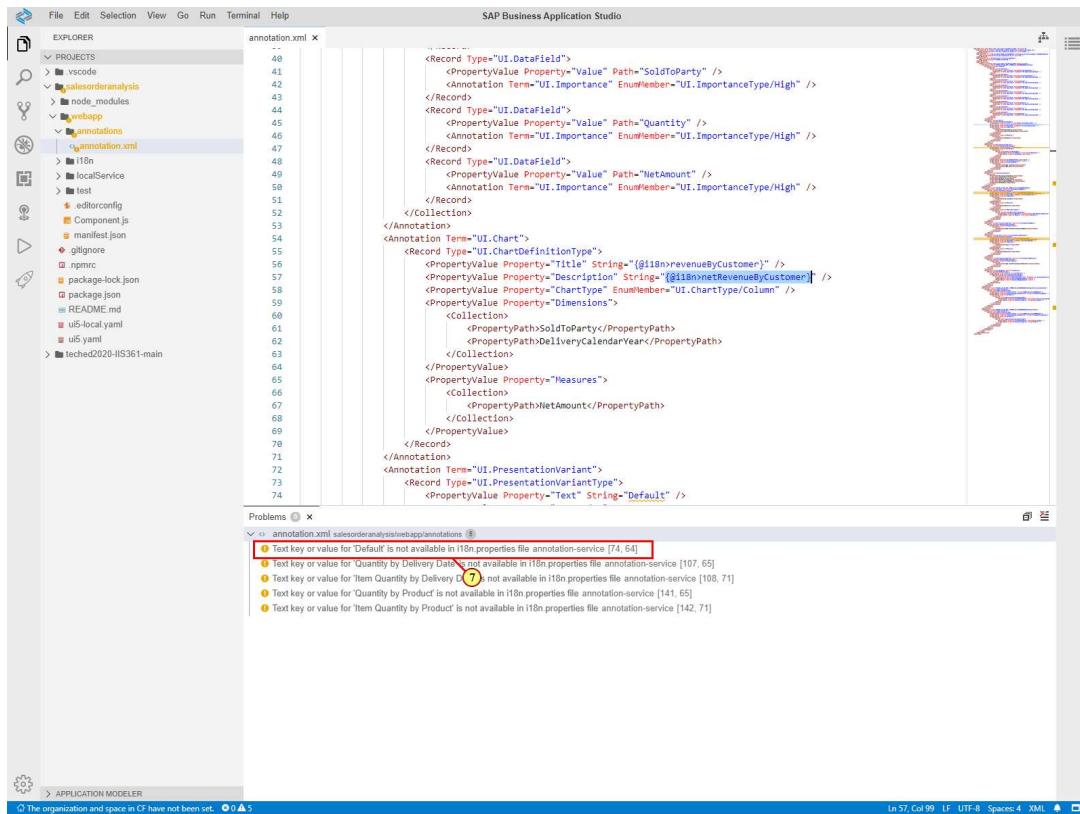
<Record Type="UI.DataField">
  <PropertyValue Property="Value" Path="SoldToParty" />
  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High" />
</Record>
<Record Type="UI.DataField">
  <PropertyValue Property="Value" Path="Quantity" />
  <Annotation Term="UI.Importance" EnumMember="UI.ImportanceType/High" />
</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="Net Revenue by Customer" />
  </Record>
  <Collection>
    <PropertyPath>SoldToParty</PropertyPath>
    <PropertyPath>DeliveryCalendarYear</PropertyPath>
  </Collection>
  <PropertyValue>
    <Collection>
      <PropertyValue>
        <Record Type="UI.PresentationVariant">
          <Record Type="UI.PresentationVariantType">
            <PropertyValue Property="Text" String="Default" />
          </Record>
        </Record>
      </Collection>
    </PropertyValue>
  </Record>
</Annotation>

```

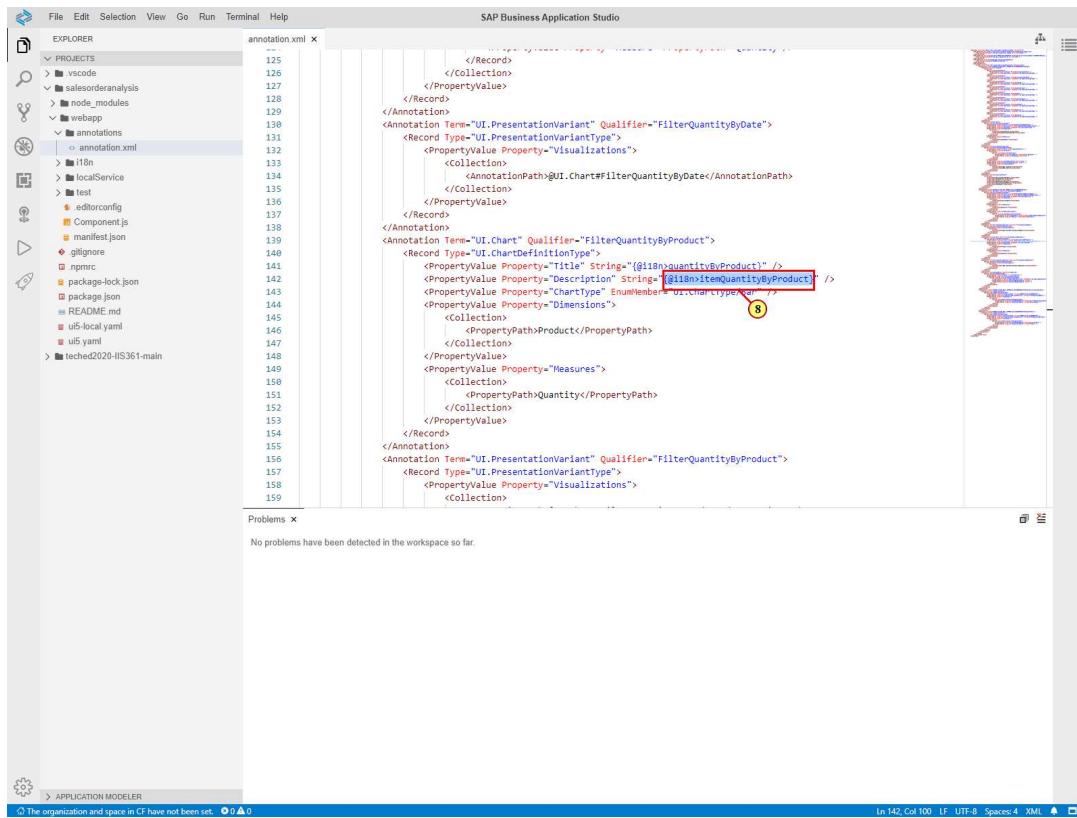
A tooltip is shown at line 59, reading "Generate a test key 'netRevenueByCustomer' in I18n properties file and substitute 'Net Revenue by Customer' by '@(i18n-netRevenueByCustomer)'". The Problems view below shows several warnings related to missing text keys.

(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.



(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. The left sidebar displays the project structure under 'PROJECTS'. The main area shows the content of 'annotation.xml'. A yellow circle highlights the text reference '@i18n>itemQuantityByProduct' in the XML code.

```

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

```

(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' for 'salesorderanalysis'. The 'annotation.xml' file is currently selected in the editor, showing XML code. Below it, the 'i18n.properties' file is also visible. The bottom status bar indicates 'The organization and space in CF have not been set.' and shows file details like 'Ln 28, Col 1' and encoding 'UTF-8'.

```

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

```

i18n.properties

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

The screenshot shows the SAP Business Application Studio interface. The left sidebar displays a project structure with files like `annotation.xml`, `i18n`, and `Component.js`. The main editor area shows the `annotation.xml` file's content, which includes XML records for presentation variants and chart definitions. A specific line of code, `<PropertyValue Property="Title" String="@i18n>quantityByProduct" />`, is selected and highlighted in blue. The SAP logo is located in the bottom-left corner of the application window.

(9) To view or modify the i18n record without leaving the file, click on the text reference `@i18n>quantityByProduct` and press **ALT+F12**.

The screenshot shows the SAP Business Application Studio interface with the following details:

- File Edit Selection View Go Run Terminal Help** - The top navigation bar.
- SAP Business Application Studio** - The title bar.
- EXPLORER** - A sidebar showing project structure:
 - PROJECTS
 - vscode
 - salesorderanalysis
 - node_modules
 - webapp
 - annotation
 - annotation.xml
 - i18n
 - i18n properties
 - localService
 - test
 - editorconfig
 - Component.js
 - manifest.json
 - gitignore
 - .npmrc
 - package-lock.json
 - package.json
 - README.md
 - ui-local.yaml
 - ui.yaml
 - teched2020-IIS361-main
- annotation.xml x** - The main editor tab showing XML code with annotations:

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

I18n properties (homeUser/projects/salesorderanalysis/webapp/i18n - Definitions (!))

```
#XFLD,35: quantityByProduct=Quantity by Product
#XFLD,75: quantityByDeliveryDate=Quantity by Delivery Date
#XFLD,90: itemQuantityByDelivery=Item Quantity by Delivery Date
#XFLD,57: quantityByProduct=Quantity by Product
#XFLD,72: itemQuantityByProduct=Item Quantity by Product
<PropertyValue Property="Description" String="{@i18n:itemQuantityByProduct}" />
<PropertyValue Property="ChartType" EnumMember="UI.ChartType/Bar" />
```
- Problems x** - A panel showing "No problems have been detected in the workspace so far."
- APPLICATION MODELER** - A small icon in the bottom left corner.
- Bottom status bar:** The organization space in CF have not been set. In 141, Col 81 LF UTE-8 Spaces: 4 XML

Summary

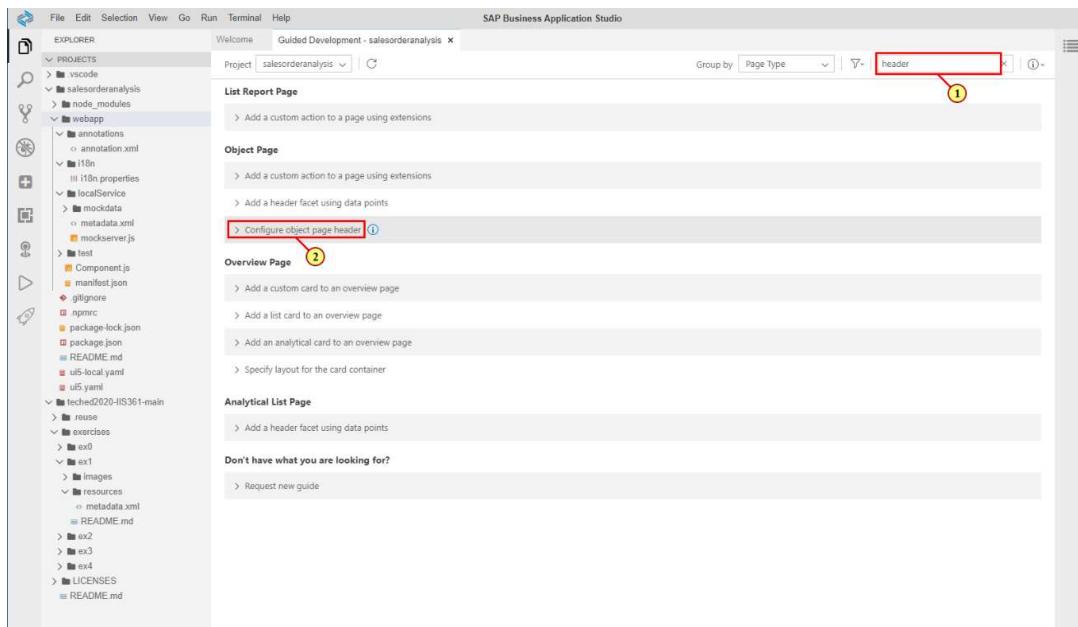
You have successfully substituted the hard coded texts in your annotation file with the references to the generated text keys. Now your Analytical List Page is prepared for translation. Continue to [Exercise 5 - Configuring the Second Page \(Object Page\)](#).

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](#).

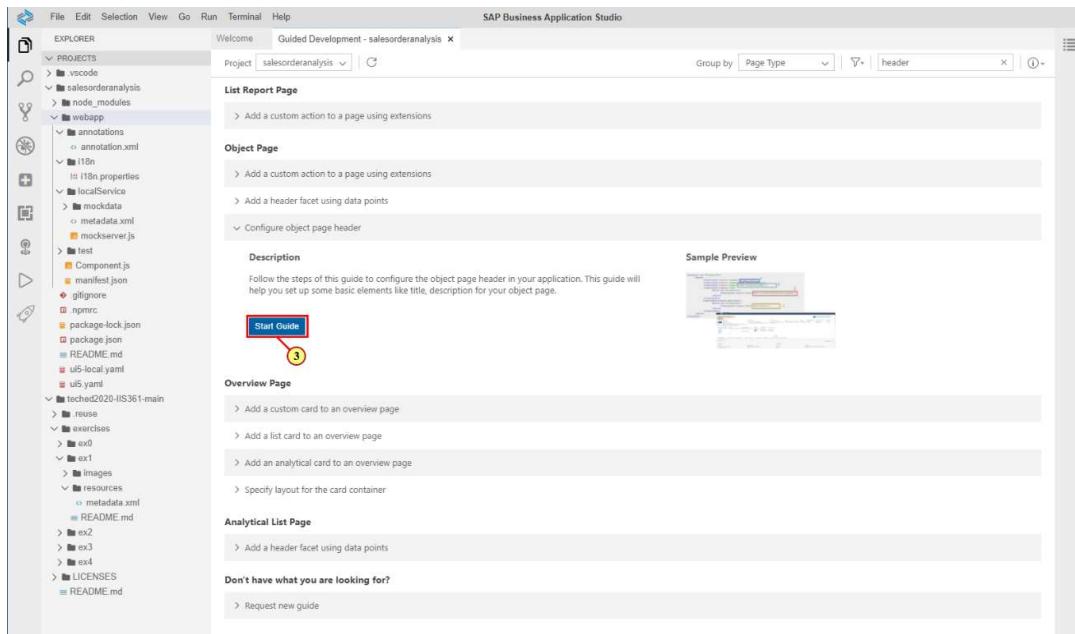
Exercise 5.1 Define Header Information

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 List Report page (type name plural). For this, you will use the guide **Configure object page header**.



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

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



(3) Click Start Guide.

The screenshot shows the 'Configure object page header' step of the guide. It includes a 'Step 1' tab and an 'About' tab. The main area is titled 'Annotate entity with UI.HeaderInfo annotation term'. It shows configuration fields for 'Entry Type' (Z_SEMPRA_SO_SALESORDERANALYSIS), 'Title - Type Name' (Sales Order Item), 'Title - Type Name (Plural)' (Sales Order Items), 'Object Title' (SalesOrderItem), and 'Object Image' (sap-icon://sales-order-item). A red box surrounds these fields. Below is a code editor with XML annotations, also highlighted with a red box. A red circle highlights the 'Apply' button in the toolbar above the code editor.

(4) Enter the following values:

| Field | Value |
|-------|-------|
|-------|-------|

| | |
|----------------------------|--------------------------------|
| Entity Type | SEPMRA_SO_SALESORDERANALYSType |
| 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**.

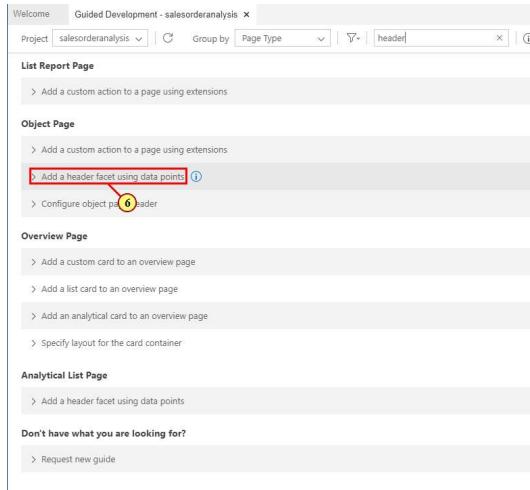
The basic header of the object page is defined and you can exit the guide.

(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**.



```

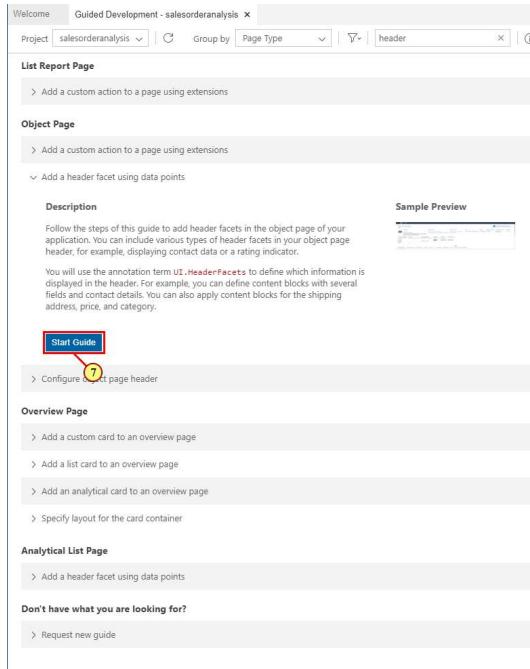
<annotation>
  <edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
    <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/>
      <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
    </edmx:Reference>
    <edmx:Reference Uri="/sap/opu/odata/IWFN/CATALOGSERVICE/v2/vocabularies/>
      <edmx:Include Namespace="com.sap.vocabularies.UT.v1" Alias="UI"/>
    </edmx:Reference>
    <edmx:Reference Uri="/here/goes/your/serviceurl/smetadata">
      <edmx:Include Namespace="TECHED_ALP_SO_A_SRV"/>
    </edmx:Reference>
    <edmx:DataServices>
      <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
        <Annotations Target="TECHED_ALP_SO_A_SRV;Z_SEPMRA_SO_SALESORDERANALYSType">
          <Annotation Term="UI.LineItem">
            <Collection>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="DeliveryCalen...>
                <Annotation Term="UI.Importance" EnumMember="UI.Im...>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="DeliveryCalen...>
                <Annotation Term="UI.Importance" EnumMember="UI.Im...>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="SalesOrderIte...>
                <Annotation Term="UI.Importance" EnumMember="UI.Im...>
              </Record>
              <Record Type="UI.DataField">
                <PropertyValue Property="Value" Path="Product"/>
                <Annotation Term="UI.Importance" EnumMember="UI.Im...>
              </Record>
            </Collection>
          </Annotation>
        </Annotations>
      </Schema>
    </DataServices>
  </edmx:Edmx>
</annotation>

```

(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.



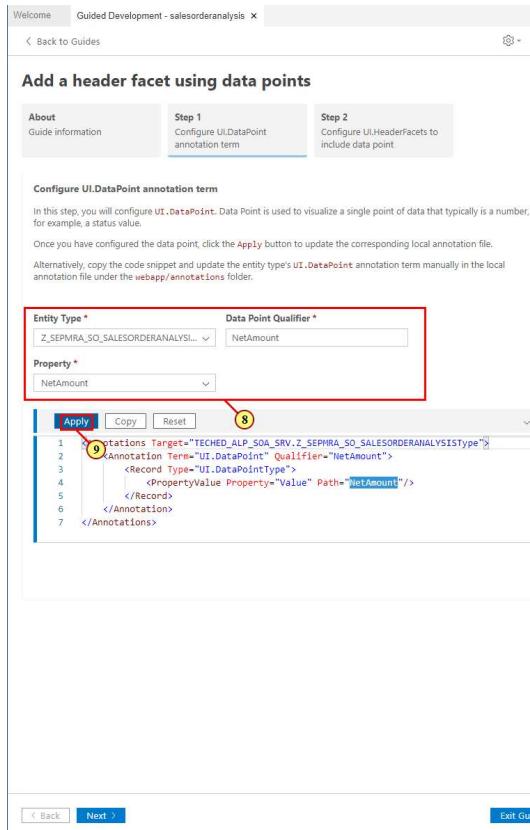
The screenshot shows the SAP Guided Development interface for a project named "salesorderanalysis". The left sidebar lists sections: "List Report Page", "Object Page", "Description", "Overview Page", and "Analytical List Page". The "Description" section contains a "Start Guide" button, which is circled in yellow. The main area displays the annotation XML code for the UI Header Facets.

```

<edmx:Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
  <edmx:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/Common.v1" Alias="Common">
    <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common" />
  </edmx:Reference>
  <edmx:Reference Uri="/sap/opu/odata/IMFND/CATALOGSERVICE;v=2/Vocabularies(T)">
    <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI" />
  </edmx:Reference>
  <edmx:Reference Uri="/here/goes/your/serviceurl/$metadata">
    <edmx:Include Namespace="TECHED_ALP_SOAS_SRV" />
  </edmx:Reference>
  <edmx:DataService>
    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edm" Namespace="soa">
      <Annotations Target="TECHED_ALP_SOAS_SRV.Z_SEPMRA_SO_SALESORDERANALY">
        <Annotation Term="UI.LineItem">
          <Collection>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="DeliveryCalen"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="DeliveryCalen"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="SalesOrder"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="SalesOrderite"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="Product"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="MainProductCa"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="SoldToParty"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="Quantity"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
            <Record Type="UI.DataField">
              <PropertyValue Property="Value" Path="NetAmount"/>
              <Annotation Term="UI.Importance" EnumMember="UI.Impo"/>
            </Record>
          </Collection>
        </Annotation>
      </Annotations>
    </Schema>
  </edmx:DataService>

```

(7) Click Start Guide.



The screenshot shows the "Add a header facet using data points" guide. It has two steps: "Step 1 Configure UI.DataPoint annotation term" and "Step 2 Configure UI.HeaderFacets to include data point". Step 1 is active, showing a "Configure UI.DataPoint annotation term" form. The "Entity Type" dropdown is set to "Z_SEPMRA_SO_SALESORDERANALYSIS" and the "Data Point Qualifier" input field is set to "NetAmount". Below the form is a code editor showing the XML annotation code. The "Apply" button is highlighted with a yellow circle. The code editor shows the following XML:

```

<Annotations Target="TECHED_ALP_SOAS_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
  <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 | SEPMRA_SO_SALESORDERANALYSISType |
| Data Point Qualifier | NetAmount |
| Property | NetAmount |

(9) Click Apply.

The screenshot shows the SAP Guided Development interface for 'Guided Development - salesorderanalysis'. The 'Step 1' tab is active, showing the configuration of a UI.DataPoint annotation term. The 'Entity Type' is set to Z_SEPMRA_SO_SALESORDERANALYSIS and the 'Data Point Qualifier' is set to Status. The 'Step 2' tab is visible below. On the right, a code editor displays the annotation.xml file with the following code snippet highlighted:

```

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/IVFND/CATALOGSERVICE;v=2/Vocabularies(T)" />
4     <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="I" />
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/edmx" Namespace="soa" />
11      <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEPMRA_SO_SALESORDERANALYSIS">
12        <Annotation Term="UI.LineItem">
13          <Collection>
14            <Record Type="UI.DataField">
15              <PropertyValue Property="Value" Path="DeliveryCalendar"/>
16              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
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.Medium" />
25            </Record>
26            <Record Type="UI.DataField">
27              <PropertyValue Property="Value" Path="SalesOrderItem"/>
28              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
29            </Record>
30            <Record Type="UI.DataField">
31              <PropertyValue Property="Value" Path="Product"/>
32              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
33            </Record>
34            <Record Type="UI.DataField">
35              <PropertyValue Property="Value" Path="MainProductCategory"/>
36              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
37            </Record>
38            <Record Type="UI.DataField">
39              <PropertyValue Property="Value" Path="SoldToParty"/>
40              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
41            </Record>
42            <Record Type="UI.DataField">
43              <PropertyValue Property="Value" Path="Quantity"/>
44              <Annotation Term="UI.Importance" EnumMember="UI.Importance.Medium" />
45            </Record>
46            <Record Type="UI.DataField">
47              <PropertyValue Property="Value" Path="NetAmount"/>
48              <Annotation Term="UI.Importance" EnumMember="UI.Importance.High" />
49            </Record>
50          </Collection>
51        </Annotation>
52      <Annotation Term="UI.Chart">
53        <Record Type="UI.ChartDefinitionType">
54          <PropertyValue Property="Title" String="#{i18n:revenueByCustomer}" />
55          <PropertyValue Property="Description" String="#{i18n:none}" />
56          <PropertyValue Property="ChartType" EnumMember="UI.ChartType.Bar" />
57          <PropertyValue Property="Dimensions">
58            <Collection>
59              <PropertyValue Path="SoldToParty"/>
60            </Collection>
61          </Dimensions>
62        </Record>
63      </Annotation>
64    </Schema>
65  </Annotations>
66</edmx:DataService>
67</edmx:Edmx>

```

The 'Step 2' tab is visible below the configuration form. The 'Annotations' section of the code editor shows the applied annotation term:

```

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

```

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

| Field | Value |
|----------------------|----------------------------------|
| Entity Type | SEPMRA_SO_SALESORDERANALYSISType |
| Data Point Qualifier | Status |
| Property | SalesOrderOverallStatus |

(11) Click Apply.

The screenshot shows the SAP Guided Development interface for a project named "salesorderanalysis". The current step is "Step 2: Configure UI.HeaderFacets to include data point". A red box highlights this step, and a yellow circle with the number "12" points to the "Configure UI.DataPoint annotation term" section. The interface includes tabs for "About", "Step 1", and "Step 2". Below the tabs, there's a "Configure UI.DataPoint annotation term" section with a "Status" dropdown set to "SalesOrderOverallStatus". A code snippet window shows the XML code for the annotation term:

```

1 <Annotations Target="TECHED_ALP_SOAS_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>

```

To the right of the interface is a large preview window showing the XML code for "annotation.xml". The code is a complex OData EDMX file with many annotations and schema definitions. A vertical scroll bar is visible on the right side of the preview window.

(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.

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

| Field | Value |
|----------------------|----------------------------------|
| Entity Type | SEPMRA_SO_SALESORDERANALYSISType |
| Data Point Qualifier | UI.DataPoint#NetAmount |

(14) Click **Apply**.

The screenshot shows the SAP Guided Development interface for the salesorderanalysis application. The current step is "Configure UI.HeaderFacets to include data point". On the right, the annotation.xml file is displayed, showing XML code for defining a header facet. A red box highlights the "Data Point Reference" dropdown, which contains "UI.DataPoint>Status". Another red box highlights the "Apply" button. A callout bubble labeled "15" points to the "Apply" button, and another callout bubble labeled "16" points to the "Data Point Reference" dropdown. The XML code includes annotations like `<Annotation Term="UI.HeaderFacets">` and `<Record Type="UI.ReferenceFacet">`.

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

(16) Click **Apply**.

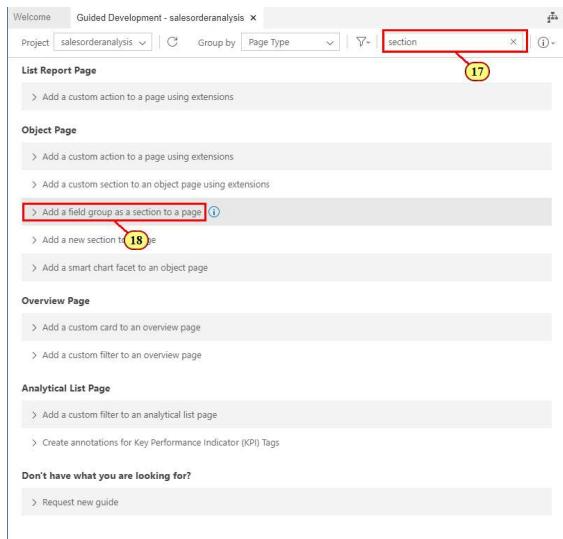
The header of the object page is now configured and you can exit the guide.

(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**.



The screenshot shows the Guided Development interface for a project named "salesorderanalysis". The search bar at the top has the word "section" typed into it. A red box highlights the search bar, and a yellow circle labeled "17" is positioned to the right of the search term.

annotation.xml

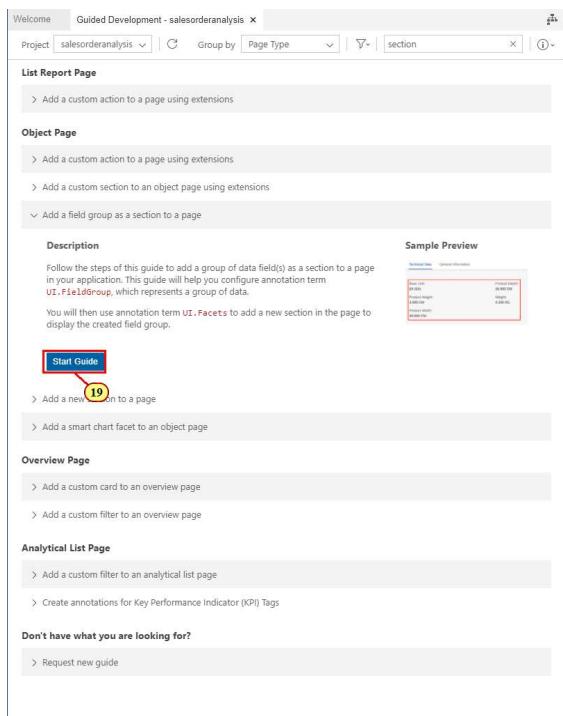
```

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">
3     <edmx:Include Namespace="com.sap.vocabularies.Common" Alias="Common"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE/v2/Vocabularies(T-1)">
6     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceuri/$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/edmx" Namespace="soa">
13        <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEMPRA_SO_SALESORDERANALY">
14          <Annotation Term="UI.LineItem">
15            <Collection>
16              <Record Type="UI.DataField">
17                <PropertyValue Property="Value" Path="DeliveryCalen">
18                  <Annotation Term="UI.Importance" EnumMember="UI.Imp">
19                </PropertyValue>
20              </Record>
21              <Record Type="UI.DataField">
22                <PropertyValue Property="Value" Path="DeliveryCalen">
23                  <Annotation Term="UI.Importance" EnumMember="UI.Imp">
24                </PropertyValue>
25              </Record>
26              <Record Type="UI.DataField">
27                <PropertyValue Property="Value" Path="SalesOrder" />
28                <Annotation Term="UI.Importance" EnumMember="UI.Imp">
29              </Record>
30              <Record Type="UI.DataField">
31                <PropertyValue Property="Value" Path="Product" />
32                <Annotation Term="UI.Importance" EnumMember="UI.Imp">
33              </Record>
34              <Record Type="UI.DataField">
35                <PropertyValue Property="Value" Path="MainProductCa">
36                  <Annotation Term="UI.Importance" EnumMember="UI.Imp">
37                </PropertyValue>
38              </Record>
39            </Collection>
40          </Annotation>
41        </Annotations>
42      </Schema>
43    </edmx:DataServices>
44  </edmx:Edmx>

```

(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.



The screenshot shows the same Guided Development interface as above, but with a different focus. The "Object Page" group is expanded, and the "Add field group as a section to a page" guide is visible. A red box highlights the "Start Guide" button, and a yellow circle labeled "19" is positioned to its right.

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">
3     <edmx:Include Namespace="com.sap.vocabularies.Common" Alias="Common"/>
4   </edmx:Reference>
5   <edmx:Reference Uri="/sap/opu/odata/INFND/CATALOGSERVICE/v2/Vocabularies(T-1)">
6     <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7   </edmx:Reference>
8   <edmx:Reference Uri="/here/goes/your/serviceuri/$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/edmx" Namespace="soa">
13        <Annotations Target="TECHED_ALP_SO_A_SRV.Z_SEMPRA_SO_SALESORDERANALY">
14          <Annotation Term="UI.LineItem">
15            <Collection>
16              <Record Type="UI.DataField">
17                <PropertyValue Property="Value" Path="DeliveryCalen">
18                  <Annotation Term="UI.Importance" EnumMember="UI.Imp">
19                </PropertyValue>
20              </Record>
21              <Record Type="UI.DataField">
22                <PropertyValue Property="Value" Path="DeliveryCalen">
23                  <Annotation Term="UI.Importance" EnumMember="UI.Imp">
24                </PropertyValue>
25              </Record>
26              <Record Type="UI.DataField">
27                <PropertyValue Property="Value" Path="SalesOrder" />
28                <Annotation Term="UI.Importance" EnumMember="UI.Imp">
29              </Record>
30              <Record Type="UI.DataField">
31                <PropertyValue Property="Value" Path="Product" />
32                <Annotation Term="UI.Importance" EnumMember="UI.Imp">
33              </Record>
34              <Record Type="UI.DataField">
35                <PropertyValue Property="Value" Path="MainProductCa">
36                  <Annotation Term="UI.Importance" EnumMember="UI.Imp">
37                </PropertyValue>
38              </Record>
39            </Collection>
40          </Annotation>
41        </Annotations>
42      </Schema>
43    </edmx:DataServices>
44  </edmx:Edmx>

```

(19) Click **Start Guide**.

Add a field group as a section to a page

About
Guide information

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

Step 2
Add a new section to display the field group

Entity Type *
Z_SEPMRA_SO_SALESORDERANALYSIS...

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

Qualifier *
General

New Data Field Parameters (20)
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

Annotations

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

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/1.0.0/1.0.0.edmx">
3 <edmx:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4 </edmx:Reference>
5 <edmx:Reference Uri="sap/opu/odata/IMFND/CATALOGSERVICEx/v2/Vocabularies(T)">
6 <edmx:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7 </edmx:Reference>
8 <edmx:Reference Uri="here/goes/your/serviceuri/Smetadata">
9 <edmx:Include Namespace="TECHED_ALP_SOASRV"/>
10 </edmx:Reference>
11 <edmx:DataServices>
12 <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
13 <Annotations Target="TECHED_ALP_SOASRV.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.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">
37 <PropertyValue Property="Value" Path="MainProductCategory"/>
38 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
39 </Record>
40 <Record Type="UI.DataField">
41 <PropertyValue Property="Value" Path="SoldToParty"/>
42 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
43 </Record>
44 <Record Type="UI.DataField">
45 <PropertyValue Property="Value" Path="Quantity"/>
46 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
47 </Record>
48 <Record Type="UI.DataField">
49 <PropertyValue Property="Value" Path="NetAmount"/>
50 <Annotation Term="UI.Importance" EnumMember="UI.ImportanceMedium"/>
51 </Record>
52 </Collection>
53 <Annotation Term="UI.Chart">
54 <Record Type="UI.ChartDefinitionType">
55 <PropertyValue Property="Title" String="@(118n)revenueB"/>
56 <PropertyValue Property="Description" String="@(118n)one"/>
57 <PropertyValue Property="ChartType" EnumMember="UI.ChartTypeLine"/>
58 <PropertyValue Property="Dimensions">
59 <Collection>
60 <PropertyPath>SoldToParty</PropertyPath>

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

| Field | Value |
|-------------|----------------------------------|
| Entity Type | SEPMRA_SO_SALESORDERANALYSISType |
| Qualifier | General |

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

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_SALESORDERANALY... ▾

New Field Group Parameters

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

Qualifier *

General

New Data Field Parameters

Select the Property from your chosen entity type that you would like represented as a new data field.

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

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

Navigation Path

Property * SalesOrder

Apply Copy Reset 21

22 21

```

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

```

Back Next ▶

Exit Guide

```

annotation.xml x
1 <Edmx xmlns:edmx="http://docs.oasis-open.org/odata/ns/edmx" Version="4.0">
2   <edm:Reference Uri="https://sap.github.io/odata-vocabularies/vocabularies/"/>
3     <edm:Include Namespace="com.sap.vocabularies.Common.v1" Alias="Common"/>
4   </edm:Reference>
5   <edm:Reference Uri="sap/odata/InfoCatalogService;v2/vocabularies(T)">
6     <edm:Include Namespace="com.sap.vocabularies.UI.v1" Alias="UI"/>
7   </edm:Reference>
8   <edm:Reference Uri="here/goes/your/serviceurl?snedata">
9     <edm:Include Namespace="TECHED_ALP_SO_SRV"/>
10  </edm:Reference>
11  <edm:DataService>
12    <Schema xmlns="http://docs.oasis-open.org/odata/ns/edmx" Namespace="soa">
13      <Annotations Target="TECHED_ALP_SO_SRV.Z_SEPMRA_SO_SALESORDERANALY..."/>
14      <Annotation Term="UI.ListItem">
15        <Collection>
16          <Record Type="UI.DataField">
17            <PropertyValue Property="Value" Path="DeliveryCalen...
18            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
19          </Record>
20          <Record Type="UI.DataField">
21            <PropertyValue Property="Value" Path="DeliveryCalen...
22            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
23          </Record>
24          <Record Type="UI.DataField">
25            <PropertyValue Property="Value" Path="SalesOrder" />
26            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
27          </Record>
28          <Record Type="UI.DataField">
29            <PropertyValue Property="Value" Path="SalesOrderIte...
30            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
31          </Record>
32          <Record Type="UI.DataField">
33            <PropertyValue Property="Value" Path="Product" />
34            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
35          </Record>
36          <Record Type="UI.DataField">
37            <PropertyValue Property="Value" Path="MainProductCa...
38            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
39          </Record>
40          <Record Type="UI.DataField">
41            <PropertyValue Property="Value" Path="SoldToParty" />
42            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
43          </Record>
44          <Record Type="UI.DataField">
45            <PropertyValue Property="Value" Path="Quantity" />
46            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
47          </Record>
48          <Record Type="UI.DataField">
49            <PropertyValue Property="Value" Path="NetAmount" />
50            <Annotation Term="UI.Importance" EnumMember="UI.Imp...
51          </Record>
52        </Collection>
53      </Annotation>
54    <Annotation Term="UI.Chart">
55      <Record Type="UI.ChartDefinitionType">
56        <PropertyValue Property="Title" String="({@118}xrevenueB...
57        <PropertyValue Property="Description" String="({@118}n...
58        <PropertyValue Property="ChartType" EnumMember="UI.Cha...
59        <PropertyValue Property="Dimensions" />
60        <Collection>
61          <PropertyPath>SoldToParty/PropertyPath>

```

(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

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

Entity Type *
Z_SEPMRA_SO_SALESORDERANALYSIS...

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

Qualifier *
General

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

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

Navigation Path
Property *
Select a navigation path NetAmount

Code snippet has been successfully applied

```

1 <Annotations Target="TECHED_ALP_SO_ASRV_Z_SEPMRA_SO_SALESORDERANALYSISType">
2   <Annotation Term="UI.FieldGroup" Qualifier="General">
3     <Record Type="UI.FieldGroupType">
4       <PropertyValue Property="Name">
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>

```

annotation.xml

```

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

```

Exit Guide

(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.

annotation.xml

```

114     <Record>
115         <PropertyValue>
116             <PropertyValue Property="typeImageURL" String="sap-icon://sales-on-d"/>
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="DataFields">
142                 <Collection>
143                     <Record Type="UI.DataField">
144                         <PropertyValue Property="Value" Path="SalesOrder"/>
145                     </Record>
146                     <Record Type="UI.DataField">
147                         <PropertyValue Property="Value" Path="DeliveryCalendarDate"/>
148                     </Record>
149                     <Record Type="UI.DataField">
150                         <PropertyValue Property="Value" Path="GrossAmount"/>
151                     </Record>
152                     <Record Type="UI.DataField">
153                         <PropertyValue Property="Value" Path="NetAmount"/>
154                     </Record>
155                 </Collection>
156             </PropertyValue>
157         </Record>
158     </Annotation>
159     <Annotations Target="TECHED_ALP_SO_ASRV_Z_SEPMRA_SO_SALESORDERANALYSISType">
160         <Annotation Term="UI.Facets">
161             <Collection>
162                 <Record Type="UI.ReferenceFacet">
163                     <PropertyValue Property="Label" String="General Information"/>
164                     <PropertyValue Property="ID" String="GI"/>
165                     <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#General"/>
166                 </Record>
167             </Collection>
168         </Annotation>
169     </Annotations>
170     <Annotations Target="TECHED_ALP_SO_ASRV_SEPMRA_SO_ALP_SLDDORDERTITEMType">
171         <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
172             <Record Type="UI.ChartDefinitionType">
173                 <PropertyValue Property="Title" String="(@11n)quantityByDeliveryDate"/>
174                 <PropertyValue Property="Description" String="(@11n)itemQuantityByDeliveryDate"/>
175                 <PropertyValue Property="CharType" EnumMember="UI.Charttype/Line"/>
176                 <PropertyValue Property="Dimensions">
177                     <Collection>
178                         <PropertyPath>DeliveryDate</PropertyPath>
179                     </Collection>
180                 </Dimensions>
181             <Record Type="UI.MeasureDefinitionType">
182                 <PropertyValue Property="Measures">
183                     <Collection>
184                         <PropertyPath>Quantity</PropertyPath>
185                     </Collection>
186                 </Measures>
187             </Record>
188         </Record>
189     </Annotation>
190 
```

(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**.

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 * **1**
Z_SEPMRA_SO_SALESORDERANALYSIS...

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

Label **ID**
General Information GI

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

Field Group *
UI.FieldGroup#General

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

```

1 <Annotations Target="TECHED_ALP_SO_A_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#Genera
8       </Record>
9     </Collection>
10    </Annotation>
11  </Annotations>

```

Exit Guide

```

114   <Record>
115     <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-ord
116   </Record>
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 Term="UI.HeaderFacets">
128     <Collection>
129       <Record Type="UI.ReferenceFacet">
130         <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#"
131       </Record>
132       <Record Type="UI.ReferenceFacet">
133         <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#"
134       </Record>
135     </Collection>
136   </Annotation>
137   <Annotation Term="UI.FieldGroup" Qualifier="General">
138     <Record Type="UI.FieldGroupType">
139       <PropertyValue Property="Data">
140         <Collection>
141           <Record Type="UI.DataField">
142             <PropertyValue Property="Value" Path="SalesOrder"/>
143           </Record>
144           <Record Type="UI.DataField">
145             <PropertyValue Property="Value" Path="DeliveryCalendarD
146           </Record>
147           <Record Type="UI.DataField">
148             <PropertyValue Property="Value" Path="GrossAmount"/>
149           </Record>
150           <Record Type="UI.DataField">
151             <PropertyValue Property="Value" Path="NetAmount"/>
152           </Record>
153         </Collection>
154       </PropertyValue>
155     </Record>
156   </Annotation>
157   <Annotation Term="UI.Facet">
158     <Collection>
159       <Record Type="UI.ReferenceFacet">
160         <PropertyValue Property="Label" String="General Information"/>
161         <PropertyValue Property="ID" String="GI"/>
162         <PropertyValue Property="Target" AnnotationPath="@UI.FieldGroup#
163       </Record>
164     </Collection>
165   </Annotation>
166   <Annotations>
167     <Annotation Target="TECHED_ALP_SO_A_SRV_SEPMRA_SO_ALP_SLBORDERITEMType">
168       <Annotation Term="UI.Chart" Qualifier="FilterQuantityByDate">
169         <Record Type="UI.ChartDefinitionType">
170           <PropertyValue Property="Title" String="#@{lineQuantityByDeliveryD
171           <PropertyValue Property="Description" String="#@{lineItemQuantityBy
172           <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/
173         </Record>
174       </Annotation>

```

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

```

114     <Record>
115         <PropertyValue Property="TypeImageUrl" String="sap-icon://sales-ord"/>
116     </Record>
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 Term="UI.HeaderFacets">
128         <Collection>
129             <Record Type="UI.ReferenceFacet">
130                 <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#<*>"/>
131             </Record>
132             <Record Type="UI.ReferenceFacet">
133                 <PropertyValue Property="Target" AnnotationPath="@UI.DataPoint#<*>"/>
134             </Record>
135         </Collection>
136     </Annotation>
137     <Annotation Term="UI.FieldGroupType" Qualifier="General">
138         <Record Type="UI.FieldGroupType">
139             <PropertyValue Property="Data">
140                 <Collection>
141                     <Record Type="UI.DataField">
142                         <PropertyValue Property="Value" Path="SalesOrder"/>
143                     </Record>
144                     <Record Type="UI.DataField">
145                         <PropertyValue Property="Value" Path="DeliveryCalendarD"/>
146                     </Record>
147                     <Record Type="UI.DataField">
148                         <PropertyValue Property="Value" Path="GrossAmount"/>
149                     </Record>
150                     <Record Type="UI.DataField">
151                         <PropertyValue Property="Value" Path="NetAmount"/>
152                     </Record>
153                 </Collection>
154             </PropertyValue>
155         </Record>
156     </Annotation>
157     <Annotations Target="TECHED_ALP_SOAL_SRV_Z_SEMPRA_SO_SALESORDERANALYSISType">
158         <Annotation Term="UI.FieldGroup" Qualifier="Product">
159             <Record Type="UI.FieldGroupType">
160                 <PropertyValue Property="Data">
161                     <Collection>
162                         <Record Type="UI.DataField">
163                             <PropertyValue Property="Value" Path="ProductName"/>
164                         </Record>
165                     </Collection>
166                 </PropertyValue>
167             </Record>
168         </Annotation>
169         <Annotations Target="TECHED_ALP_SOAL_SRV_SEMPRA_SO_ALP_SLOORDERITEMType">
170             <Annotation Term="UI.Chart" Qualifier="filterQuantityByDate">
171                 <Record Type="UI.ChartDefinitionType">
172                     <PropertyValue Property="Title" String="#@i18n:itemQuantityByDeliveryDate#"/>
173                     <PropertyValue Property="Description" String="#@i18n:itemQuantityByDeliveryDate#"/>
174                     <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
175                 </Record>
176             </Annotation>
177         </Annotations>
178     </Annotations>
179 
```

(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 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

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>

```

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="G1"/>
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_ALP_SI_ORDERWRITEType">
192     <Annotation Term="UI.PresentationVariant" Qualifier="FilterQuantityByDate">
193       <Record Type="UI.PresentationVariantType">
194         <PropertyValue Property="Title" String="#@1@n:quantityByDeliveryDate"/>
195         <PropertyValue Property="Description" String="#@1@n:ItemQuantityByDeliveryDate"/>
196         <PropertyValue Property="ChartType" EnumMember="UI.ChartType/Line"/>
197         <PropertyValue Property="Dimensions">
198           <Collection>
199             <Record Type="UI.Dimension">
200               <PropertyValue Property="Path" Value="DeliveryDate/PropertyPath"/>
201             </Record>
202           </Collection>
203         </PropertyValue>
204         <PropertyValue Property="Measures">
205           <Collection>
206             <Record Type="UI.Measure">
207               <PropertyValue Property="Path" Value="Quantity/PropertyPath"/>
208             </Record>
209           </Collection>
210         </PropertyValue>
211         <PropertyValue Property="MeasureAttributes">
212           <Collection>
213             <Record Type="UI.ChartMeasureAttributeType">
214               <PropertyValue Property="Measure" Path="Quantity/PropertyPath"/>
215               <PropertyValue Property="DataPoint" AnnotationPath="@UI.PresentationVariantType"/>
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.

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.

The screenshot shows a SAP application interface for a Sales Order Item. At the top, there's a header bar with the SAP logo and the title "Sales Order Item". Below the header, the number "40" is displayed. On the right side of the header, there are search and filter icons.

The main content area has two tabs: "General Information" (selected) and "Product Information".

General Information:

| | | | |
|---------------------------|-----------------------|--------------------------------|--------------------------|
| Sales Order: 500000012 | Date: Jul 29, 2018 | Gross Revenue: 5,890.50 EUR | Revenue: 4,950.00 EUR |
|---------------------------|-----------------------|--------------------------------|--------------------------|

Product Information:

| | | |
|------------------------------------|------------------------------------|-------------------|
| Product Name: Notebook Basic 19 | Supplier Company Name: Talpa | Quantity: 3 EA |
| Main Category: | Net Product Price: 1,650.00 EUR | |

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 ShareActionSheet near the **Share** button.

The screenshot shows a SAP application interface for a Sales Order Item. At the top, there's a header with the SAP logo and the title "Sales Order Item". Below the header, the number "40" is displayed. On the right side of the header, there are icons for search, refresh, and other navigation functions. A blue ribbon bar contains a document icon and the text "4,950.00 EUR New (N)". To the right of the ribbon, there are buttons for "Send Email" and "Save as Tile".

The main content area is divided into two tabs: "General Information" (which is selected) and "Product Information".

General Information:

- Sales Order: 500000012
- Date: Jul 29, 2018
- Gross Revenue: 5,890.50 EUR
- Revenue: 4,950.00 EUR

Product Information:

- Product Name: Notebook Basic 19
- Main Category:
- Supplier Company Name: Talpa
- Net Product Price: 1,650.00 EUR
- Quantity: 3 EA

Summary

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