Create a simple CDS

Create a simple CDS with name **ZWS##_CDS_SIMPLE** where ## is your number.
Add the fields: Id, CustomerId, _Customer.name and GrossAmount.

> Template:

```
@AbapCatalog.sqlViewName: 'ZWK##CDSSIMPLE'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'Simple CDS'
define view ZWS##_CDS_Simple as select from ztmcds9_i_so {
    key Id as SalesOrderID,
    CustomerId as CustomerID,
    _Customer.name as CustomerName,
    GrossAmount
}
```

Activate your CDS using CTRL-F3.
Test your CDS by opening it with **Data Preview**. This should result in a list of records.

SalesOrderID	CustomerID	CustomerName	GrossAmount
00001	00001	Pixel Tech	523.29
00002	00001	Pixel Tech	1940.88
00003	00005	Techlanch	5.20
00004	00004	Monotech	196.20
00005	00002	Visions	3294.31
00006	00003	Techaholic	600.00
00007	00005	Techlanch	2054.58

Create Service Definition

You are going to create a Service Definition in which you can list all the CDS views you want to expose in a OData service.
Right click on your Package and select *New* **Other ABAP Repository Object**, then type

Service and select **Service Definition**.
Enter Name **ZUI_WKSP_##** and enter a description.

> Hint: Naming conventions are often used to specify if the service definition is used as a UI or API service.

Add your CDS as the entity name and give it a nice name like SimpleCDS.

```
@EndUserText.label: 'UI ## Service Definition'
define service ZUI_WKSP_## {
    expose ZWS##_CDS_Simple as SimpleCDS;
}
```

Create Service Binding

Now we are going to expose the Service Definition by creating a Service Binding.
Right click on your Package and select *New* **Other ABAP Repository Object**, then type *Service* and select **Service Binding**.
Enter Name **ZUI_WKSP_##** and enter a description. Then select *Binding Type* **OData V4 - UI**, and then enter your Service Definition. You can start typing the first letters of your Service Definition and then use CTRL+SPACE for Auto Complete, or use the `Browse` button.


Activate your Service Binding and then push Publish (this may take a few seconds). Your Service Binding is now ready to be used.

If you press the ServiceURL a browser will be started and it will open the ROOT URL for your service.
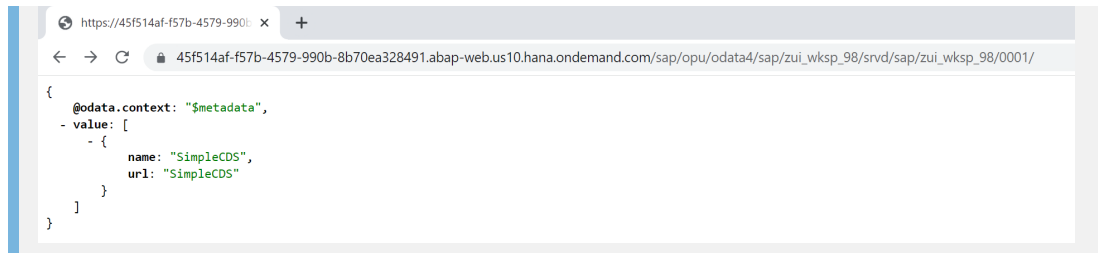
If you select an Entity Set and press the `Preview` button, it will open a browser with an example application. But you still need to goto the settings to select the columns you want to display.
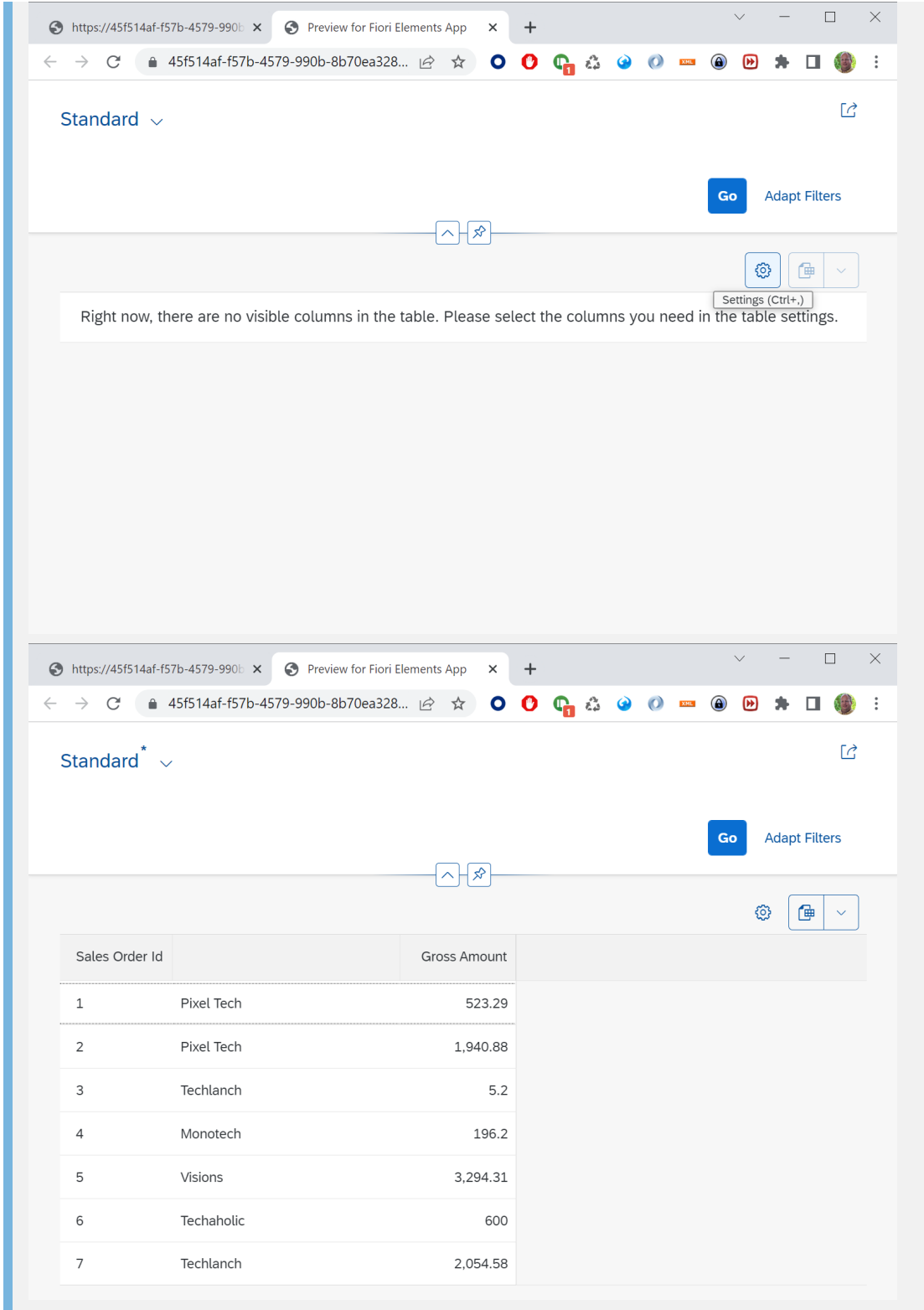
Add Some UI Annotiations

Now add some annotations to make the Preview application display lines directly without have to go to the settings.
Add Header to table and select by default the Sales Order Id, CustomerName and

GrossAmount.

> Hint: @UI.headerInfo, @UI.lineItem

When you have added the annotations to your CDS, open the Preview again and see the result.

Option 1, Annotations in your CDS

```
@AbapCatalog.sqlViewName: 'ZWK##CDSSIMPLE'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'Simple CDS'
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
define view ZWS##_CDS_Simple as select from ztmcds9_i_so {
@UI.lineItem: [{position: 10 }]
    key Id as SalesOrderID,
    CustomerId as CustomerID,
@UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
    _Customer.name as CustomerName,
@UI.lineItem: [{position: 30 }]
    GrossAmount
}
```

Option 2, use a Metadata Extension

Create a Metadata Extension for your CDS. Add the annotation **@Metadata.allowExtensions: true** to your Simple CDS above the *define* line.

```
@AbapCatalog.sqlViewName: 'ZWS##CDSBASIC'
@AbapCatalog.compiler.compareFilter: true
@AbapCatalog.preserveKey: true
@AccessControl.authorizationCheck: #CHECK
@EndUserText.label: 'Basic CDS'
@Metadata.allowExtensions: true
define view ZWS##_CDS_Basic as select from ztmcds9_i_so {
    key Id as SalesOrderID,
    CustomerId as CustomerID,
    _Customer.name as CustomerName,
    GrossAmount
}
```

Right click on your Package and select *New* **Other ABAP Repository Object**, then type *Core* and select **Metadata Extension**.
And add the annotations for the fields to this file.

```
@Metadata.layer: #CUSTOMER
@UI.headerInfo.typeName: 'Sales Order'
@UI.headerInfo.typeNamePlural: 'Sales Orders'
annotate view ZWS##_CDS_Basic with
{
  @UI.lineItem: [{position: 10 }]
  SalesOrderID;
  @UI.lineItem: [{position: 20 },{ label: 'Customer Name' }]
  CustomerName;
  @UI.lineItem: [{position: 30 }]
  GrossAmount;
}
```

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Result:

Preview for Fiori Elements App

🔒 45f514af-f57b-4579-99...

Standard ⌄

Go   Adapt Filters

Enter

Sales Orders (7)

Sales Order Id	Customer Name	Gross Amo…	
1	Pixel Tech	523.29	›
2	Pixel Tech	1,940.88	›
3	Techlanch	5.2	›
4	Monotech	196.2	›
5	Visions	3,294.31	›
6	Techaholic	600	›
7	Techlanch	2,054.58	›