

Fusion development with ABAP Cloud in SAP Build

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Hands-on Lab: Fusion Development with ABAP Cloud in SAP Build

asUG **Tech Connect**

In partnership with **SAP TechEd**

Agenda

Exercise 1

- Start your development by creating an ABAP project in the SAP Build Lobby

Exercise 2

- Create a Shopping Cart business object, projection and service with the Graphical Modeler in SAP Build Code

Exercise 3

- Implement transactional behavior in ADT, create validations and determinations

Exercise 4

- Create, preview and adapt a SAP Fiori elements application



Github

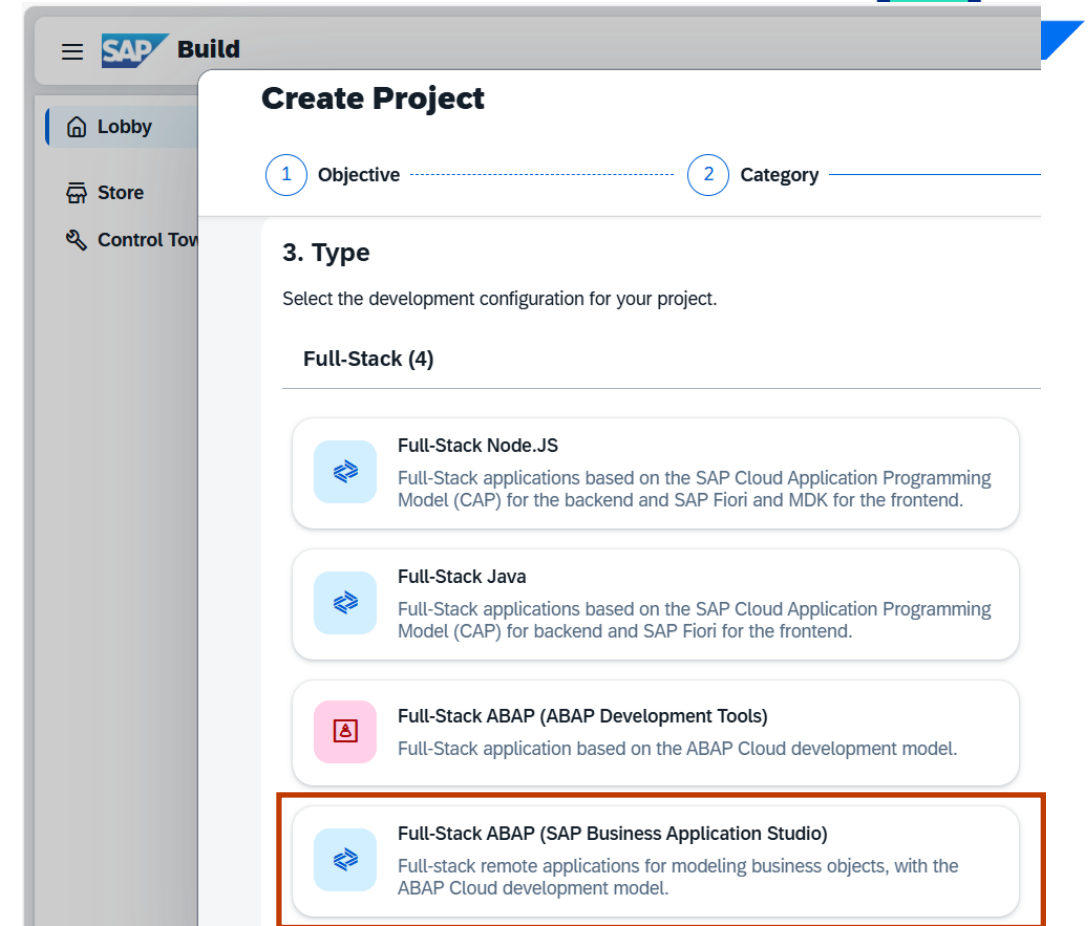
Introduction

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What you will do in this hands-on workshop – Practice fusion development of ABAP Cloud

1. SAP Build Lobby - Create a Full-Stack ABAP project (SAP Business Application Studio)



What you will do in this hands-on workshop – Practice fusion development of ABAP Cloud

1. SAP Build Lobby - Create a Full-Stack ABAP project (SAP Business Application Studio)
2. SAP Business Application Studio - Graphical Modeler



Cart Business Object		
OrderUid		abap.raw(16)
Ab Currency		abap.cuky
Ab Notes		abap.char(100)
Ab OrderID		abap.numc(8)
RequestDeliveryDate		abap.datin
12 TotalPrice		abap.curr(11,2)

Item Entity		
ItemUid		abap.raw(16)
ParentUid		abap.raw(16)
Ab ItemID		abap.numc(8)
Ab OrderedItem		abap.char(40)
Ab Quantity		abap.numc(4)
12 ItemPrice		abap.curr(11,2)
Ab Currency		abap.cuky
12 ItemUnitPrice		abap.curr(11,2)

What you will do in this hands-on workshop – Practice fusion development of ABAP Cloud

1. SAP Build Lobby - Create a Full-Stack ABAP project (SAP Business Application Studio)
2. SAP Business Application Studio – Graphical Modeler
3. ABAP Development Tools - Implementation of Business Logic



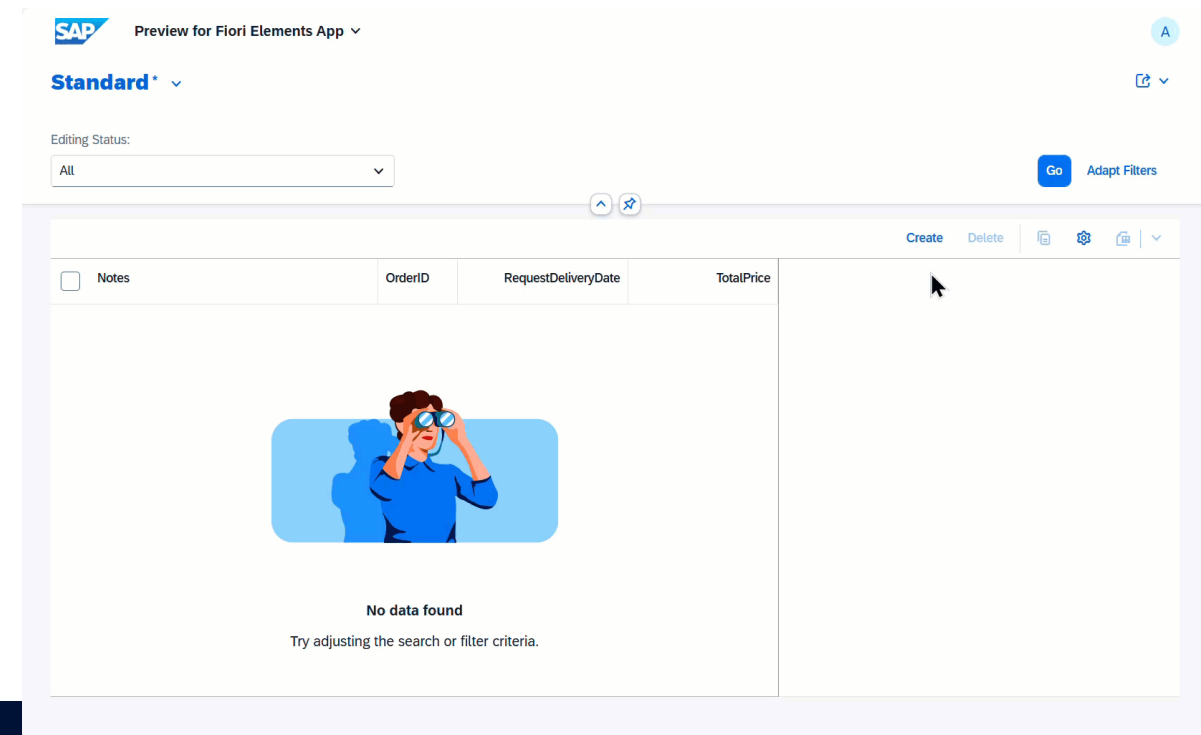
```
35  
36 validation validateRequestDeliveryDate on save { create; field RequestDeliveryDate; }  
37  
38 draft action Activate optimized;  
39 draft action Discard;  
40 draft action Edit;  
41 draft action Resume;  
42 //draft determine action Prepare;  
43 draft determine action Prepare  
44 {  
45     validation validateRequestDeliveryDate;  
46 }  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65 association _Items { create; with draft; }  
66  
67 }  
--
```

```
METHOD validateRequestDeliveryDate.  
  
ENDMETHOD.
```

Predict RAP Business Logic

What you will do in this hands-on workshop – Practice fusion development of ABAP Cloud

1. SAP Build Lobby - Create a Full-Stack ABAP project (SAP Business Application Studio)
2. SAP Business Application Studio – Graphical Modeler
3. ABAP Development Tools - Implementation of Business Logic
4. SAP Business Application Studio - Create, preview and adapt a SAP Fiori elements application



Exercise 1: Start your development by creating an ABAP project in the SAP Build Lobby

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Exercise 1: Create a Full-Stack ABAP (SAP Business Application Studio) Project

Create a Full-Stack ABAP (SAP Business Application Studio) Project

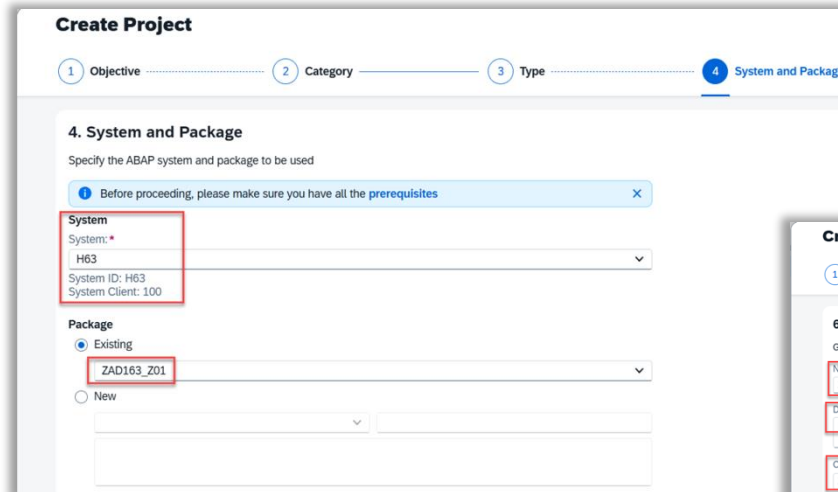
Connect to backend system
H63

Use a pre-created package
ZAD163-A##

Create and start Dev Space
in SAP Business Application Studio



Full-Stack ABAP (SAP Business Application Studio)
Full-stack remote applications for modeling business objects, with the ABAP Cloud development model.



Create Project

1 Objective 2 Category 3 Type 4 System and Package

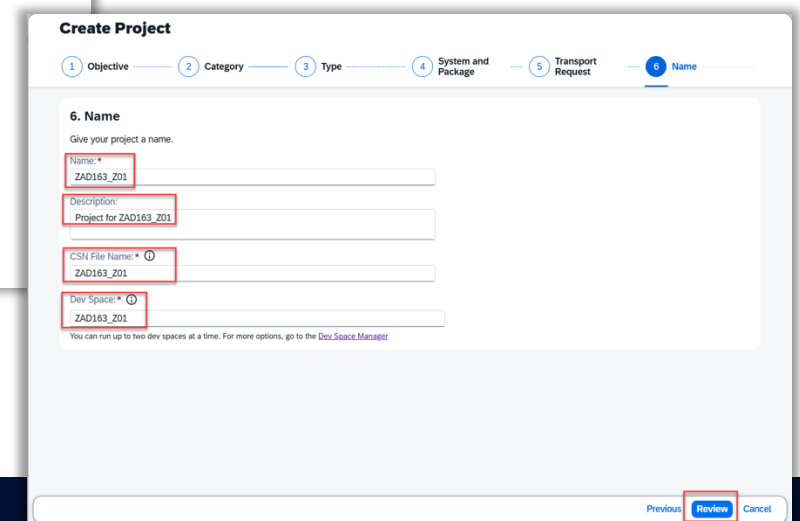
4. System and Package

Specify the ABAP system and package to be used

Before proceeding, please make sure you have all the prerequisites

System:
System: *
H63
System ID: H63
System Client: 100

Package:
☒ Existing
ZAD163_Z01
☐ New



Create Project

1 Objective 2 Category 3 Type 4 System and Package 5 Transport Request 6 Name

6. Name

Give your project a name.

Name: *
ZAD163_Z01

Description:
Project for ZAD163_Z01

CSN File Name: *
ZAD163_Z01

Dev Space: *
ZAD163_Z01

You can run up to two dev spaces at a time. For more options, go to the [Dev Space Manager](#)

Previous Review Cancel

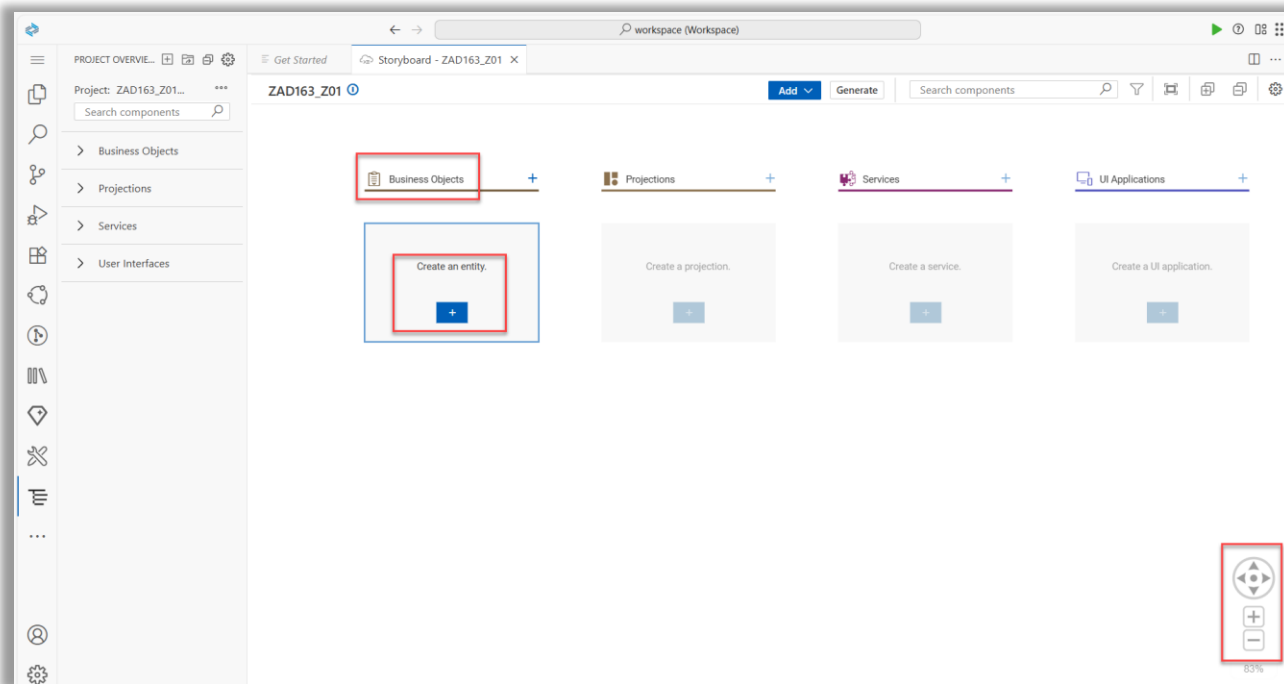
Exercise 2 : Create a Shopping Cart business object, projection and service with the Graphical Modeler in SAP Build Code

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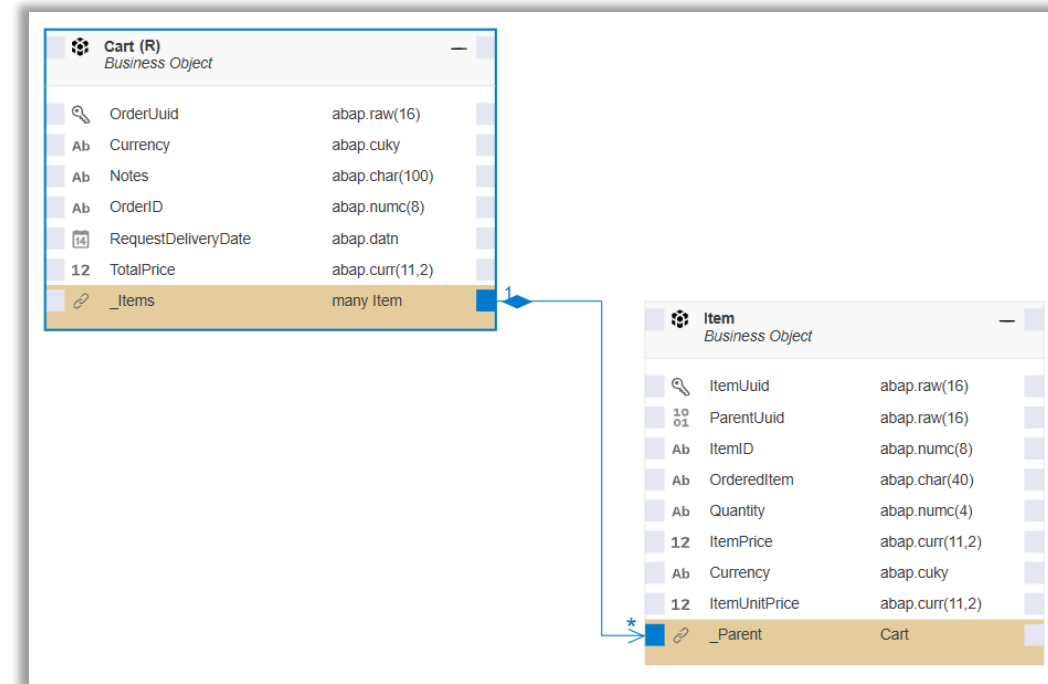
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Exercise 2: Model the ShoppingCart Business Object

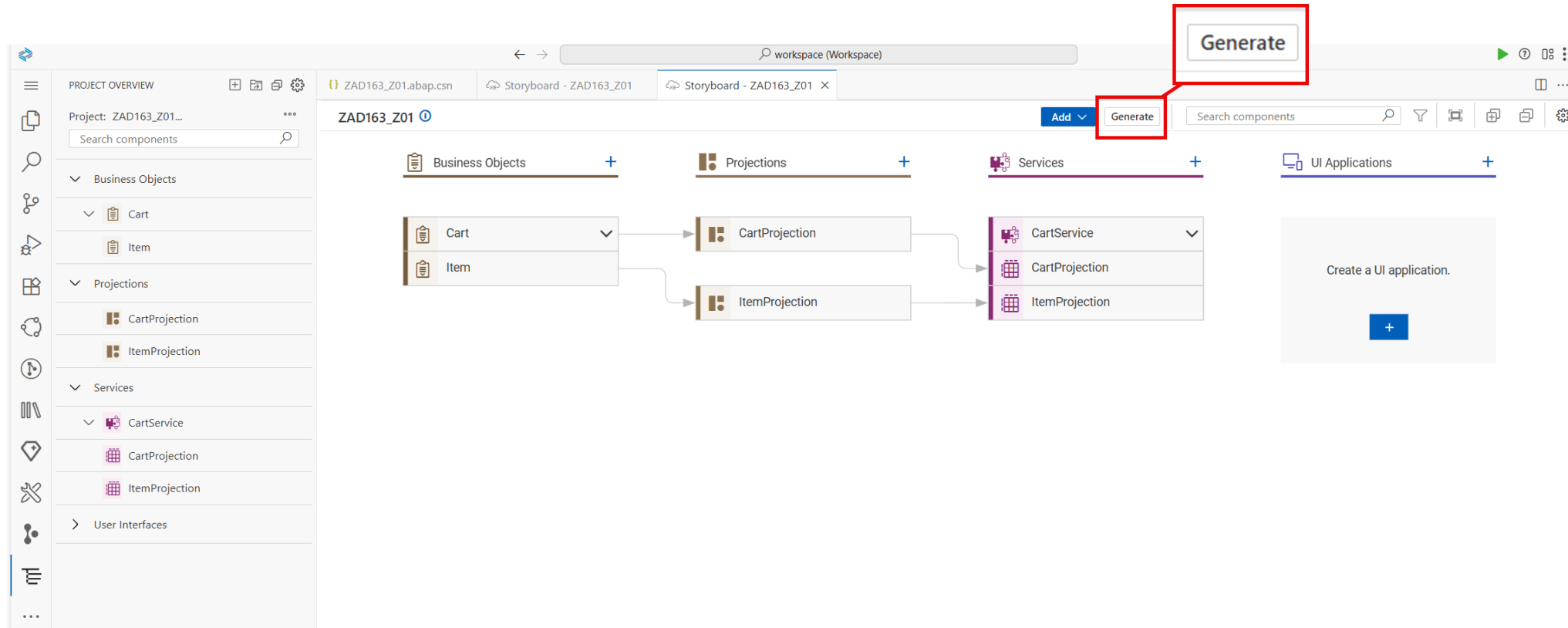
Storyboard



Graphical Modeller



Exercise 2: Add Projection and Service Layer, Generate ABAP artefacts



Exercise 3: Implement transactional behavior in ADT, create validations and determinations

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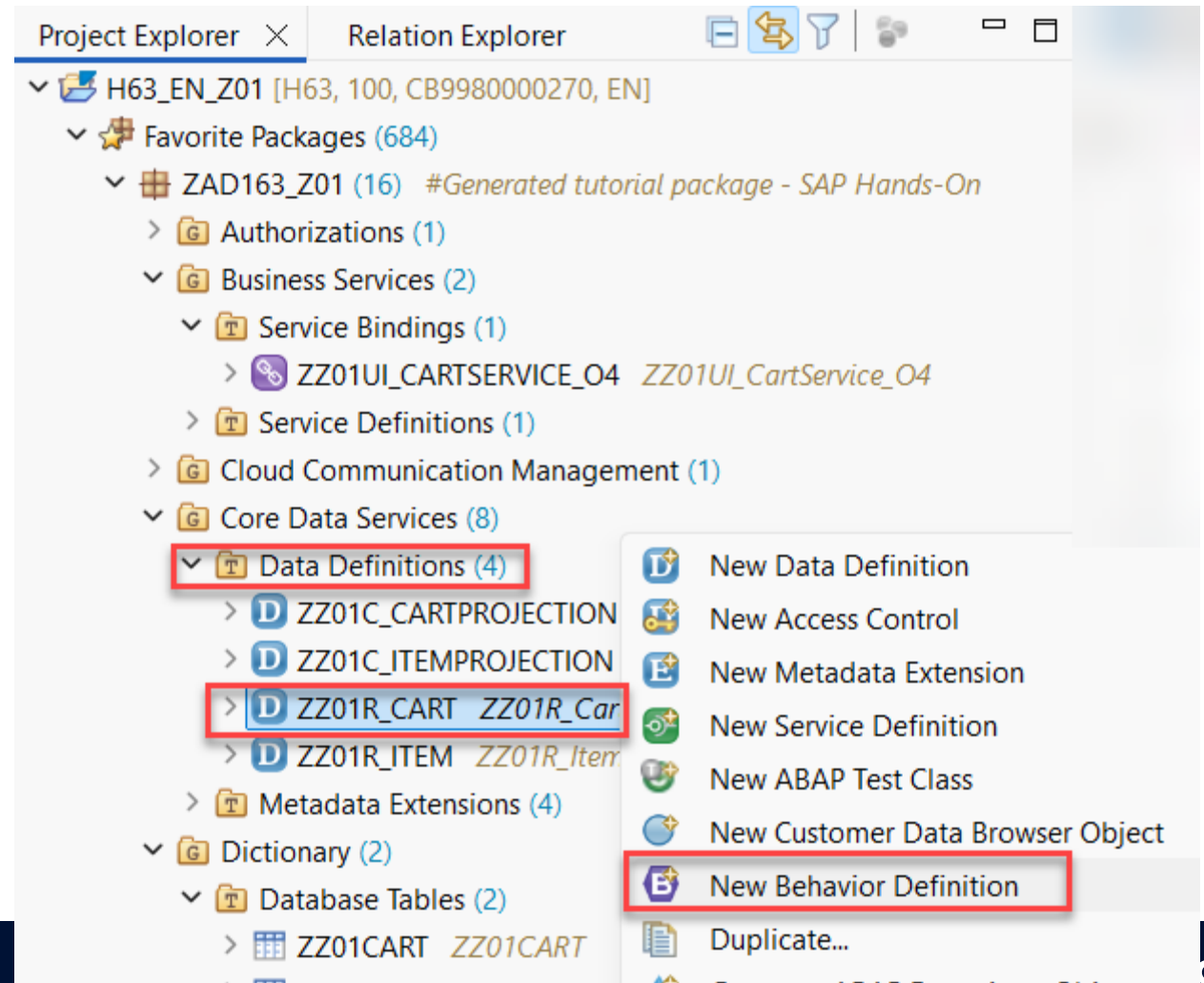
Exercise 3: Create ABAP cloud project in ADT

The screenshot displays the SAP ADT workspace interface. On the left, the Explorer pane shows the project structure for 'ZAD163_Z01', with 'Service Bindings' expanded and 'ZZ01UI_CARTSERVICE_O4.abap.srvb' selected. The main editor area shows an error message: 'Unable to open the "/H63/ZAD163_Z01/Service Bindings/ZZ01UI_CARTSERVICE_O4.abap.srvb" file.' with a link 'Open this object in ADT'. Two dialog boxes are overlaid: 'Open ADT Link' with a 'New...' button, and 'New Project' with 'ABAP Cloud Project' selected and a 'Next >' button.

1 – Create ABAP cloud project in ADT

Exercise 3: Add transactional behavior

```
1 @EndUserText.label : 'ZZ01CART'
2 @AbapCatalog.enhancement.category : #NOT_EXTENSIBLE
3 @AbapCatalog.tableCategory : #TRANSPARENT
4 @AbapCatalog.deliveryClass : #A
5 @AbapCatalog.dataMaintenance : #ALLOWED
6 define table zz01cart {
7
8   key client          : abap.clnt not null;
9   key order_uid       : abap.raw(16) not null;
10  currency            : abap.cuky;
11  notes               : abap.char(100);
12  order_id            : abap.numc(8);
13  request_delivery_date : abap.datn;
14  @Semantics.amount.currencyCode : 'zz01cart.currency'
15  total_price         : abap.curr(11,2);
16  local_created_by    : abp_creation_user;
17  local_created_at     : abp_creation_tstmpl;
18  local_last_changed_by : abp_locinst_lastchange_user;
19  local_last_changed_at : abp_locinst_lastchange_tstmpl;
20  last_changed_at      : abp_lastchange_tstmpl;
21
22 }
```




Exercise 3: Implement determinations and validations using Joule

```
35  
36 validation validateRequestDeliveryDate on save { create; field RequestDeliveryDate; }  
37  
38 draft action Activate optimized;  
39 draft action Discard;  
40 draft action Edit;  
41 draft action Resume;  
42 //draft determine action Prepare;  
43 draft determine action Prepare  
44 {  
45     validation validateRequestDeliveryDate;  
46 }
```

```
64  
65 association _Items { create; with draft; }  
66  
67 }
```

METHOD validateRequestDeliveryDate.

ENDMETHOD.

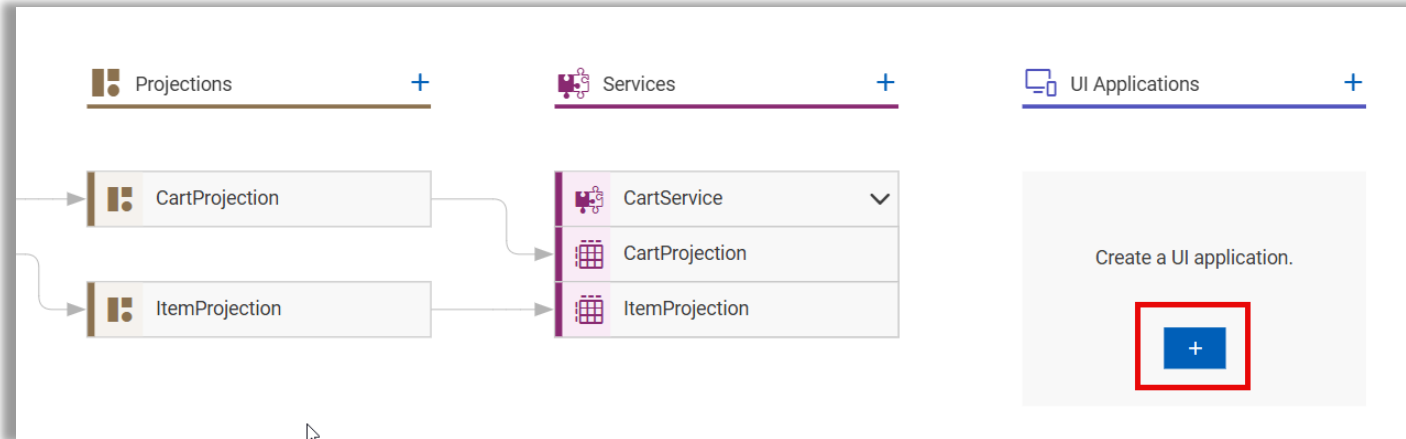
 Predict RAP Business Logic

Exercise 4: Create, preview and adapt a SAP Fiori elements application

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Exercise 4: Create, preview and adapt a SAP Fiori elements application



SAP Fiori generator ⓘ

Template Selection
Template: List Report Page

Data Source and Service Selection
Data Source: Connect to a System
System: H63 (BTP)
Service: ZZ00UI_CARTSERVICE_O4 > ZZ00UI_CARTSERVICE_O4 (001) - OData V4

Entity Selection
Main Entity: CartProjection
Navigation Entity: None
Generate Annotations: Yes
Table Type: Responsive

Project Attributes
Configure the main project attributes.

Module Name ⓘ *
ad163uz00

Application Title ⓘ
Shopping Cart App AD163UZ00

Application Namespace ⓘ

Description ⓘ
A Fiori application.

Project Folder Path *
/home/user/projects

Minimum SAPUI5 Version ⓘ *
1.136.8 (Source system version)

Enable TypeScript
☐ Yes ☒ No

Add Deployment Configuration
☐ Yes ☒ No

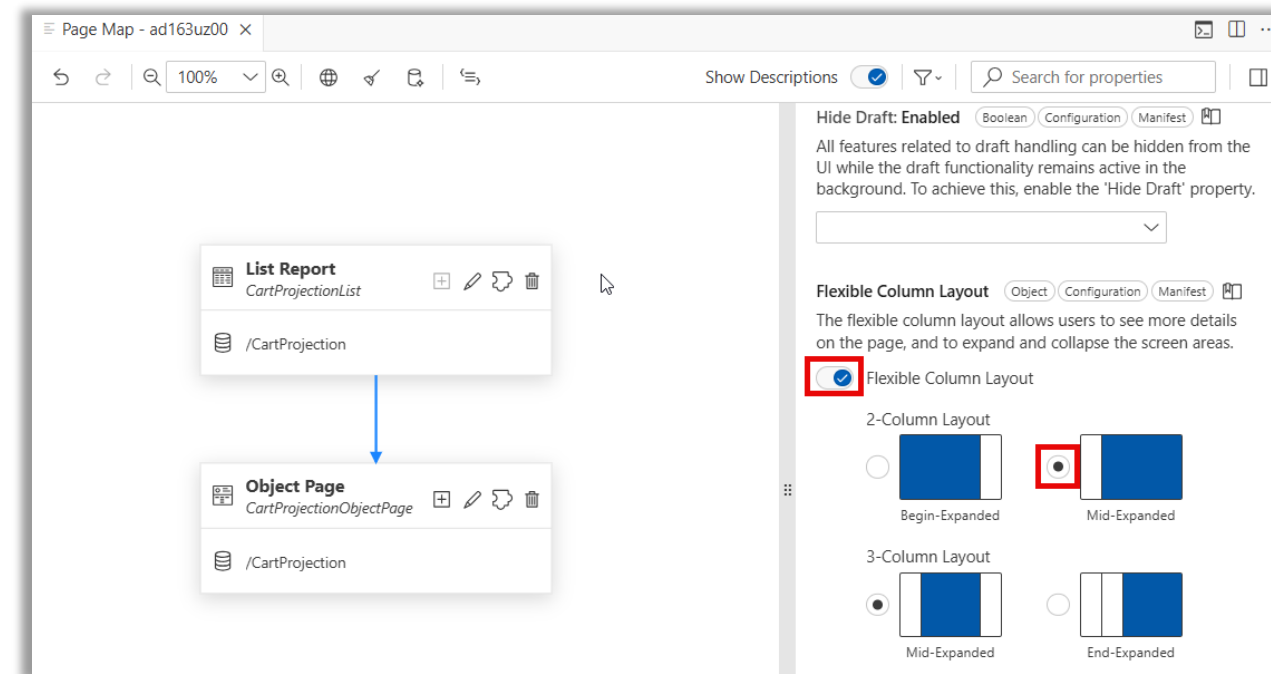
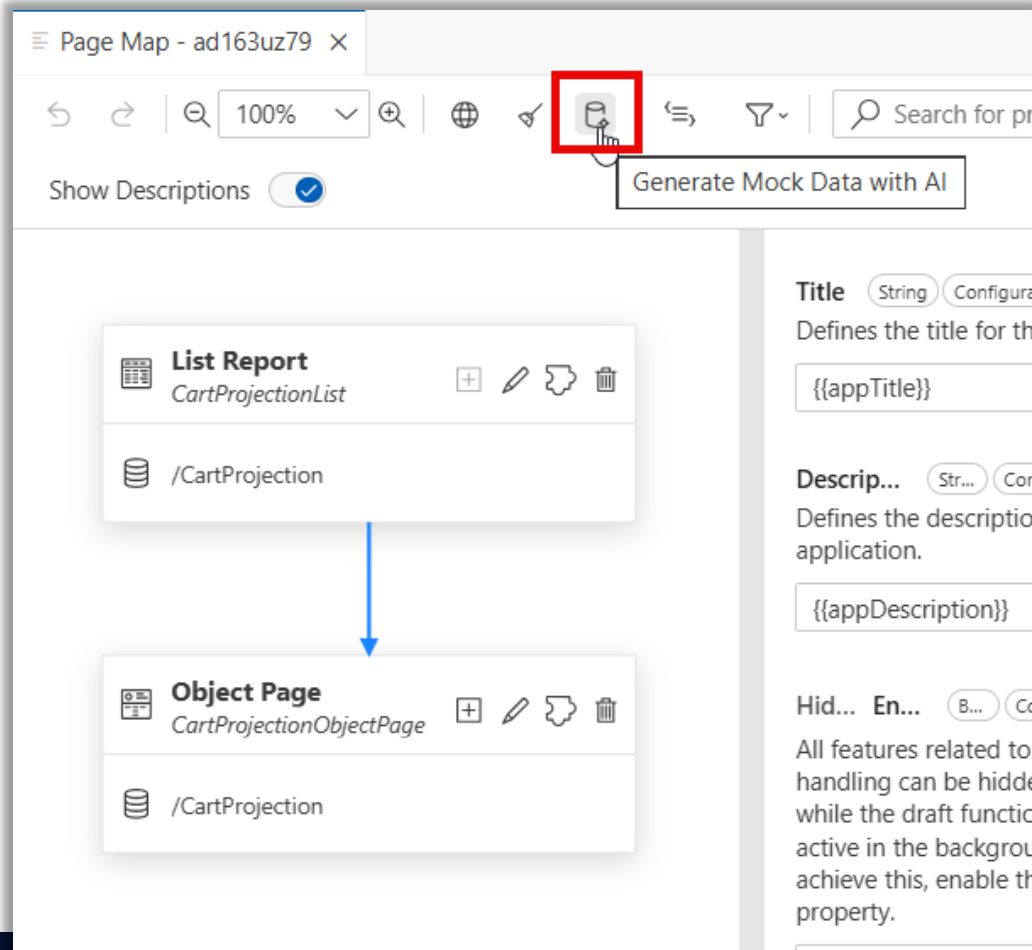
Add SAP Fiori Launchpad Configuration
☐ Yes ☒ No

Use Virtual Endpoints for Local Preview ⓘ
☒ Yes ☐ No

Configure Advanced Options ⓘ
☐ Yes ☒ No

< Back Finish

Exercise 4: Create, preview and adapt a SAP Fiori elements application





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Acesse o aplicativo do
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e responda a pesquisa de
avaliação desta sessão.