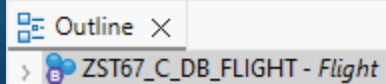
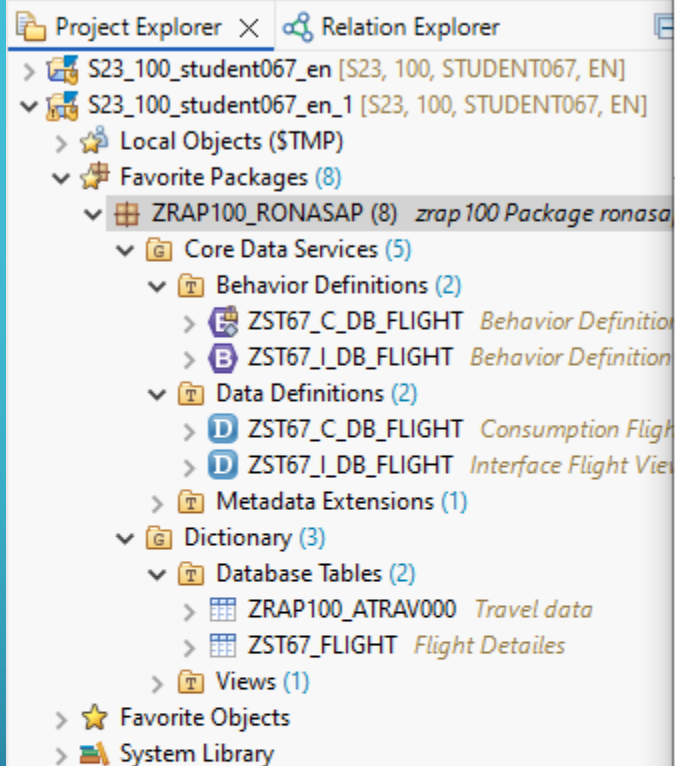




# ABAP RAP- RESTFUL APPLICATION PROGRAMMING PART 3

SUMMARY & COMPILATION OF MY LEARNING WITH A NUMBER OF ONLINE  
COURSES & TUTORIALS INCLUDING DEVELOPED BY ME SAMPLES



## New Service Definition

## Templates

Select one of the available templates.

☒ Use the selected template

Name	Description
Service Definition (creation)	
defineService	Define Service
Service Extend (creation)	

```
@EndUserText.label: '${source_description}'
define service ${source_name}
{
    expose ${entity_name};
    ${cursor}
}
```



&lt; Back

Next &gt;

Finish

Cancel

# THE BELOW SYNTAX APPEARS :

eclipse2025\_6\_workspace - Behavior Definition ZST67\_C\_DB\_FLIGHT [S23,100] - inactive, locked - S23\_100\_student067\_en\_1 - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer x Relation Explorer

- > S23\_100\_student067\_en [S23, 100, STUDENT067, EN]
- > S23\_100\_student067\_en\_1 [S23, 100, STUDENT067, EN]
- > Local Objects (STMP)
- > Favorite Packages (8)
  - > ZRAP100\_RONASAP (8) zrap100 Package ronasa
    - > Core Data Services (5)
      - > Behavior Definitions (2)
        - > ZST67\_C\_DB\_FLIGHT Behavior Definition
        - > ZST67\_I\_DB\_FLIGHT Behavior Definition
      - > Data Definitions (2)
        - > ZST67\_C\_DB\_FLIGHT Consumption Flight
        - > ZST67\_I\_DB\_FLIGHT Interface Flight View
      - > Metadata Extensions (1)
    - > Dictionary (3)
      - > Database Tables (2)
        - > ZRAP100\_ATRAV000 Travel data
        - > ZST67\_FLIGHT Flight Details
      - > Views (1)
  - > Favorite Objects
  - > System Library

New Service Definition

Templates

Select one of the available templates.

☒ Use the selected template

Name	Description
> Service Definition (creation)	
defineService	Define Service
> Service Extend (creation)	

```
@EndUserText.label: '${source_description}'
define service ${source_name}
{
    expose ${entity_name};
    ${cursor}
}
```

< Back Next > Finish Cancel

# NEXT STEP IS TO CREATE A SERVICE DEFINITION-

eclipse2025\_6\_workspace - Behavior Definition ZST67\_C\_DB\_FLIGHT [S23,100] - inactive, locked - S23\_100\_student067\_en\_1 - Eclipse IDE

File Edit Navigate Search Project Run Window Help

Project Explorer × Relation Explorer

- > S23\_100\_student067\_en [S23, 100, STUDENT067, EN]
- ▼ S23\_100\_student067\_en\_1 [S23, 100, STUDENT067, EN]
  - > Local Objects (\$TMP)
  - ▼ Favorite Packages (8)
    - ▼ ZRAP100\_RONASAP (8) *zrap100 Package ronasap*
      - ▼ Core Data Services (5)
        - ▼ Behavior Definitions (2)
          - > ZST67\_C\_DB\_FLIGHT *Behavior Definition for Consumption*
          - > ZST67\_I\_DB\_FLIGHT *Behavior Definition for Interface Flight*
        - ▼ Data Definitions (2)
          - > ZST67\_C\_DB\_FLIGHT *Consumption Flight Details*
          - > ZST67\_I\_DB\_FLIGHT *Interface Flight View*
        - > Metadata Extensions (1)
      - ▼ Dictionary (3)
        - ▼ Database Tables (2)
          - > ZRAP100\_ATRAV000 *Travel data*
          - > ZST67\_FLIGHT *Flight Details*
        - > Views (1)
      - > Favorite Objects
      - > System Library

New ABAP Repository Object

ABAP Repository Object

Create an ABAP repository object

Project: S23\_100\_student067\_en\_1 Browse

ser

- ▼ Business Services
  - Event Binding
  - Event Consumption Model
  - SOAP Provider Model
  - Service Binding
  - Service Consumption Model
  - Service Definition
- ▼ Connectivity

? < Back Next > Finish Cancel





- > S23\_100\_student067\_en [S23, 100, STUDENT067, EN]
- ▼ S23\_100\_student067\_en\_1 [S23, 100, STUDENT067, EN]
  - > Local Objects (\$TMP)
  - ▼ Favorite Packages (8)
    - ▼ ZRAP100\_RONASAP (8) zrap100 Package ronasa
      - ▼ Core Data Services (5)
        - ▼ Behavior Definitions (2)
          - > ZST67\_C\_DB\_FLIGHT Behavior Definition
          - > ZST67\_I\_DB\_FLIGHT Behavior Definition
        - ▼ Data Definitions (2)
          - > ZST67\_C\_DB\_FLIGHT Consumption Flight
          - > ZST67\_I\_DB\_FLIGHT Interface Flight View
        - > Metadata Extensions (1)
      - ▼ Dictionary (3)
        - ▼ Database Tables (2)
          - > ZRAP100\_ATRAV000 Travel data
          - > ZST67\_FLIGHT Flight Details
        - > Views (1)
    - > Favorite Objects
    - > System Library

- > ZST67\_C\_DB\_FLIGHT - Flight

## New Service Definition

### Service Definition

Create a service definition

Project: \* S23\_100\_student067\_en\_1 Browse...

Package: \* ZRAP100\_RONASAP Browse...

☐ Add to favorite packages

Name: \* zst67\_flight

Description: \* Flight Service Definition

Original Language: EN

Source Type: ▼

Referenced Object: Browse...



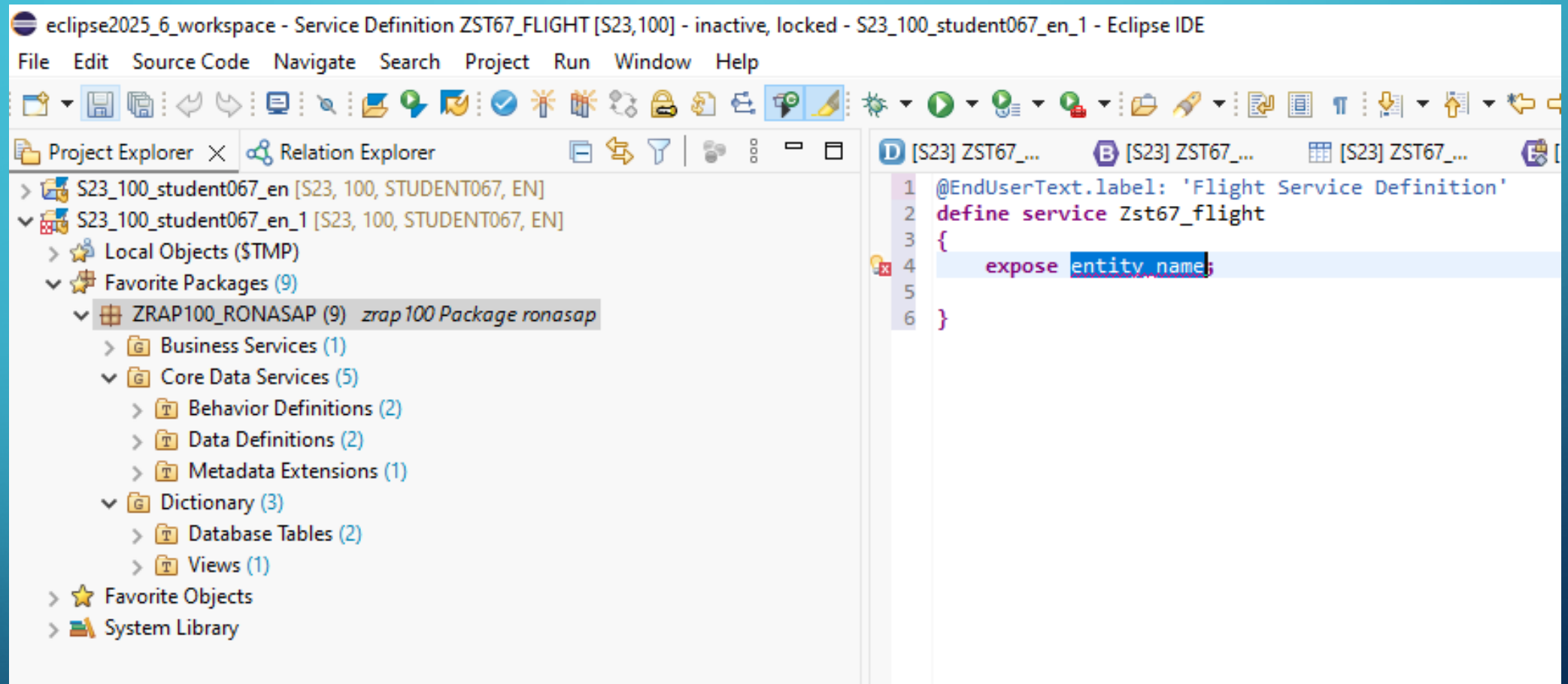
< Back

Next >

Finish

Cancel

## THE BELOW SYNTAX APPEARS-



# PROVIDE THE CONSUMPTION VIEW NAME:

The screenshot shows the Eclipse IDE interface. The title bar indicates the workspace is 'eclipse2025\_6\_workspace' and the current project is 'Service Definition ZST67\_FLIGHT [S23,100]'. The menu bar includes File, Edit, Source Code, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The Project Explorer on the left shows the project structure, with 'ZST67\_C\_DB\_FLIGHT Consumption Flight Details' selected under 'Data Definitions (2)'. The main editor displays the service definition code:

```
1 @EndUserText.label: 'Flight Service Definition'
2 define service Zst67_flight {
3     expose ZST67_C_DB_FLIGHT;
4 }
```

# NEXT STEP IS TO CREATE A SERVICE BINDING FOR THE SERVICE DEFINITION :

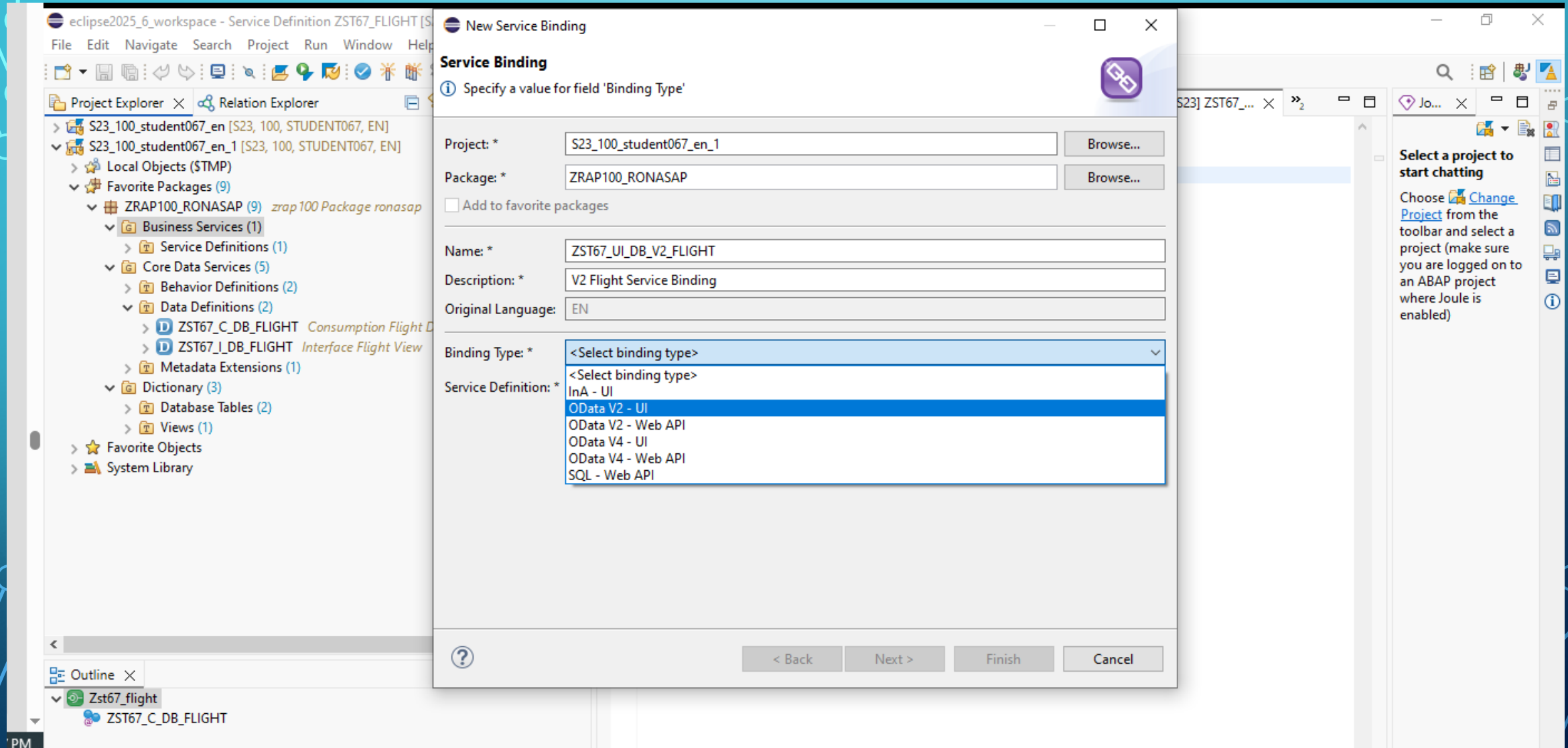
The screenshot shows the Eclipse IDE interface with the following components:

- Top Bar:** eclipse2025\_6\_workspace - Service Definition ZST67\_FLIGHT [S23,100] - inactive, locked - S23\_100\_student067\_en\_1 - Eclipse IDE
- Menu Bar:** File Edit Navigate Search Project Run Window Help
- Toolbars:** Standard Eclipse toolbars for file operations, editing, and development.
- Project Explorer:** Displays the project structure for S23\_100\_student067\_en\_1. The 'Data Definitions' folder is expanded, showing 'ZST67\_C\_DB\_FLIGHT' and 'ZST67\_I\_DB\_FLIGHT'. A context menu is open over 'ZST67\_C\_DB\_FLIGHT' with the 'New' option selected, leading to a sub-menu where 'Service Binding' is highlighted.
- Editor:** Shows the ABAP code for the service definition:

```
1 @EndUserText.label: 'Flight Service Definition'
2 define service Zst67_flight {
3   expose ZST67_C_DB_FLIGHT;
4 }
```
- Outline:** Located at the bottom left, it shows the 'Zst67\_flight' service definition and its associated 'ZST67\_C\_DB\_FLIGHT' data definition.



# PROVIDE A NAME, DESCRIPTION AND BINDING TYPE- WE CAN CHOOSE ODATA V2/V4 UI



# PROVIDE THE SERVICE DEFINITION FOR WHICH BINDING IS TO BE CREATED.

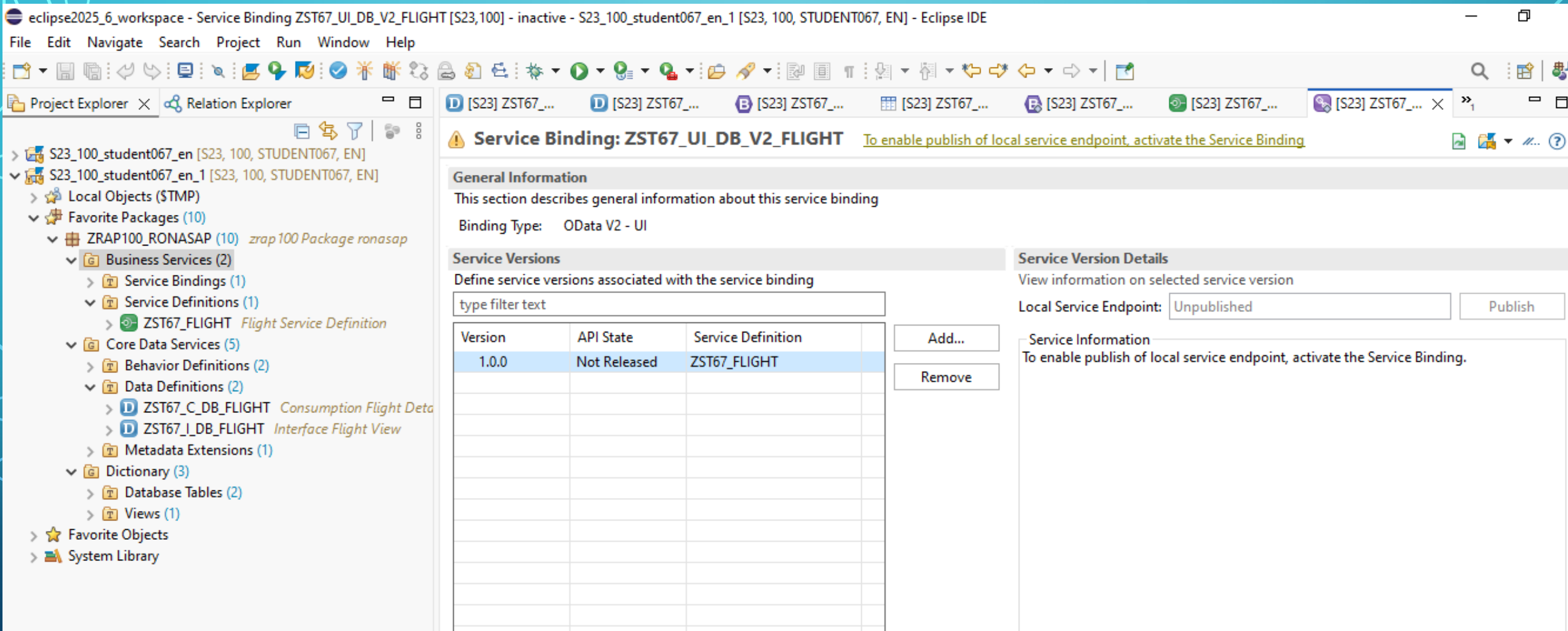
The screenshot displays the SAP Studio interface. On the left, the 'Project Explorer' shows a project structure for 'S23\_100\_student067\_en'. Under 'Favorite Packages', the 'ZRAP100\_RONASAP' package is expanded, showing 'Business Services (1)' with 'Service Definitions (1)'. The 'Service Definition ZST67\_FLIGHT' is highlighted. On the right, the 'New Service Binding' dialog is open. It contains the following fields:

- Project:** S23\_100\_student067\_en\_1
- Package:** ZRAP100\_RONASAP
- ☐ Add to favorite packages
- Name:** ZST67\_UI\_DB\_V2\_FLIGHT
- Description:** V2 Flight Service Binding
- Original Language:** EN
- Binding Type:** OData V2 - UI
- Service Definition:** ZST67\_FLIGHT

A warning message at the bottom of the dialog states: "If you're using the implementation type managed without draft and you want to use Fiori Elements, you use OData V2 to expose your service. In all other scenarios, OData V4 is strongly recommended."

At the bottom of the dialog, there are buttons for '< Back', 'Next >', 'Finish', and 'Cancel'.

# BELOW SCREEN APPEARS :












The screenshot displays the Eclipse IDE interface for configuring a service binding. The left-hand Project Explorer shows a project structure with a 'ZST67\_FLIGHT' service definition selected. The main editor area is titled 'Service Binding: ZST67\_UI\_DB\_V2\_FLIGHT'. The 'General Information' tab is active, showing the binding type as 'OData V2 - UI'. Below this, the 'Service Versions' section contains a table with one entry: version '1.0.0' with API State 'Not Released'. To the right of the table are 'Add...' and 'Remove' buttons. The 'Service Version Details' tab is also visible, showing the 'Local Service Endpoint' as 'Unpublished' and a 'Publish' button. A message at the bottom of the details tab states: 'Local service endpoint is not published. [Publish local service endpoint](#) to view service URL, entity sets and associations.'

Version	API State	Service Definition
1.0.0	Not Released	ZST67_FLIGHT



 eclipse2025\_6\_workspace - Service Binding ZST67\_UI\_DB\_V2\_FLIGHT [S23,100] - active, locked - S23\_100\_student067\_en\_1 - Eclipse IDE

 [S23] ZST67\_...
  [S23] ZST67\_...
  [S23] ZST67\_...
  [S23] ZST67\_...
  [S23] ZST67\_...
  [S23] ZST67\_...
  [S23] ZST67\_...
 






This section describes general information about this service binding

### Service Versions

type filter text

Add...  
Remove

[View information on selected service version](#)

Unpublish

**Service URL:** /sap/opu/odata/sap/ZST67\_UI\_DB\_V2\_FLIGHT

Preview...

>  System Library

◀ ▶

SELECT THE ENTITY AND PREVIEW. HERE IS THE FIORI UI. CLICK GO AND NO DATA FOUND.

Preview for Fiori Elements App

https://mmc-s4sap06.mmc.1stbasis.com:44300/sap/bc/adt/businessservices/odatav2/feap?feapParams=nghJKsi%5DsXVsJFsZ%60%5D%5B%5Ch77nghJKsWsX...

Welcome to Week 1... כניסה ורישום — שיר... https://sapes5.sapd... SAPUI5 Tutorial for... Главная Home [Europe (Rot)... Object Navigator

**Standard** ▾

Search  Connection No.:  **Go** Adapt Filters

**Flights** Create Delete ⚙️ | ▾

Flight Code	Connection...	From Coun...	From City	From Airport	To Country	To City	To Airport	Departure Time	Arrival Time
To start, set the relevant filters and choose "Go".									



# LET'S CREATE:

Preview for Fiori Elements App

https://mmc-s4sap06.mmc.1stbasis.com:44300/sap/bc/adt/businessservices/odatav2/feap?feapParams=nghJKsi%5DsXVsjFsZ%60%5D%5B%5Ch77nghJKsWsX...

Welcome to Week 1... כניסה ורישום — שיר... https://sapes5.sapd... SAPUI5 Tutorial for... Главная Home [Europe (Rot)... Object Navigator Other favorites

**Standard** ▾

Connection No.:

Search   **Go** Adapt Filters

Flights

Create Delete ⚙️  ▾

Ctrl+Enter

Flight Code	Connection...	From Coun...	From City	From Airport	To Country	To City	To Airport	Departure Time	Arrival Time
No data found.									



## Unnamed Object

### Flight

Flight Code: \*

From Airport:

Departure Time:

*e.g. 11:59:58 PM*



Connection No.: \*

To Country:

Arrival Time:

*e.g. 11:59:58 PM*



From Country:

To City:

From City:

To Airport:

[Create](#)[Cancel](#)



IN

## Flight

Flight Code:\*

IN

From Airport:

Departure Time:

8:55:09 PM



Connection No.:\*

101

To Country:

US

Arrival Time:

12:55:27 PM



From Country:

IN

To City:

From City:

To Airport:

Create

Cancel

The screenshot displays the Eclipse IDE environment. On the left, the Project Explorer shows a project structure with folders like 'S23\_100\_student067\_en\_1' and 'ZST67\_FLIGHT'. The central Data Preview window shows a table with columns: CLIENT, CARRID, CONNID, COUNTRYFR, CITYFROM, AIRPFROM, COUNTRYTO, CITYTO, and AIRPTO. The first two rows of data are visible: (100, IN, 101, IN, , , , , ) and (100, JE, 105, JE, , , , , ). The SQL Console on the right shows the query: SELECT \* FROM ZST67\_FLIGHT WHERE CARRID = 100.