



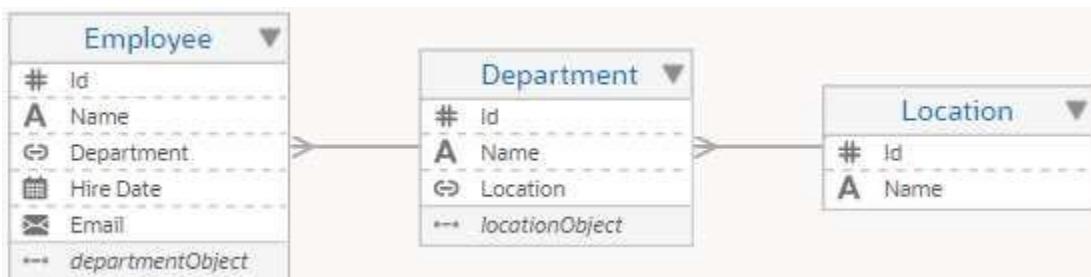
### **“LAPORAN PRAKTIKUM JOBSHEET 7”**

Mata Kuliah : Sistem Terdistribusi (Software as Service)  
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NIM : 1931710075  
Kelas : Manajemen Informatika – 3C

#### **PRAKTIKUM**

Oracle Visual Builder adalah alat pengembangan untuk membuat aplikasi web dan seluler dengan menyeret dan menjatuhkan komponen pada halaman. Komponen ini bergantung pada objek bisnis untuk datanya. Objek bisnis hanyalah sumber daya -- seperti pesanan pembelian atau faktur -- yang memiliki bidang untuk menyimpan data untuk aplikasi Anda. Objek bisnis mirip dengan tabel database, karena menyediakan struktur untuk data Anda; pada kenyataannya, objek bisnis disimpan dalam database. Aplikasi web Anda mengakses objek bisnis melalui titik akhir REST mereka.

Pada praktikum ini kita akan mencoba membuat sebuah bisnis object seperti pada gambar dibawah ini:



Setelah Kita memiliki objek bisnis, kita akan menggunakan untuk membangun aplikasi Sumber Daya Manusia (Human Resource Application) yang sangat sederhana di mana setiap karyawan menjadi bagian dari sebuah departemen, dan setiap departemen memiliki lokasi. Hasil akhir dari project ini pengguna bisa menambahkan nama karyawan dan departemen mereka ke database, dan mengubah data jika diperlukan.

Alat dan bahan:

- Visual builder
  - Browser
1. Membuat Aplikasi (Create Web Application)  
Login OCI -> Pilih **OCI Classic Service** -> **Create Instace**

The screenshot shows the Oracle Cloud Infrastructure (OCI) Home page. A red box highlights the "OCI Classic Services" link in the left sidebar. Another red box highlights the "Visual Builder" link under the "Content and Experience" section.

## OCI Classic Service -> Create Instace

The screenshot shows the "Visual Builder" Instances page. A red box highlights the "Create Instance" button at the top right. Below it, a grey arrow points from the text "You don't have any instances. After meeting the prerequisites, use this button to create an instance." to the "Create Instance" button.

Isi nama instace, nama, deskripsi dari instance, Region dan tak

The screenshot shows the "Create Instance" wizard, Step 1: Instance. A red box highlights the "Details" section where instance name, description, notification email, region, and tags are specified. The "Special Instructions" section is also visible.

**Create Visual Builder Instance Confirmation**  
Confirm your selections and create your Visual Builder instance.

**Service**

Instance Name:	osykris
Description:	For Web
Notification Email:	1931710075@student.polinema.ac.id
License Type:	Cloud License
Region:	No Preference
Tags:	business

Hasil instance yang telah dibuat:

**Overview**

**Instance Overview** As of Oct 17, 2021 11:42:10 AM UTC

Status:	Ready
Active:	Yes
Optional. Select only if you received a special tag from Oracle for creating this instance:	
Special Tag:	ics_pcs
IDCS Application:	VBINST_osykris
License:	Cloud License
Tags:	business

Lihat pada pojok kiri, terdapat simbol menu (klik simbol tersebut dan akan muncul menu berikut), Kemudian pilih **Open Visual Builder Home Page**

**Open Visual Builder Home Page**

- Start
- Stop
- Manage Tags
- View Activity

<https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder>

Tunggu beberapa saat, kemudian jika berhasil akan muncul halaman berikut. Klik New Application.



The screenshot shows the Oracle Visual Builder interface. At the top, there are tabs for 'Home | Oracle Cloud Infrastructure' (active), 'Visual Builder Details', and 'Oracle Visual Builder'. The URL in the address bar is 'osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/'. Below the header, the title 'Visual Applications' is displayed. A large central heading says 'Welcome to Visual Builder, Osy Krisdayanti!'. Below this is a colorful illustration of a potted plant with purple and orange leaves in a red pot, sitting on a yellow mat with a green watering can nearby. A message below the illustration states 'You don't have any applications yet.' A red box highlights the 'New Application' button at the bottom center. Below the buttons, a link says 'Let us walk you through the process of creating your first app step-by-step, or just dive in and start building! We'll help you along the way.' At the very bottom, there's a 'Show me how' link and a standard Windows taskbar.

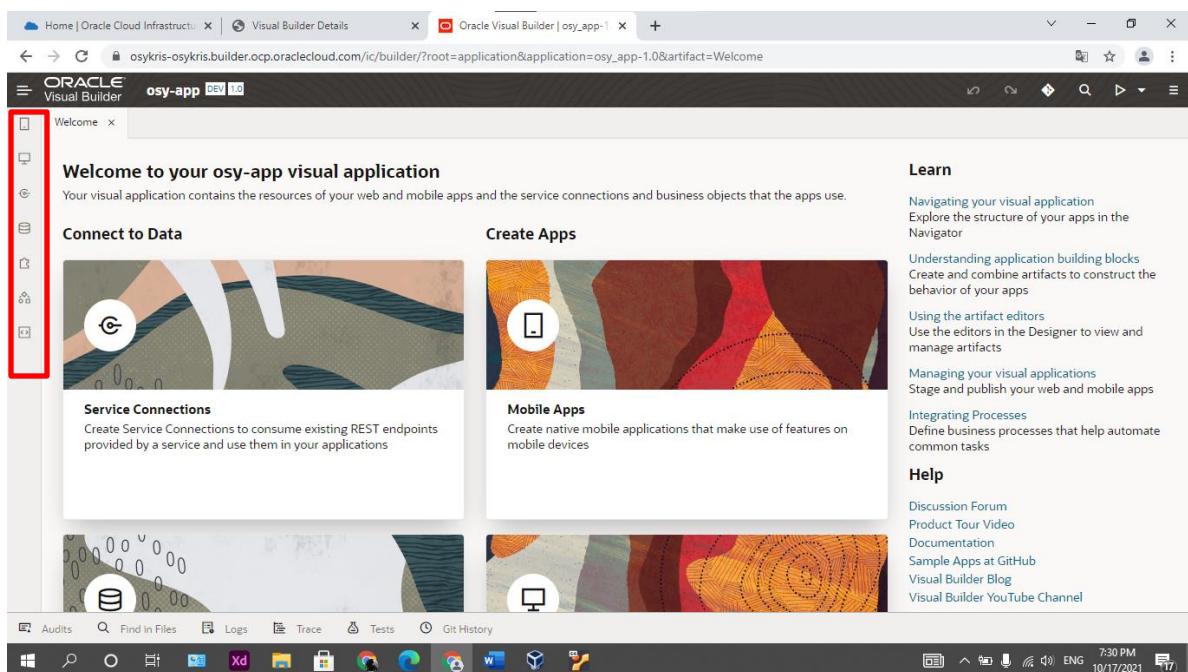
Isi informasi tentang aplikasi yang akan dibuat.

The screenshot shows the Oracle Visual Builder interface with a modal dialog titled "Create Application". The dialog contains fields for "Application Name" (osy-app), "Best to keep the name short so it looks nice", "Application ID" (osy.app), and a description ("To create a web, distributed systems course"). Below the fields is an "Application Template" section with an "Empty Application" option selected. At the bottom right of the dialog are "Cancel" and "Finish" buttons. The background shows the "Visual Applications" list with one item: "osy-kris-osy-kris.builder.ocp.oraclecloud.com/ic/builder/".

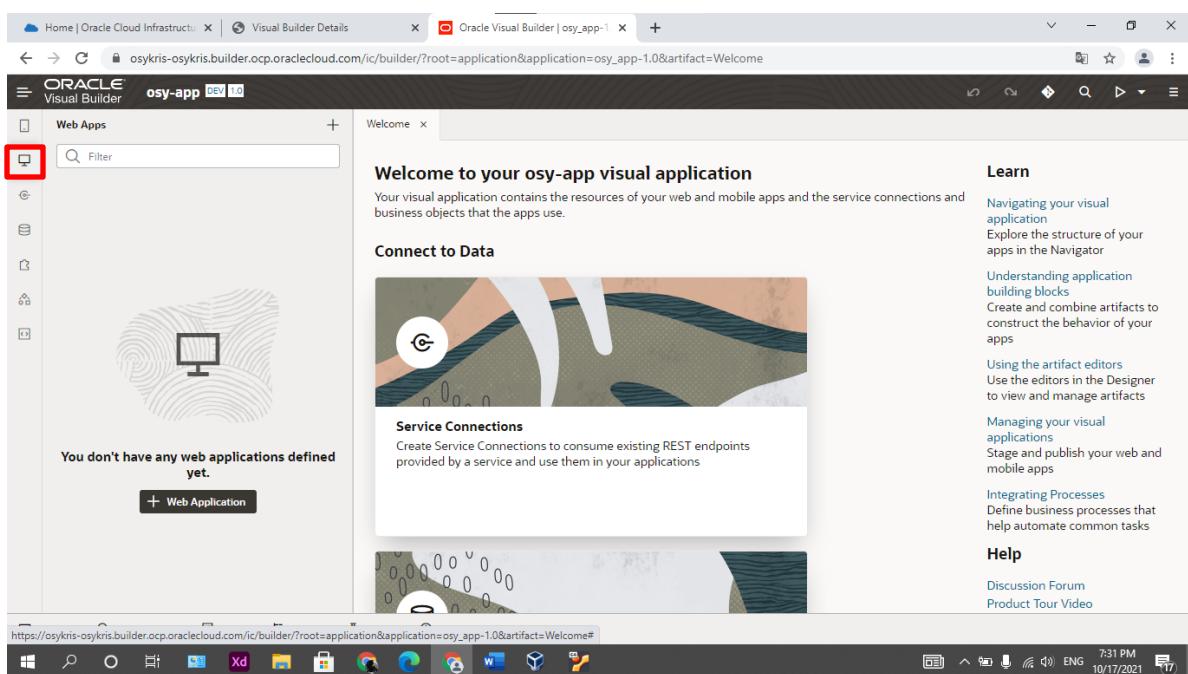
Jika kita berhasil membuat akan muncul nama aplikasi yang akan kita buat seperti gabaridibawah ini:

Name	Status	Origin	Version	Recent activity	Actions
osy-app	{ } Development	Visual Builder	1.0	Just now	<a href="#">Edit</a> <a href="#">Delete</a>

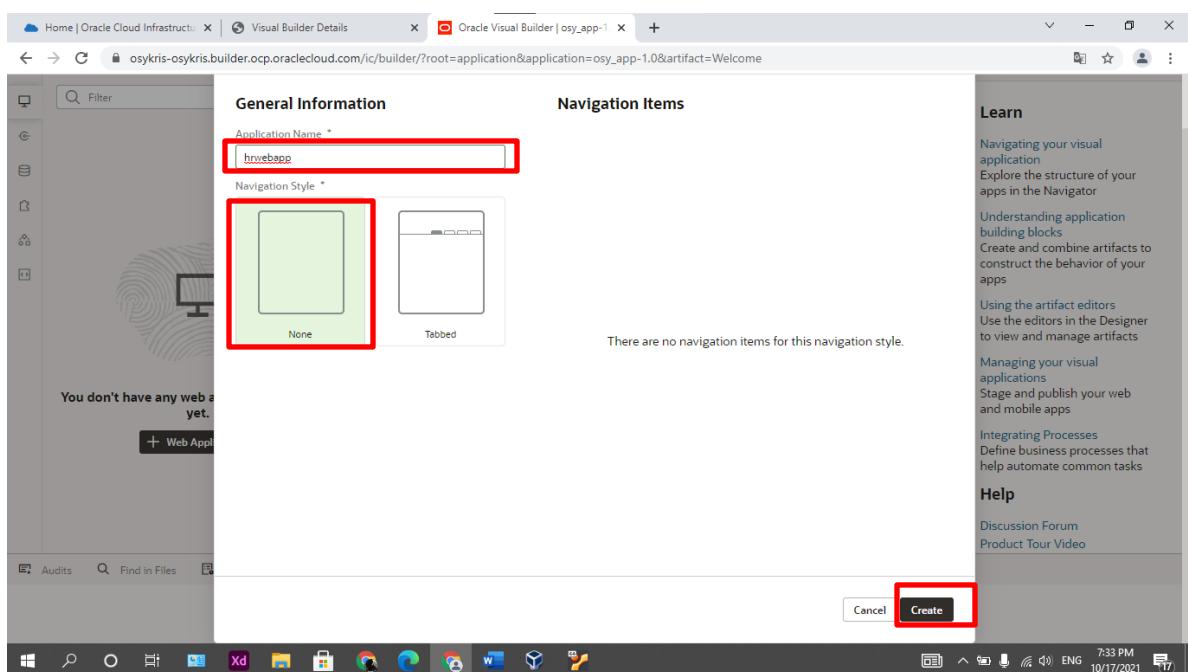
Klik nama aplikasi yang telah kita buat (seperti pada gambar sebelumnya), maka akan muncul halaman berikut:



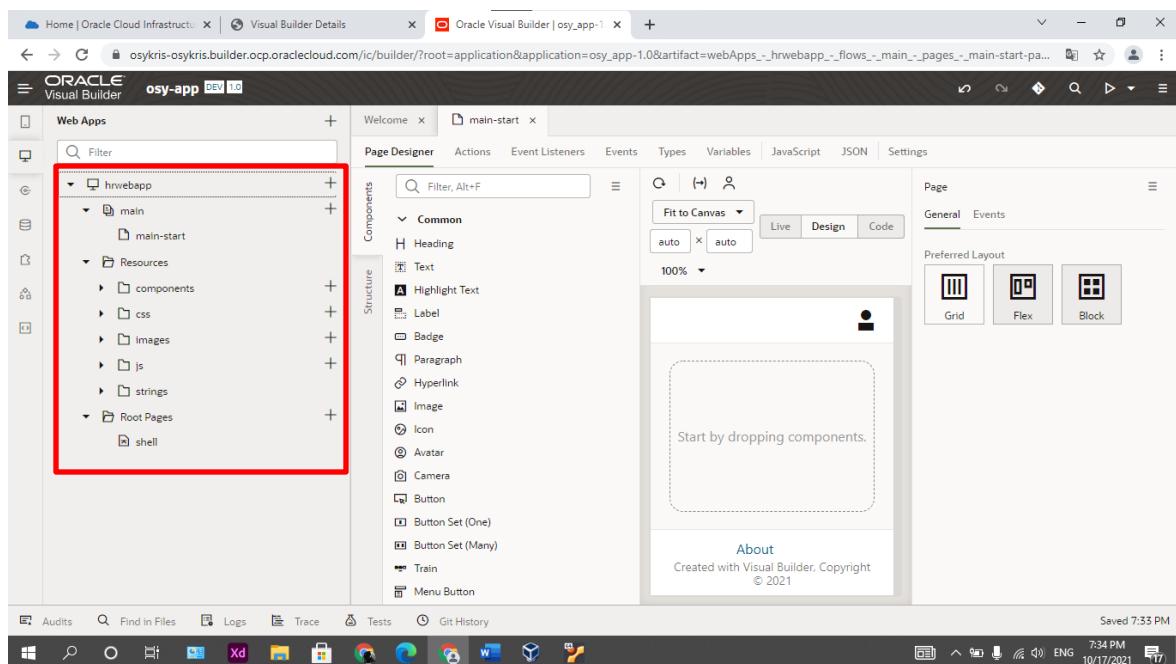
Pada sisi kiri adalah menu dari (kotak berwarna merah) visual builder dari aplikasi yang akan kita buat, pilih ikon web kemudian akan muncul menu berikut :



2. Pada dialog box **Create Application**, isi nama web dengan nama “**hrwebapp**” dan untuk navigation style biarkan **none**.



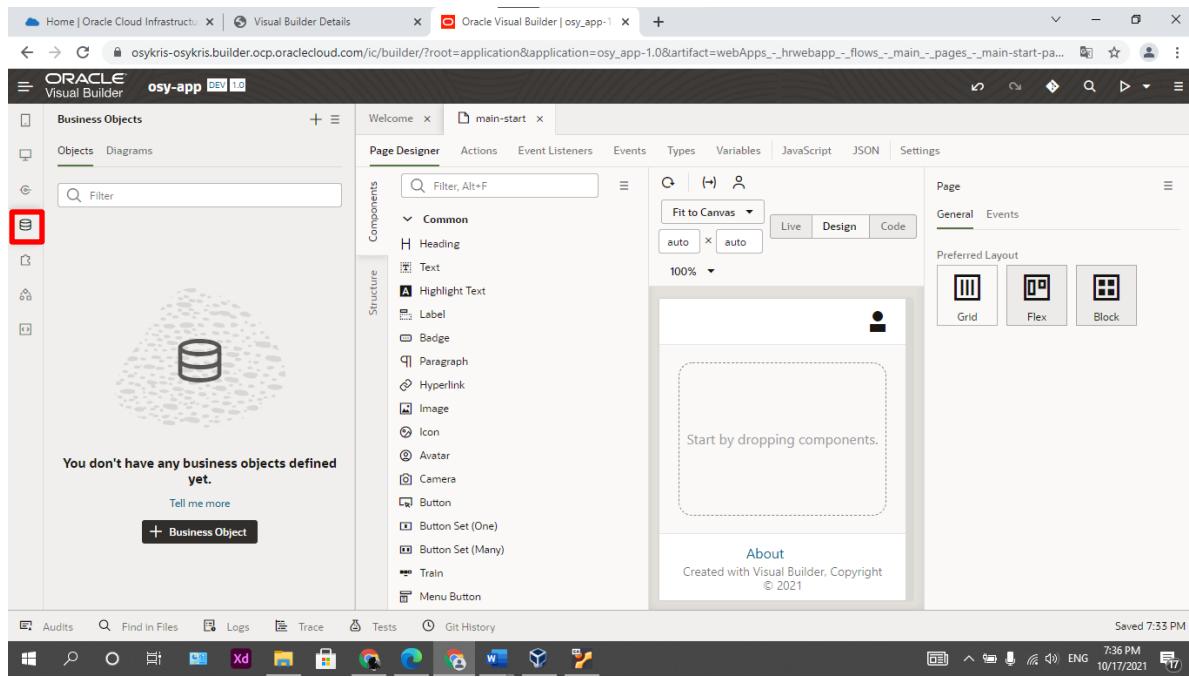
3. Expand **hrwebapp**, kita akan melihat struktur struktur dari aplikasi web, kurang lebih seperti gambar dibawah ini:



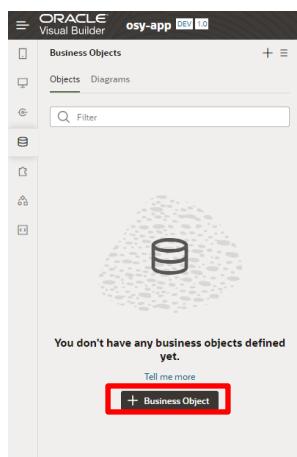
### Import Location Busines dari file

Pada tahap ini kita akan membuat object busines location dan melakukan import data.

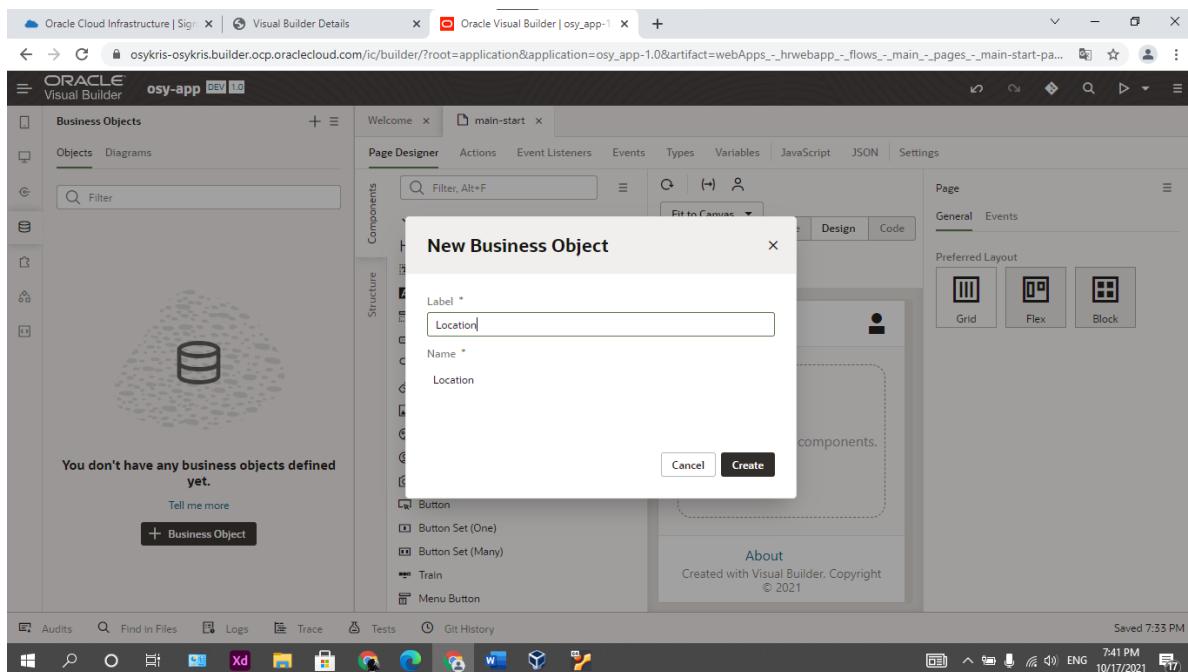
1. Klik **Business Object** , pada tab navigator:



2. Klik tombol **+ Business Object**.



3. Pada dialog box **Business Object**, isi field label dengan “Location” kemudian tekan tombol create (pada field name akan otomatis terisi).



4. Klik **Field** tab

Type	Field Name	Display Label	Required	Description
A	createdBy	Created By	—	
E	creationDate	Created	—	
#	id	Id	✓	
E	lastUpdateDate	Last Updated	—	
A	lastUpdatedBy	Last Updated By	—	

5. Klik **+** Field untuk menambahkan Busines Object

6. Ketika pup-up box, masukan

- Label: Name
- Field Name: name (automatically populated)
- Type: String (selected by default)

The screenshot shows the Oracle Visual Builder interface with the 'Fields' tab selected. A modal window is open for creating a new field. The 'Label' field contains 'Name', and the 'Field Name' field also contains 'name'. The 'Type' is set to 'String'. The 'Create Field' button is visible at the bottom right of the modal.

- Pada property inspector, centang Required di bawah label constrain.

The screenshot shows the Oracle Visual Builder Fields tab. On the right, the properties for the 'name' field are displayed. Under the 'Constraints' section, the 'Required' checkbox is checked and highlighted with a red box. Other options like 'Unique', 'Indexed', 'Updatable', and 'Searchable' are also listed.

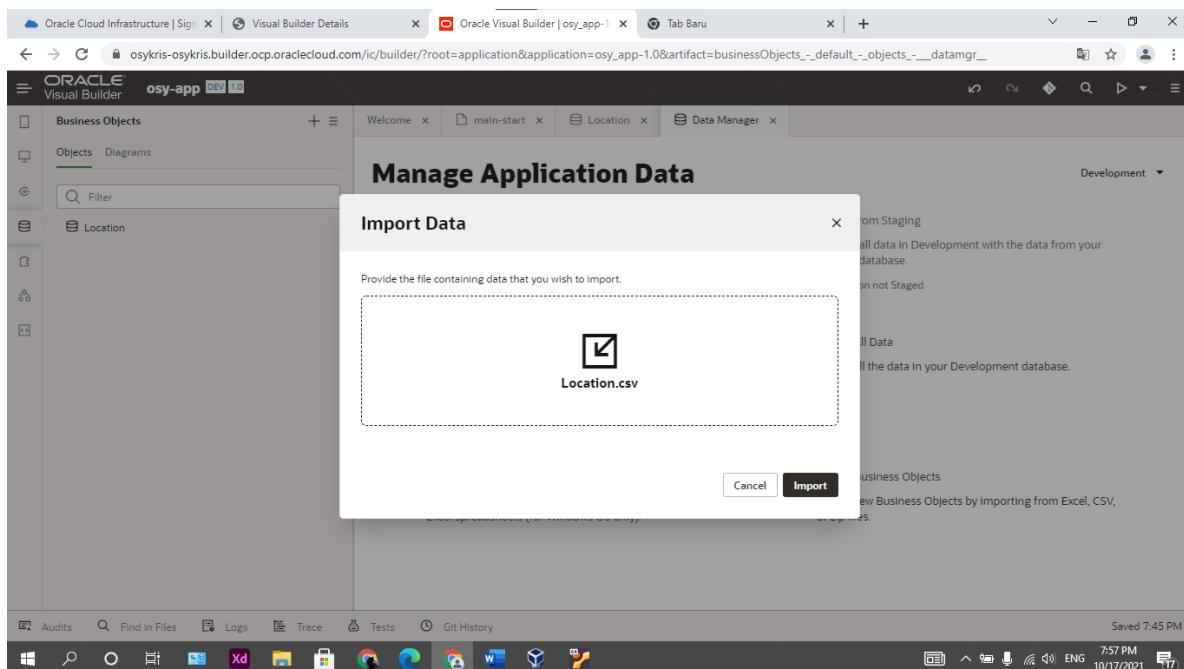
- Klik Menu icon dan pilih Data Manager (Data Manager bisa kita gunakan untuk mengimpor data dari berbagai sumber)

The screenshot shows the Oracle Visual Builder interface with the title bar 'osy-app DEV 1.0'. The 'Data Manager' option is highlighted in the top navigation bar.

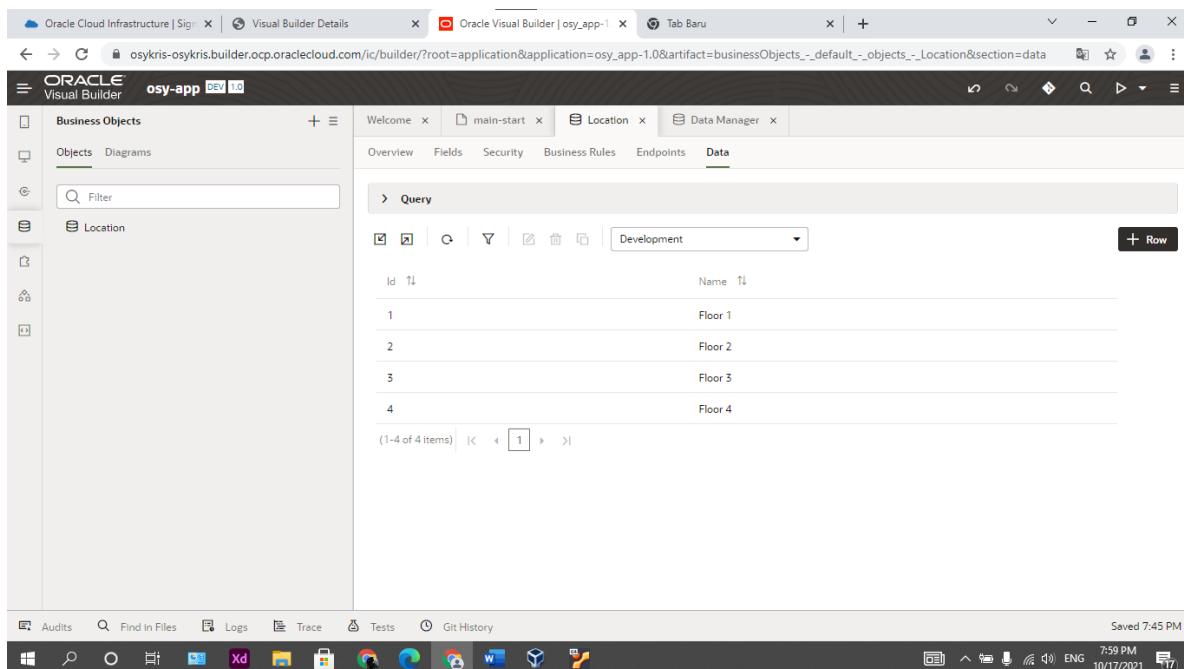
- Pilih Impor From File.

The screenshot shows the 'Manage Application Data' screen in Oracle Visual Builder. The 'Import from File' option is highlighted with a red box. It describes replacing all data in Development with data from a zip file, CSV file, or Excel spreadsheet.

10. Di kotak dialog Impor Data, klik kotak impor, pilih Location.csv, dan klik Import. Ketika impor berhasil, klik Tutup.

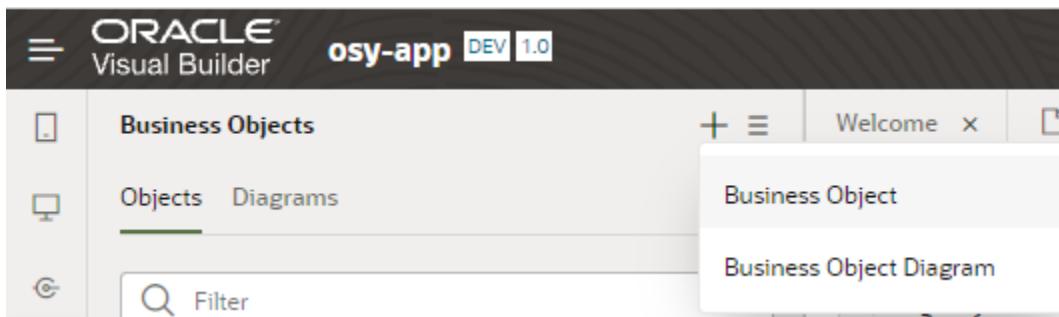


11. Di panel Bisnis Object, klik Location, lalu klik tab Data untuk melihat Location.

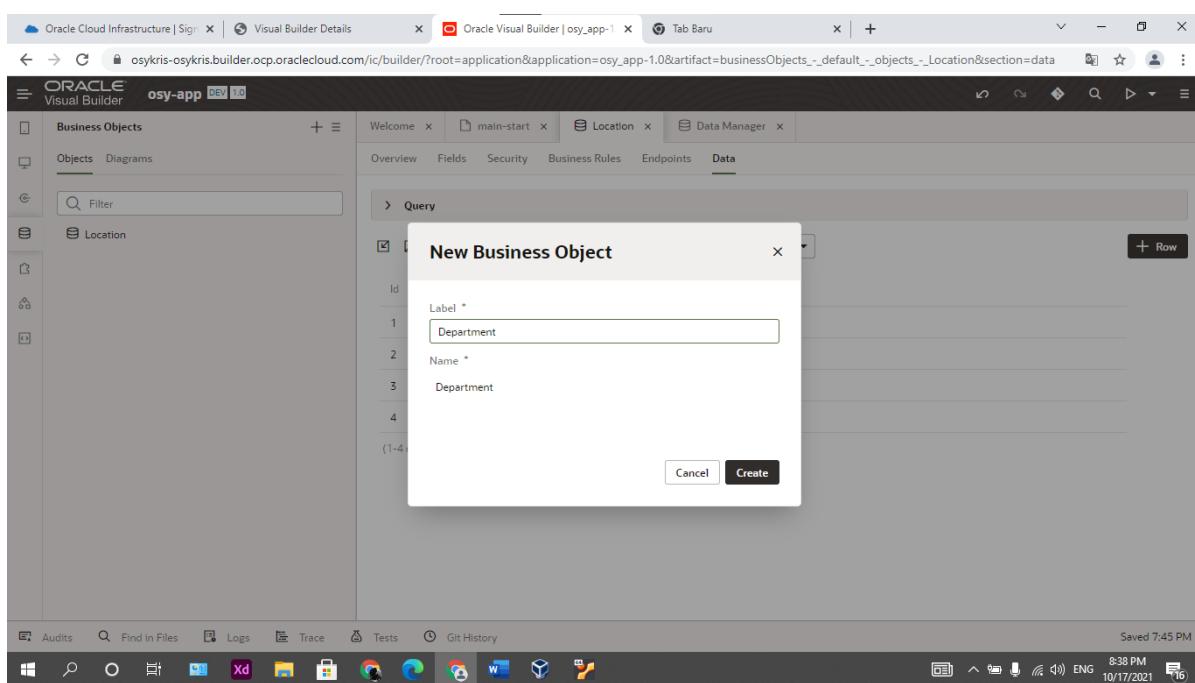


## Department Business Object

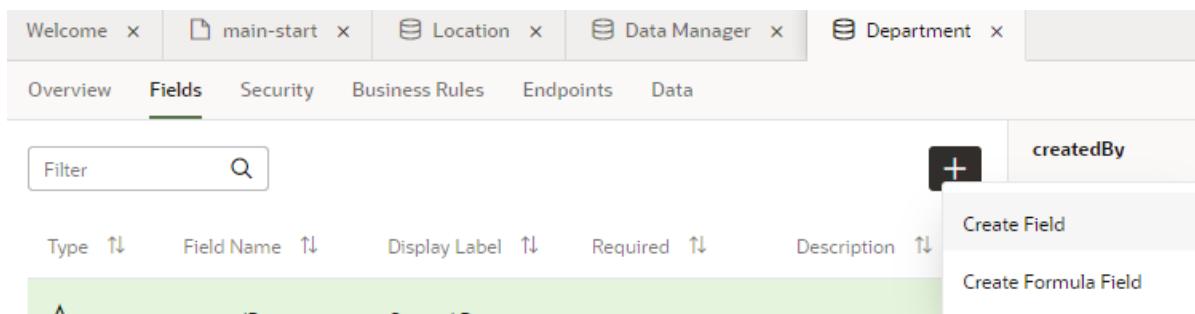
1. Pada panel Business Objects, klik tanda +, lalu pilih Business Object



2. Pada new Business Object dialog Box, Pada field label isi dengan "Department".

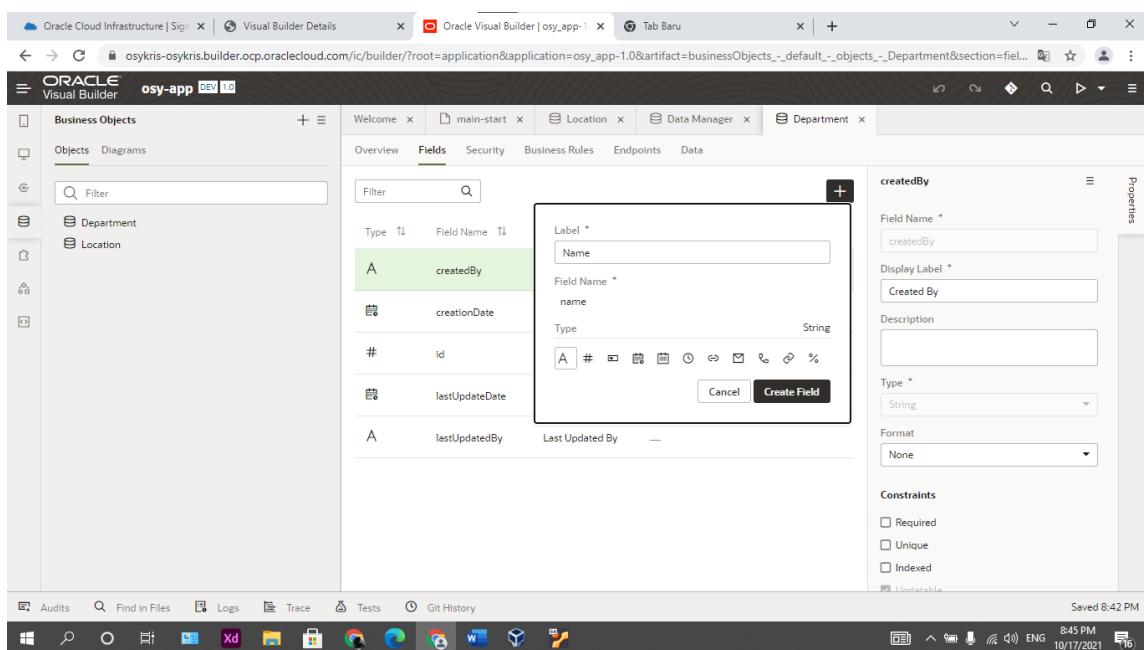


3. Klik **Fields** tab kemudian klik **+** Field.



4. Pada pop-up box, masukan:

- Label: **Name**
- Field Name: name (automatically populated)
- Type: String String icon (selected by default)
- Click **Create Field**.



5. Pada property inspector, centang **Required** di bawah label **constraint**.

**name**

None

**Value Calculation**

None

Set to default if value not provided

Calculate value with a formula

Aggregate from related object data

**Constraints**

Required

Unique

Indexed

Updatable

Searchable

#### 6. Klik **Fields** tab kemudian klik + **Field**

Label: Location

Field Name: location (automatically populated)

Type: Reference Reference icon

Referenced Business Object: Location

(Reference field seperti foreign key pada database table)

Display Field: Name (automatically populated)

The screenshot shows the Oracle Visual Builder interface with the 'Fields' tab selected. On the left, a list of existing fields includes 'createdBy', 'creationDate', 'id', 'lastUpdateDate', 'lastUpdatedBy', and 'name'. A new field is being created on the right, with the following properties:

- Label:** Location
- Field Name:** location
- Type:** Reference (Reference icon)
- Referenced Business Object:** Location
- Display Field:** Name

The 'Properties' panel on the right shows additional settings for the field.

### Employee Business Object

Pada langkah ini, kita akan membuat objek bisnis terakhir yang kita butuhkan, objek Karyawan, yang berisi nama karyawan dan data pengenal. Dalam hal ini, Karyawan memiliki bidang Referensi yang merujuk ke Departemen.

#### 1. Pada panel Bisnis oject, klik tanda +, lalu pilih Bisnis Objek.

The screenshot shows the Oracle Visual Builder interface with the 'Business Objects' tab selected. A context menu is open over the 'Objects' tab, with the option 'Business Object' highlighted.

#### 2. Pada new Business Object dialog Box, Pada field label isi dengan "Employee".

The screenshot shows the Oracle Visual Builder interface. In the center, a modal dialog titled "New Business Object" is open. Inside the dialog, the "Label" field contains "Employee". Below it, the "Name" field also contains "Employee". At the bottom right of the dialog are two buttons: "Cancel" and "Create". To the right of the dialog, a properties panel is visible with fields for "Field Name" (set to "name"), "Display Label" (set to "Name"), "Type" (set to "String"), and "Format" (set to "None"). The main workspace on the left shows a tree view with "Department" and "Location" selected under "Business Objects". The top navigation bar includes tabs for "Overview", "Fields", "Security", "Business Rules", "Endpoints", and "Data".

3. Klik Fields tab kemudian klik + Field.

The screenshot shows the "Fields" tab in the Oracle Visual Builder interface. A new field is being created, with the "Field Name" set to "createdBy". The "Label" is also set to "createdBy". The "Type" is selected as "String". On the right side, there is a properties panel for the "createdBy" field. Below the table, there are buttons for "Create Field" and "Create Formula Field".

4. Pada pop-up box, masukan:

- Label: Name
- Field Name: name (automatically populated)
- Type: String String icon (selected by default) Click **Create Field**.

The screenshot shows the "Fields" tab in the Oracle Visual Builder interface. A new field is being created, with the "Field Name" set to "name". The "Label" is set to "Name". The "Type" is selected as "String". On the right side, there is a properties panel for the "name" field. Below the table, there are buttons for "Create Field" and "Create Formula Field".

5. Pada property inspector, centang **Required** di bawah label **constraint**.



<b>name</b>	<input type="text" value="None"/> <span>▼</span>
<b>Value Calculation</b>	
<input checked="" type="radio"/> None	
<input type="radio"/> Set to default if value not provided	
<input type="radio"/> Calculate value with a formula	
<input type="radio"/> Aggregate from related object data	
<b>Constraints</b>	
<input checked="" type="checkbox"/> Required	
<input type="checkbox"/> Unique	
<input type="checkbox"/> Indexed	
<input checked="" type="checkbox"/> Updatable	
<input checked="" type="checkbox"/> Searchable	

6. Pilih + **Fields**, kemudian mauskan atau isi:

- Label: Department
  - Field Name: department (automatically populated)
  - Type: Reference Reference 
  - Referenced Business Object: Department
  - Display Field: Name (automatically populated)
  - Klik **Create Field.**

Label \*

Department

Field Name \*

department

Type Reference

A # ☐ 📁 📈 ⏷ ⏸ ⏹ %

Referenced Business Object \*

Department

Display Field ⓘ

Name

Cancel Create Field

7. Pilih + **Fields**, kemudian mauskan atau isi:

- Label: Hire Date
  - Field Name: hireDate (automatically populated)
  - Type: Date Date 
  - Klik **Create Field.**

Label \*

Field Name \*

Type

Date

A
#
☒
☐
⌚
↶
↷
✉
↗
%

Cancel
Create Field

8. Pilih + **Fields**, kemudian mauskan atau isi:



### Label: Email

Field Name: email (automatically populated)

Type: Email Email 

Klik **Create Field**, Di editor properti, Format diatur ke Email.

Label \*

Field Name \*

Type

Email

Cancel
Create Field

email	≡
Field Name *	<input type="text" value="email"/>
Display Label *	<input type="text" value="Email"/>
Description	<input type="text"/>
Type *	<input type="text" value="String"/> ▾
Format	<input type="text" value="Email"/> ▾

9. Klik tab Endpoints dan lihat API resource dan REST end point yang dibuat untuk Business Object Employee. Karena Object Employee merujuk ke Department, kita dapat melihat end point untuk kedua objek tersebut jika Anda memperluas node departmentObject. Perluas node Resource API untuk melihat URL untuk mengakses metadata dan data untuk objek bisnis, lalu perkecil lagi.

Welcome x main-start x Location x Data Manager x Department x Employee x

Overview Fields Security Business Rules Endpoints Data

> Resource APIs

> Resource Cache Control

▼ Endpoints

Filter Endpoints Edit Endpoints

▼ Employee

/Employee

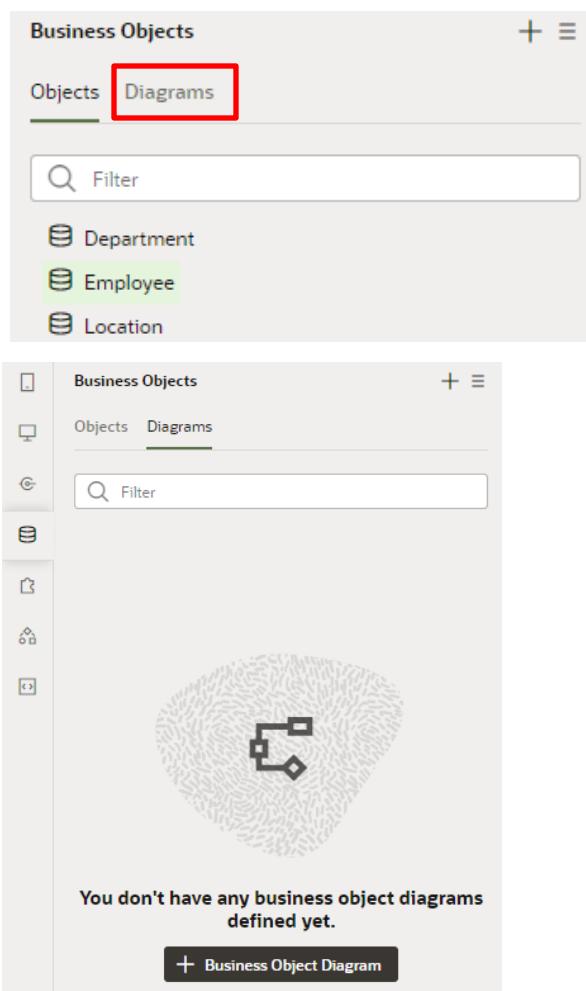
<button>GET</button>	Get Many	Get all	getall_Employee
<button>POST</button>	Create	Create	create_Employee

/Employee/{Employee\_Id}

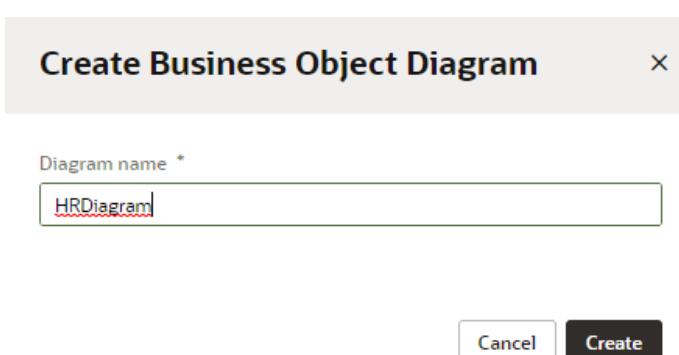
<button>GET</button>	Get One	Get	get_Employee
<button>PATCH</button>	Update	Update	update_Employee
<button>DELETE</button>	Delete	Delete	delete_Employee

Tests Git History Saved 9:25 PM

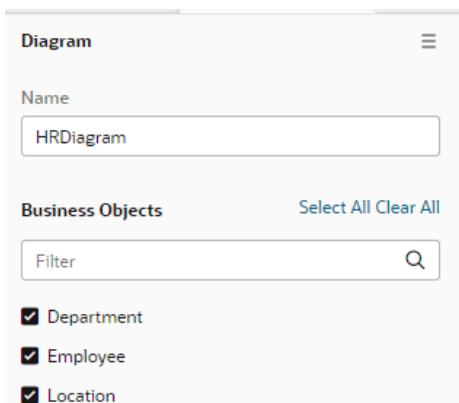
10. Di panel Objek Bisnis Navigator, klik tab Diagram, lalu klik tombol + **business object diagram**.



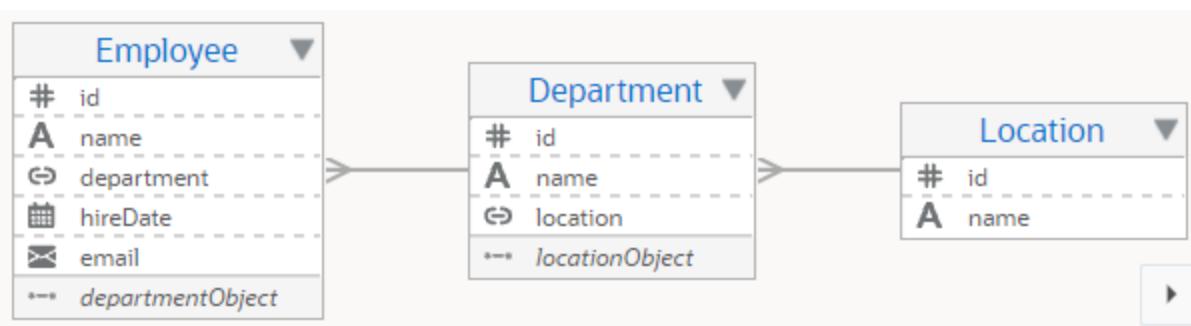
11. Pada Create Business Object Diagram dialog box, isi field Diagram name dengan “HRDiagram”.



12. Pada properti inspector, pilih semua



Kurang lebih diagram yang dihasilkan seperti ini:

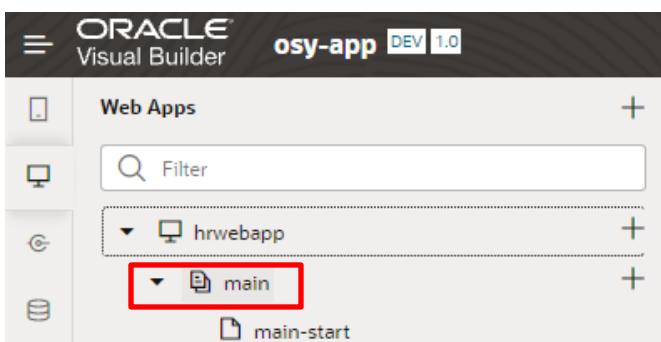


### main-start Page untuk Display Departments

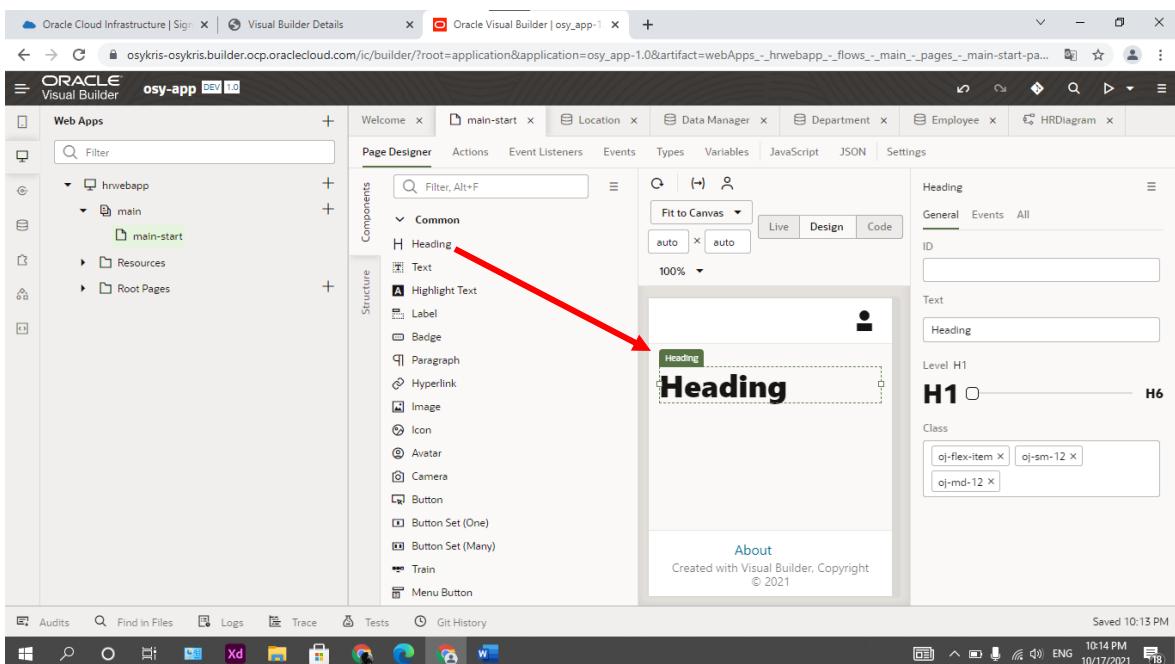
- Pilih Web Applications pada tab navigator.



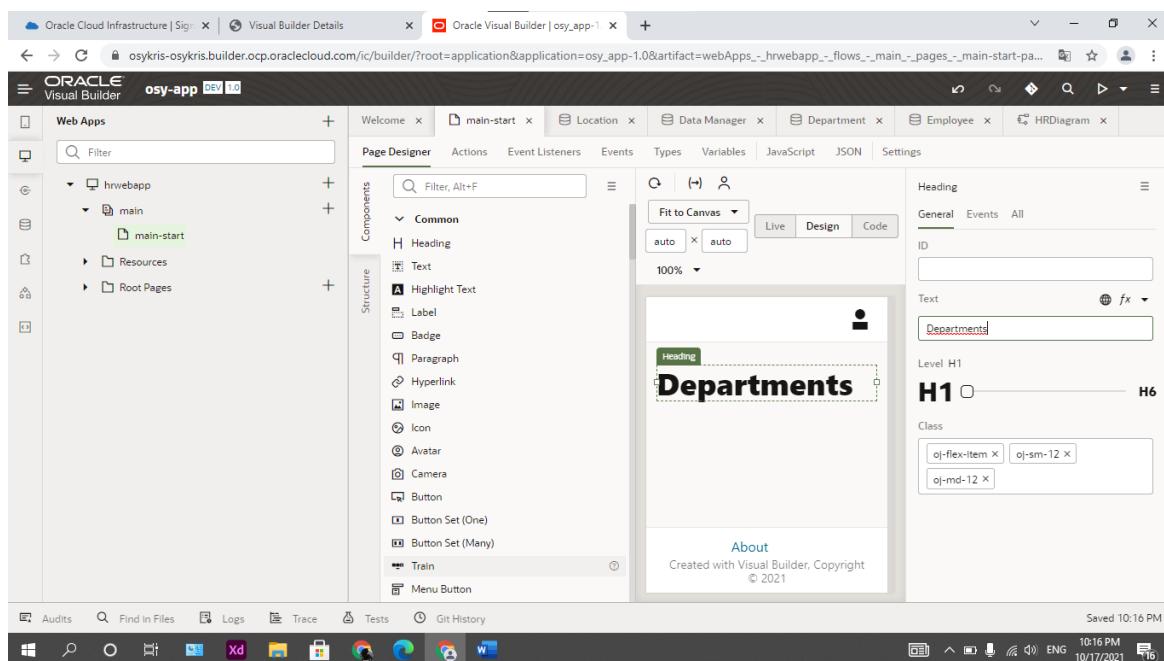
- Expand main nodes



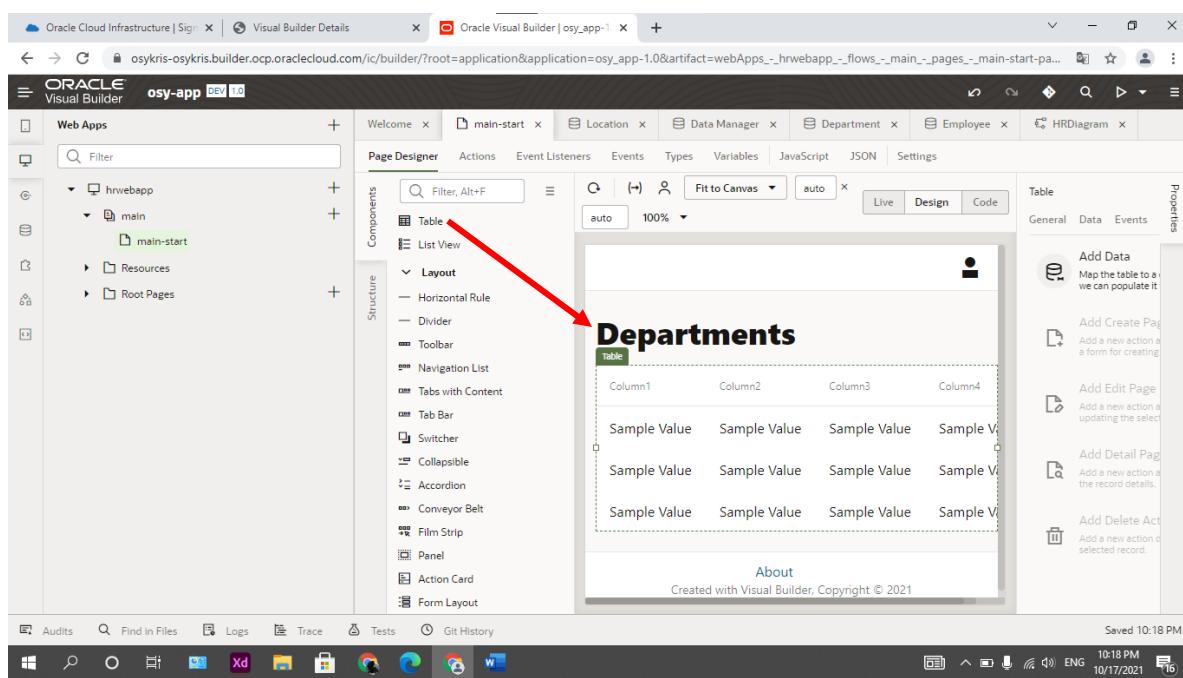
- Perhatikan pada komponen palette, tempatkan **Heading** komponen pada bagian common kemudian drag (heading) ke halaman.



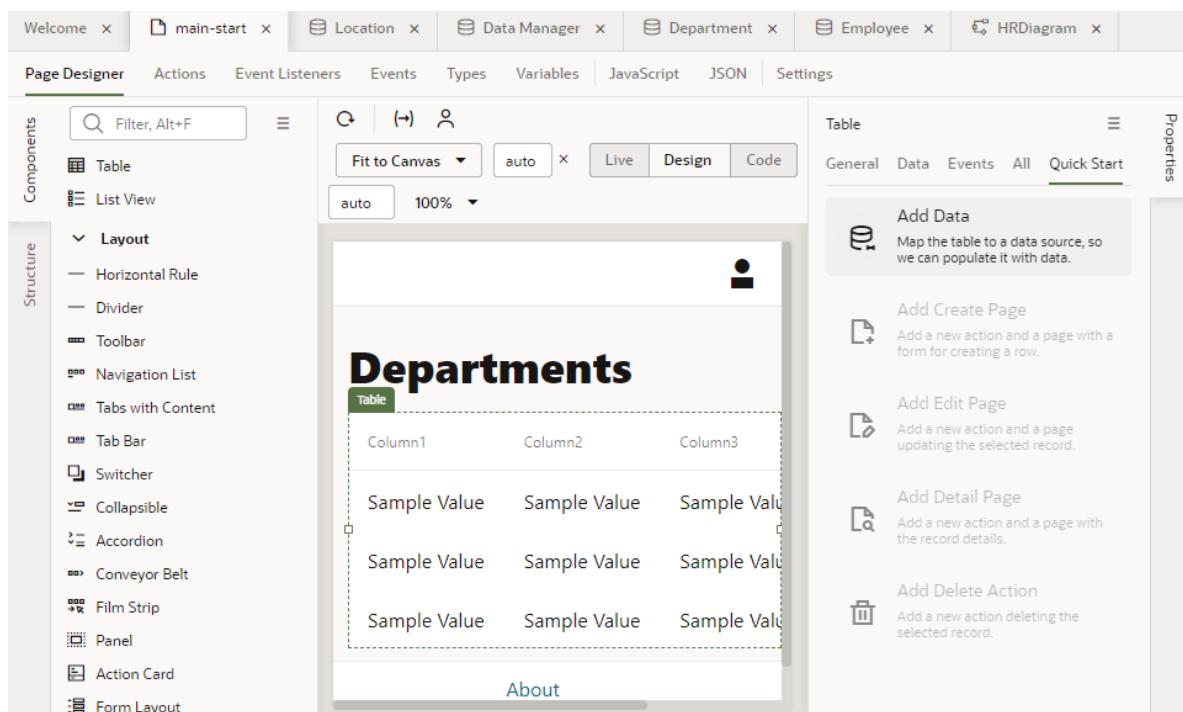
- Pada heading property inspector, isi text field dengan “Departments”.



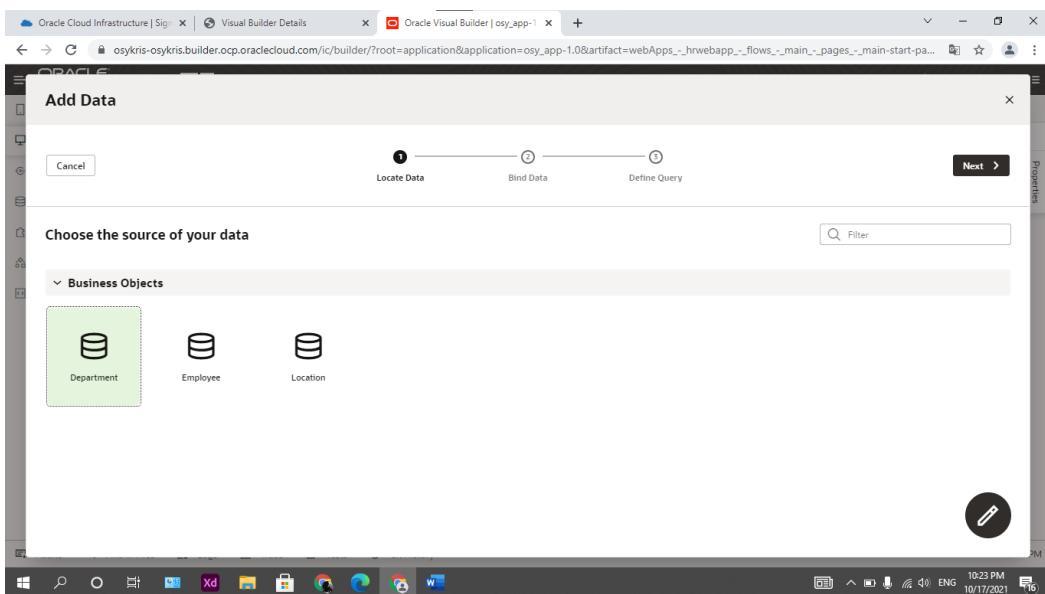
5. Pada components palette, scroll down sampai menemukan **collection**, pilih **table**, kemudian drop di bawah heading (departement).



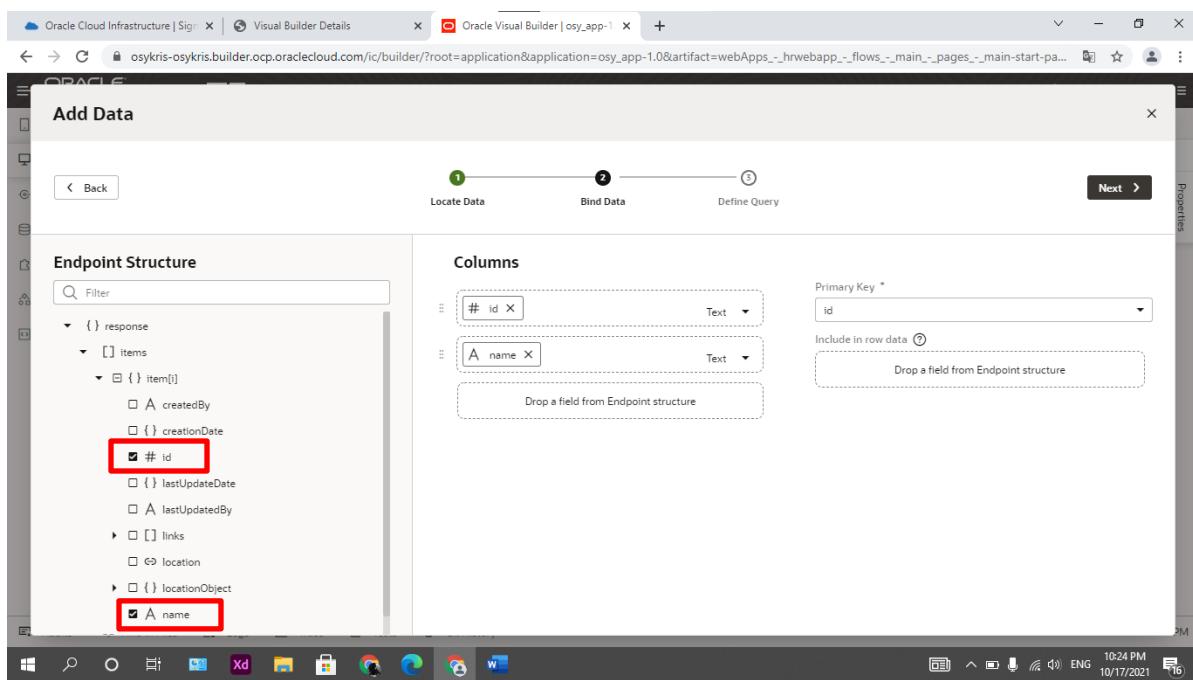
6. Klik Add Data di Property Inspector untuk membuka Add Data Quick Stats



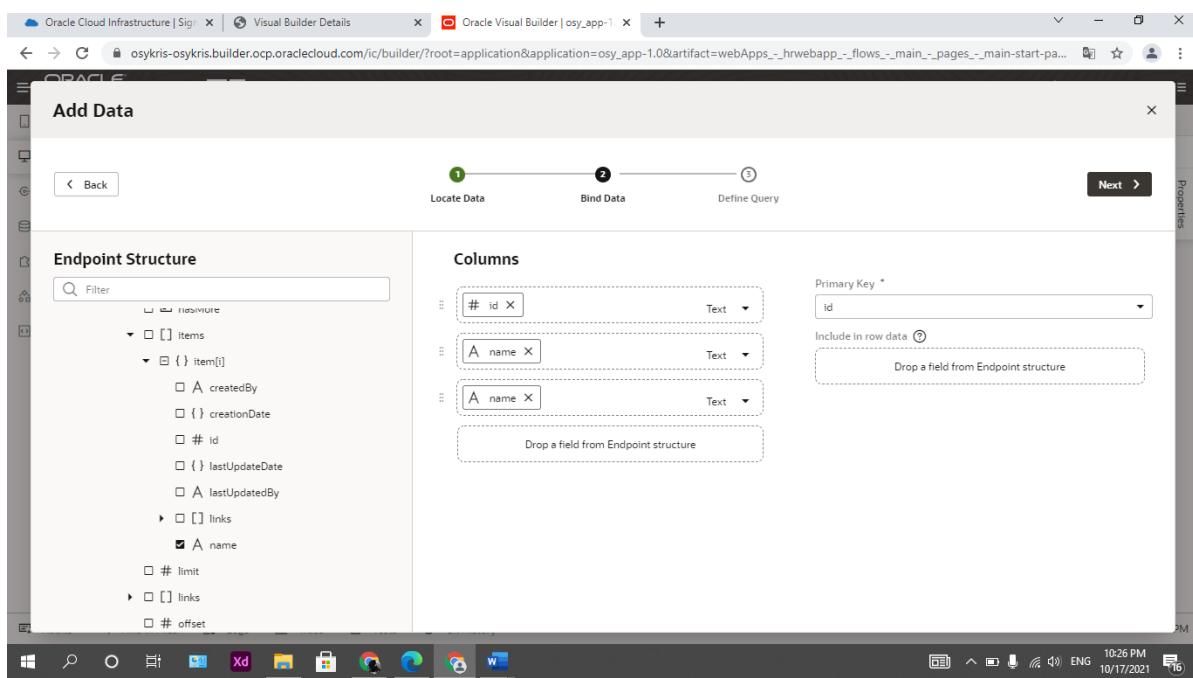
7. Pada halaman **Quick Start**, pilih business object Departemen, lalu klik next.



8. Pada halaman **Bind Data**, di bawah item[i], centang id dan nama.



9. Perluas node locationObject dan item dan pilih name untuk mengaktifkan location name agar muncul di tabel. Klik **next**.



10. Pada halaman **Query Page**, klik **Finish**.

11. Untuk membuat kolom nama lokasi deskriptif, klik **Data tab**. dibawah **Table** (side menu bar sebelah kanan), klik ikon

12. Pada kolom, Header text field, ubah “**Name**” menjadi “**Location**”. Kemudian klik untuk kembali ke sub menu **Data tab**.

### Page untuk Department Business Object

Halaman **create** memungkinkan kita untuk mengisi tabel dengan data dengan membuat instance baru dari business object.

- Klik pada **Quick Start** (side menu sebelah kanan), kemudian klik **Add Create Page**.

The screenshot shows the Oracle Visual Builder interface. At the top, there's a navigation bar with tabs: General, Data, Events, All, and Quick Start. The Quick Start tab is currently active. Below the navigation bar, there are two main sections: 'Add Data' and 'Add Create Page'. The 'Add Create Page' section contains a sub-section titled 'Add Create Page' with the sub-instruction 'Add a new action and a page with a form for creating a row.' A callout box points to this section.

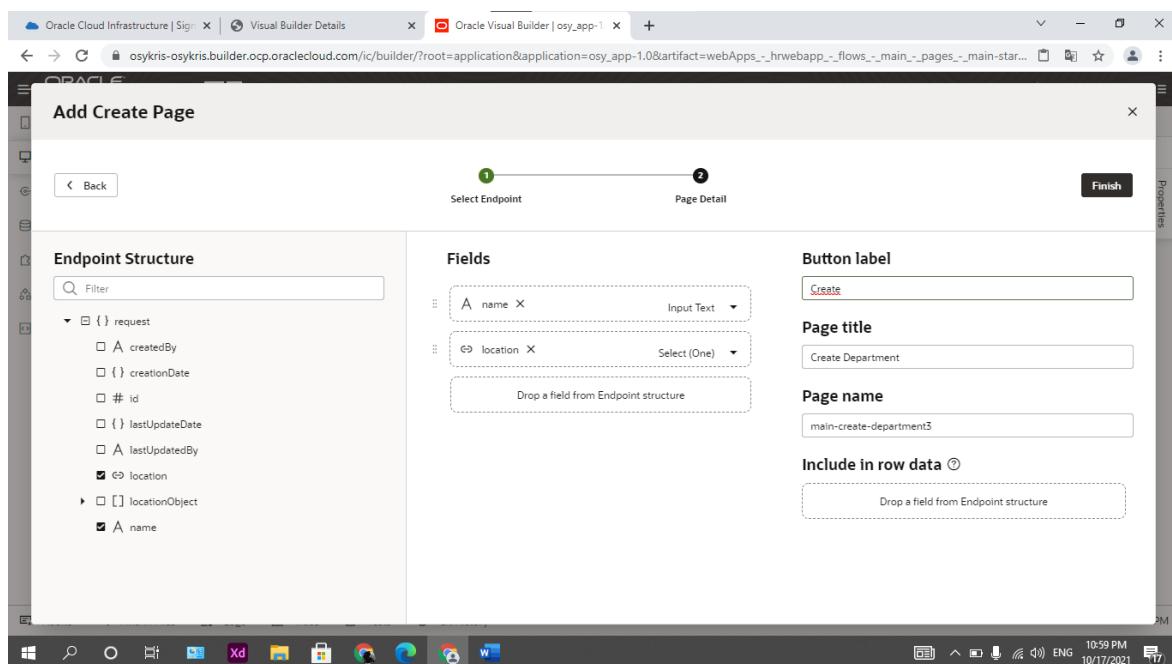
- Kemudian pada halaman End point, pilih business object **Department**, kemudian pilih **next**.

This screenshot shows the 'Add Create Page' dialog box. It has two main steps: 'Select Endpoint' (step 1) and 'Page Detail' (step 2). Step 1 is currently active. In the 'Select Endpoint' section, there's a 'Choose the source of your data' dropdown which is set to 'Business Objects'. Inside this dropdown, three icons are visible: 'Department' (highlighted in green), 'Employee', and 'Location'. To the right of the dropdown is a 'Filter' search bar. At the bottom right of the dialog box is a 'Next >' button.

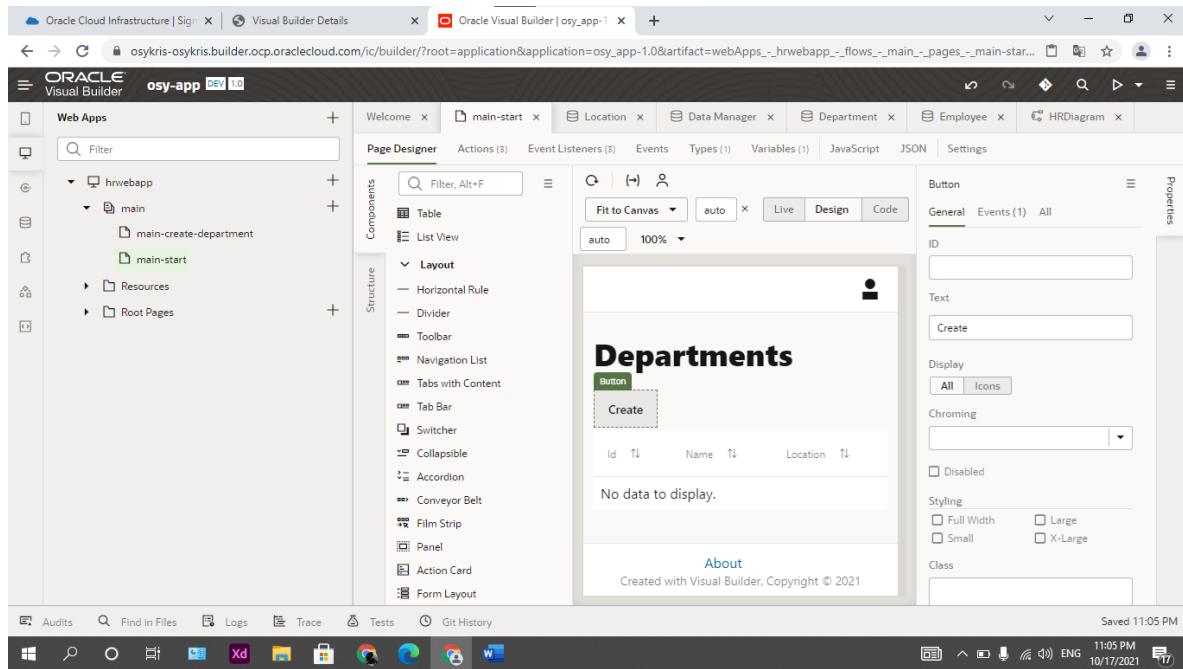
- Pada halaman detail page, dibawah **endpoint structure**, pilih dan centang **location**.

This screenshot shows the 'Add Create Page' dialog box at the 'Page Detail' step. It has two main sections: 'Select Endpoint' (step 1) and 'Page Detail' (step 2). Step 2 is active. In the 'Page Detail' section, there's a 'Fields' panel where 'name' is selected. Below it, there's a 'Drop a field from Endpoint structure' placeholder. To the right of the fields, there are several configuration fields: 'Button label' (set to 'Create Department'), 'Page title' (set to 'Create Department'), 'Page name' (set to 'main-create-department'), and 'Include in row data' (with a placeholder 'Drop a field from Endpoint structure'). There's also a checked checkbox for 'location'. The 'Endpoint Structure' panel on the left shows various fields like 'request', 'createdBy', 'creationDate', 'id', 'lastUpdateDate', 'lastUpdatedBy', and 'location' (which is checked).

- Isi field **Button label** dengan “Create”. Kemudian klik tombol **Finish**,



Setelah kita tekan tombol finish, akan muncul komponen tombol **Create** di atas tabel di halaman awal utama. Klik tab **Web Application** (side menu sebelah kiri) untuk melihat halaman **main-create-department** yang berada dalam satu list **main-start**.



5. Klik **main-create-department** dan buka Page Designer. Pada halaman tersebut kita bisa melihat ada 2 filed sama seperti langkah ke-4. Selain itu terdapat 2 tombol **Cancel** dan **Save**.

My Application 1931710075@student.polinema.ac.id

## Create Department

Name: Administration

Location:

- Floor 1
- Floor 2
- Floor 3
- Floor 4

**Cancel** **Save**

About  
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6. Pada halaman Quic Preview klik **Live**, pada mode ini kita bisa mencoba apakah form yang kita buat sudah berjalan atau tidak.
7. Pada field Name isikan dengan “Administration” dan untuk lokasi pilih Floor 1.

My Application 1931710075@student.polinema.ac.id

## Create Department

Name: Administration

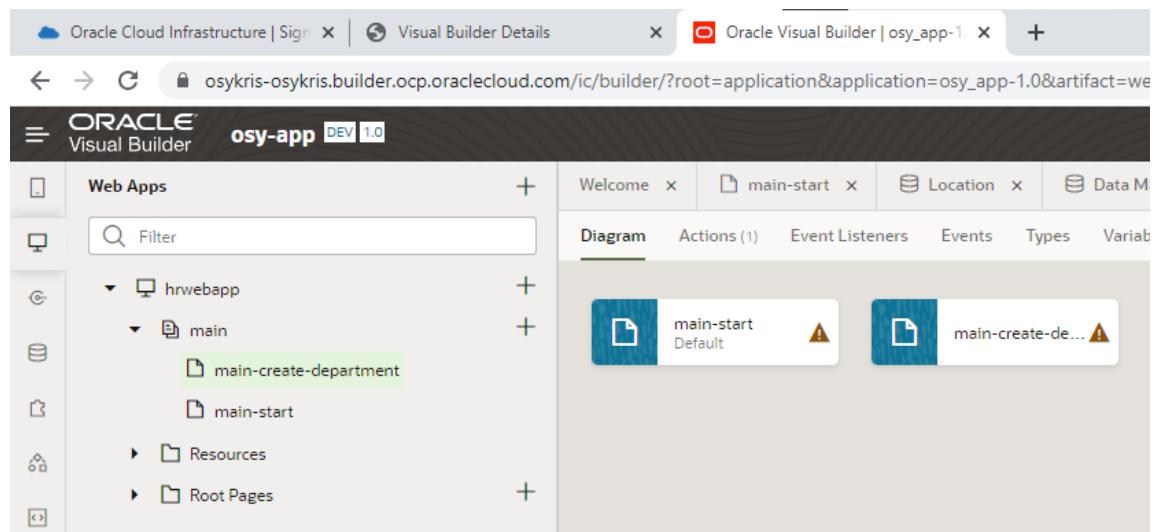
Location:

- Floor 1
- Floor 2
- Floor 3
- Floor 4

**Cancel** **Save**

About  
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Kemudian klik **Save**, maka akan muncul pesan dan **Oracle Visual Builder** akan mengarahkan kita ke halaman flow diagram dari halaman yang kita buat.



8. Buka, halaman **main-start**, bisa kita lihat data pada tabel telah ditambahkan.

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# Departments

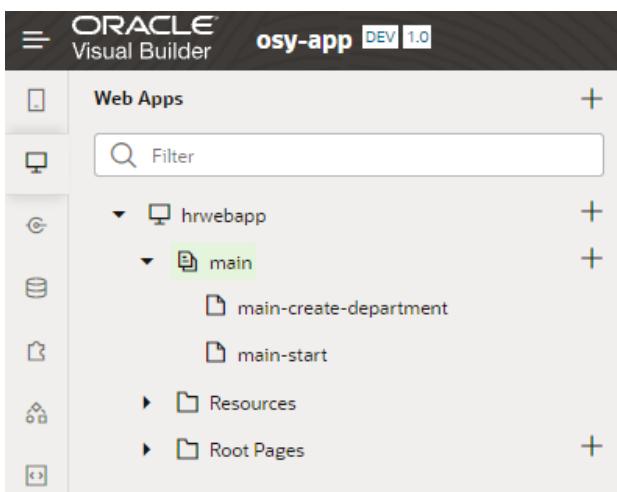
Create

Id ↑↓	Name ↑↓	Location ↑↓
1	Administration	Floor 1

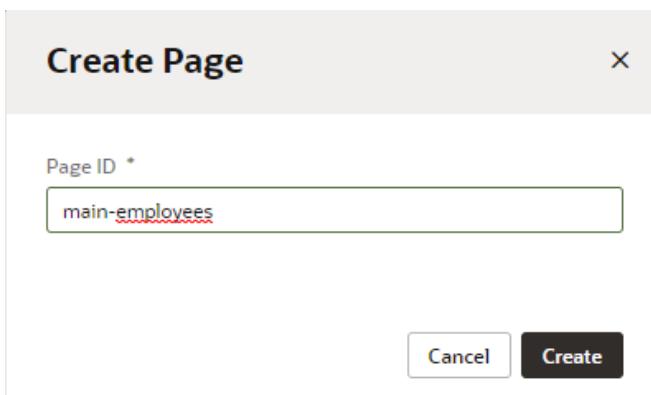
### Menambah Halaman Display Employees

Pada bagian ini, Kita akan membuat halaman untuk menampilkan Employee, prosesnya mirip dengan pada langkah sebelumnya (membuat halaman departement).

1. Pada main klik simbol + pada **main** node.



2. Pada dialog box Creating Page, masukkan " employees" setelah prefix main-, kemudian klik create.



3. Kemudian tambahkan **Heading** pada halaman **main-employess**, dengan cara melakukan drop komponen heading ke halaman main-employess.

The screenshot shows the Oracle Visual Builder interface. On the left, the 'Source' panel displays project structure with 'dynamicLayouts', 'businessObjects', 'settings', and 'webApps' sections. The 'HRDiagram' tab is active in the top navigation bar. The main area is titled 'main-employees'. The 'Components' panel on the right lists various UI elements under the 'Common' category, including 'Heading', 'Text', 'Label', 'Badge', 'Paragraph', 'Hyperlink', 'Image', 'Icon', 'Avatar', 'Camera', 'Button', 'Button Set (One)', 'Button Set (Many)', 'Train', and 'Menu Button'. A red arrow points from the 'Components' panel to a 'Heading' component placed on the canvas. The 'Properties' panel on the far right shows general settings for the selected 'Heading' component.

**4. Ganti filed text pada side menu (sebelah kanan) properties Heading dengan “Employees”**

This screenshot shows the Oracle Visual Builder interface after step 4. The 'Properties' panel on the right is open, specifically for the 'Heading' component. The 'Text' field is now set to 'Employees'. The 'Level H1' dropdown is also visible. The main canvas still displays the 'Heading' component with the text 'Employees'.

**5. Kemudian tambahkan komponen Table pada halaman main-employess.**

This screenshot shows the Oracle Visual Builder interface after step 5. The 'Components' panel on the right has been expanded to show the 'Collection' section, where 'Table' is listed. A 'Table' component has been added to the 'main-employees' page. The table has four columns labeled 'Column1', 'Column2', 'Column3', and 'Column4'. Each row contains sample values: 'Sample Value' for all four columns. The 'Properties' panel on the right shows the table's properties, including its columns and data.

**6. Klik Add Data.**

HRDiagram x main-create-department x main-employees >

Page Designer Actions Event Listeners Events Types Variables JavaScript JSON Settings

Components Structure

Filter, Alt: Fit to Canvas auto Live Design Code auto 98%

Table General Data Events All Quick Start Properties

Add Data Map the table to a data source, so we can populate it with data.

Add Create Page Add a new action and a page with a form for creating a row.

Add Edit Page Add a new action and a page updating the selected record.

Add Detail Page Add a new action and a page with the record details.

Add Delete Action Add a new action deleting the selected record.

**Employees**

Table Column1 Column2 Column3

Sample Value Sample Value Sample Value

Sample Value Sample Value Sample Value

Sample Value Sample Value Sample Value

About

7. Pada menu pop-up add data, pilih business object **Employee**, kemudian pilih next.

Home | Oracle Cloud Infrastructure x Visual Builder Details x Oracle Visual Builder | osy\_app-1 x +

Locate Data Bind Data Define Query Next >

Choose the source of your data

Business Objects

Department Employee Location

8. Untuk field data pilih **id, name, hireDate, dan Email**.

Home | Oracle Cloud Infrastructure x Visual Builder Details x Oracle Visual Builder | osy\_app-1 x +

Locate Data Bind Data Define Query Next >

Endpoint Structure

Columns

Primary Key \* Id

Include in row data Drop a field from Endpoint structure

Drop a field from Endpoint structure

9. Expand **departmentObject -> item nodes**, pilih **name**, kemudian pilih next.

10. Kita bisa melewati halaman Define Quire, pilih **Finish**.

11. Kembali ke menu properties pilih tab **Data**, dibawah table column **name** (paling bawah) klik pada field columnt header text isi dengan ” Department”.

12. Klik untuk kembali ke **Data** tab.

**Table | Table Columns**

General Data Events All Quick

Columns, Header Text fx

**Department**

Columns, Field

## Halaman Create untuk Employee Business Object

### 1. Quick Start, klik Add Create Page.

The screenshot shows the Oracle Visual Builder interface. On the left, there's a sidebar with 'Components' and 'Structure' sections. In the center, there's a canvas with a table titled 'Employees'. The table has columns: Id, Name, Hire Date, Email, and Department. Below the table, it says 'No data to display.' On the right, there's a 'Properties' panel with several options: 'Add Data', 'Add Create Page' (which is highlighted with a red box), 'Add Edit Page', 'Add Detail Page', and 'Add Delete Action'. The 'Add Create Page' option is described as 'Add a new action and a page for creating a row.'

### 2. Pilih end point Employee.

The screenshot shows the 'Add Create Page' dialog box. At the top, it says 'Choose the source of your data'. Under 'Business Objects', there are three icons: 'Department' (disabled), 'Employee' (selected and highlighted in green), and 'Location'. At the bottom right of the dialog, there's a 'Next >' button.

### 3. Untuk field pilih **hireDate**, **email**, dan **departement** (name otomatis dipilih karena required field).

Add Create Page

1 Select Endpoint      2 Page Detail

**Endpoint Structure**

Fields

A name X Input Text  
 hireDate X Input Date  
 email X Email  
 department X Select (One)

Drop a field from Endpoint structure

4. Pada field Button Label isi dengan **Create**, klik **finish**.

Home | Oracle Cloud Infrastructure | Visual Builder Details | Oracle Visual Builder | osy\_app-1

Add Create Page

1 Select Endpoint      2 Page Detail      Finish

**Endpoint Structure**

**Fields**

A name X Input Text  
 hireDate X Input Date  
 email X Email  
 department X Select (One)

Drop a field from Endpoint structure

**Button label**  
 Create

**Page title**  
 Create Employee

**Page name**  
 main-create-employee

**Include in row data**

Drop a field from Endpoint structure

5. Klik **live**, kemudian masukan data **name**: Lasile Smith, **Hire Date**: (today), **email**: lsmith@example.com **Departmet**: Administration. Kemudian pilih **Save**. Setelah itu kita akan diarah ke halaman Page Flow. Ketika kita kembali ke halaman main-employess akan tampil data yang telah kita isikan (jika tidak tampil klik tombol **reload page**).

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## Create Employee

Name

Hire Date  Calendar icon

Email

Department

Cancel Save

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## Employees

Create

Id ↑↓	Name ↑↓	Hire Date ↑↓	Email ↑↓	Department ↑↓
1	Lasile Smith	2021-10-18	lsmith@example.com	Administration

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6. Klik **Code** untuk melihat kode HTML dari halaman main-employess.

Event Listeners (1) Events Types (1) Variables (1) JavaScript JSON Settings

Live Design Code

```

1 <div class="oj-flex">
2   <h1 class="oj-flex-item oj-sm-12 oj-md-12">Employees</h1>
3 </div>
4 <div class="oj-flex">
5   <oj-toolbar id="oj-toolbar-for-" chroming="solid" class="oj-flex-item">
6     <oj-button on-oj-action="[$listeners.createEmployeeButtonClicked]"></oj-button>
7   </oj-toolbar>
8 </div>
9 <div class="oj-flex">
10  <oj-table scroll-policy="loadMoreOnScroll" class="oj-flex-item oj-sm-12 oj-md-12">
11    <!-- data="[$page.variables.employeeListSDP]" -->
12    <!-- columns='[{"headerText": "Id", "field": "id"}, {"headerText": "Name", "field": "name"}, {"headerText": "Hire Date", "field": "hireDate"}, {"headerText": "Email", "field": "email"}, {"headerText": "Department", "field": "department"}]' -->
13    <template slot="nameCellTemplate5">
14      <oj-bind-text value="[$current.data.items[0] ? $current.data.items[0].name : undefined]"></oj-bind-text>
15    </template>
16  </oj-table>
17 </div>

```

7. Klik **Design** untuk kembali ke halaman main-employees, kemudian klik **Structure**

Page Designer Actions (1) Event Listeners (1) Events

Components

Filter

Structure

- Grid Row
  - Heading (Employees)
- Grid Row
  - Toolbar
    - Button (Create)
- Grid Row
  - Table
    - Cell Template @nameCellTemplate5
      - Bind Text [\$curr...name : undefined]

8. Klik **Structure** lagi untuk menutup structure view.

HRDiagram x main-create-department x main-employees x main-create-employee x

Page Designer Actions (1) Event Listeners (1) Events Types (1) Variables (1) JavaScript JSON Settings

Components

Custom 1024 auto 60%

Live Design Code

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**Employees**

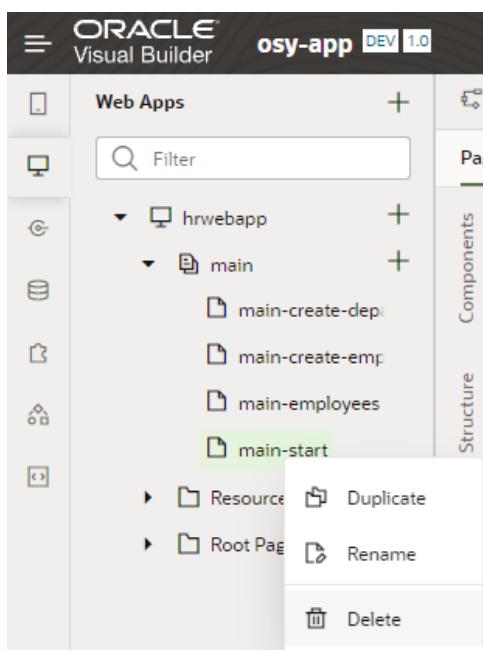
Structure

ID	Name	Hire Date	Email	Department
1	Lasile Smith	2021-10-18	lsmith@example.com	Administration

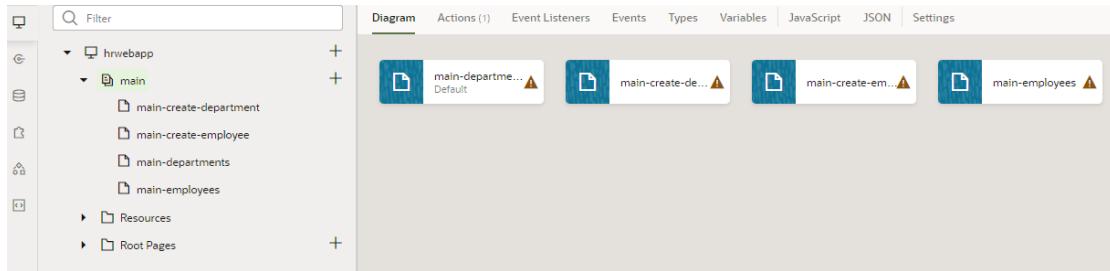
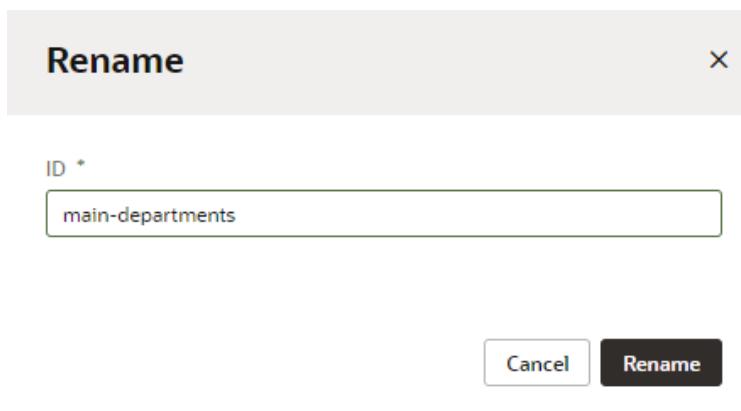
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### Mengganti Nama Halaman main-start

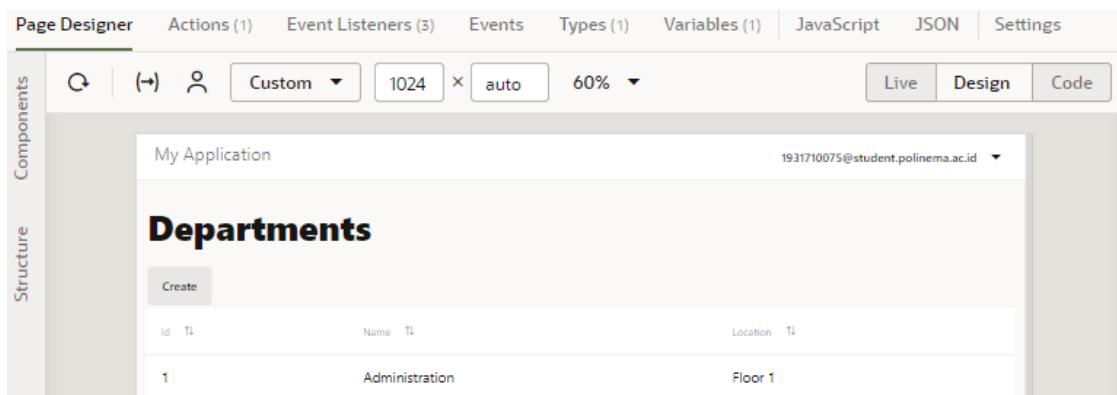
1. Pada Side menu (**Web Apps**) klik kanan pada **main-start**, kemudian pilih **rename**.



2. Pada pop-up menu, pada file ide Ganti nama **start** dengan **departments**, sehingga akan menjadi seperti:



3. Double klik pada main-departments.



4. Klik **Source View** expand webApps, hrwebapp, flows, dan main nodes. Kemudian klik **mainflow.json**

```

1  {
2    "id": "main",
3    "description": "Flow main",
4    "defaultPage": "main-departments",
5    "services": {},
6    "types": {},
7    "variables": {}
8  }

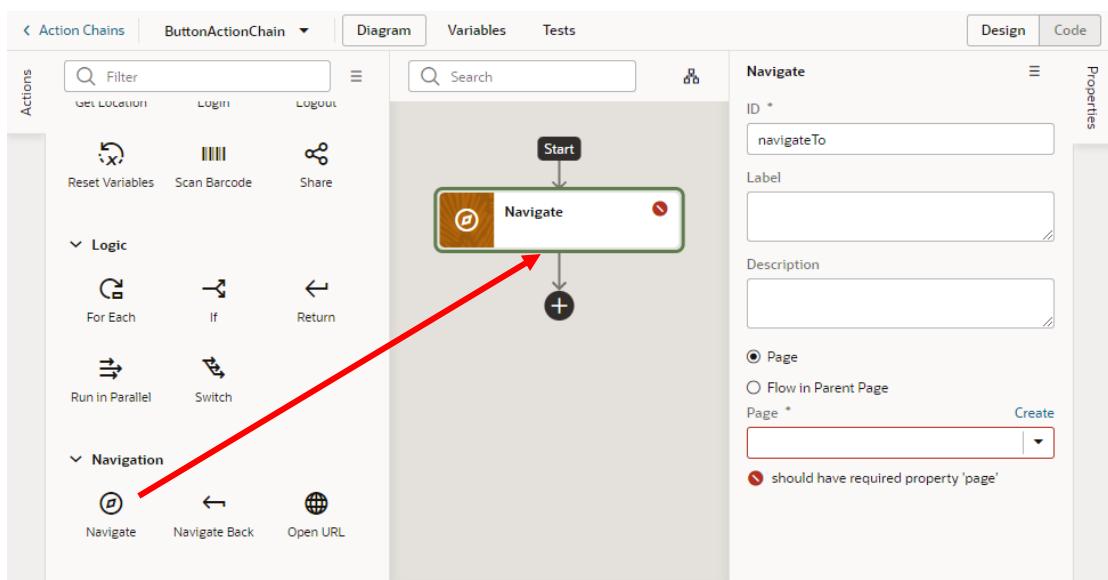
```

## Action Chain halaman Departments ke halaman Employess

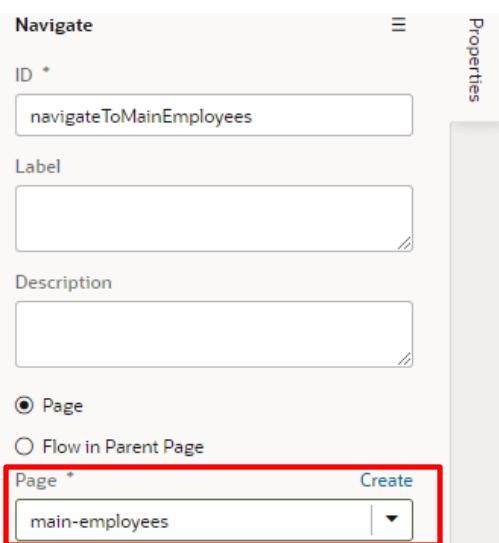
1. Tambahkan **Button** pada halaman **main-departments**, beri nama button “Display Employee”.

2. klik + **New Event** (side bar properties), pilih **Quick Start: ‘ojAction’**, setelah di klik sebuah action chain akan dibuat dengan nama **ButtonActionChain**, berisi **Start** action.

3. Drag **Navigate** action dari **Navigation** section yang ada di Action Palatte ke tanda + dibawah action start.



4. Pada **Navigate** Property inspector, Pada filed Target pilih **main-employees**.



5. Klik **Preview ▶** di header untuk menguji halaman dan navigasi. Applikasi akan membuka browser tab yang lain, click **Create** dan tambahkan data departemtn (contoh: IT -> Floor 2). Kemudian klik **Save**.

Oracle Cloud Infrastructure | Sign In | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | Create Department | + | - | X | osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-create-department | ☆ | 0 | :

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## Create Department

Name	<input type="text" value="IT"/>
Location	<input type="text" value="Floor 2"/>
<input type="button" value="Cancel"/>	<input type="button" value="Save"/>

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Windows Taskbar: 1:10 PM ENG 10/18/2021

6. Klik Display Employees Page, kemudian klik Create. Tambahkan data employee sesuatikan dengan nama departemet yang baru dibuat.

Oracle Cloud Infrastructure | Sign In | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/ | + | - | X | My Application 1931710075@student.polinema.ac.id

## Departments

<input type="button" value="Create"/>	<input type="button" value="Display Employee"/>	
ID	Name	Location
1	Administration	Floor 1
4	IT	Floor 2

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Oracle Cloud Infrastructure | Sign In | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-employees | + | - | X | My Application 1931710075@student.polinema.ac.id

## Employees

<input type="button" value="Create"/>				
ID	Name	Hire Date	Email	Department
1	Lasile Smith	2021-10-18	lsmith@example.com	Administration

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My Application

## Create Employee

Name: Osy

Hire Date: 10/18/2021

Email: osy.krisdayanti27@gmail.com

Department: IT

**Cancel** **Save**

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Employees

ID	Name	Hire Date	Email	Department
1	Lasile Smith	2021-10-18	lsmith@example.com	Administration
2	Osy	2021-10-18	osy.krisdayanti27@gmail.com	IT

**Confirmation**  
**Employee saved**  
Employee record successfully created

### Action Chain halaman Employees ke halaman Departments

- Untuk proses action chain halaman employees ke halaman departments sama dengan pada langkah sebelumnya, berinama tombol “**Display Departments**”. Untuk Navigate Page “Navigate maindepartments”.

1024 x auto 60% **LIVE** **Design** **Code**

My Application

## Employees

**Create** **Display Departments**

**Action Chains** **ButtonActionChain** **Diagram** **Variables** **Tests** **Design** **Code**

**Actions**

- Get Location
- Login
- Logout
- Reset Variables
- Scan Barcode
- Share
- For Each
- If
- Return
- Run in Parallel
- Switch
- Navigation

**Properties**

**General**

ID:

Text:  **Display Departments**

**Events**

**Diagram**

```

graph TD
    Start((Start)) --> Navigate[Navigate main-departments]
    Navigate --> End((End))
    
```

**Navigate**

ID \*:  **navigateToMainDepartments**

Label:

Description:

**Page**   
**Flow in Parent Page**

Page \*: **main-departments** **Create**

- Klik Preview ▶.

Oracle Cloud Infrastructure | Sig | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-employees

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## Employees

Create Display Departments

ID	Name	Hire Date	Email	Department
1	Lasile Smith	2021-10-18	lsmith@example.com	Administration
2	Osy	2021-10-18	osy.krisdayanti27@gmail.com	IT

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Windows Taskbar: 1:22 PM ENG 10/18/2021

Setalah diklik Display departments akan muncul halaman departments

Oracle Cloud Infrastructure | Sig | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/

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## Departments

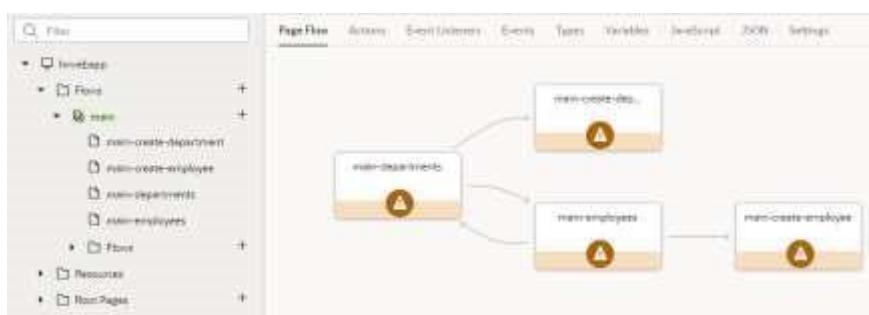
Create Display Employee

ID	Name	Location
1	Administration	Floor 1
4	IT	Floor 2

About  
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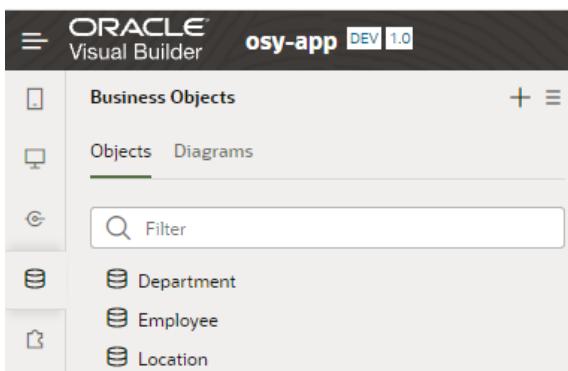
Windows Taskbar: 1:22 PM ENG 10/18/2021

- Klik main -> Page Flow, akan muncul diagram kurang lebih seperti berikut:



### Import Data ke Busines Object

- Pada Navigator, Pilih tab **Busines Object** , kemudian klik **Object** tab.



2. Klik **Departement** kemudian klik **Data** tab, kemudian akan tampil jenis object yang telah kita buat tadi.

Id	Location	Name
1	Floor 1 (1)	Administration
4	Floor 2 (2)	IT

3. Klik **Import from File**.



4. Pada dialog-box import data, pilih **Replace** untuk **Row Handling** jika belum dipilih. Kemudian klik upload box, browse, pilih file Departement.csv dan klik **Import**.

**Import Data**

Provide the file containing data that you wish to import and choose to append or replace existing data.

Department.csv

Row Handling:

- Append - This will append all records from the import file to the existing data in Development. This may create duplicate records.
- Replace - This will erase all records currently in Development and replace them with records from the import.

Cancel Import

Id	Location	Name
1	Floor 1 (1)	Administration
2	Floor 2 (2)	Marketing
3	Floor 3 (3)	Purchasing
4	Floor 1 (1)	Human Resources
5	Floor 2 (2)	IT
6	Floor 3 (3)	Sales

5. Ulangi langkah yang sama (langkah 1-4) untuk import data Employee menggunakan file Employee.csv.

Import Data

Provide the file containing data that you wish to import and choose to append or replace existing data.

Employee.csv

Row Handling:

Append - This will append all records from the import file to the existing data in Development. This may create duplicate records.

Replace - This will erase all records currently in Development and replace them with records from the import.

Import Cancel

Department	Email	Hire Date	Id	Name
Administration (1)	edavis@example.com	Jun 17, 2006	1	Elizabeth Davis
Administration (1)	jmillier@example.com	Sep 21, 2008	2	James Miller
Marketing (2)	jgarcia@example.com	Jan 13, 2004	3	Jennifer Garcia
Purchasing (3)	mwilliams@example.com	Jan 3, 2009	4	Mark Williams
Marketing (2)	sbrown@example.com	May 21, 2010	5	Sarah Brown
Administration (1)	dsmith@example.com	Jun 25, 2008	6	David Smith
Marketing (2)	kjohnson@example.com	Feb 5, 2009	7	Karen Johnson
Purchasing (3)	rwilson@example.com	Feb 7, 2010	8	Richard Wilson

## Halaman Edit Department Busines Object (data manipulation)

- Pada aplikasi HR Application, tab **Web Application** pilih halaman **main-departments** - > **Page Designer**. Klik **Reload Page** jika diperlukan, untuk menampilkan update halaman terbaru (setelah import data).

The screenshot shows the Oracle Visual Builder interface. The left sidebar shows the project structure under 'hrwebapp' with 'main' selected, containing 'main-create-department', 'main-create-employee', 'main-departments', and 'main-employees'. The main area is titled 'Departments' and displays a table with the following data:

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

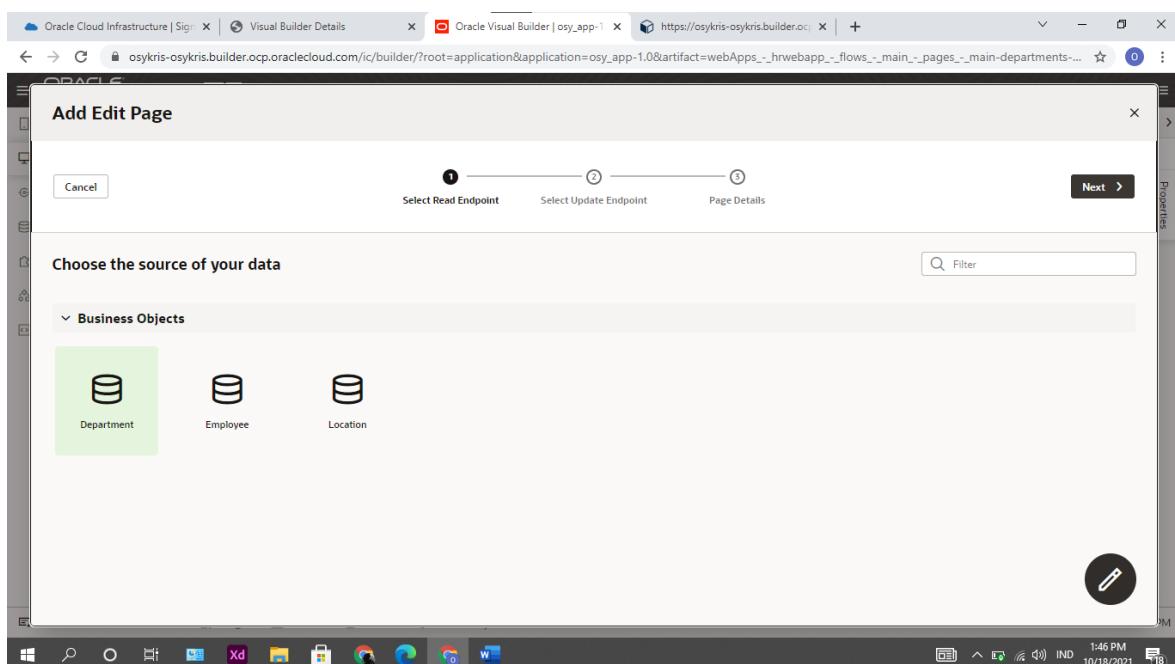
The properties panel on the right shows 'Preferred Layout' set to 'Grid'.

- Klik komponen table yang ada di halman **main-departments**, kemudian pada properties (side menu sebelah kanan) pilih **Quick Start**, klik **Add Edit Page**.

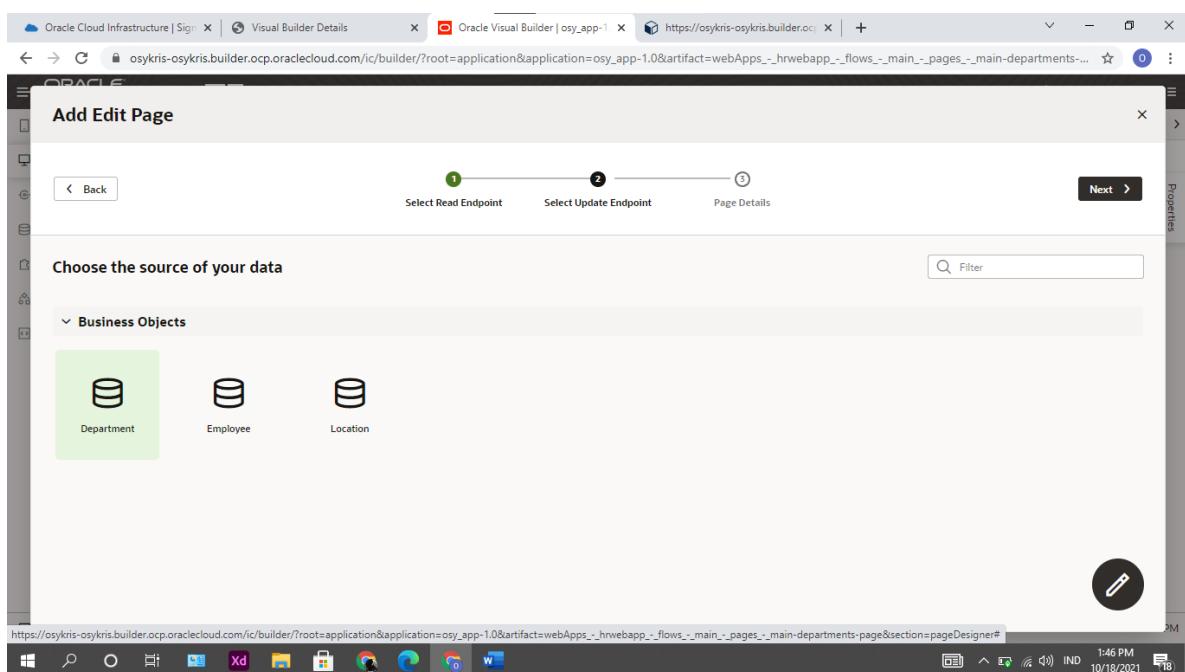
The screenshot shows the Oracle Visual Builder interface with the 'Table' component selected in the properties panel. The 'Quick Start' tab is active, showing the following options:

- Add Data**: Map the table to a data source, so we can populate it with data.
- Add Create Page**: Add a new action and a page with a form for creating a row.
- Add Edit Page**: Add a new action and a page updating the selected record. This option is highlighted with a red box.
- Add Detail Page**: Add a new action and a page with the record details.
- Add Delete Action**: Add a new action deleting the selected record.

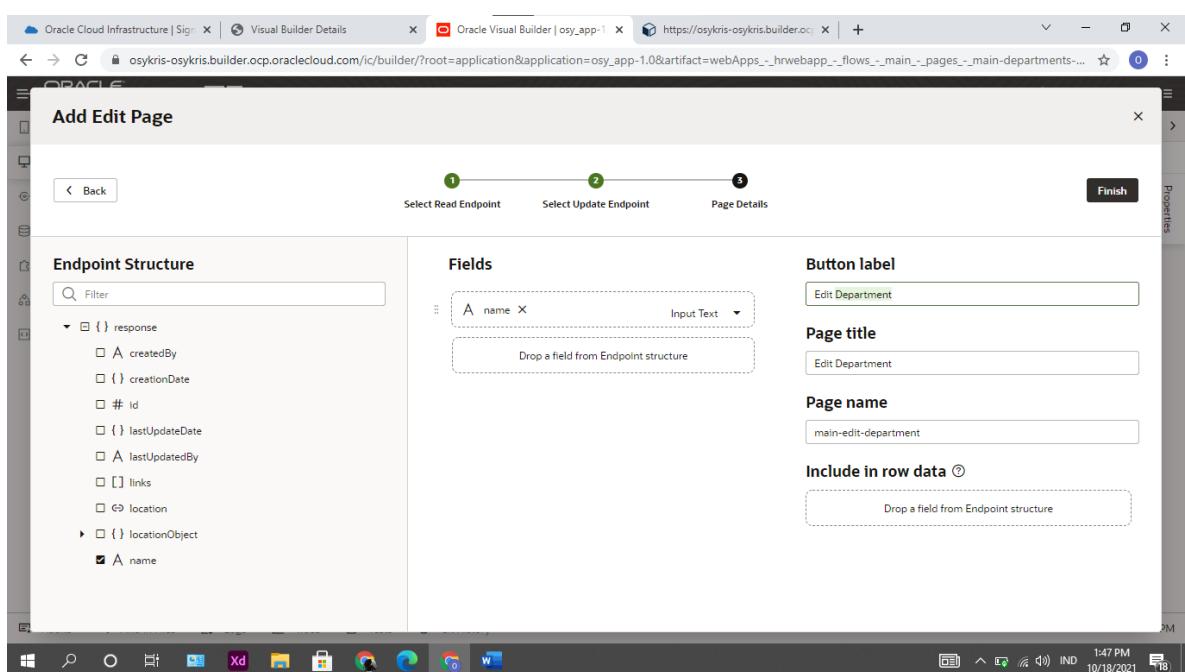
- Untuk halaman end point, pilih business object **Department**, kilik **Next**.



4. Untuk update end point, pilih business object **Departmetn**, kemudian klik **Next**.



5. Pada halaman Page Details, pilih location dibawah struktur Endpoint (**name** otomatis akan dipilih), klik **Finish**. Tombol **Edit Department** akan tampil pada halaman main-department, tetapi halaman tersebut masih belum aktif.



My Application 193171001

## Departments

[Create](#) [Display Employee](#) [Edit Department](#)

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

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### Halaman Detail untuk Department Business Object

1. Pilih Quick Start menu, klik Add Detail Page.

Page Designer Actions (4) Event Listeners (0) Events Types (1) Variables (2) JavaScript JSON Settings

Components Structure

Common

- H Heading
- T Text
- A Highlight Text
- L Label
- B Badge
- P Paragraph
- H Hyperlink
- I Image
- O Icon
- A Avatar
- C Camera
- B Button
- BS (One)
- BS (Many)
- T Train
- M Menu Button

Table General Data Events (1) All Quick St

Add Data Map the table to a data source, so we can populate it with data.

Add Create Page Add a new action and a page with a form for creating a row.

Add Edit Page Add a new action and a page updating the selected record.

**Add Detail Page** Add a new action and a page with the record details.

Add Delete Action Add a new action deleting the selected record.

My Application 193171001

## Departments

[Create](#) [Display Employee](#) [Edit Department](#)

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

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2. Pilih halaman end point business object Department,

Oracle Cloud Infrastructure | Sign In Visual Builder Details Oracle Visual Builder | osy\_app-1 https://osykris-osykris.builder.oraclecloud.com/

Add Detail Page

Choose the source of your data

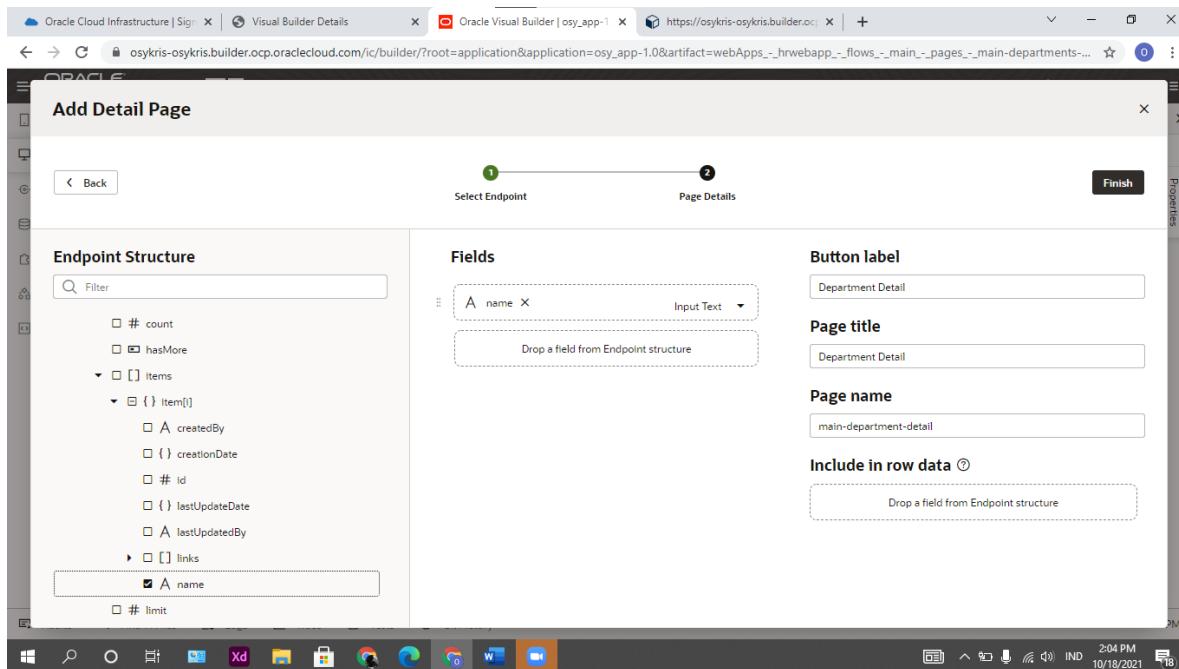
**Business Objects**

- Department
- Employee
- Location

Cancel Select Endpoint Next > Page Details

https://osykris-osykris.builder.oraclecloud.com/ic/builder/?root=application&application=osy\_app-1.0&artifact=webApps-\_hrwebapp-\_flows-\_main-\_pages-\_main-departments-page&section=pageDesigner#

3. Pada Page Detail, pilih name dibawah EndPoint Structure, expand **locationObject** dan **items** (item[i]) pilih **name**, klik **Finish**. Tombol **Department Detail** akan ditampilkan pada toolbar yang ada pada halaman main-department, untuk saat ini tombol tersebut masih belum aktif



4. Klik Live, pilih data (terserah), klik tombol **Departement Detail** untuk membuka halaman maindepartment.

ID	Name	Location	Floor
1	Administration		Floor 1
2	Marketing		Floor 2
3	Purchasing		Floor 3
4	Human Resources		Floor 1
5	IT		Floor 2
6	Sales		Floor 3

5. Klik **Design** untuk kembali ke mode Desain.



6. Klik **main-department-detial**, pilih Name (paling bawah), ganti label menjadi **Location** (Properties -> General -> Label Hit)

## Halaman Delete untuk Department Business Object

- Kembali ke halaman **main-department**, klik **Quick Start** kemudian klik **Add Delete Action**.

The screenshot shows the Oracle Visual Builder interface. At the top, there are tabs for Event Listeners (7), Events, Types (1), Variables (2), JavaScript, JSON, and Settings. Below this is a toolbar with search, filter, and export icons, followed by a dropdown for 'Custom' and a value '1024'. The main area displays a table titled 'My Application' with the ID '19317100'. The table has columns for 'Id', 'Name', and 'Location'. The data rows are:

Id	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

To the right of the table is a sidebar with tabs for General, Data, Events (1), All, and Quick Start. The 'Quick Start' tab is selected. Under 'Table', there are several options:

- Add Data**: Map the table to a data source.
- Add Create Page**: Add a new action and a page for creating a row.
- Add Edit Page**: Add a new action and a page for updating the selected record.
- Add Detail Page**: Add a new action and a page with the record details.
- Add Delete Action**: Add a new action for deleting the selected record. This option is highlighted with a red box.

- Pilih Endpoint business object **Department**,

The screenshot shows the 'Add Delete Action' dialog box. At the top, it says 'Select Endpoint'. Below this, it says 'Choose the source of your data' and shows a section for 'Business Objects' with three icons: 'Department' (highlighted in green), 'Employee', and 'Location'. A 'Filter' input field is also present. In the bottom right corner of the dialog, there is a 'Finish' button.

- Tombol **Delete Department** akan ditampilkan pada toolbar, kondisi tombol akan berada pada inactive.

My Application 193171007

## Departments

[Create Table](#) [Display Employee](#) [Edit Department](#) [Department Detail](#) [Delete Department](#)

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

### Test Fungsi Halaman Department Business Object

- Lakukan test pada setiap tombol yang telah Anda buat dengan menggunakan mode review.

Oracle Cloud Infrastructure | Sign In | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/ + 9:29 PM 10/18/2021

My Application 1931710075@student.polinema.ac.id

## Departments

[Create](#) [Display Employee](#) [Edit Department](#) [Department Detail](#) [Delete Department](#)

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

About  
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- Cobalah menambahkan Data, Update, dan menghapus data.

#### Tambah Data

Oracle Cloud Infrastructure | Sign In | Visual Builder Details | Oracle Visual Builder | osy\_app-1 | Create Department | https://osykris-osykris.builder.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-create-department + 9:33 PM 10/18/2021

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## Create Department

Name: Education

Location: Floor 2

[Cancel](#) [Save](#)

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My Application 1931710075@student.polinema.ac.id

## Departments

Create Display Employee Edit Department Department Detail Delete Department

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3
7	Education	Floor 2

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## Detail

My Application 1931710075@student.polinema.ac.id

## Department Detail

Location Floor 2

Back

## Edit

My Application 1931710075@student.polinema.ac.id

## Edit Department

Name English

Location Floor 3

Cancel Save

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My Application

## Departments

**Confirmation**  
Department saved  
Department record successfully updated

ID	Name	Location
7	English	Floor 3
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

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Windows Taskbar: 9:35 PM 10/18/2021

## Hapus

My Application

## Departments

**Confirmation**  
Department deleted  
Department [7] successfully deleted

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

About  
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Windows Taskbar: 9:35 PM 10/18/2021

## Employee Business Object

1. Tambahkan halaman **edit**, **detail** dan **delete** pada halaman business object Employee.
2. Proses pembuatan halaman sama dengan langkah sebelumnya, Pilih Quick Start (Add Edit Page) dan Delete Action Page.

### Edit Page

My Application

## Employees

**Create** **Display Departments** **Edit Employee**

ID	Name	Hire Date	Email	Department
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration
2	James Miller	2008-09-21	jmillier@example.com	Administration
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing
6	David Smith	2008-06-25	dsmith@example.com	Administration
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing
9	Linda Jones	2005-08-17	ljones@example.com	Administration

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## Delete Page

**Employees**

Create	Display Departments	Edit Employee	Delete Employee	
ID	Name	Hire Date	Email	Department
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration
2	James Miller	2008-09-21	jmillier@example.com	Administration
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing
6	David Smith	2008-06-25	dsmith@example.com	Administration
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing
9	Linda Jones	2005-08-17	ljones@example.com	Administration

About  
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- Untuk page details pada business object employee pilih **name** (otomatis dipilih) **hireDate**, **email** dan **department**.

**Employees**

Create	Display Departments	Edit Employee	Delete Employee	Employee Detail
ID	Name	Hire Date	Email	Department
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration
2	James Miller	2008-09-21	jmillier@example.com	Administration
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing
6	David Smith	2008-06-25	dsmith@example.com	Administration
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing
9	Linda Jones	2005-08-17	ljones@example.com	Administration

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- Set agar tampilan pada halaman **Edit employee** menjadi seperti ini (2 row):

Event Listeners (3) Events Types (3) Variables (5) JavaScript JSON Settings

Custom 1024 auto Live Design Code 50%

**Edit Employee**

Name	Department
Email	Hire Date

Form Layout

General Events All

ID  
Columns  
Max Columns  
Label Fling

Pilihan halaman main-edit-employee -> klik formlayout yang ada pada halaman -> **Properties** -> **General** -> set **Max Columns 2**.

- Untuk field detail page pilih **name**, **hireDate**, **email**. Expand **departmentObject** -> **items** -> **name**. Klik **Finish**.

6. Ganti label name (yang ke dua/paling bawah) pada halaman **Employee Detail** menjadi **Department** (Properties-> General -> Label Hint).

The screenshot shows a form titled "Employee Detail". It contains four input fields: "Name", "Email", "Hire Date", and "Department". Below the fields is a "Back" button.

7. Tambahkan halaman Delete Employee dengan menggunakan objct busines Employee, sehingga tampilan akhir dari **main-employee** menjadi seperti dibawah ini:

The screenshot shows a table titled "Employees" with the following data:

ID	Name	Hire Date	Email	Department
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration
2	James Miller	2008-09-21	jmillier@example.com	Administration
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing
6	David Smith	2008-06-25	dsmith@example.com	Administration
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing
9	Linda Jones	2005-08-17	ljones@example.com	Administration

Below the table is an "About" section stating "Created with Visual Builder. Copyright © 2021".

### Test Fungsi Halaman Employee Busines Object

3. Lakukan test pada setiap tombol yang telah Anda buat dengan menggunakan mode **review**. Ketika pertama kali klik review akan muncul tampilan seperti gabar di bawah ini.

The screenshot shows a table titled "Departments" with the following data:

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

Below the table is an "About" section stating "Created with Visual Builder. Copyright © 2021".

4. Cobalah menambahkan Data, Update, dan menghapus data.



Cloud Oracle Cloud Infrastructure | Sig: X | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-employees

My Application 1931710075@student.polinema.ac.id

## Employees

Create Display Departments Edit Employee Delete Employee Employee Detail

ID	Name	Hire Date	Email	Department
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration
2	James Miller	2008-09-21	jmillier@example.com	Administration
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing
6	David Smith	2008-06-25	dsmith@example.com	Administration
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing

## Create Data

Oracle Cloud Infrastructure | Sign In | Oracle Visual Builder | osy\_app-1 | Create Employee

osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-create-employee

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## Create Employee

Name: Gisella Anastasia

Hire Date: 10/18/2021

Email: gisella@gmail.com

Department: Marketing

Cancel Save

## My Application

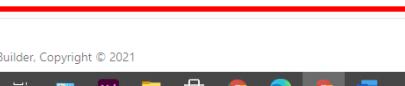
# Employees

Confirmation  
Employee saved  
Employee record successfully created

Oracle Cloud Infrastructure | Sign In | Oracle Visual Builder | osy\_app-1 | https://osykris-osykris.builder.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-employees

Employee Detail				
Create	Display Departments		Edit Employee	Delete Employee
ID	Name	Hire Date	Email	Department
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration
2	James Miller	2008-09-21	jmiller@example.com	Administration
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing
6	David Smith	2008-06-25	dsmith@example.com	Administration
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing
9	Linda Jones	2005-08-17	ljones@example.com	Administration
10	Gisella Anastasia	2021-10-18	gisella@gmail.com	Marketing

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10:43 PM 10/18/2021 ENG



## Update Data

My Application

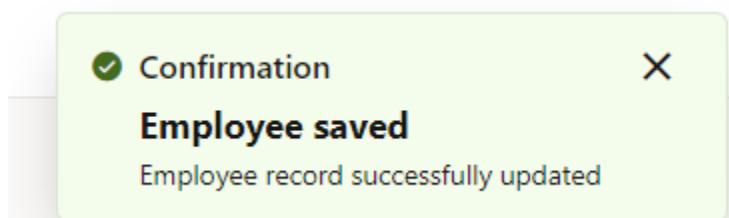
1931710075@student.polinema.ac.id

## Edit Employee

Name	Gisella	Department	Purchasing
Email	gisella@gmail.com	Hire Date	10/18/2021

Enter an email address.

**Cancel** **Save**



Oracle Cloud Infrastructure | Sig x | Oracle Visual Builder | osy\_app-1 x | https://osykris-osykris.builder.oraclecloud.com/ | +

osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-employees

☆ 0 : ...

Employee List						
Create		Display Departments		Edit Employee	Delete Employee	Employee Detail
Id	Name	Hire Date	Email	Department		
1	Elizabeth Davis	2006-06-17	edavis@example.com	Administration		
2	James Miller	2008-09-21	jmiller@example.com	Administration		
3	Jennifer Garcia	2004-01-13	jgarcia@example.com	Marketing		
4	Mark Williams	2009-01-03	mwilliams@example.com	Purchasing		
5	Sarah Brown	2010-05-21	sbrown@example.com	Marketing		
6	David Smith	2008-06-25	dsmith@example.com	Administration		
7	Karen Johnson	2009-02-05	kjohnson@example.com	Marketing		
8	Richard Wilson	2010-02-07	rwilson@example.com	Purchasing		
9	Linda Jones	2005-08-17	ljones@example.com	Administration		
10	Gisella	2021-10-18	gisella@gmail.com	Purchasing		

## Detail Data

Oracle Cloud Infrastructure | Sign In | Oracle Visual Builder | osy\_app-1 | Employee Detail

My Application 1931710075@student.polinema.ac.id

# Employee Detail

Name: Gisella

Email: gisella@gmail.com

Hire Date: 10/18/2021

Department: Purchasing

[Back](#)

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10:50 PM 10/18/2021 ENG

## Delete Data

The screenshot shows a web browser window for Oracle Visual Builder. The URL is https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/design/osy\_app/1.0/preview/webApps/hrwebapp/?page=shell&shell=main&main=main-employees. The page title is 'My Application'. A modal dialog box in the center says 'Confirmation' with a green checkmark icon, 'Employee deleted', and 'Employee [10] successfully deleted'. Below the modal is a table titled 'Employees' with columns: Id, Name, Hire Date, Email, and Department. The table contains 8 rows of employee data. At the bottom of the screen is a Windows taskbar.

## Stage and Publish Stage

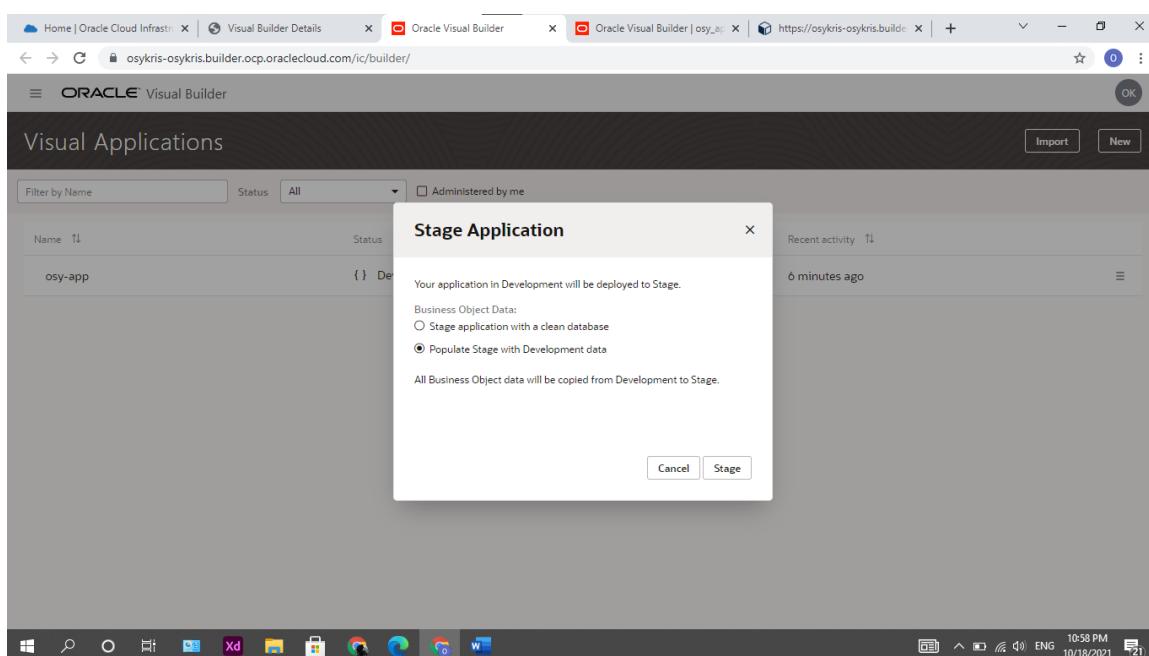
### 1. Kembali ke halaman utama Visual Builder.

The screenshot shows a web browser window for Oracle Visual Builder. The URL is https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/. The page title is 'ORACLE Visual Builder'. Under the heading 'Visual Applications', there is a table with one row: 'osy-app' (Status: Development, Origin: Visual Builder, Version: 1.0, Recent activity: 6 minutes ago). There are 'Import' and 'New' buttons at the top right. The Windows taskbar is visible at the bottom.

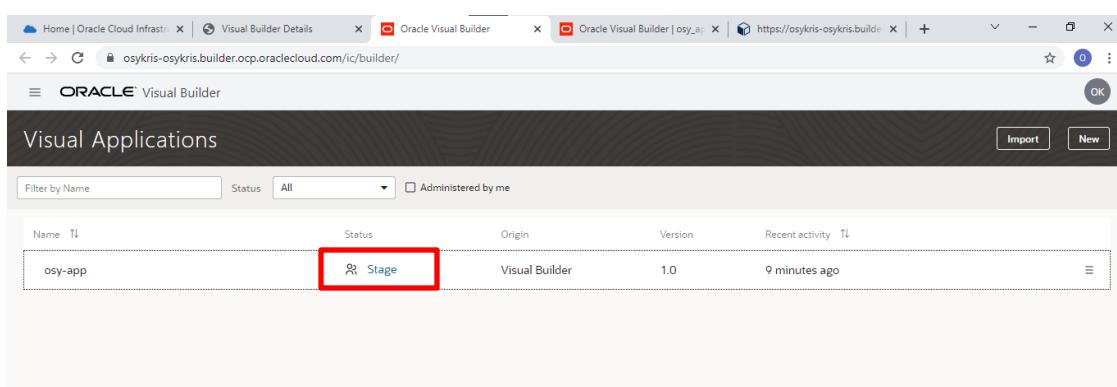
### 2. Pada aplikasi yang telah dibuat klik Options ≡, kemudian select Stage.

The screenshot shows a web browser window for Oracle Visual Builder. The URL is https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/. The page title is 'ORACLE Visual Builder'. Under the heading 'Visual Applications', there is a table with one row: 'osy-app' (Status: Development, Origin: Visual Builder, Version: 1.0, Recent activity: 6 minutes ago). A context menu is open over the 'osy-app' row, with the 'Stage' option highlighted with a red box. The Windows taskbar is visible at the bottom.

### 3. Pada popup-box pilih Populate Stage with Development data kemudian klik Stage.



Application stage berubah dari **development** ke **stage**.



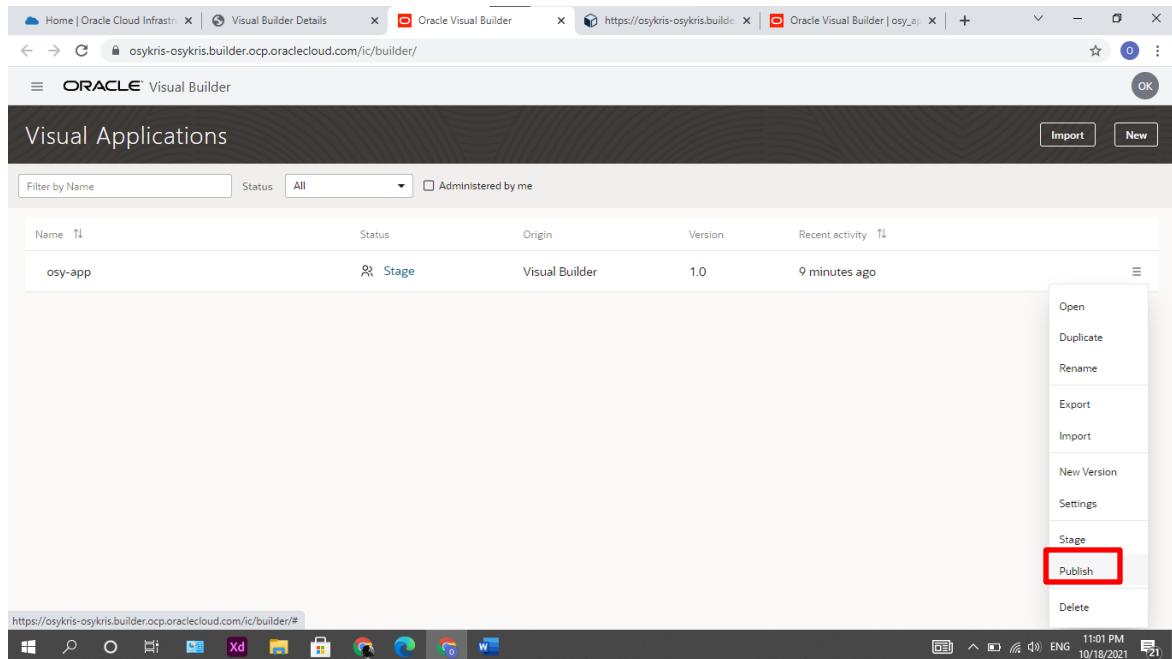
- Klik **Stage**, pilih **hrwebapp** (nama aplikasi web yang kita buat). Setelah kita klik akan membuka tab baru pada web browser yang kita gunakan. Pada halaman yang baru dibuka akan ada data yang kita tambahkan pada saat development.

ID	Name	Location
1	Administration	Floor 1
2	Marketing	Floor 2
3	Purchasing	Floor 3
4	Human Resources	Floor 1
5	IT	Floor 2
6	Sales	Floor 3

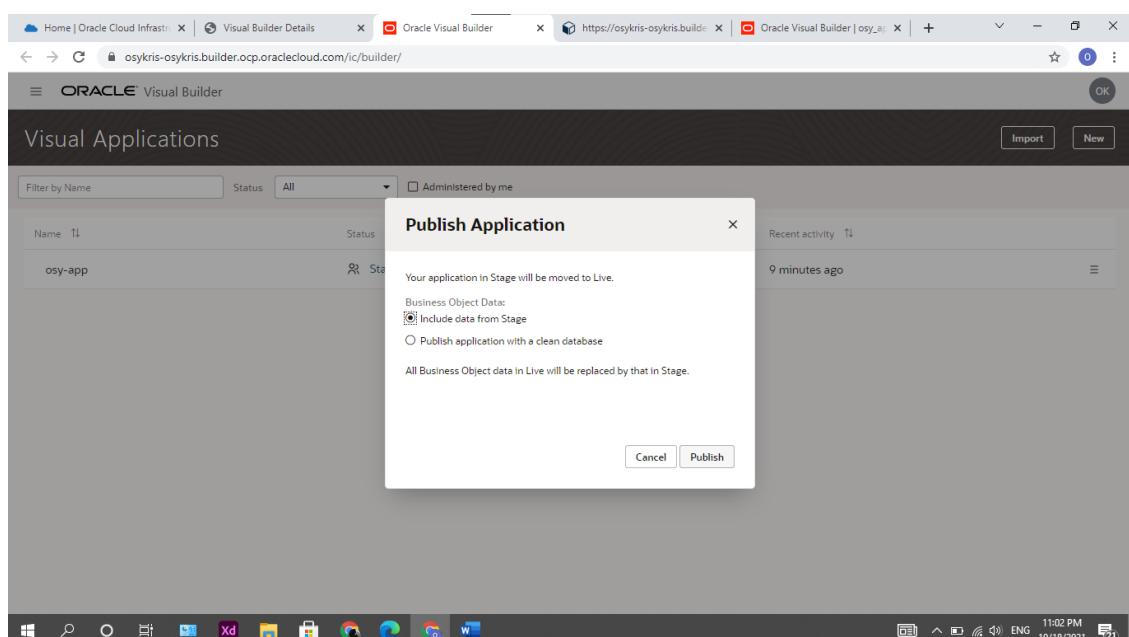
## Publish Application

Setelah kita berhasil menguji aplikasi pada tahab sebelum, kita dapat mempublikasikannya dan membuat aplikasi live. Aplikasi langsung dapat dilihat oleh pengguna dengan kredensial yang tepat.

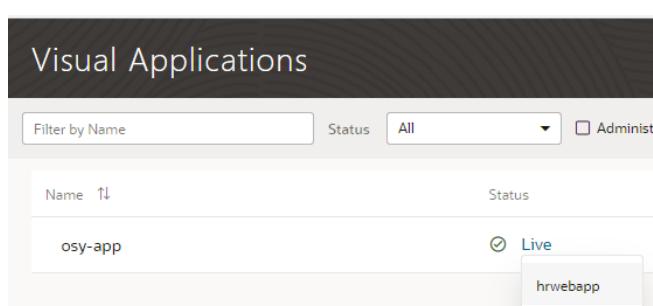
1. Klik ikon menu dan select **Publish**.



2. Pada pop-up box select **Include data from Stage** dan klik **Publish**.



3. Klik **OROCLE Visual Builder** untuk kembali Visual Applications page.
4. Klik **Live** dan pilih **hrwebapp**. Aplikasi akan membuka tab browser baru.



Data akan secara otomatis terisi dengan data saat kita melakukan stage, tetapi jika ingin memulai aplikasi dengan database yang kosong kita bisa memilih **Publish application with a clean database**.

My Application 1931710075@student.polinema.ac.id

## Departments

<a href="#">Create</a>	<a href="#">Display Employee</a>	<a href="#">Edit Department</a>	<a href="#">Department Detail</a>	<a href="#">Delete Department</a>
<a href="#">Id</a> ↑↓	<a href="#">Name</a> ↑↓	<a href="#">Location</a> ↑↓		
1	Administration	Floor 1		
2	Marketing	Floor 2		
3	Purchasing	Floor 3		
4	Human Resources	Floor 1		
5	IT	Floor 2		
6	Sales	Floor 3		

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Windows Taskbar: 11:05 PM 10/18/2021

- Catat link dari aplikasi yang telah kita buat, dari link tersebut kita membagikannya ke Public User.

Link:

[https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/rt/osy\\_app/live/webApps/hrwebapp/](https://osykris-osykris.builder.ocp.oraclecloud.com/ic/builder/rt/osy_app/live/webApps/hrwebapp/)

### Import data (Opsiional) – Stage

Proses ini dilakukan ketika stage bukan saat aplikasi duah **live**, buka Visual Applications page, klik **HR Application**, klik **Business Object**, klik **Menu**, dan pilih **Data Manager**.

The screenshot shows the Oracle Visual Builder interface with the title bar "ORACLE Visual Builder osy-app LIVE 1.0". Below the title bar, there's a navigation menu with "Business Objects" selected. On the right side, a dropdown menu is open under "Data Manager", showing options like "General", "Application N", and "HRDiagra".

Dari dropdown list pojok kanan, pilih **staging** import data ke staging database.

The screenshot shows a dropdown menu titled "Development" with three options: "Development", "Staging", and "Live". The "Staging" option is highlighted.

Klik **Import from File**, pada dialog box pilih file HR\_Application\_Stage.zip, klik **import**, setelah import sukses klik **Close**.

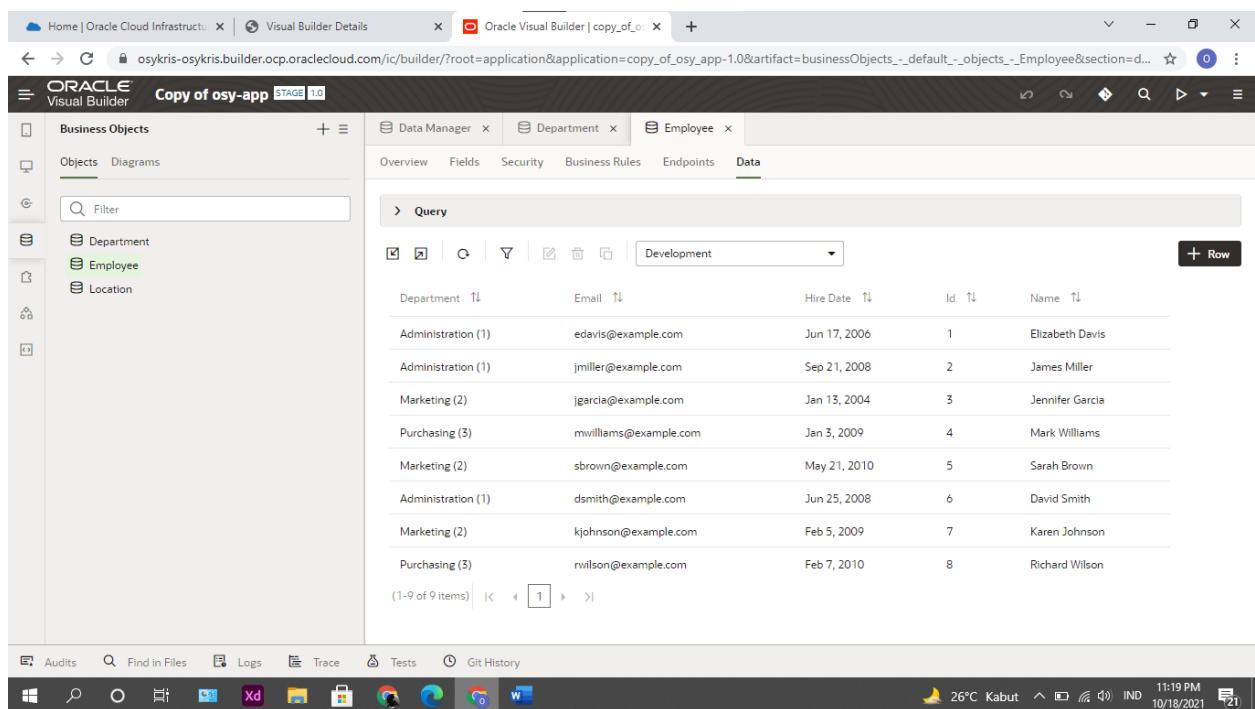
The screenshot shows the Oracle Visual Builder interface. On the left, there's a sidebar for 'Business Objects' with 'Department', 'Employee', and 'Location' listed under 'Objects'. The main area is titled 'Manage Application Data'. It features two buttons: 'Import from Live' (Replace all the data in Staging with the data from your Live database) and 'Import from Development' (Replace all data in Staging with the data from your Development database). A central modal window is open, titled 'Import Data', with the instruction 'Provide the file containing data that you wish to import.' It displays a file selection box containing 'HR\_Application\_Stage.zip'. At the bottom of the modal are 'Cancel' and 'Import' buttons.

Pada business object, klik **Department**, klik **Data**, pilih **Staging** pada drop-down list untuk melihat Department baru saja ditambahkanl.

The screenshot shows the Oracle Visual Builder interface with the 'Department' object selected. The 'Data' tab is active. In the top navigation bar, the 'Data' tab is highlighted. Below it, a search bar contains 'Staging'. The main area displays a table with three columns: 'Id', 'Location', and 'Name'. The data rows are:

Id	Location	Name
10	Floor 2 (2)	Administration
20	Floor 3 (3)	Marketing
30	Floor 1 (1)	Purchasing
40	Floor 2 (2)	Human Resources
50	Floor 1 (1)	Shipping
60	Floor 2 (2)	IT
70	Floor 4 (4)	Public Relations
80	Floor 4 (4)	Sales

Klik **Employee** -> tab **Data** ->kemudian pilih **Staging** untuk melihat employee baru yang baruun ditambahkan.



The screenshot shows the Oracle Visual Builder interface. The title bar indicates it's a copy of the osy-app application. The left sidebar lists Business Objects, specifically Department, Employee, and Location. The main area is titled 'Query' and displays a table of employee data. The columns are: Department, Email, Hire Date, Id, and Name. The data shows 9 items from various departments like Administration, Marketing, and Purchasing. The bottom of the screen shows a taskbar with icons for Audits, Find in Files, Logs, Trace, Tests, and Git History. The system tray shows the date as 10/18/2021 and time as 11:19 PM.

Department	Email	Hire Date	Id	Name
Administration (1)	edavis@example.com	Jun 17, 2006	1	Elizabeth Davis
Administration (1)	jmiller@example.com	Sep 21, 2008	2	James Miller
Marketing (2)	jgarcia@example.com	Jan 13, 2004	3	Jennifer Garcia
Purchasing (3)	mwilliams@example.com	Jan 3, 2009	4	Mark Williams
Marketing (2)	sbrown@example.com	May 21, 2010	5	Sarah Brown
Administration (1)	dsmith@example.com	Jun 25, 2008	6	David Smith
Marketing (2)	kjohnson@example.com	Feb 5, 2009	7	Karen Johnson
Purchasing (3)	rwilson@example.com	Feb 7, 2010	8	Richard Wilson

## TUGAS

1. Menambahkan **business object Salary**.
2. Buat main page dari salary dan buat action **create, edit, detail** dan **Delete**.