

Mendix Quick-Start

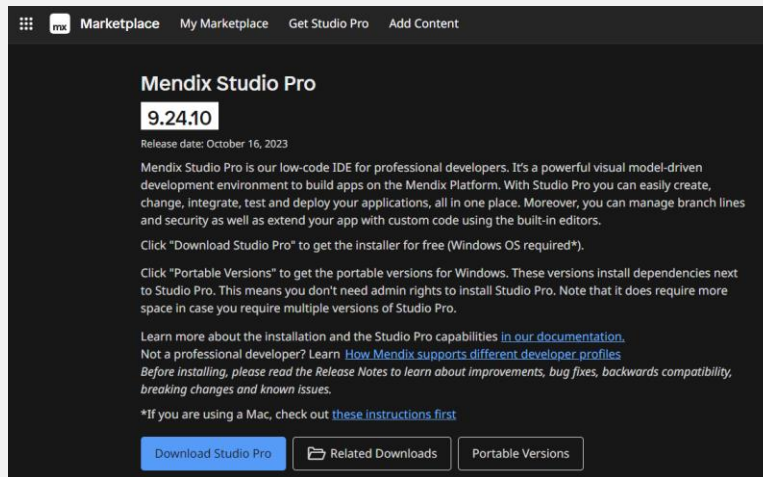
<< Hands-on >>

2023.11
DX Tech Group

Installation & Configuration

Mendix.com 에서 계정 생성
<https://www.mendix.com/>

Mendix StudioPro 9.24.10 설치
<https://marketplace.mendix.com/link/studiopro/9.24.10>



시나리오

영업 기회 추적 요구사항

본 과정에서는 이 부분만

- Sales Manager로서, 모든 영업 기회를 한 화면에 보고 영업 활동들을 디지털화해서 관리하고 싶다.
 - Sales Manager로서, 영업 기회를 수정할 수 있어 시스템에 업데이트하고 지속적으로 관리하고 싶다.
 - Sales Manager로서, 필터링 기능을 통해 \$150,000 이상인 영업기회 중 실패한 경우만 리뷰할 수 있으면 좋겠다.
-
- Sales Manager로서, 지도를 통해서 고객사의 위치를 쉽게 파악할 수 있으면 좋겠다.
 - Sales Manager로서, 우편번호 입력을 통해 도시가 자동으로 선택되면 데이터 입력 시간을 줄일 수 있어 좋을 것 같다.

To-be Service

본 과정에서는 이 부분만

Opportunity Tracker

Opportunities

Companies

To be called

Requires loss analysis

Person	Company	Estimated Value	Due Date	
Mr. John Doe	ACME Corp.	150.000	4/6/2019	Edit
Mr. John Doe	ACME Corp.	150.000	4/6/2019	Edit
Mr. John Doe	ACME Corp.	150.000	4/6/2019	Edit
Mr. John Doe	ACME Corp.	150.000	4/6/2019	Edit
Mr. John Doe	ACME Corp.	150.000	4/6/2019	Edit

Opportunity Tracker

Opportunities

Companies

Company	
ACME Corp.	
AMD	
Mendix	
Microsoft	
Zzz Corp.	



Choose “start from spreadsheet”

The screenshot shows the Mendix Studio Pro interface with the 'Create New App' dialog open. The dialog has a dark blue header with the Mendix logo and menu items: File, Edit, View, App, Run, Version Control, Language, Help. The main area is titled 'Choose your starting point' and features two main options: 'Blank Web App' (Start from scratch) and 'Start from spreadsheet' (Generate a fully functional app based on your own data). The 'Start from spreadsheet' option is highlighted with a red dashed box and a red circle with the number 1. Below these options are tabs for 'Starter Apps', 'University Program', and 'SAP Template'. Under the 'Starter Apps' tab, there are six app templates: 'Blank Web App', 'Blank Native Mobile App', 'Portfolio Manager', 'AR Starter App', and 'Purchase Request'. The 'Purchase Request' template is highlighted with a red dashed box and a red circle with the number 2. A green button with the text 'Use this starting point >' is located below the 'Purchase Request' template.

Choose your starting point

Blank Web App
Start from scratch

Start from spreadsheet
Generate a fully functional app based on your own data

Starter Apps University Program SAP Template

Blank Web App
Start from scratch
Responsive web & PWA
Desktop, phone & tablet

Blank Native Mobile App
Start from scratch
Native mobile
Phone & tablet

Portfolio Manager

AR Starter App
Get started with AR
Native mobile

Purchase Request
Vendor management
Purchase orders

Ready

Start from spreadsheet

Use this starting point to generate a fully functional app based on your data. Just import a spreadsheet and we'll do the rest for you.

Use this starting point >

Proceed App Settings

□

×

App Settings

Name

App name

Opportunity Tracking

Mendix Platform

Enable online services

☒ Yes ☐ No

The Mendix Platform online services include version control and cloud deployment.

Language

Default language

English, United States

The default language is the language of the end-user interface. You can always add other languages later on.

Disk location

App directory

C:\Users\Administrator\Mendix\Opportunity Tracking-main

Browse...

The app directory is the directory where the app package file (.mpr) and related files such as Java actions and widgets are stored.

?


Create app

Cancel

Drag & drop specific excel provided

Start your app with your own data!

Select an existing spreadsheet to generate your app. We'll do the rest for you. [Read about starting your app from data](#)

 Mendix Sales Opportunity Sample Data



Drag and Drop

Drop your .xlsx spreadsheet here or [browse your files](#)

I've changed my mind, [start without data](#)

Import data

Import from Spreadsheet

← Select a different spreadsheet

Data Import Preview

2 tables are ready to be imported. You can unselect any tables, columns and relations that you don't want to import. [Read more about the data import preview](#)

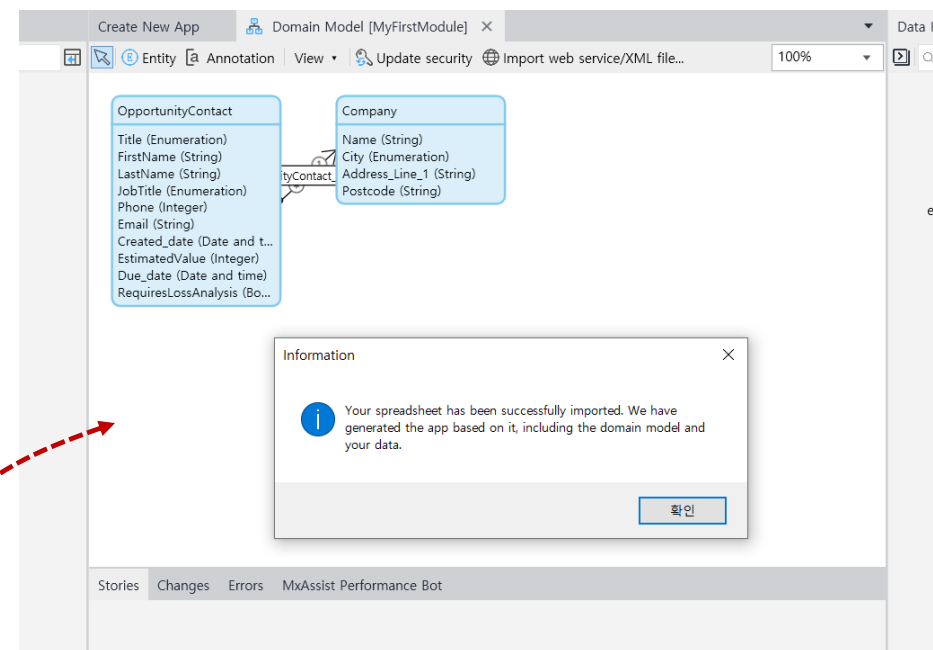
☒ OpportunityContact

☒ Company

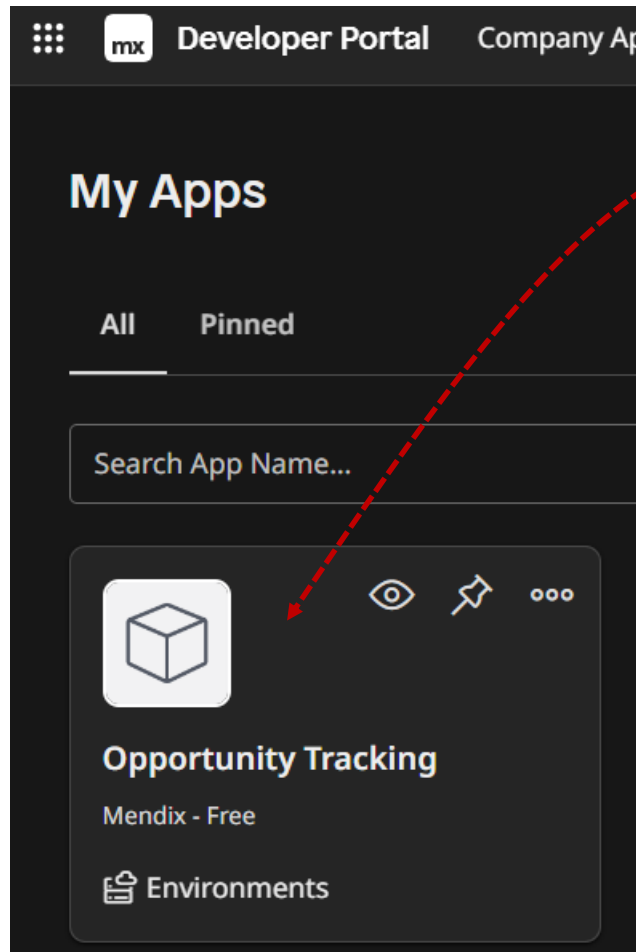
<input checked="" type="checkbox"/> Title	<input checked="" type="checkbox"/> FirstName	<input checked="" type="checkbox"/> LastName	<input checked="" type="checkbox"/> JobTitle	<input checked="" type="checkbox"/> Phone	<input checked="" type="checkbox"/> Email	Company
Ms.	Louis	Foo	CTO	93059387	louis.Foo@puppywear.com	PuppyWear
Ms.	Katie	Tan	Manager	94572374	katie.Tan@ecoenergy.com	EcoEnergy
Mrs.	Dianne	Koo	Manager	93727485	dianne.Koo@ecoenergy.com	EcoEnergy
Mrs.	Rachael	Lim	Sr. Manager	92734748	rachael.Lim@plumtech.com	PlumTech
Mr.	Craig	Yeo	Manager	92737588	craig.Yeo@everlake.com	Everlake
Enumeration	String	String	Enumeration	Integer	String	

1 relation found: [Manage Relations](#)

Import Data

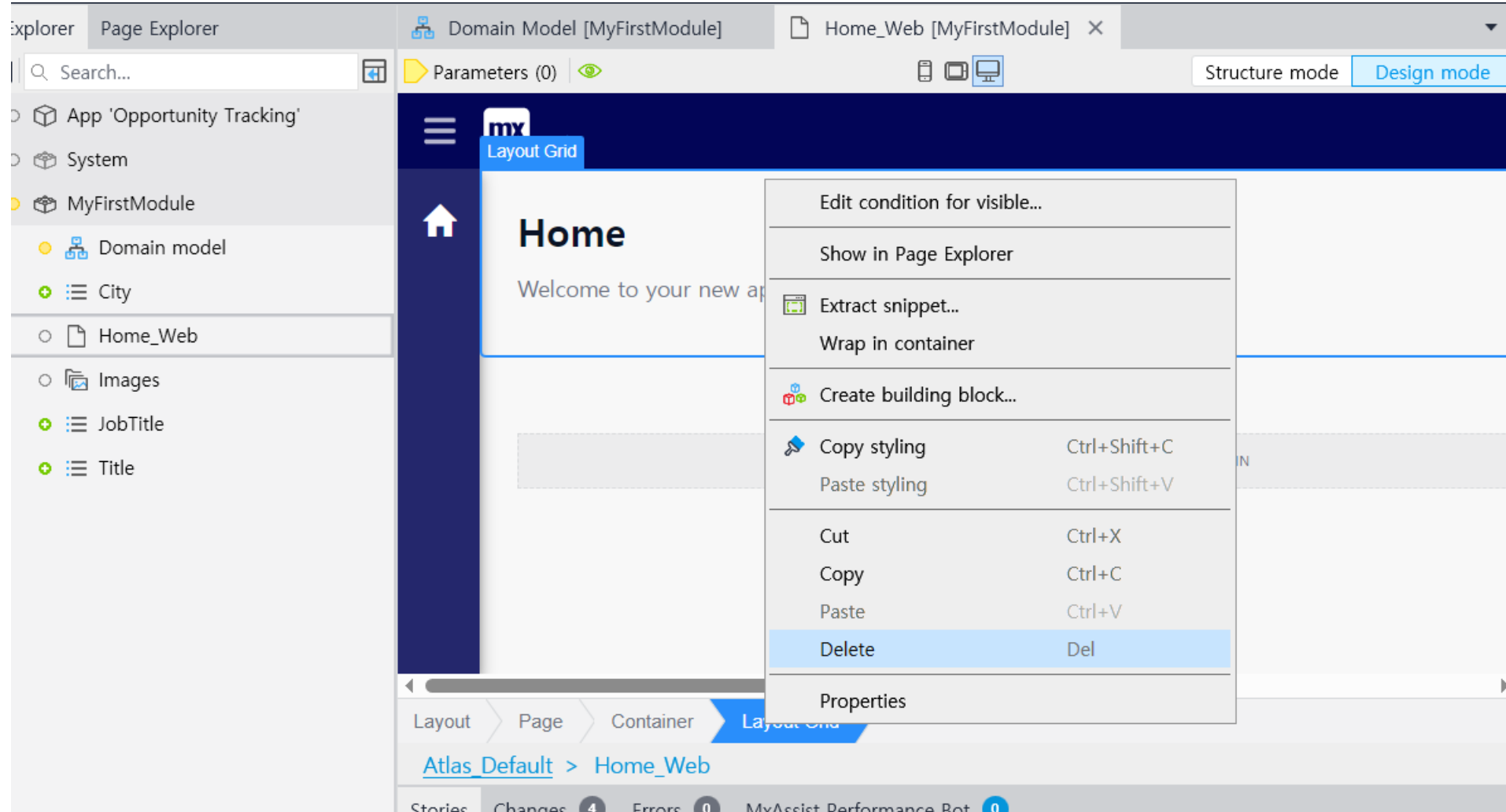


Check the developer portal (mendix.com)

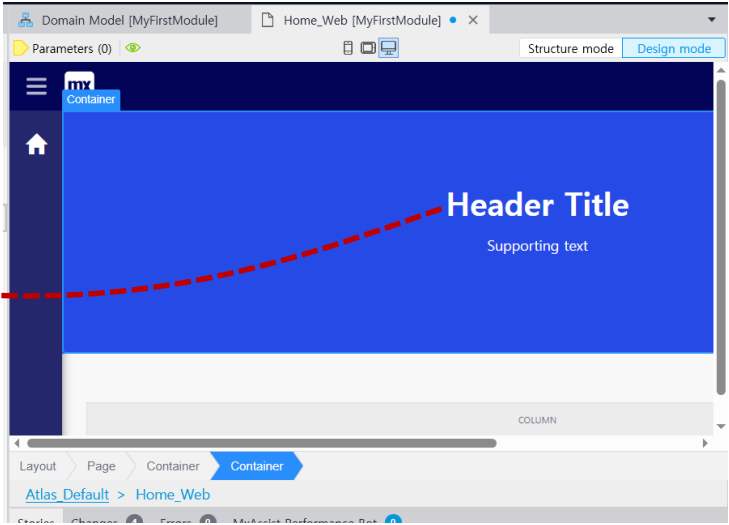
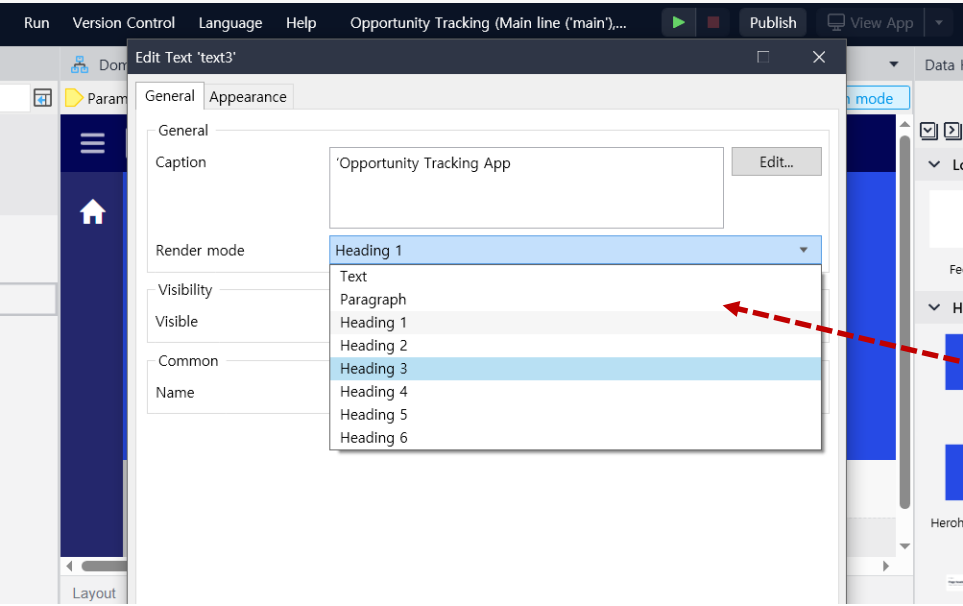
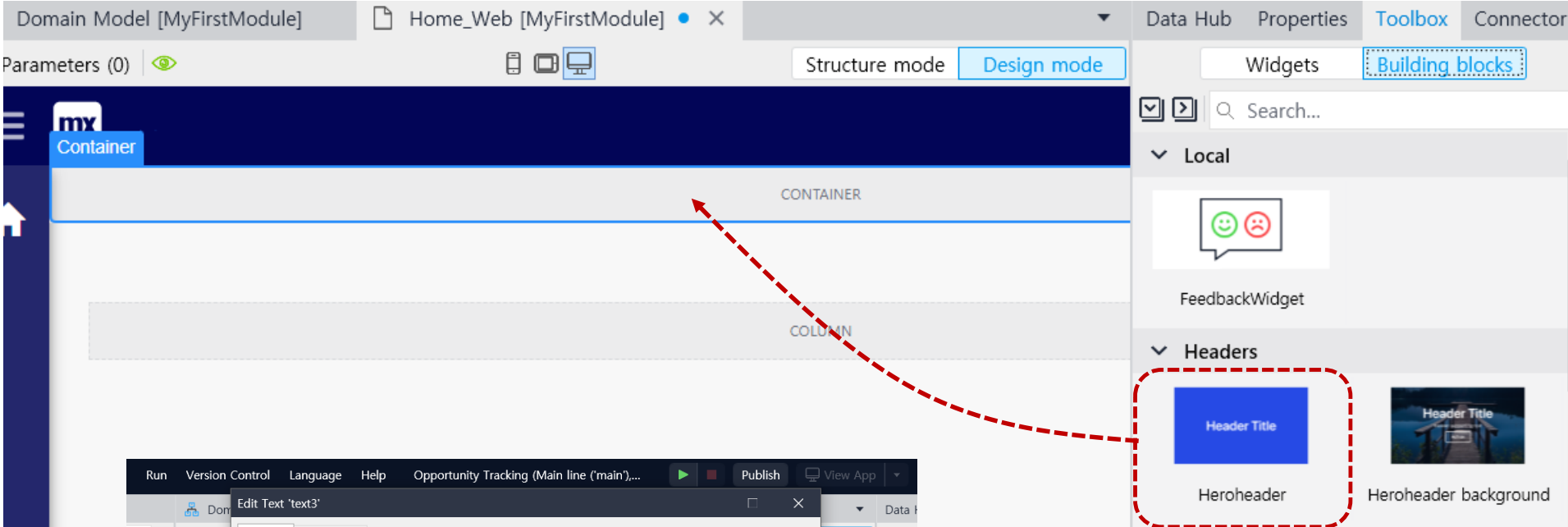


mendix.com 웹사이트에 가보면...

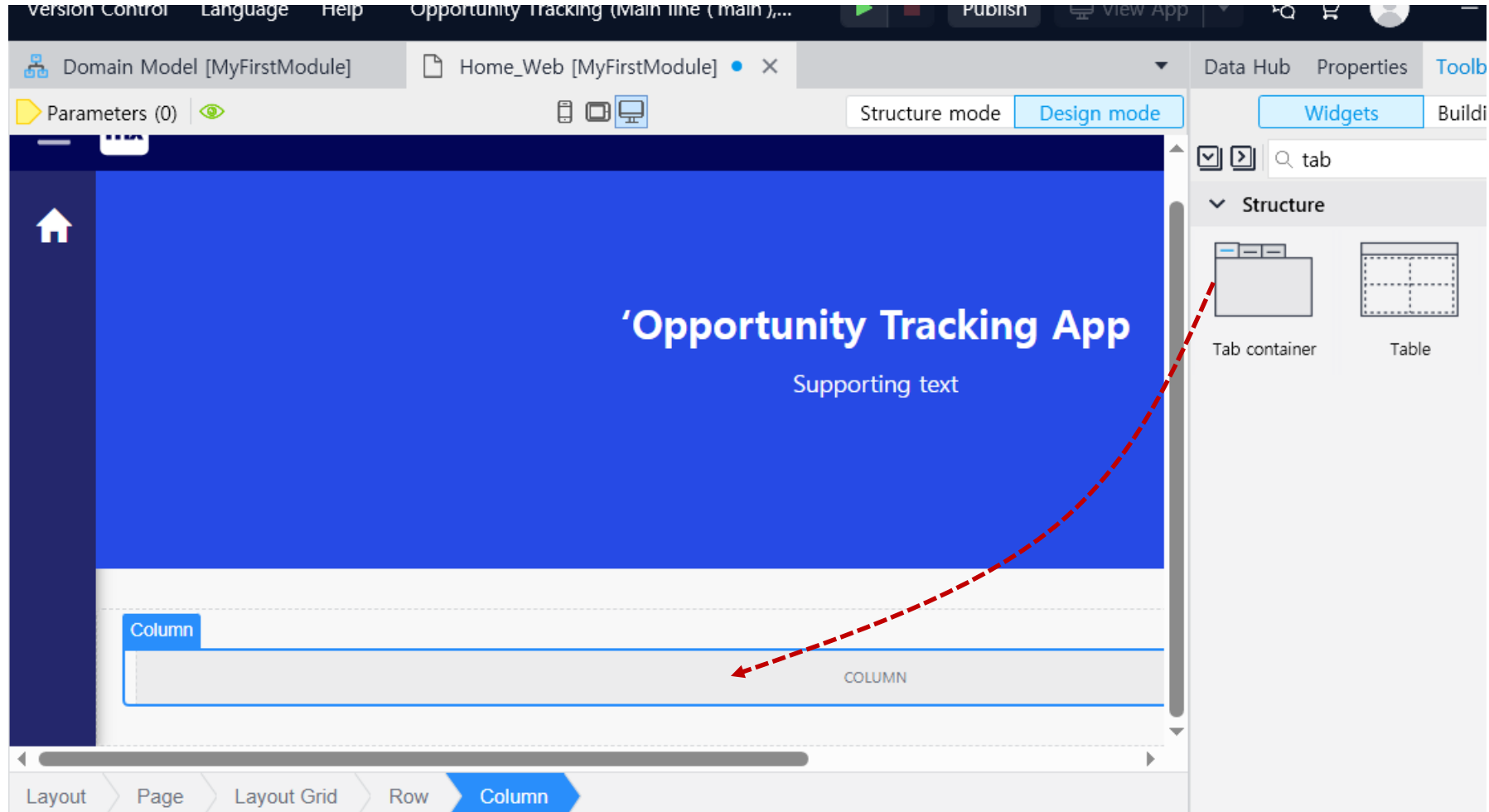
Delete the default layout grid



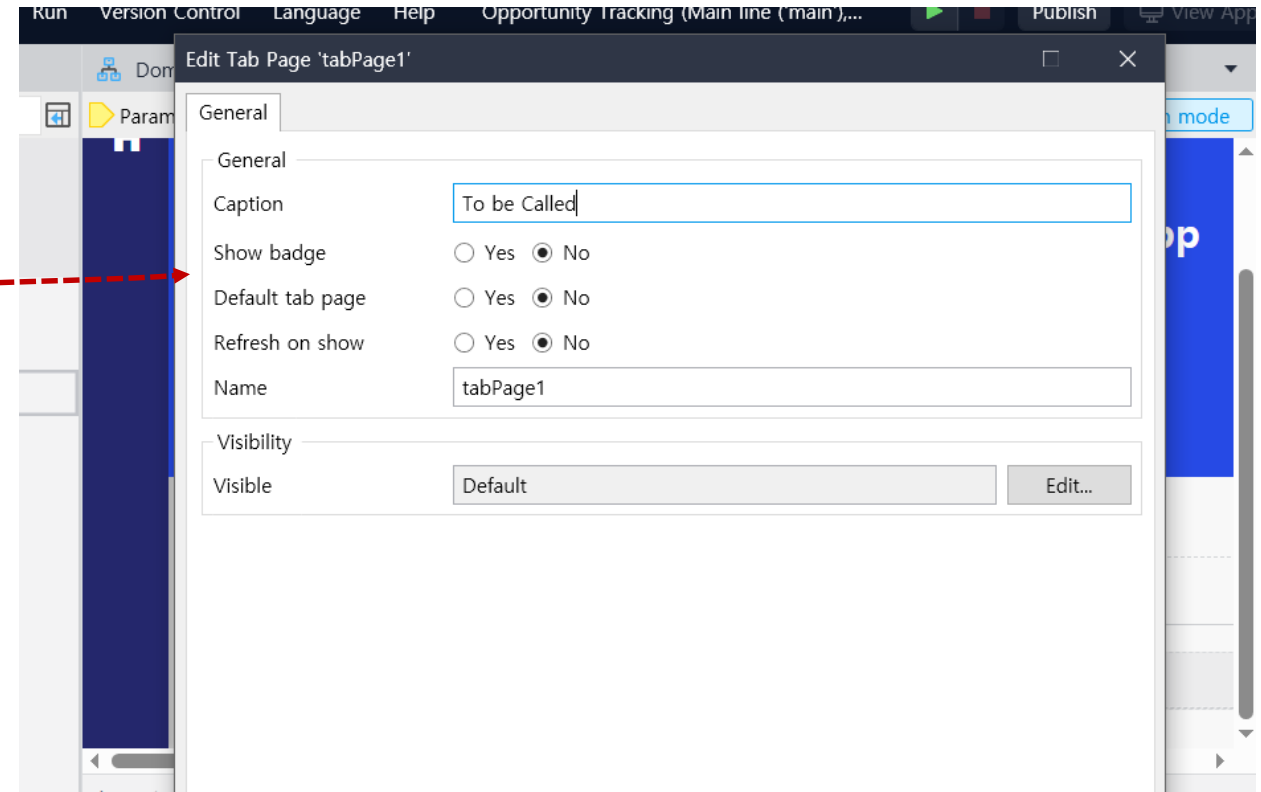
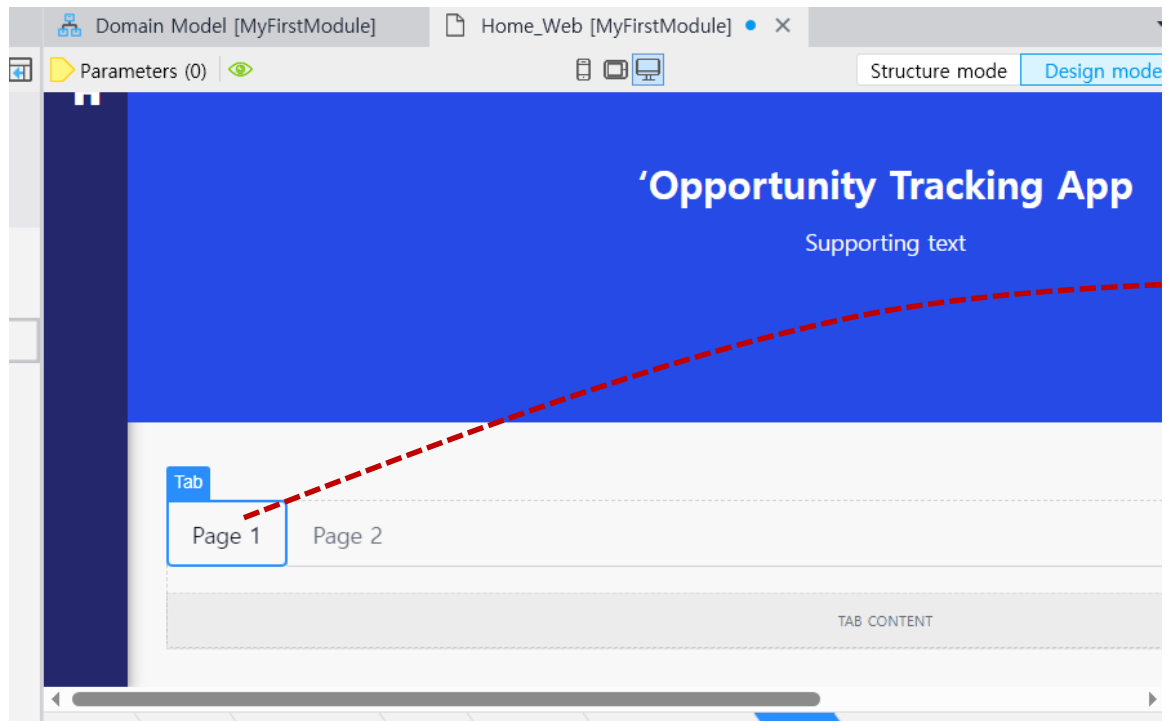
Drag & drop the specific header



Drag and drop tab container



Edit tab



Connect listview and datasource

The screenshot illustrates the process of connecting a list view to a data source in a software application. The main window is in **Design mode**, showing a **List View** widget on a page titled **To be Called Page 2**. The widget is currently labeled **No data source**. A red dashed line indicates the connection path from the **List View** widget to the **Data source** tab in the **Edit List View 'listView1'** dialog.

The **Edit List View 'listView1'** dialog has the following settings:

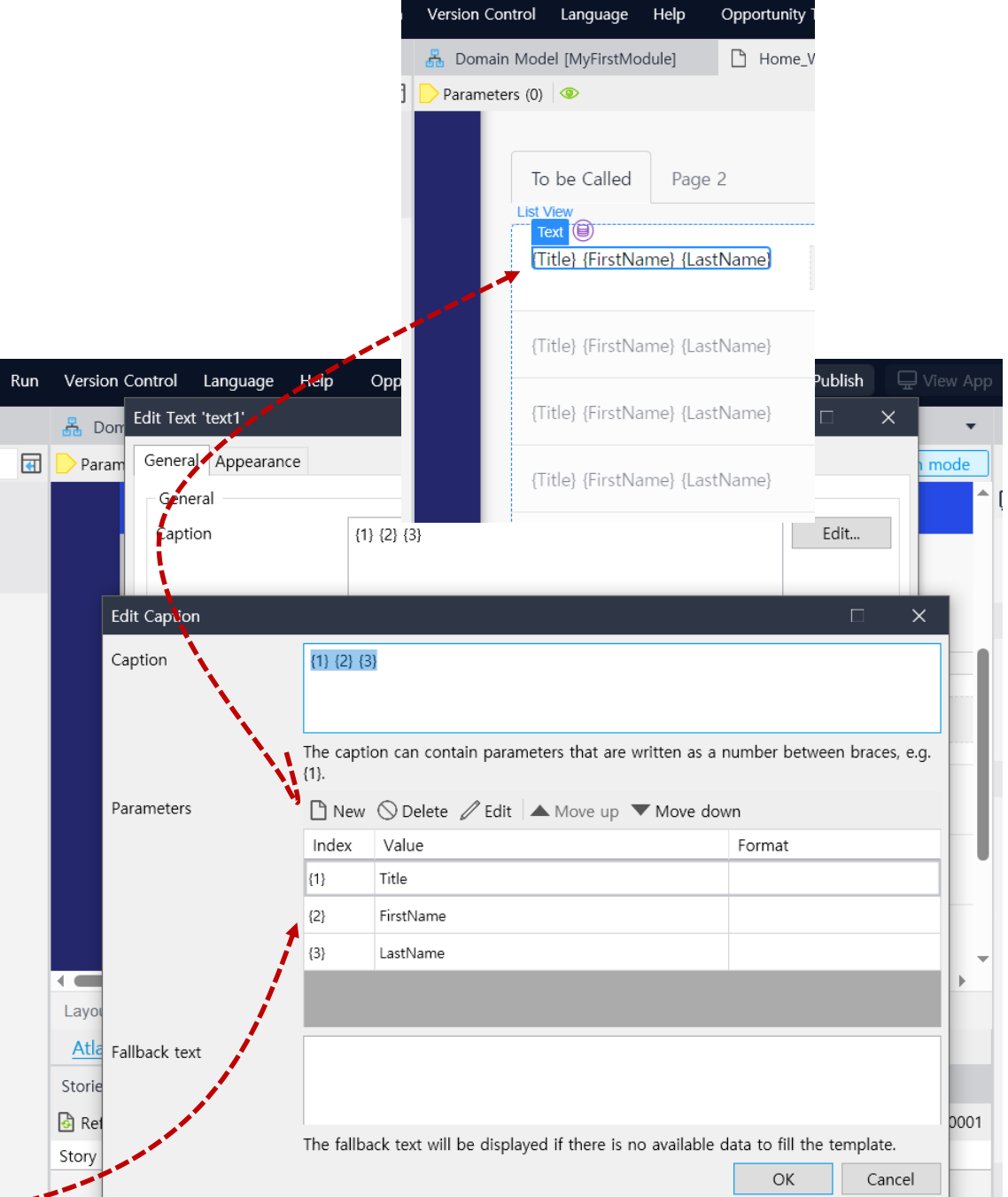
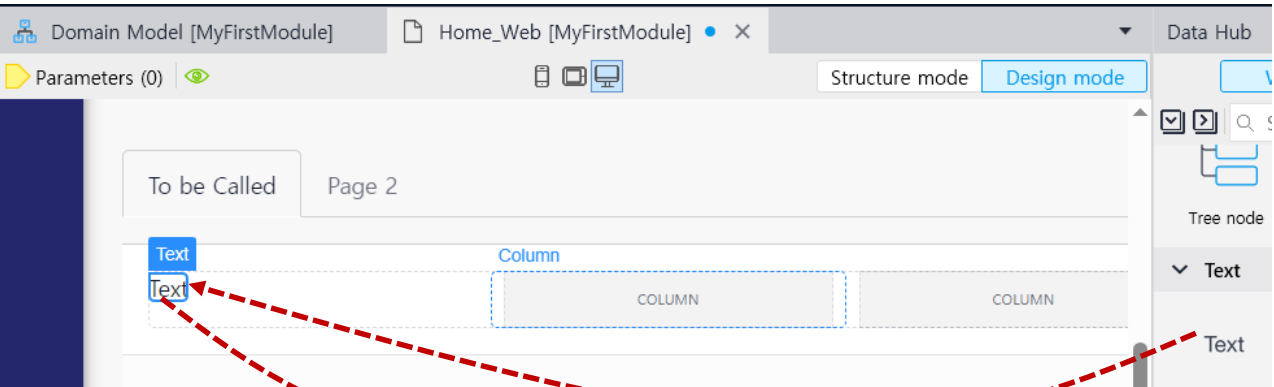
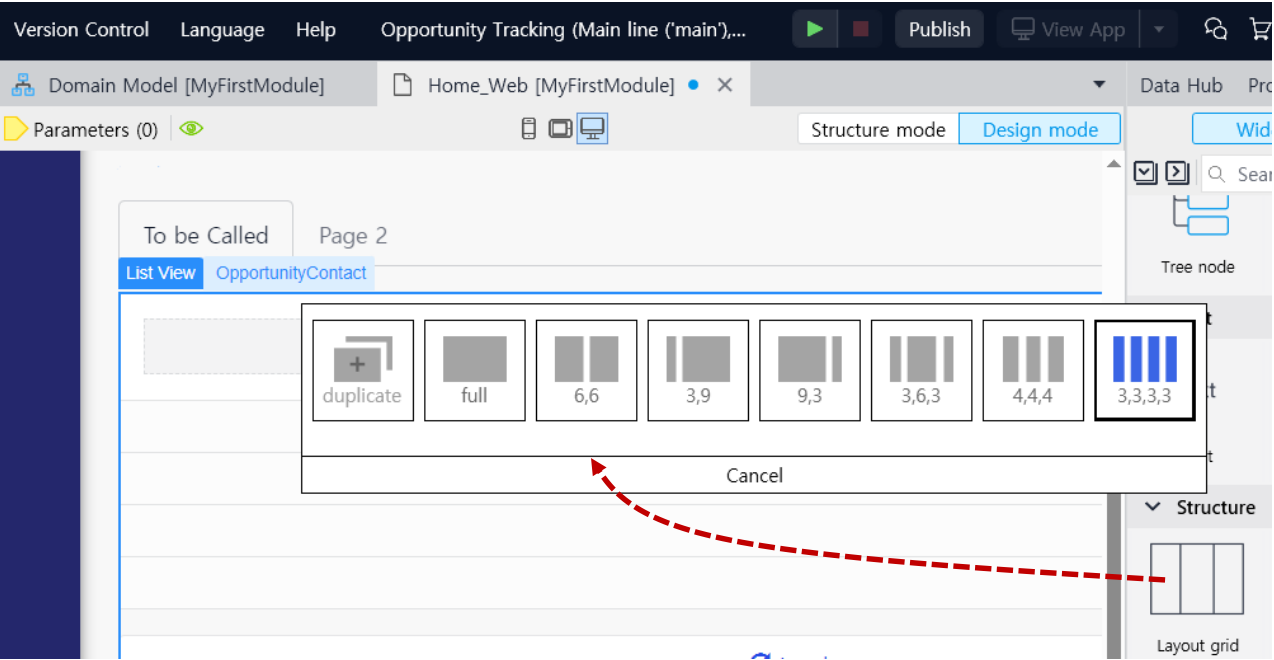
- Data source** tab is selected.
- Type**: **Database** (selected).
- Entity (path)**: **(none)**.
- Constraints**: **+** Add **✎** Edit **✕** Delete.
- Attribute**: **Operator** **Value**.

The **Select Entity** dialog shows the following structure:

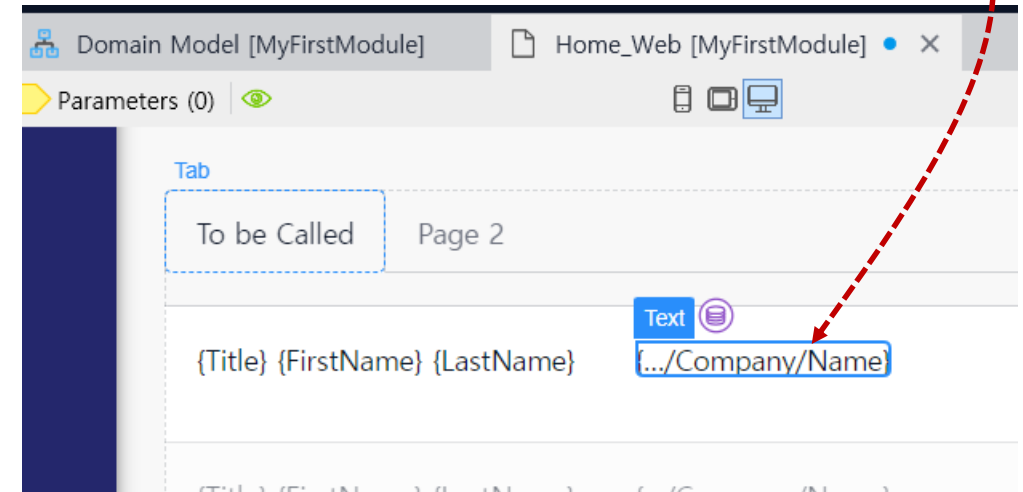
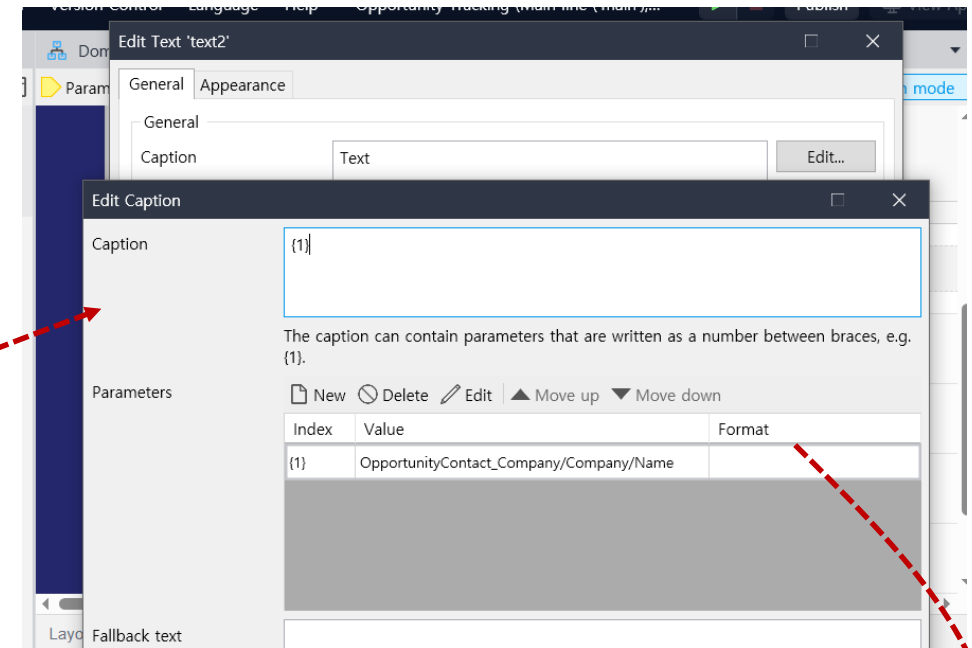
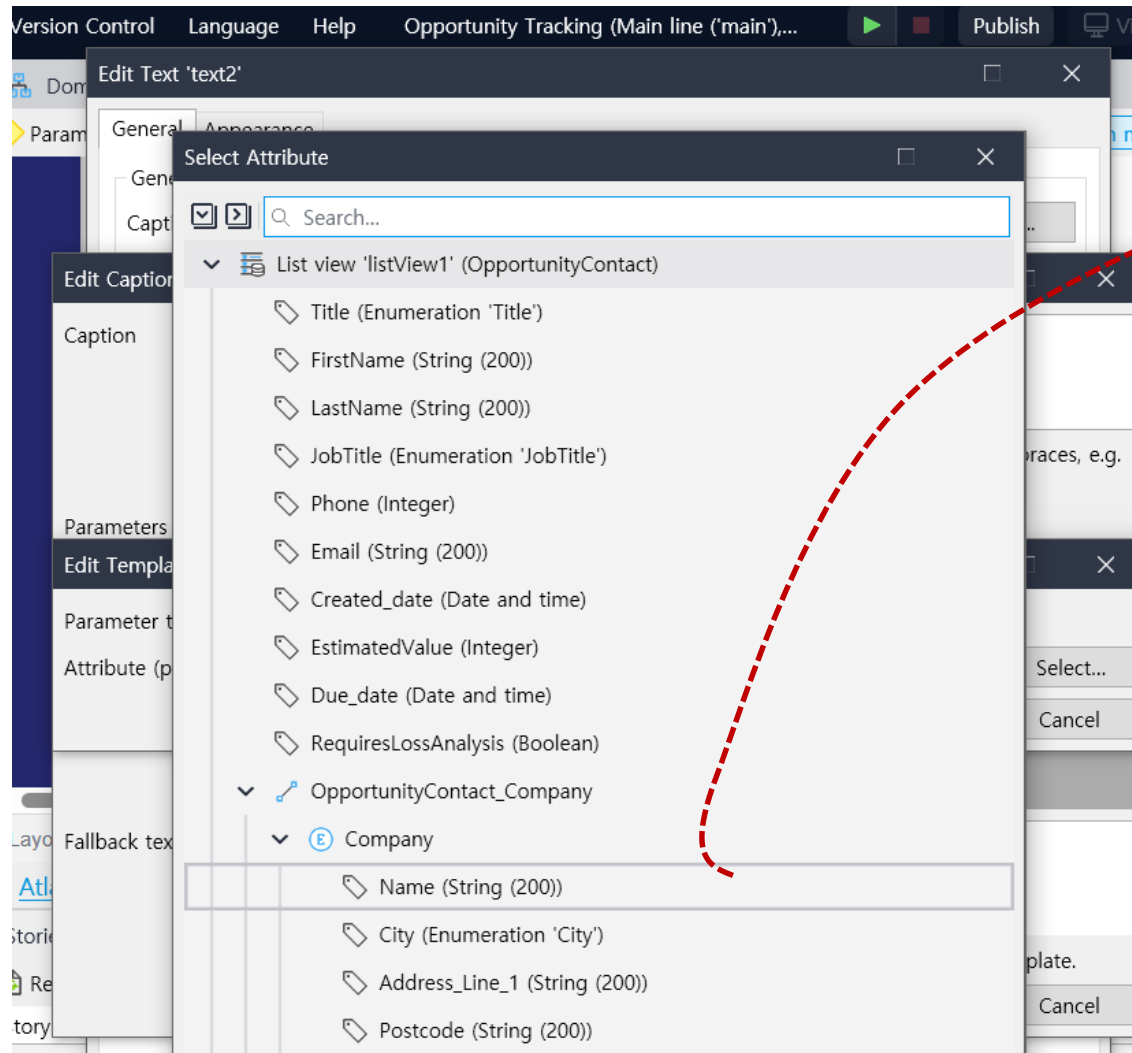
- Marketplace modules**
- System**
- MyFirstModule**
 - Company**
 - OpportunityContact** (selected)

The **Data Hub** panel on the right shows the **list** widget and the **Data containers** section.

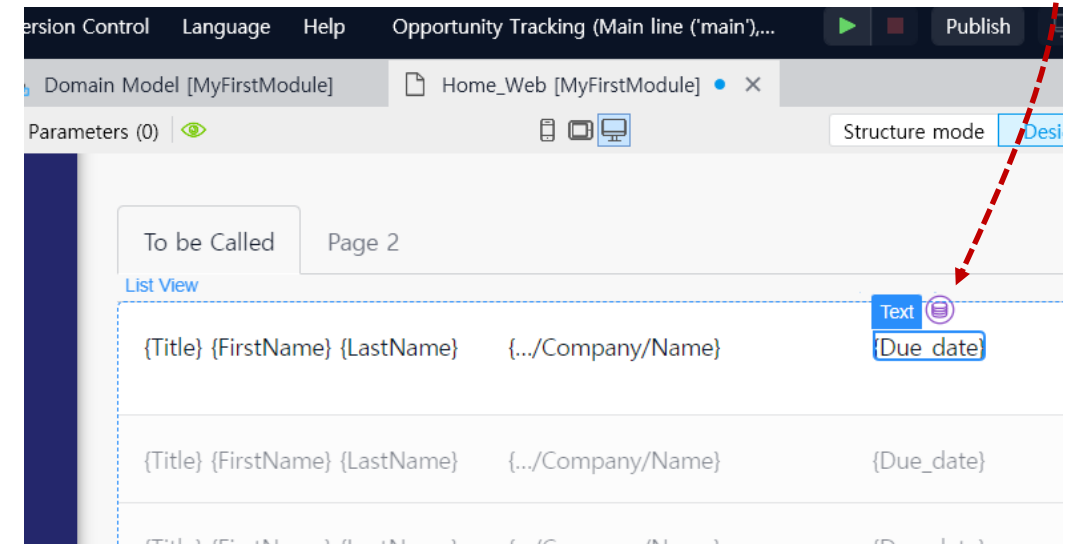
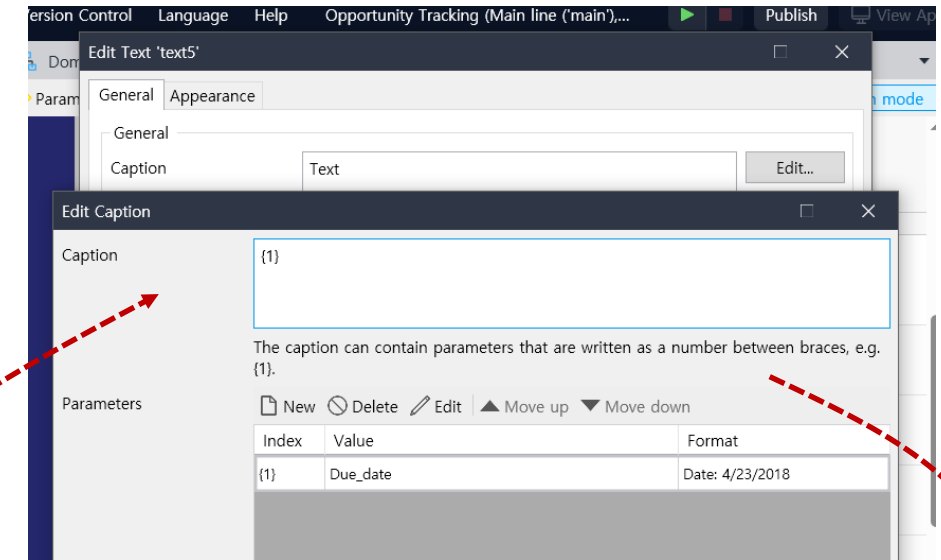
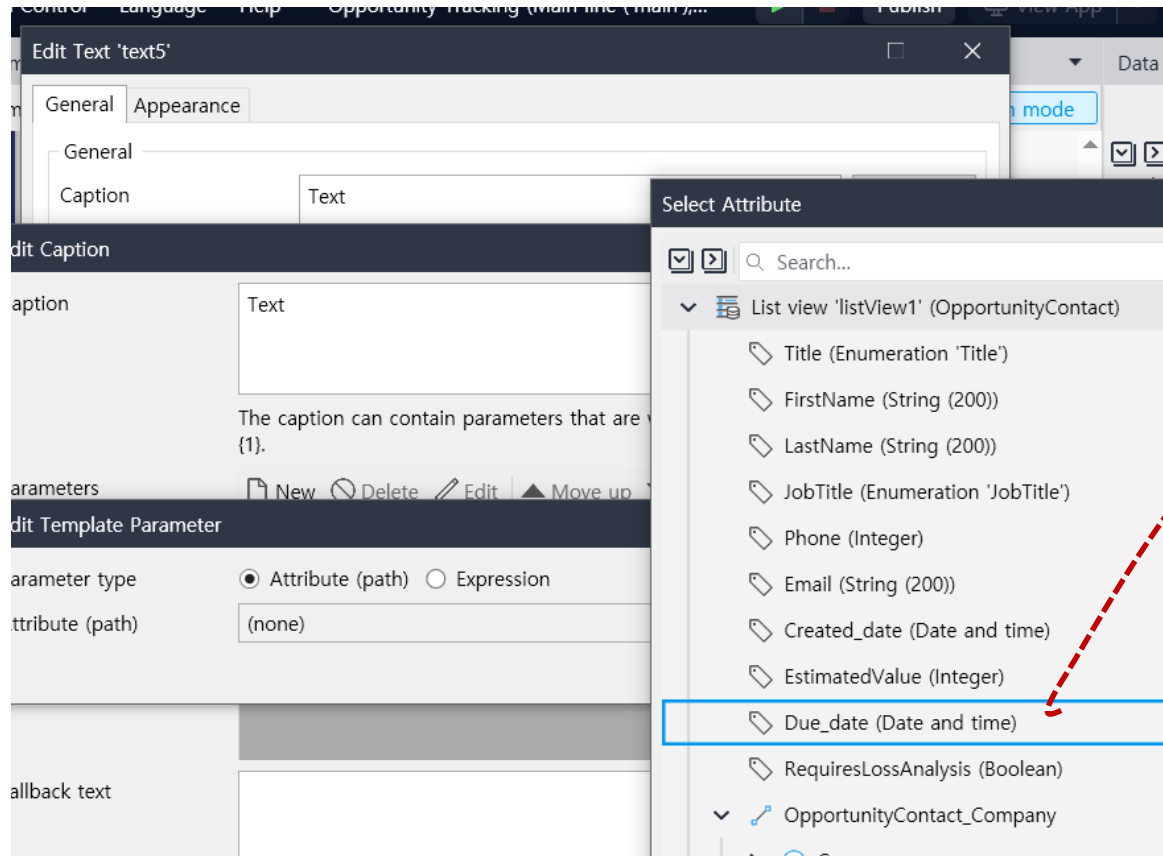
Choose layout grid for listview and create parameter connected specific entity/attributes



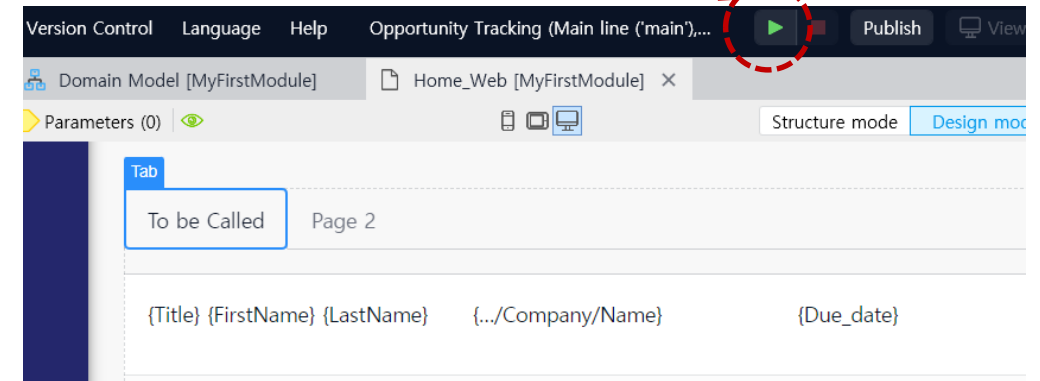
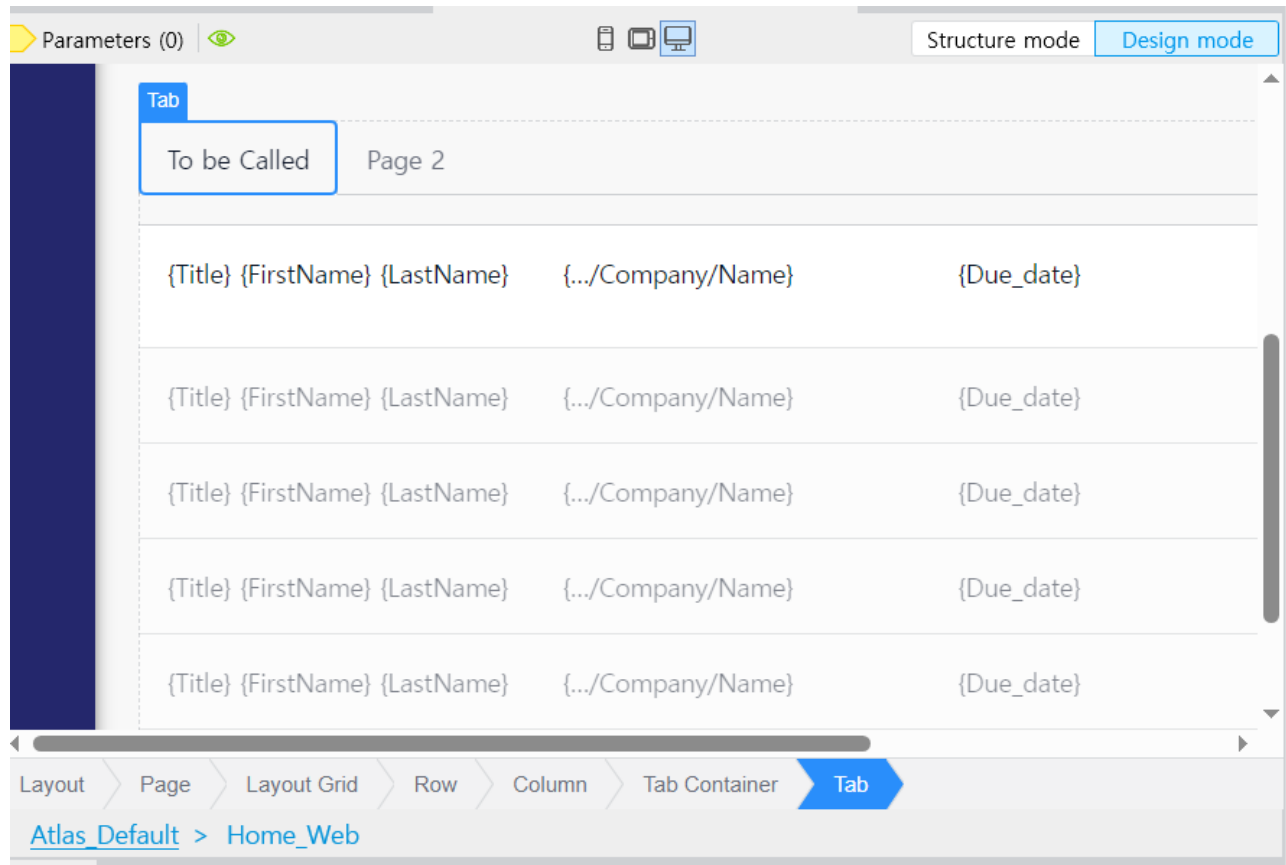
Mapping & edit the column with entity/attribute



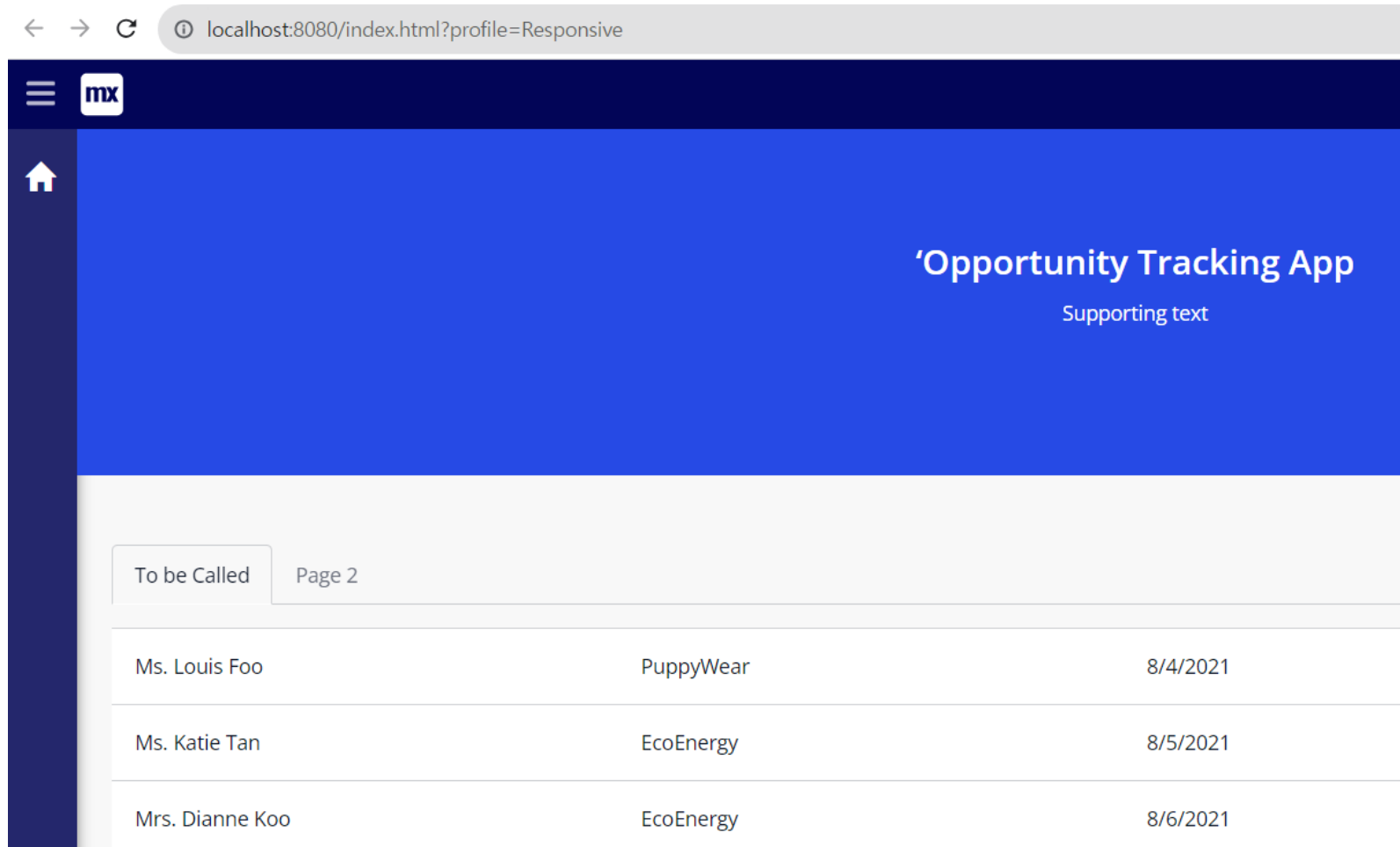
Mapping & edit the column with entity/attribute



Try the build of this App



Check the page on your Localhost:8080



← → ↻ ⓘ localhost:8080/index.html?profile=Responsive

☰ mx

🏠

'Opportunity Tracking App

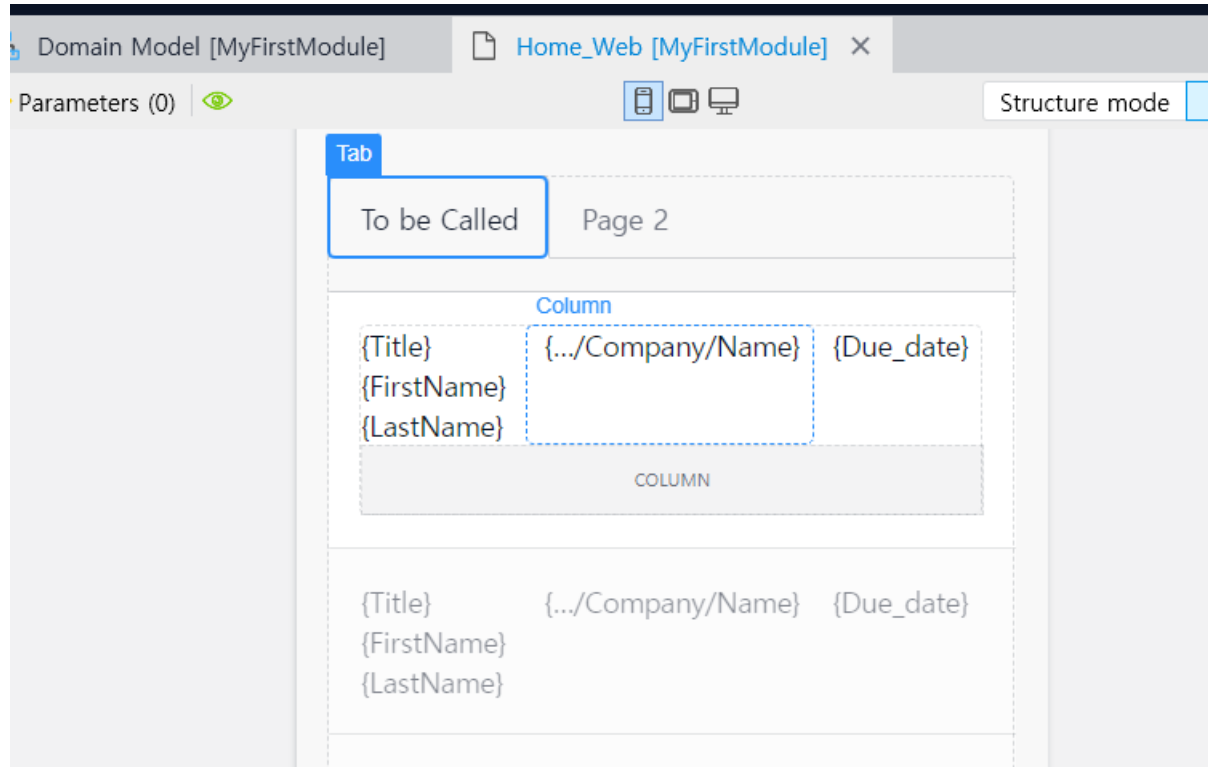
Supporting text

To be Called Page 2

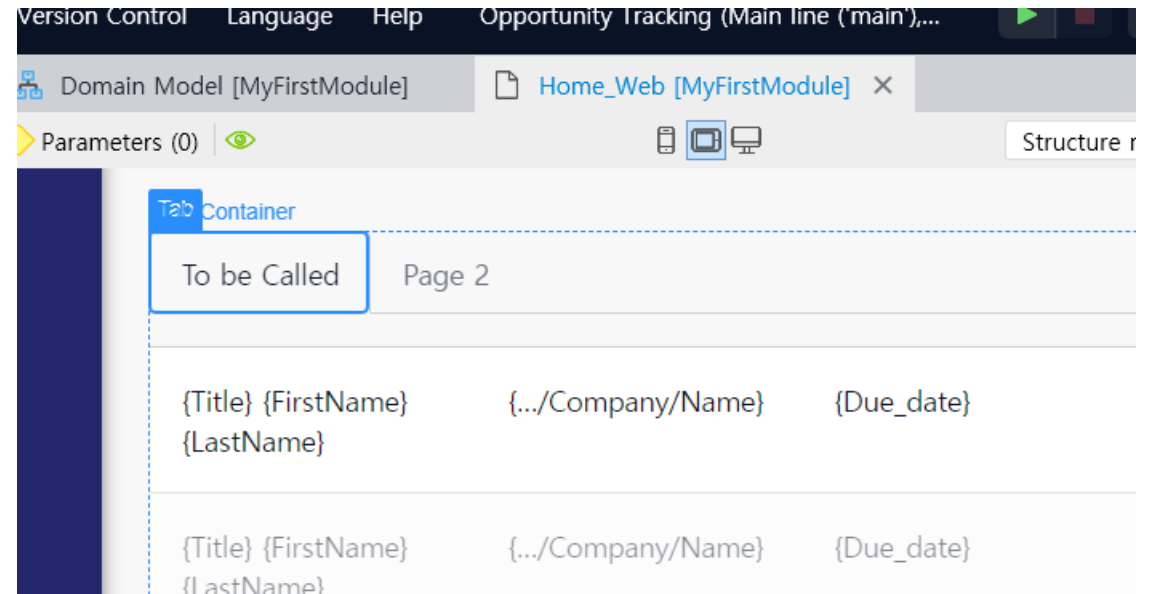
Ms. Louis Foo	PuppyWear	8/4/2021
Ms. Katie Tan	EcoEnergy	8/5/2021
Mrs. Dianne Koo	EcoEnergy	8/6/2021

Mobile style and Tablet style on Mendix StudioPro

<<Mobile>>



<<Tablet>>



Add attribute at OpportunityContact entity

Run Version Control Language Help Opportunity Tracking (Main line ('main'),... Publish View

Domain Model [MyFirstModule] Home_Web [MyFirstModule]

Entity Annotation View Update security Import web service/XML file... 100%

1

OpportunityContact

- Title (Enumeration)
- FirstName (String)
- LastName (String)
- JobTitle (Enumeration)
- Phone (Integer)
- Email (String)
- Created_date (Date and t...
- EstimatedValue (Integer)
- Due_date (Date and time)

OpportunityContact_Company

Company

- Name (String)
- City (Enumeration)
- Address_Line_1 (String)
- Postcode (String)

Properties of Entity 'MyFirstModule.OpportunityContact'

General

Name

Generalization

Image

Persistable

Attributes

New

Name

Title

FirstName

LastName

JobTitle

Phone

Email

System members

Store 'createdDate'

Store 'changedDate'

Select Enumeration

Search...

Marketplace modules

System

MyFirstModule

- City
- JobTitle
- Title

Add Enumeration

Name

ENUM_Status

OK Cancel

3

Properties of Entity 'MyFirstModule.OpportunityContact'

General

Name

Generalization

Image

Persistable

Attributes

New

Name

Title

FirstName

LastName

JobTitle

Phone

Email

System members

Store 'createdDate'

Store 'changedDate'

Select...

Add Attribute

Common

Name

Status

Documentation

Type

String

AutoNumber

Binary

Boolean

Date and time

Decimal

Enumeration

Length

Max length

2

Properties of Entity 'MyFirstModule.OpportunityContact'

General

Name

Generalization

Image

Persistable

Attributes

New

Name

Title

FirstName

LastName

JobTitle

Phone

Email

System members

Store 'createdDate'

Store 'changedDate'

Select...

Enumeration 'MyFirstModule.ENUM_Status'

Common

Name

ENUM_Status

Documentation

Add Enumeration Value

General

Caption

Name

Image

(none)

Select...

OK Cancel

4

Create enumeration type attribute at OpportunityContact entity on domain model

Enumeration 'MyFirstModule.ENUM_Status'

Common

Name ENUM_Status

Documentation

1

Add Enumeration Value

General

Caption

Name OpportunityContact

Image

System members

☐ Store 'createdDate'

☐ Store 'changedDate'

Cancel

Add Attribute

Common

Name Status

Documentation

3

Type

Type Enumeration

Enumeration MyFirstModule.ENUM_Status

Enumeration values Open, Won, Lost, Postponed

Value

Value ☐ Calculated ☒ Stored

Default value

OK Cancel

Enumeration 'MyFirstModule.ENUM_Status'

Common

Name ENUM_Status

Documentation

2

Enumeration values

New Edit Delete Move up Move down Find usages

Caption	Name	Image
Open	Open	
Won	Won	
Lost	Lost	
Postponed	Postponed	

Properties of Entity 'MyFirstModule.OpportunityContact'

General

Name OpportunityContact

Generalization (none)

Image

Persistable ☒ Yes ☐ No

System members

☐ Store 'createdDate'

☐ Store 'changedDate'

☐ Store 'owner'

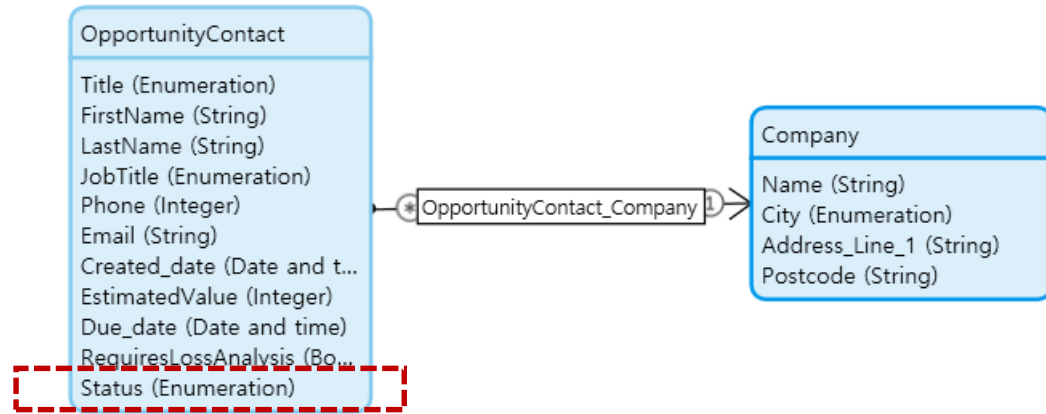
☐ Store 'changedBy'

Attributes

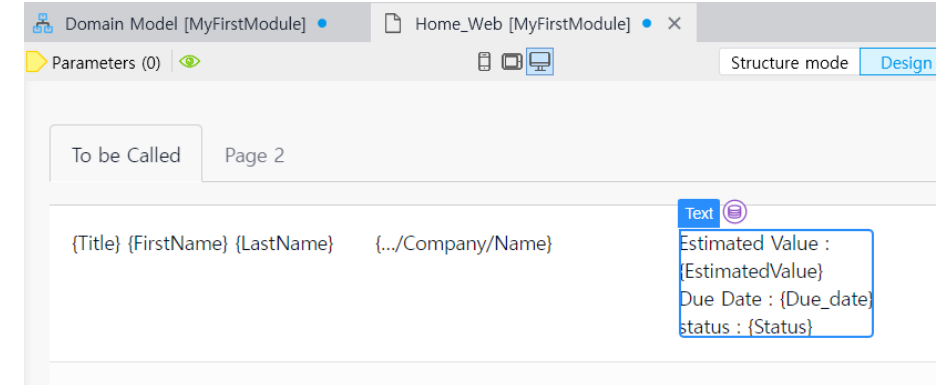
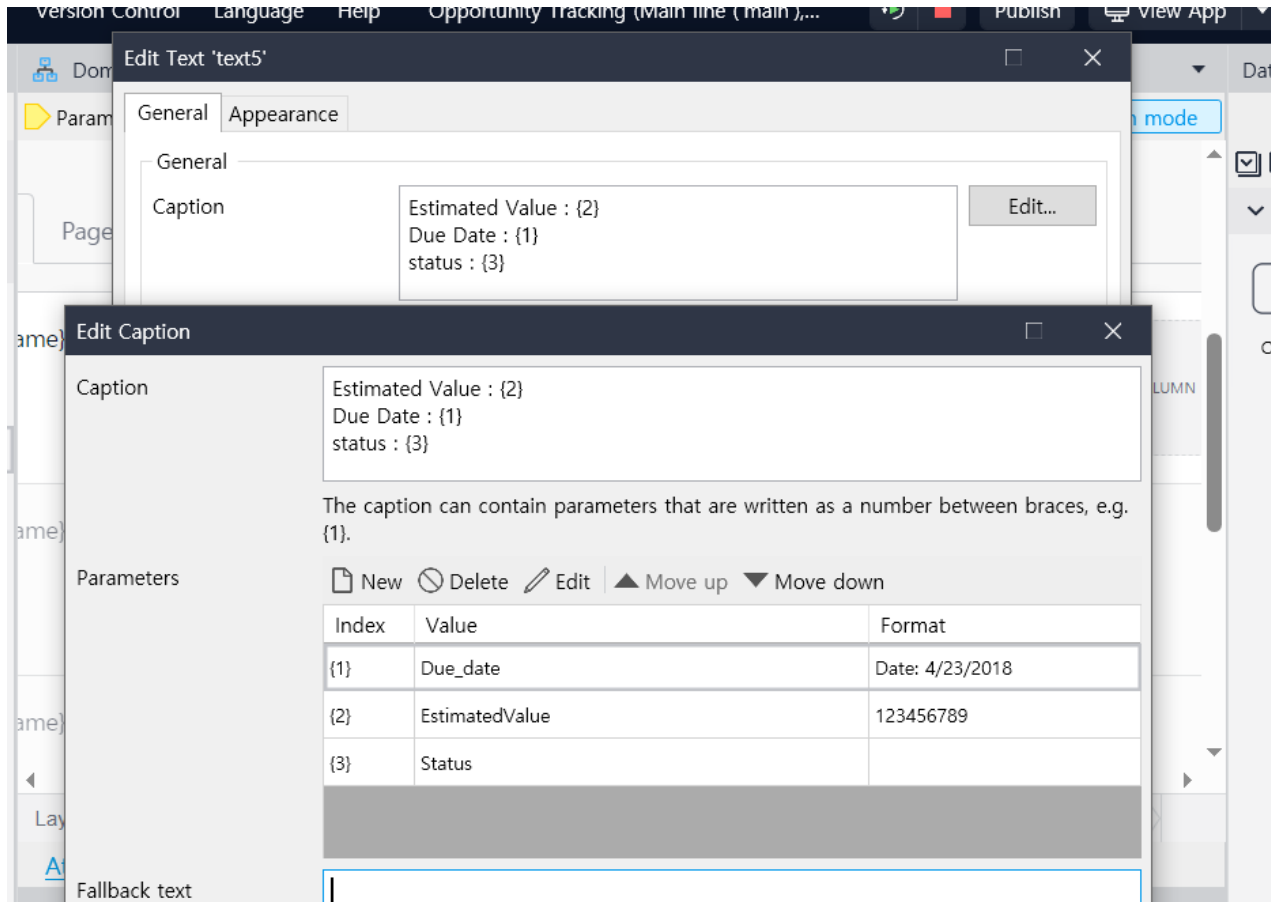
Name	Type	Default value	Microflow	Limitations
Title	Enumeration 'Title'			
FirstName	String (200)			
LastName	String (200)			
JobTitle	Enumeration 'JobTitle'			
Phone	Integer	0		
Email	String (200)			
Created_date	Date and time			
EstimatedValue	Integer	0		
Due_date	Date and time			
RequiresLossAnalysis	Boolean	false		
Status	Enumeration 'ENUM_Status'			

4

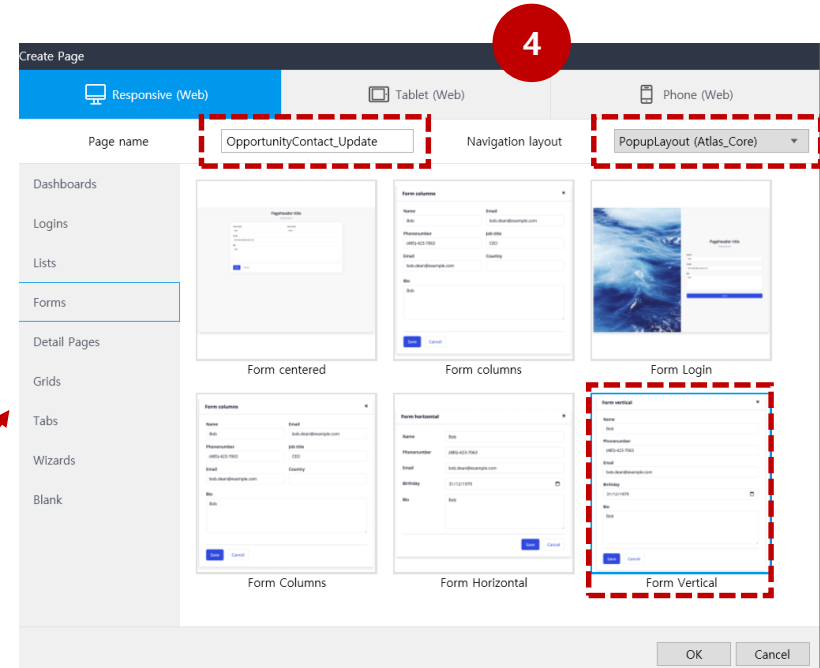
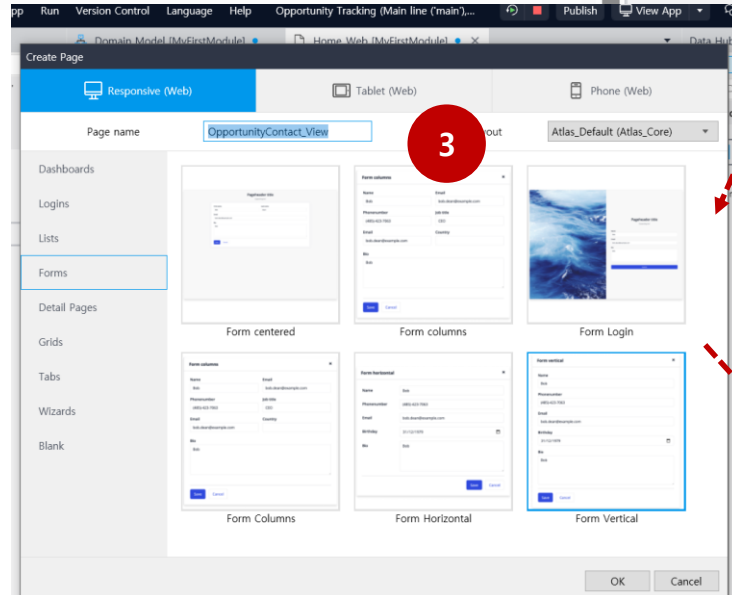
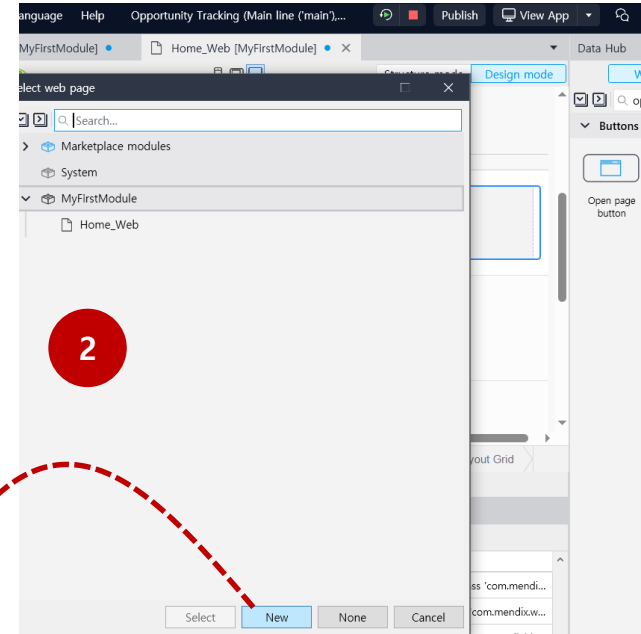
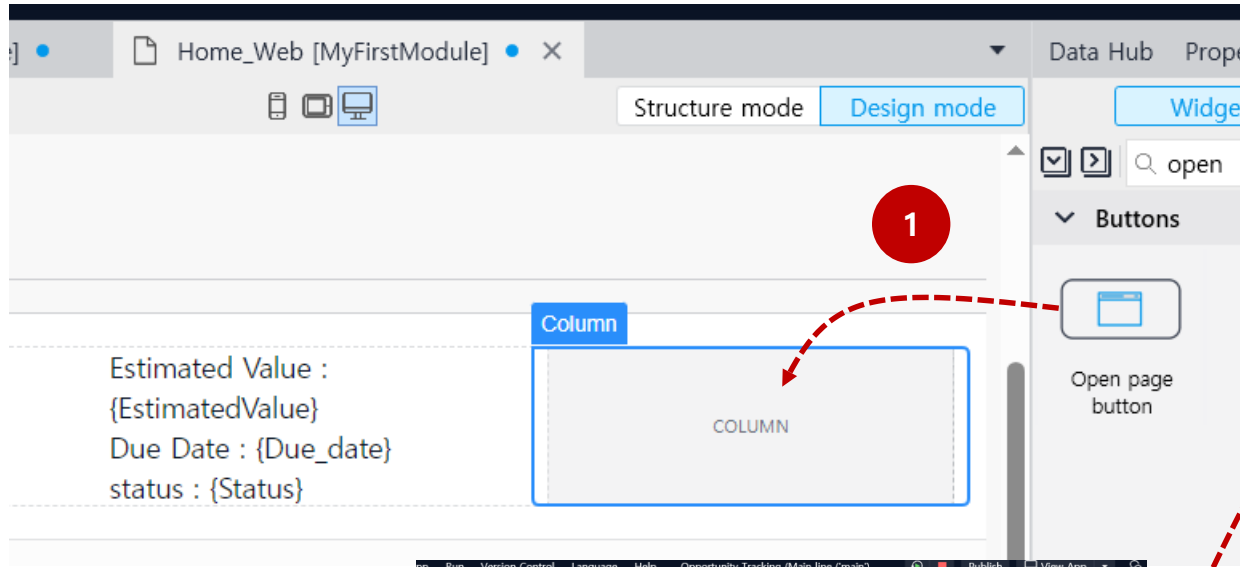
Add status attribute with enumeration type



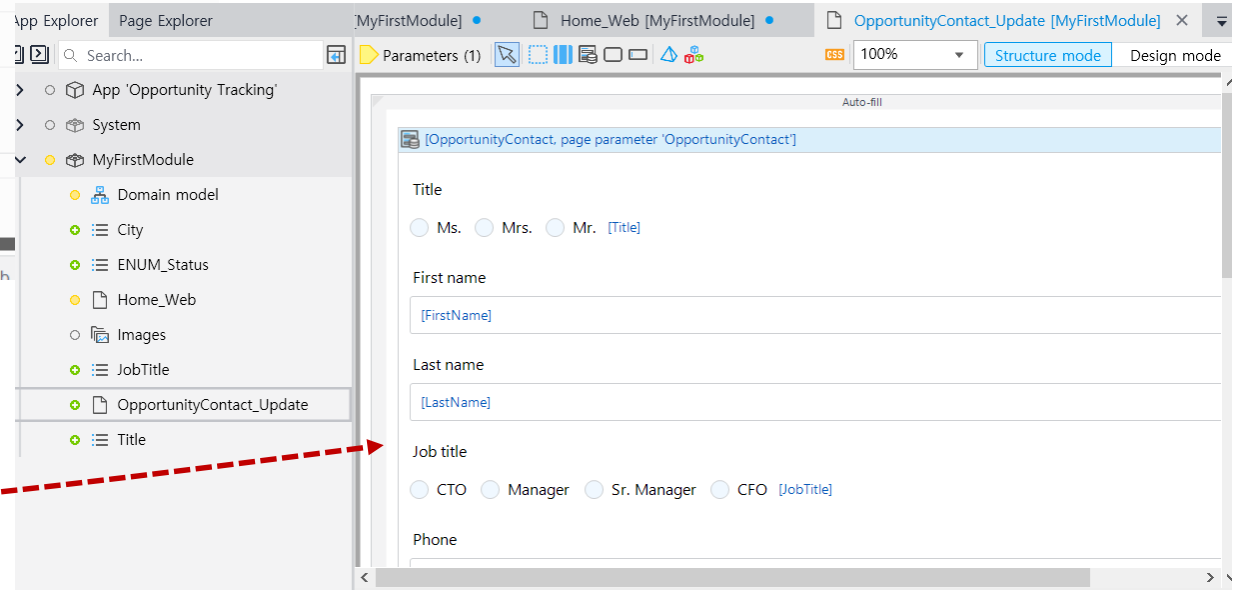
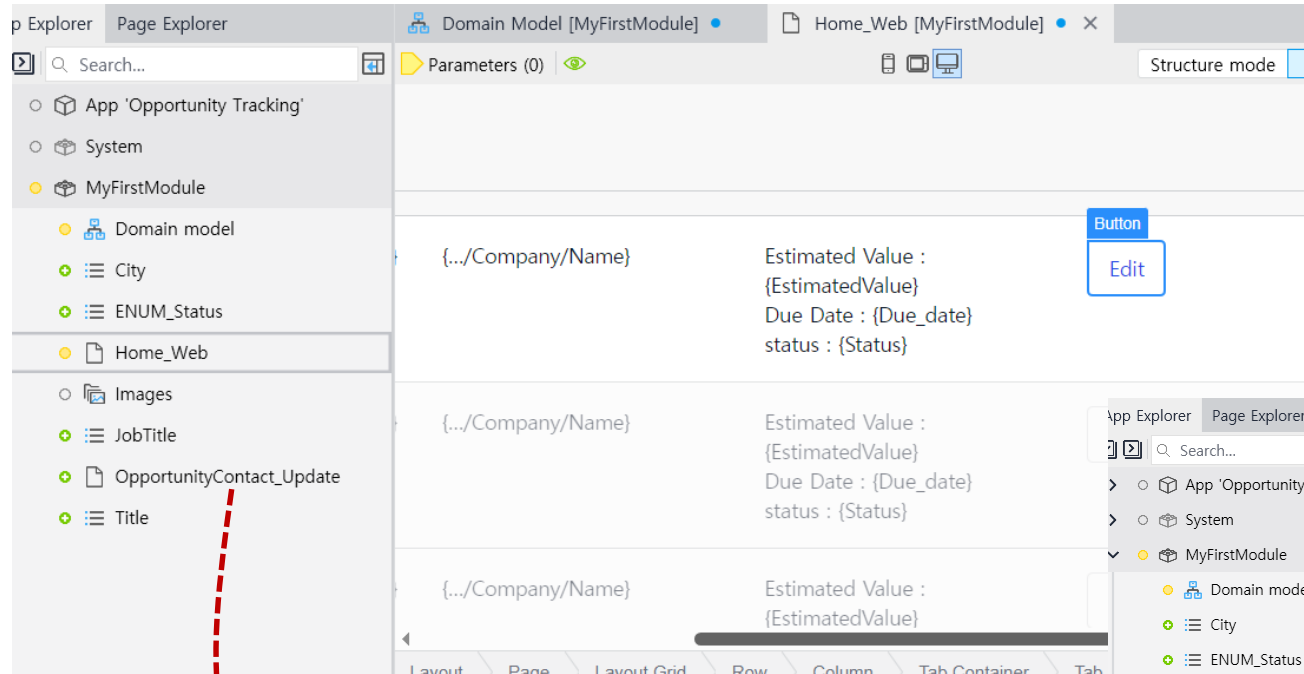
Add several attributes on specific column



Add "open page button" and choose specific style for the page



Check pop-up page called on clicking Edit button



Setting specific attributes as Read-only style

Read-Only : Title, First Name, Last Name, Job Title, Phone, Email, Created Date, RequiresLossAnalysis

The screenshot displays a mobile app development interface. The main canvas shows a form layout for 'OpportunityContact_Update'. The form includes fields for Title, First name, Last name, Job title, Phone, and Email. The Title field is currently selected, and its properties are shown in the right-hand 'Properties' panel.

The form layout includes:

- Title: Radio buttons for Ms., Mrs., Mr. [Title]
- First name: [FirstName]
- Last name: [LastName]
- Job title: Radio buttons for CTO, Manager, Sr. Manager, CFO [JobTitle]
- Phone: [Phone]
- Email: [Email]

The 'Properties' panel for the selected 'Radio buttons [Title]' shows the following settings:

- Common**
 - Name: radioButtons1
 - Tab index: 0
 - Class:
 - Style:
 - Dynamic classes:
- Data source**
 - Attribute: Title
- Design properties**
 - Spacing top:
 - Spacing bottom:
 - Spacing left:
 - Spacing right:
 - Align self:
 - Hide on phone: No
 - Hide on tablet: No
 - Hide on desktop: No
 - Resulting classes:
- Editability**
 - Editable: Never
 - Read-only style: Default
- Events**
 - On change: Never
 - On enter: Conditionally
 - On leave: Do nothing
- General**

Choose specific event called on clicking the save button

Parameters (1)

Due date
[Due_date]

Requires loss analysis
☐ Yes ☐ No [RequiresLossAnalysis]

Status
☐ Open ☐ Won ☐ Lost ☐ Postponed [Status]

Company
[OpportunityContact_Company/Company/Name]

MyFirstModule

Parameters (1)

Due date
[Due_date]

Requires loss ana
☐ Yes ☐ No

Status
☐ Open ☐ W

Company
[OpportunityCont

Tooltip

Icon (none)

Render mode ☒ Button ☐ Link

Button style Primary

Visibility

Visible Default

Events

On click Close page

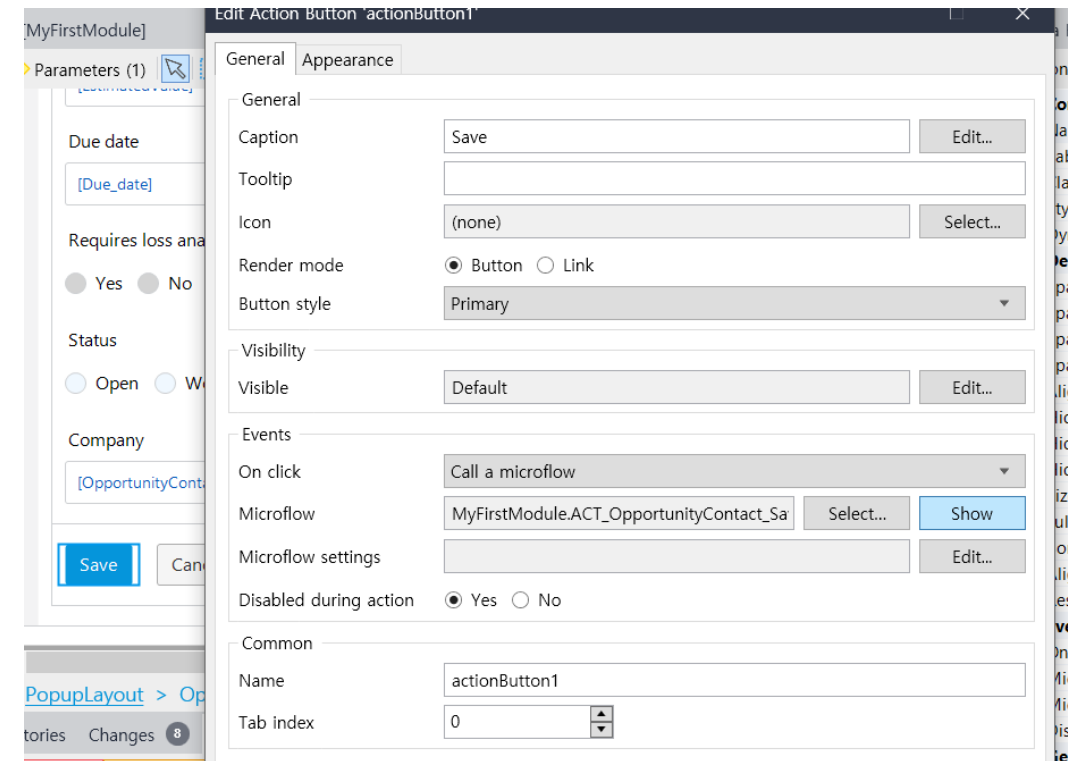
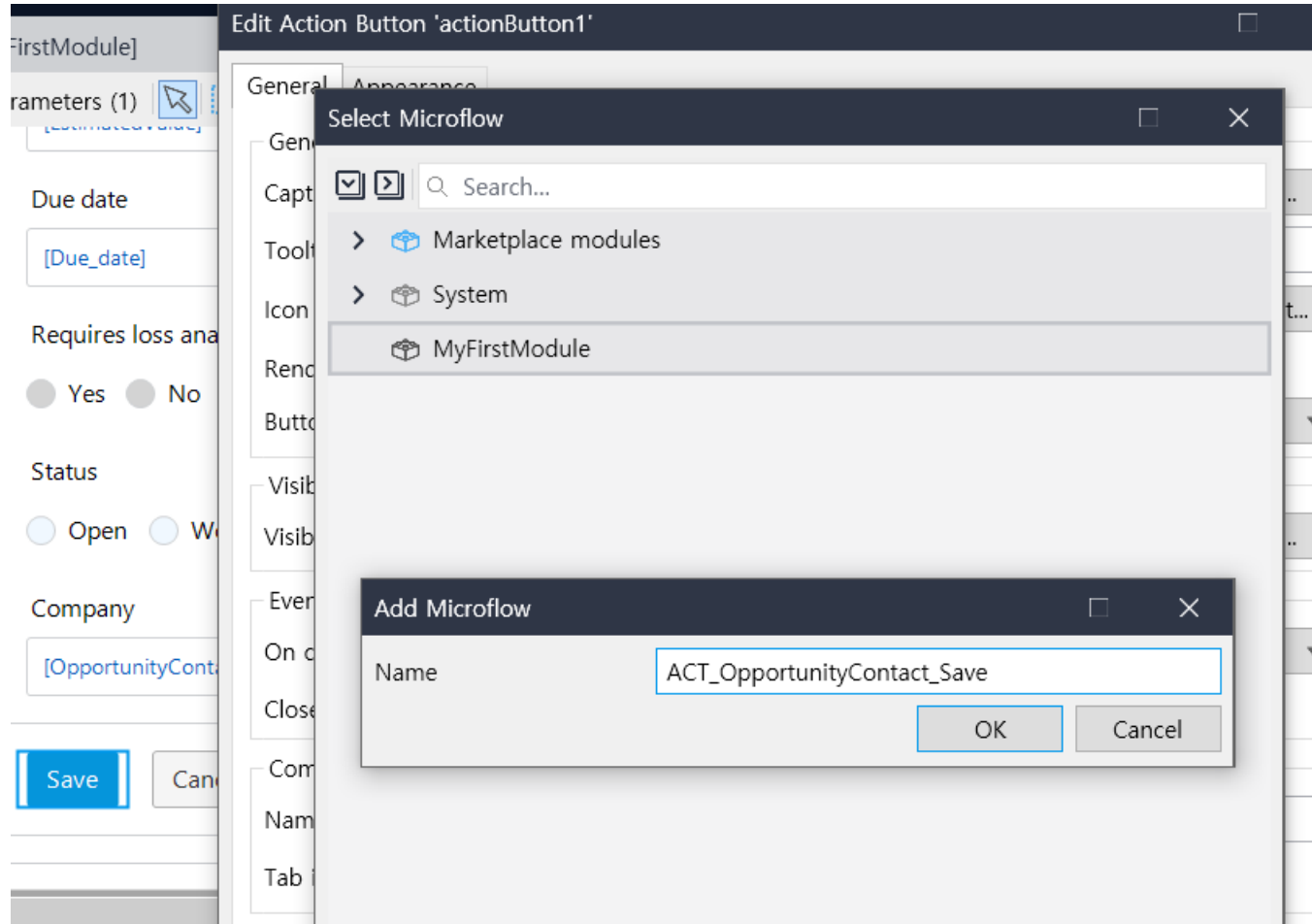
Close pages ☒ Single ☐ Multiple ☐ All

Common

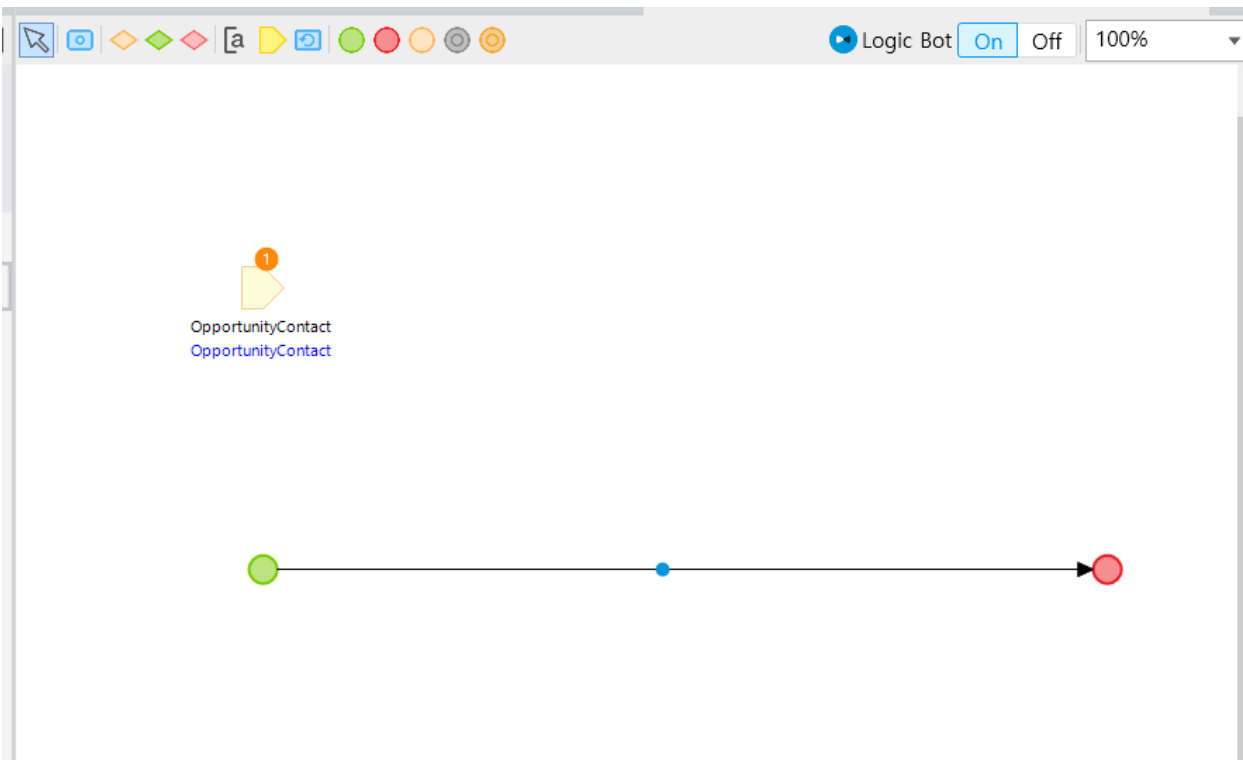
Name actionBar1

Tab index 0

Edit name of microflow called on clicking Save button



Create Microflow on clicking the Save button



The diagram shows a microflow with a decision node (diamond shape) in the middle. A green circle (Start) is on the left, followed by a blue circle (Intermediate), and then the decision node. The decision node has four outgoing paths, each marked with a small square. The top toolbar includes icons for various actions and a 'Logic Bot' button set to 'On'. The bottom status bar shows '1 Errors', '1 Deprecations', and '9 Warnings'.

Decision Properties Panel:

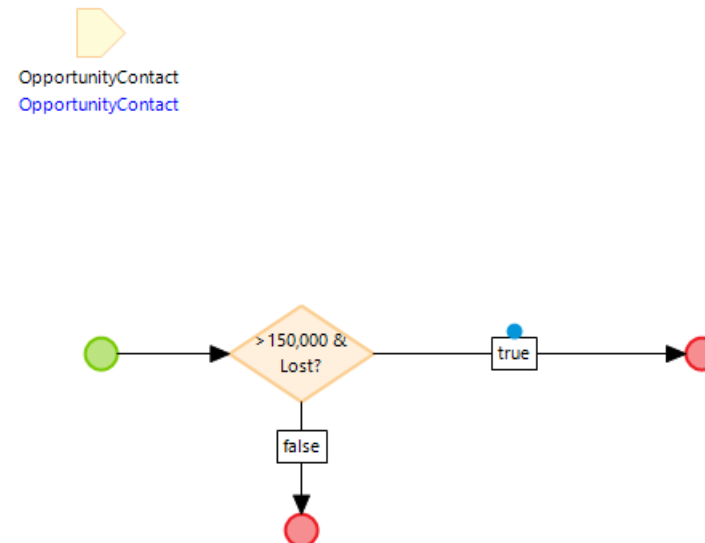
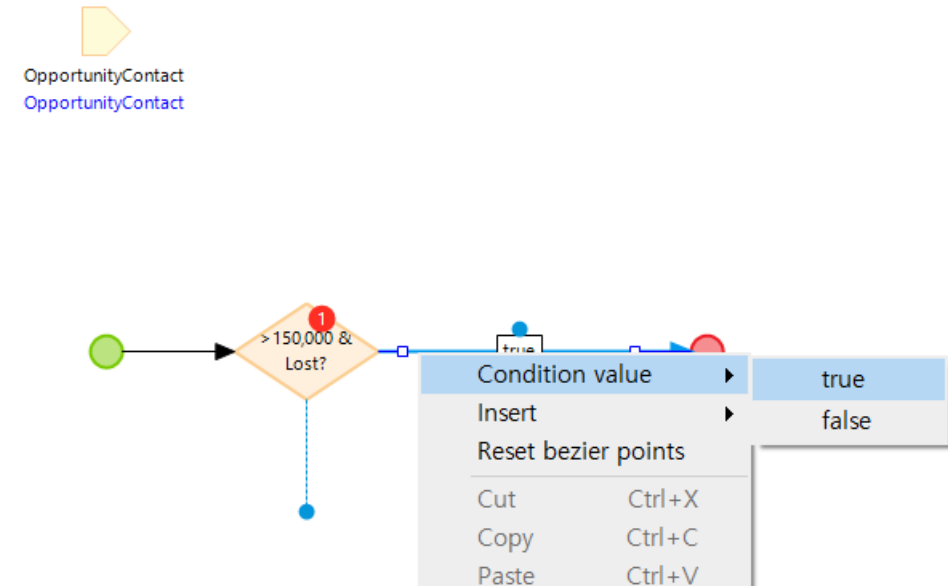
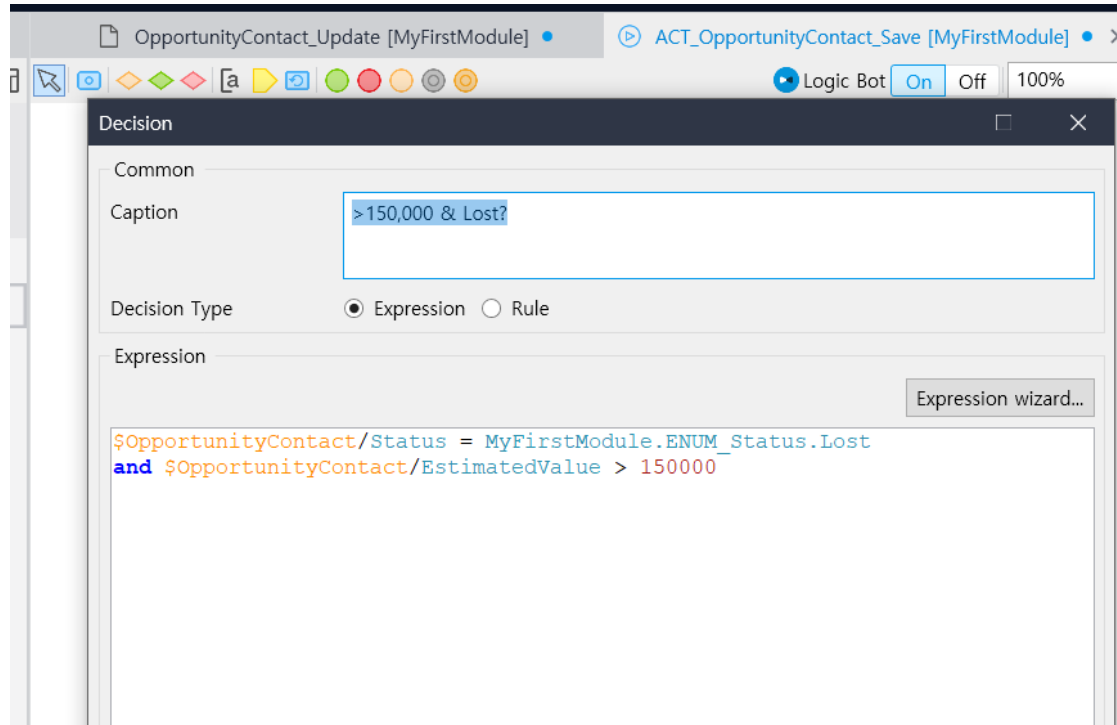
- Common:**
 - Caption: [Empty text box]
- Decision Type:**
 - ☒ Expression ☐ Rule
- Expression:**
 - [Empty text box]

Errors Table:

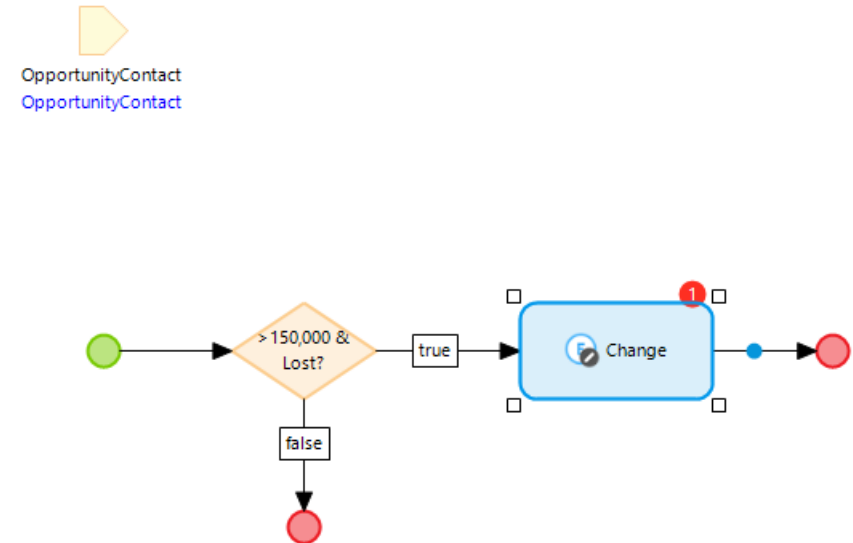
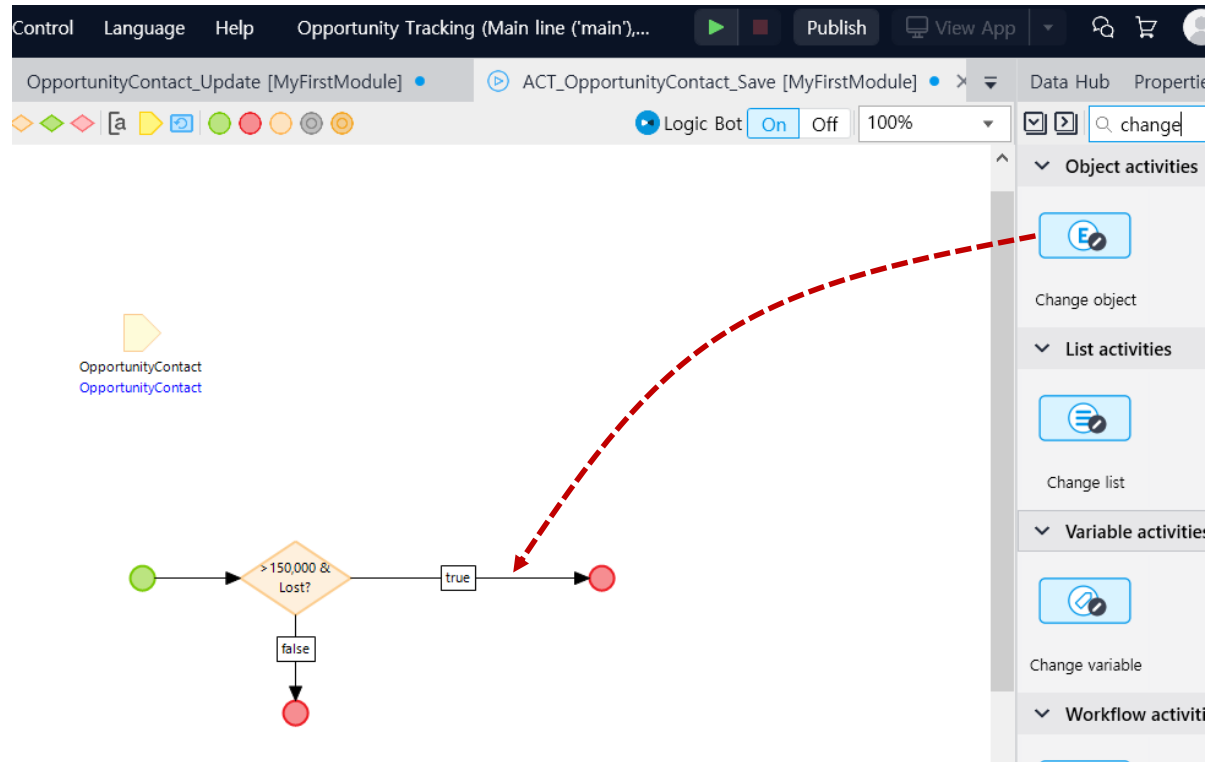
Line	Column	Error
1		Variable 'OpportunityContact'
2		The 'Condition' property is red

OK

Edit the expression for condition of Decision on Microflow



Drag & Drop "Change Object" on Microflow



Update specific attribute on change object

Visual Studio Code interface showing the 'Change Object' dialog for 'OpportunityContact (MyFirstModule.OpportunityContact)'. The 'Edit Change Item' sub-dialog is open, showing the 'RequiresLossAnalysis (Boolean)' attribute. The 'Type' is set to 'Set' and the 'Value' is 'true'.

Logic Bot: On Off 100%

Object activities

change object

List activities

OpportunityContact
OpportunityContact



Visual Studio Code interface showing the 'Change Object' dialog for 'OpportunityContact (MyFirstModule.OpportunityContact)'. The 'Commit' option is set to 'Yes' (circled in red). The 'Refresh in client' option is set to 'No'. A table below shows the attribute 'RequiresLossAnalysis' with type 'Set' and value 'true' (highlighted with a red dashed box).

Change Object

Input

Object: OpportunityContact (MyFirstModule.OpportunityContact)

Action

Commit: ☒ Yes ☐ Yes without events ☐ No

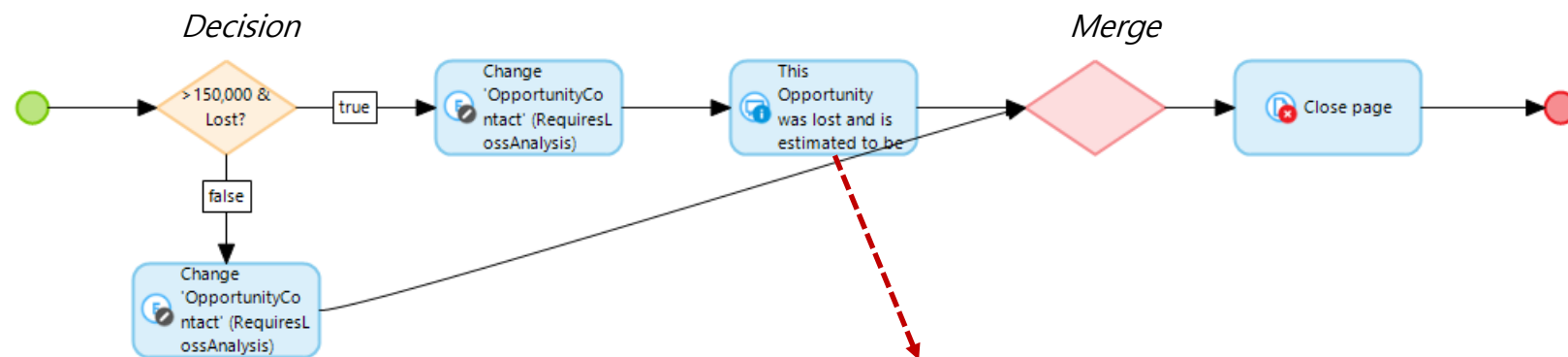
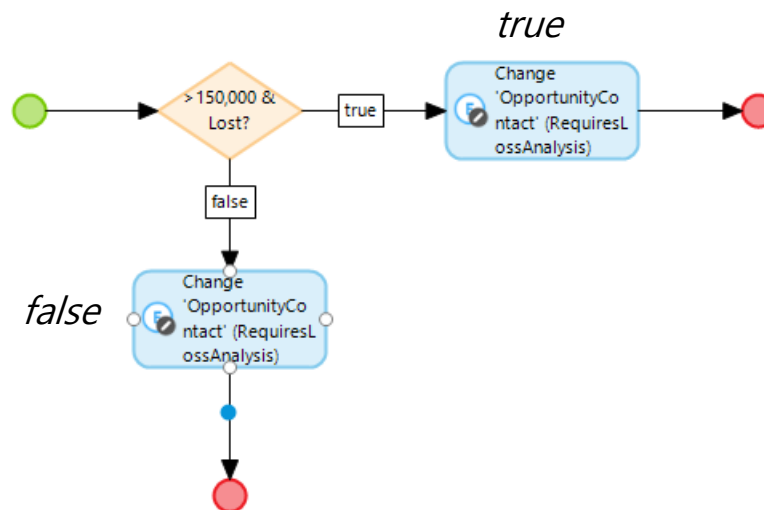
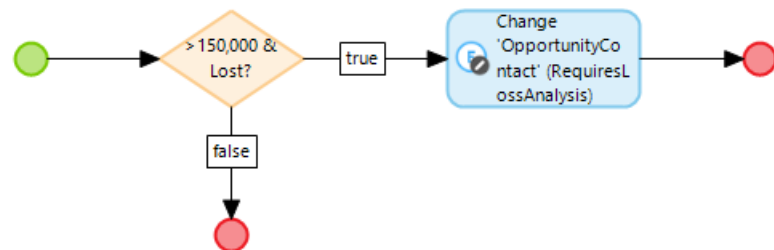
Refresh in client: ☐ Yes ☒ No

New Edit Delete Move up Move down

Member	Member type	Type	Value
RequiresLossAnalysis	Boolean	Set	true

Implement Logic by Condition on Decision In Microflow

OpportunityContact
OpportunityContact



This Opportunity was lost and is estimated to be over \$150,000. This has been flagged as requiring loss analysis.

Update data on clicking the “Edit” button

mx

‘Opportunity Tracking App

Supporting text

localhost:8080/index.html?profile=Responsive

Opportunity contact Update

Phone

93059387

Email

louis.Foo@puppywear.com

Created date

1/14/2021

Estimated value

23000

Due date

8/4/2021

Requires loss analysis

☐ Yes

☒ No

Status

☒ Open

☐ Won

☐ Lost

☐ Postponed

Company

PuppyWear

Save

Cancel

Show message in case Estimated value is over 150,000 and Status is "Lost"

louis.foo@puppywear.com

Created date
1/14/2021

Estimated value
160000

Due date
8/4/2021

Requires loss analysis
☒ Yes ☐ No

Status
☐ Open ☐ Won ☒ Lost ☐ Postponed

Company
PuppyWear

Save Cancel

'Opportunity Tracking App

Supporting text

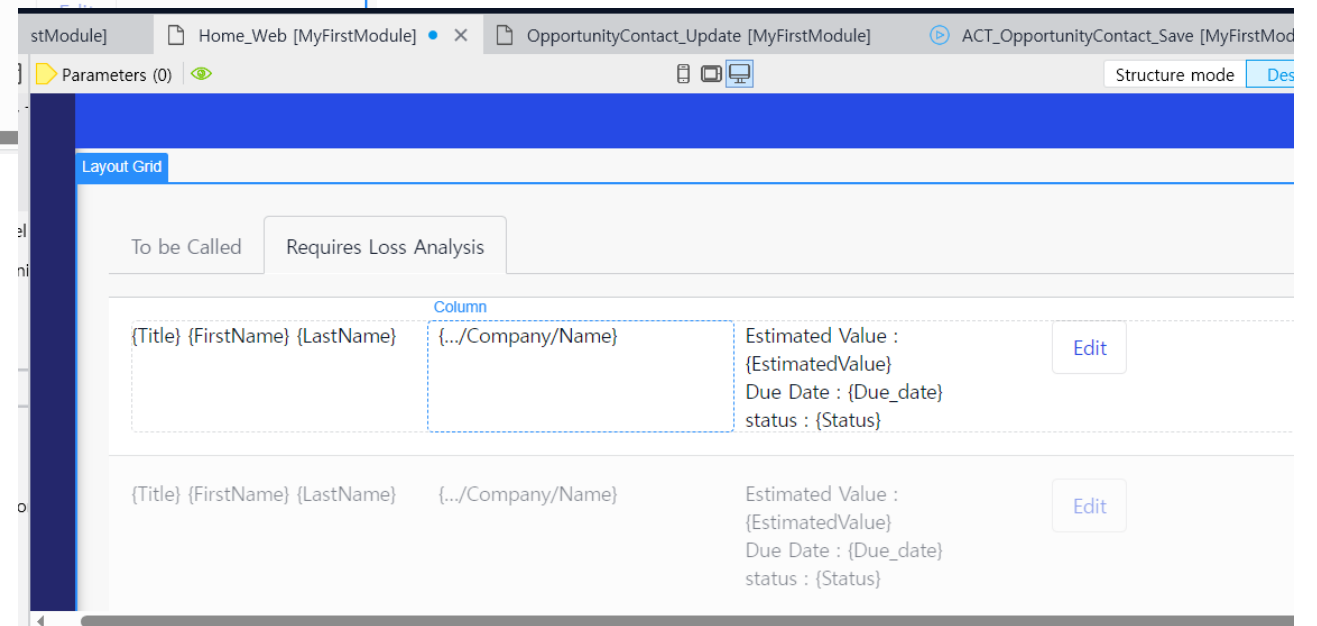
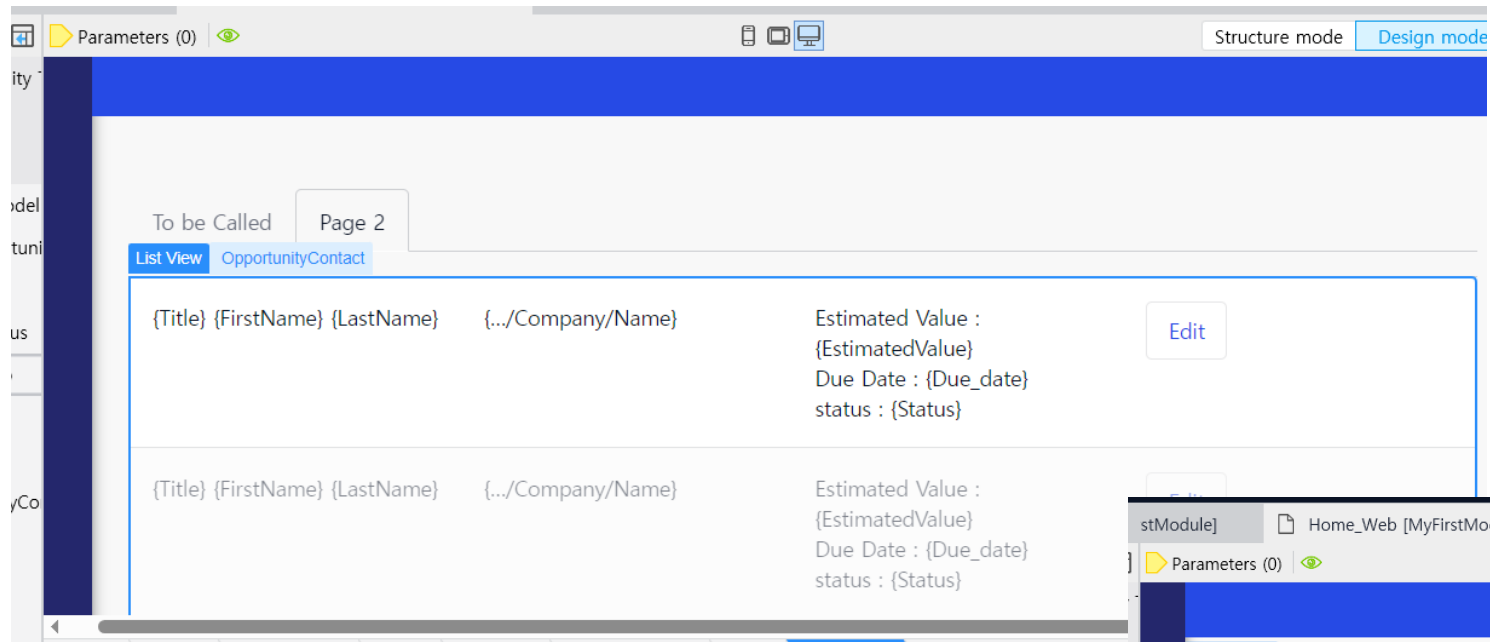
Information x

This Opportunity was lost and is estimated to be over \$150,000.
This has been flagged as requiring loss analysis.

OK

PuppyWear Estimated Value : 160000
Due Date : 8/4/2021
status : Lost

Copy Listview of 1st tab and Paste it on 2nd tab



Setting constraints for filtering the data

The screenshot shows a software interface for setting constraints. The main design view displays a list view with columns for {Title}, {FirstName}, and {LastName}. A red dashed arrow points from the 'Edit Constraints' dialog to the 'Edit Database Constraint' dialog, which is open over the main design view. The 'Edit Database Constraint' dialog shows the following settings:

Attribute	Operator	Value
RequiresLossAnalysis (Boolean)	Equals	true

The 'Edit Constraints' dialog is also open, showing a table with columns for Attribute, Operator, and Value. A red dashed arrow points from the 'Edit Constraints' dialog to the 'Edit Database Constraint' dialog. The 'Edit Constraints' dialog has a table with the following structure:

Attribute	Operator	Value
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The 'Properties' panel on the right shows the properties for the list view 'listView2'. The 'Data source' section is expanded, showing the following properties:

Type	Database
Entity (path)	OpportunityContact
Constraints	(none)

The 'Design properties' section is also expanded, showing various spacing and alignment properties. The 'General' section is partially visible at the bottom.

2nd Tab

<div> <div>To be Called</div> <div>Requires Loss Analysis</div> </div>			
Ms. Louis Foo	PuppyWear	Estimated Value : 160000 Due Date : 8/4/2021 status : Lost	<div>Edit</div>

Useful Links

- Mendix Documentation : <https://docs.mendix.com>
- Mendix Academy : <https://academy.mendix.com>
- Mendix Marketplace : <https://marketplace.mendix.com>
- Atlas UI : <https://atlas.mendix.com>