Web Blocks

Introduction

Over the course of this set of exercise labs, you will create a web application. The application will focus on creating and managing To Dos. The To Dos will be persisted in a database so they can be accessed from and shared across multiple devices. To Dos will have attributes such as category, priority (low, medium or high), due date and they can be marked as important (starred) by the user.

Users of the To Do application will be able to access all of this information. This back-office application will allow administrators to manage all existing To Dos.

You constantly will be expanding your application, publishing it to the server and testing your application to the server while learning and applying new OutSystems concepts.

At the end of this set of exercise labs, you will have a small, but well-formed web application, spanning multiple screens and concepts that you can easily access from your browser.

In this specific exercise lab, you will:

- Create a new Web Block
- Instantiate a Web Block

Table of Contents

Part 1: Create a new Web Block

In this part of the exercise, you will create a new Web Block to show a priority image based on a **PriorityId**.

1. Create a new **PriorityImage** Web Block, to show a different priority image based on an **PriorityId** Input Parameter.

    a) Switch to the **Interface** tab then right click the **MainFlow** item, select 'Add Web Block' and name it **PriorityImage**.
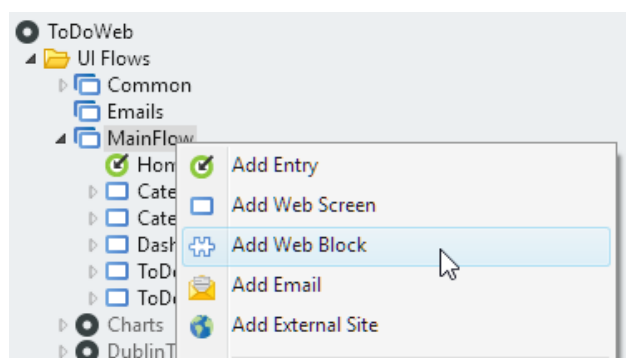

Figure 1. Add Web Block to MainFlow

NOTE: Since Web Blocks are reusable interface elements that you can use throughout other Web Blocks or Screens, they start empty and without any header, menu or footer.

    b) Right click the new **PriorityImage** Web Block, then select 'Add Input Parameter' and set its name to 'PriorityId'.

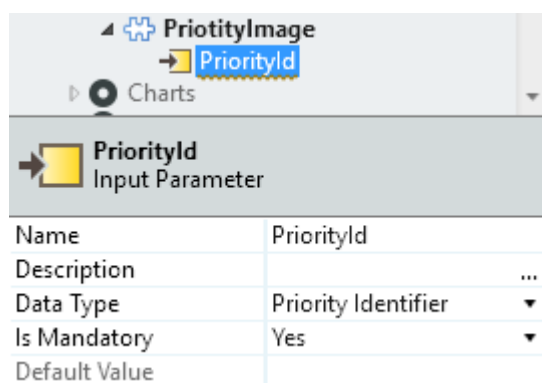   **c)** Verify that the **Data Type** of the new Input Parameter is set to 'Priority Identifier'.

Figure 2. PriorityId Input Parameter

d) Drag an **If** Widget and drop it inside the Web Block.

Figure 3. Drag and drop If Widget

e) In the properties area of the **If** Widget, set the **Condition** property to

```
PriorityId = Entities.Priority.Low
```

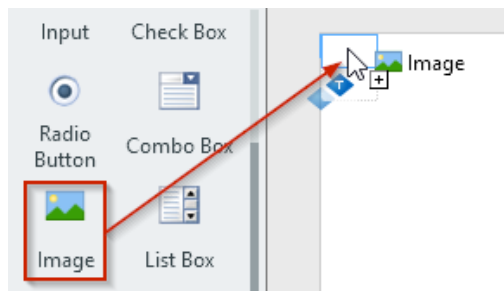**f)** Drag an **Image** Widget and drop it on the **True** branch of the **If** Widget created before.

Figure 4. Add Image Widget

g) In the **Select Image** dialog choose 'Import Image…', then select the 'priority-low.png' image located in the **Resources** folder.
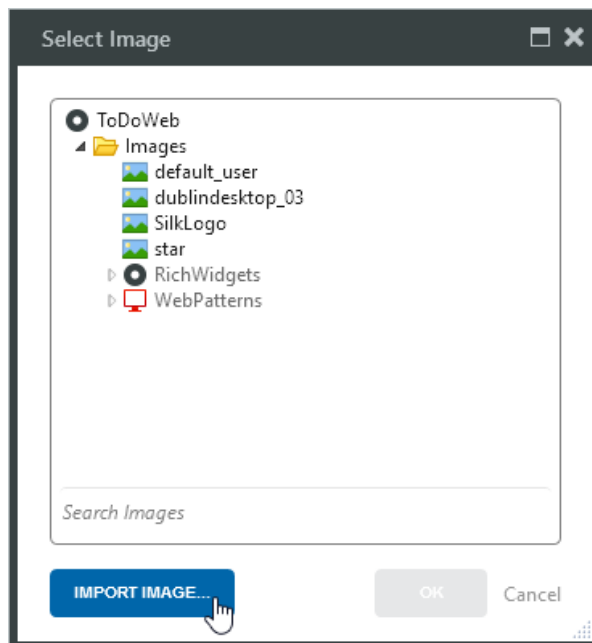

Figure 5. Import Image

h) Drag a new **If** Widget and drop it inside the **False** branch of the previous **If** Widget.

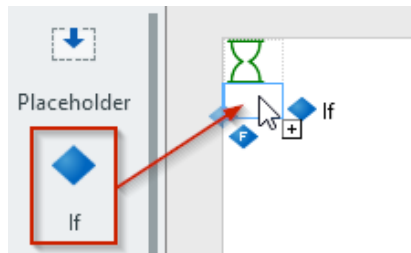Figure 6. New If widget

i) Set the **Condition** property of this newly created **If** Widget to

```
PriorityId = Entities.Priority.High
```

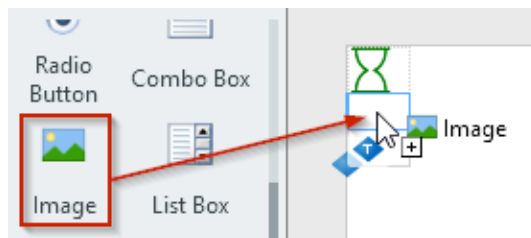**j)** Drag another **Image** to the **True** branch of the new **If**.

Figure 7. Drag another Image Widget

k) In the **Select Image** dialog select **Import Image** then locate the 'priority-high.png' image from the **Resources** folder.

l) Drag another **Image** to the **False** branch of the **If**, then in the **Select Image** dialog click 'Import Image…' and locate the 'priority-medium.png' image in the **Resources** folder.

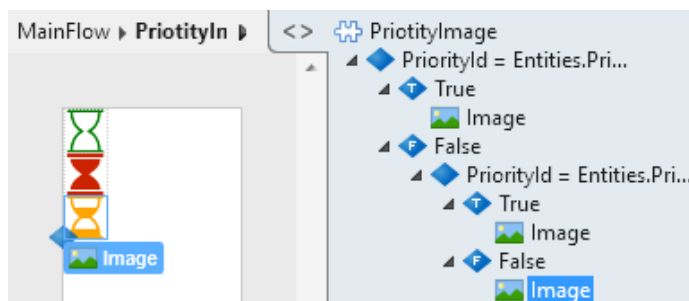**m)** Your Web Block and Widget Tree should look like this

Figure 8. PriorityImage Web Block

Do not duplicate

Part 2: Instantiate the Web Block

In this part of the exercise, you will modify the **ToDos** and **CategoryDetail** Screens, and add a reusable interface element called Web Block. Web Blocks allow you to create interface blocks that then can be reused throughout all your Screens and other Web Blocks.

1. Replace the 'Priority' **Expression** in the **ToDos** Screen, by an instance of the **PriorityImage** Web Block.

a) In the **ToDos** Screen, select the 'Priority' **Expression** in the **Priority** column, and delete it.

b) From the **Interface** tab, locate the **PriorityImage** Web Block, then drag and drop it inside the cell below the 'Priority' column title.
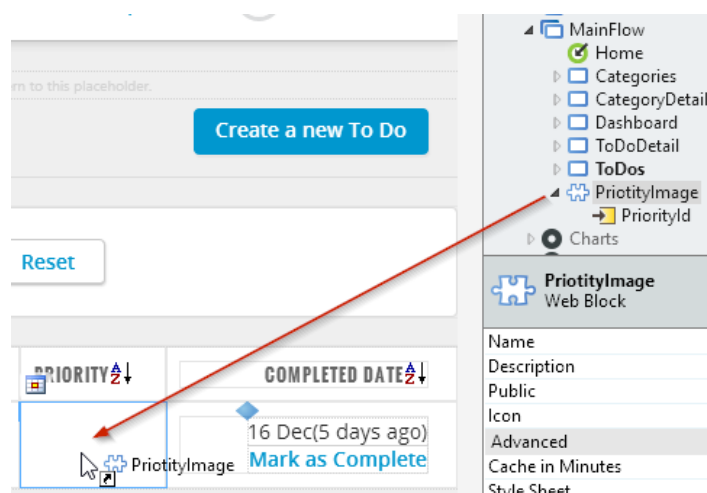
Figure 9. Create instance of PriorityImage Web Block

c) In the properties area, set the **PriorityId** parameter to '`ToDoTable.List.Current.ToDo.PriorityId`'.
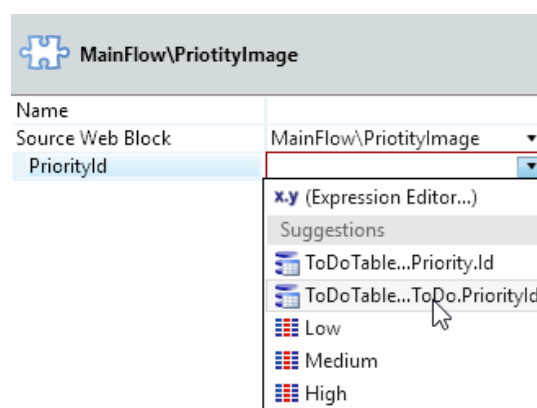
Figure 10. PriorityId Input Parameter Expression

---

2. Replace the 'Priority' **Expression** in the **CategoryDetail** Screen, by an instance of the **PriorityImage** Web Block.

a) Open the **CategoryDetail** Screen.

b) Select the 'Priority' **Expression** and delete it.

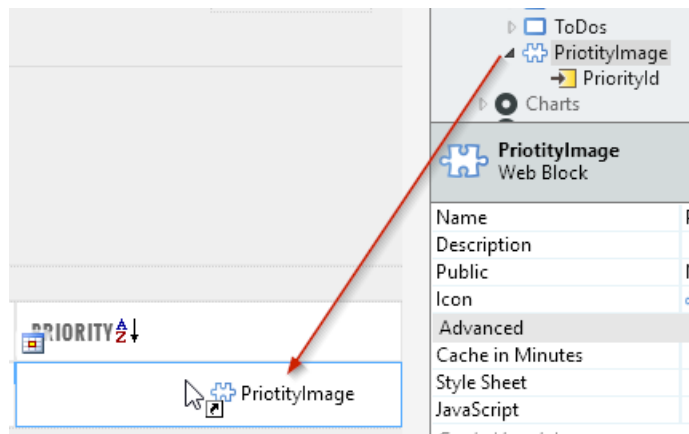**c)** Drag the **PriorityImage** Web Block and drop it in the 'Priority' empty cell.

Figure 11. Drag PriorityImage Web Block to the CategoryDetail Screen

d) With the focus on the new instance of the **PriorityImage** Web Block, open the drop down of suggestions for the **PriorityId** Input Parameter and select '`Category_ToDoTable.List.Current.ToDo.PriorityId`'.

3. Publish and test your application.

a) Click the **1-Click Publish** button to publish the module.

b) Click the **Open in Browser** button to open the application.

c) Navigate to the **ToDos** Screen and verify that the priority images appear. Your Screen should look like this
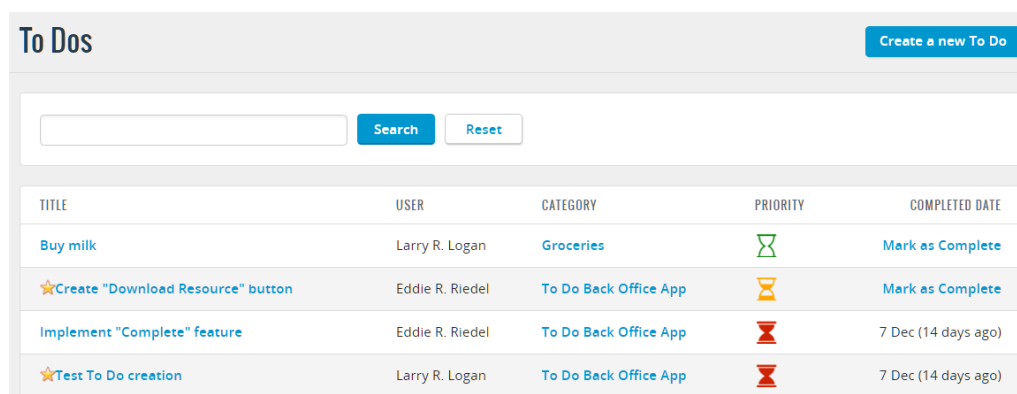

Figure 12. ToDos Screen with priority images

d) Navigate to the **CategoryDetail** Screen of the 'ToDo Back Office App'. Your Screen should look like this

Figure 13. 'ToDo Back Office App' CategoryDetail Screen with priority images

End of Lab

In this exercise, you created a new Web Block to show an image for each priority level. The new Web Block was instantiated in the **ToDos** Screen and **CategoryDetail** Screen.

You have learned how to create reusable user interface Blocks, that can be used through multiple Screens and even inside other Web Blocks.

The application module was published to the server, and the new priority image that is part of the new Web Blocks was visible in both Screens.

Do not duplicate

List of Figures

Here is the list of screenshots and pictures used in this exercise.