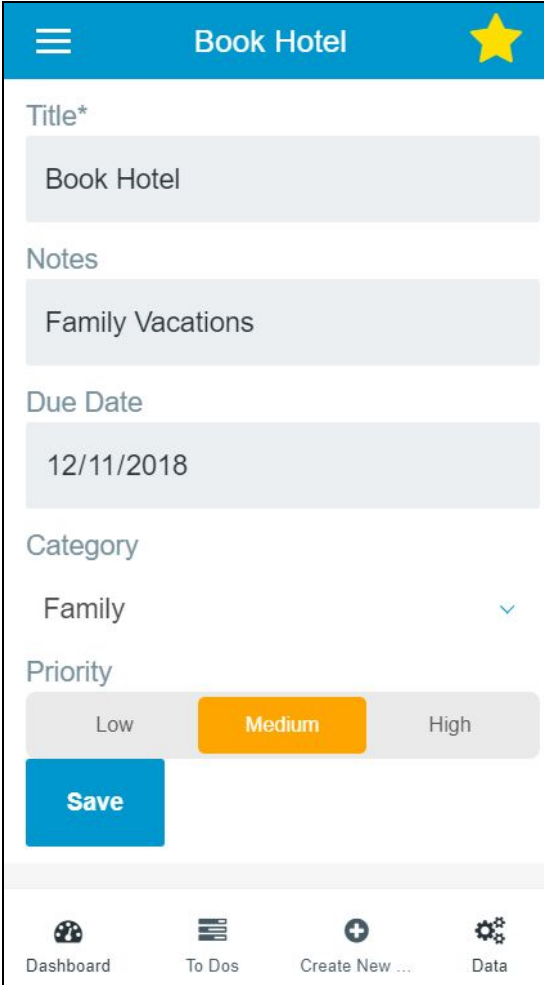


# Layouts and Common UI Exercise



The screenshot shows a mobile application interface for booking a hotel. The top header is blue with a hamburger menu icon on the left, the title 'Book Hotel' in the center, and a yellow star icon on the right. Below the header, the form contains several fields: 'Title\*' with the value 'Book Hotel', 'Notes' with the value 'Family Vacations', 'Due Date' with the value '12/11/2018', and 'Category' with the value 'Family' and a dropdown arrow. Below these fields is a 'Priority' section with three buttons: 'Low', 'Medium' (which is highlighted in orange), and 'High'. At the bottom of the form is a blue 'Save' button. The bottom of the screen features a navigation bar with four icons and labels: 'Dashboard' (globe icon), 'To Dos' (list icon), 'Create New ...' (plus icon), and 'Data' (gears icon).

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## Introduction

In this exercise lab, we will work over some elements of the Common UI Flow of the ToDo module. These elements are mostly Screens and Blocks that are common to the entire module.

First, we will do a slight change to the Splash Screen, or the loading Screen. By default, the Screen will use the icon chosen for the application, but we will change it for a better transparent icon, so that it looks nicer.

Second, we will add links to the Menu Block that direct the user to the existing Screens: Todos and ToDoDetail. This will guarantee that an user will be able to access these two Screens regardless of where it is in the application.

Finally, we will add links to the same Screens to the Bottom Bar, using Bottom Bar Items. The Bottom Bar is also available in every Screen of the application. Additionally, we will add two extra options, without links yet, to two Screens that will be created in future labs: Dashboard and DataManagement.

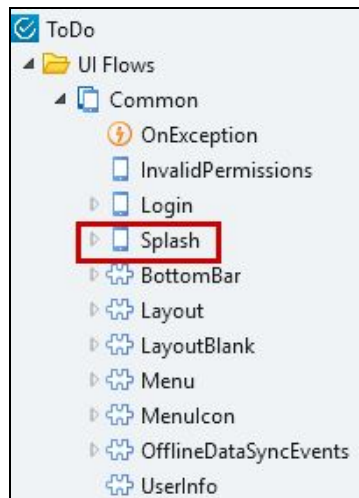
In summary, in this specific exercise lab, we will:

- Tweak the look and feel of the Splash Screen
- Add links to the existing Screens to the Menu
- Add links to the existing Screens to the Bottom Bar

## Update the Splash Screen

We will start this lab doing a slight change to the Splash Screen of the application. By default, the Splash Screen uses the icon chosen for the ToDo application, next to the name of the app, right above the Loading progress bar. However, if you notice, there is a noticeable difference of colors. So, we will start by changing the icon to a different one, to look nicer.

- 1) Replace the application logo of the Splash Screen by the todo-transparent.png file, available in the Resources folder.
  - a) Expand the Common UI flow and open the Splash Screen on the canvas.

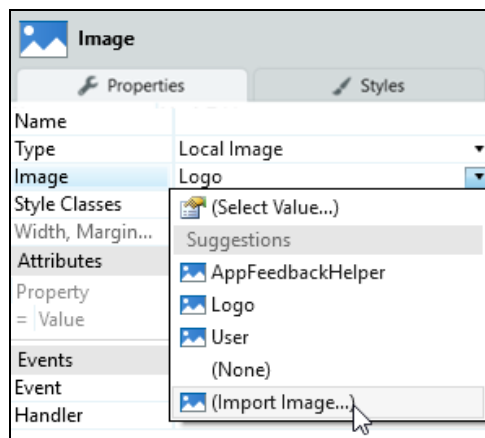


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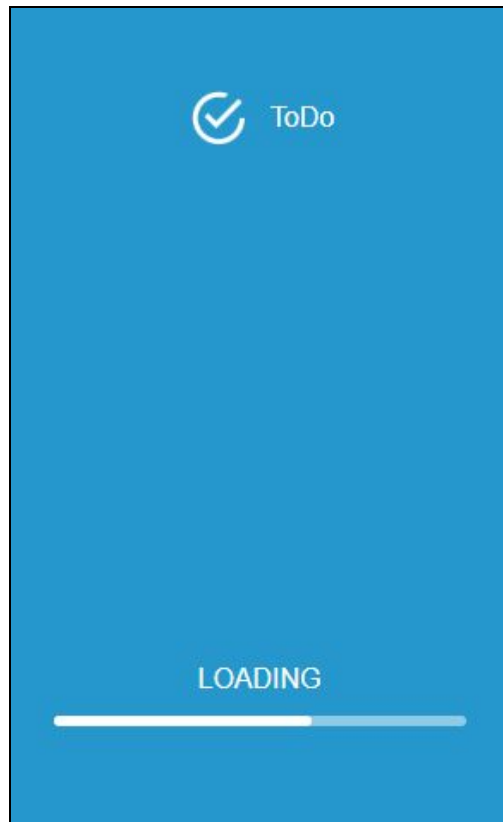
**NOTE:** The Splash Screen already contains an expression that displays the application name, and in this case, it will display To Do.

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- b) Select the ToDo image in the Splash Screen. In the properties area, open the drop down for the **Image** property and select (*Import Image...*).



- c) Choose the todo-transparent.png image file from the Resources folder of the exercise labs.
- 2) Publish the module and find the differences in the look and feel of the Screen.
  - a) Click the 1-Click Publish to publish the module to the server.
  - b) Click the Open in Browser button to open the application.
  - c) During the loading of the application, we should see the new look and feel of the Splash Screen.

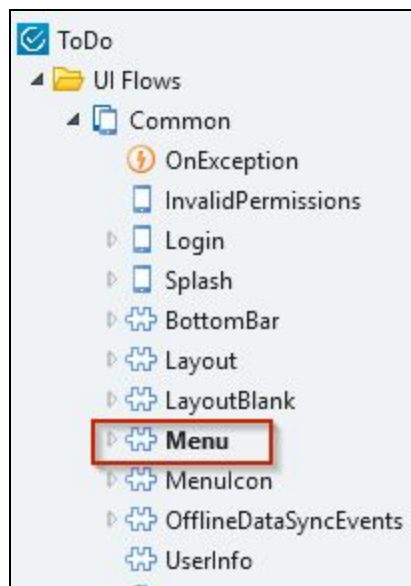


## Add Links to the Menu

In this section of the exercise lab, we will create entries for every Screen in the application Menu. This makes sure that every Screen will always be accessible, regardless of where you are in the application.

As we know, so far we have the **ToDo**s and the **ToDoDetail** Screen, so we will add one entry for each one of them. Each one of the Links will have an Icon representative of the Screen to where it directs.

- 1) Add Links to the **ToDo**s and **ToDoDetail** Screens to the application Menu.
  - a) Open the **Menu** Block located in the **Common** flow.

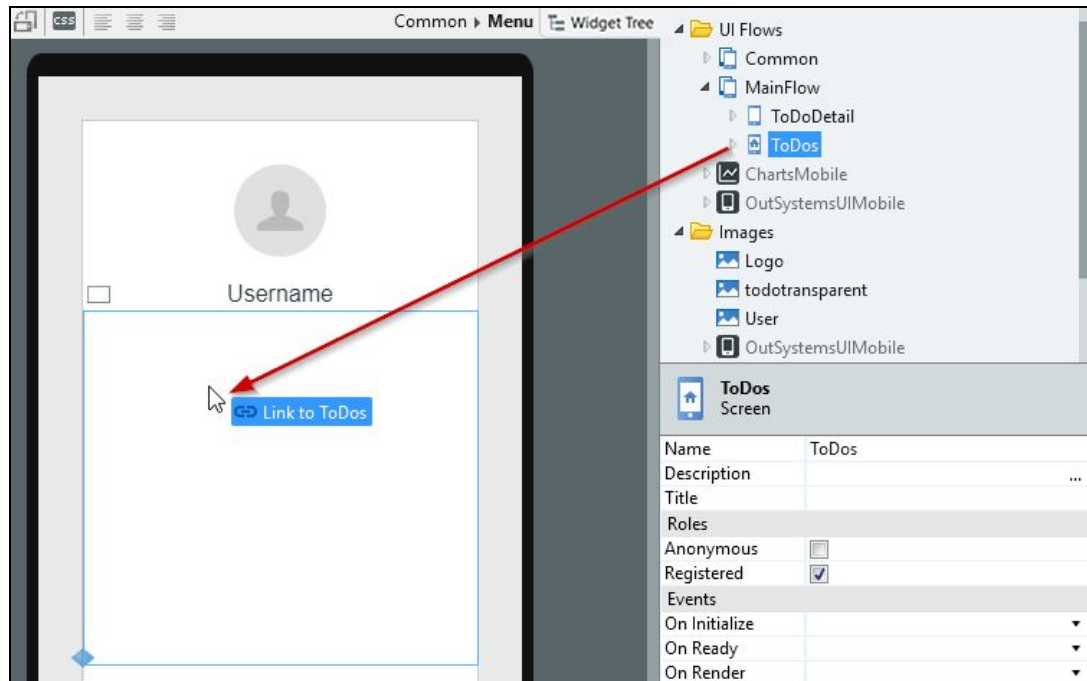


- b) Click on the **Widget Tree icon** to show the Widget Tree of the **Menu** Block, on the right-side of Service Studio.

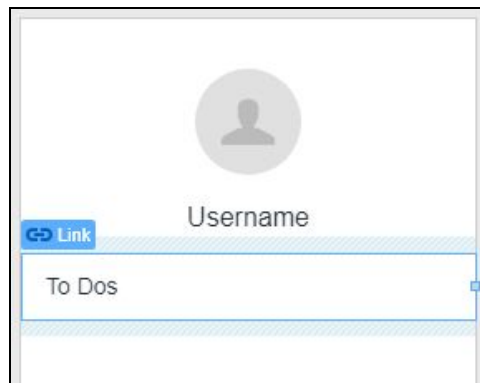


- c) By expanding the **AppMenuContainer** and **AppMenu** Containers, we can find a **PageLinks** Container. This is where all the **Menu** Links will be placed.

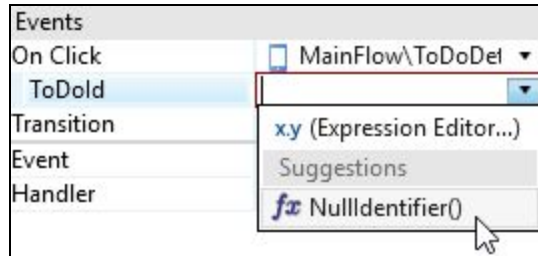
- d) Click again on the **Widget Tree Icon** to hide the Widget Tree and return to the Elements Area.
- e) Drag the **ToDo** Screen into the **PageLinks** Container.



- f) Notice that OutSystems automatically created a Link to the **ToDo** Screen, with the **Name** of the Screen. Change the text to *To Dos*.

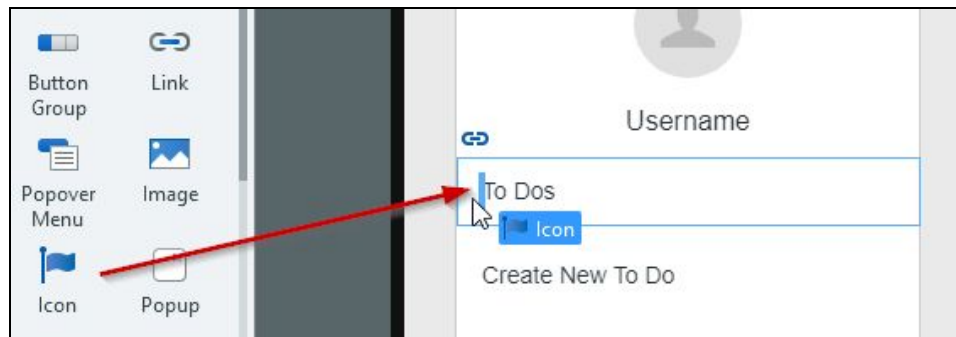


- g) Drag the **ToDoDetail** Screen into the **PageLinks** Container, below the **To Dos** Link. Change the text to *Create New To Do*.
- h) Set the **ToDoid** property of the link to *NullIdentifier()* to fix the error.



2) Add an icon before the text of each Menu item.

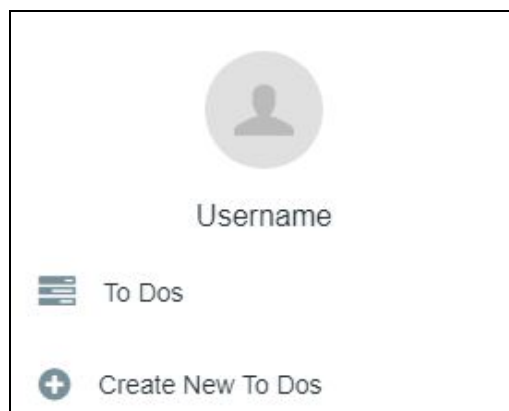
a) Drag an **Icon** Widget and drop it just before the *ToDos* text.



b) In the **Pick an Icon** dialog choose the *tasks* icon.

c) Repeat the same process for the *Create New To Do* Link, but this time select the *plus circle* icon.

d) The **Menu** should now look like this.





## Add Screen Links to the Bottom Bar

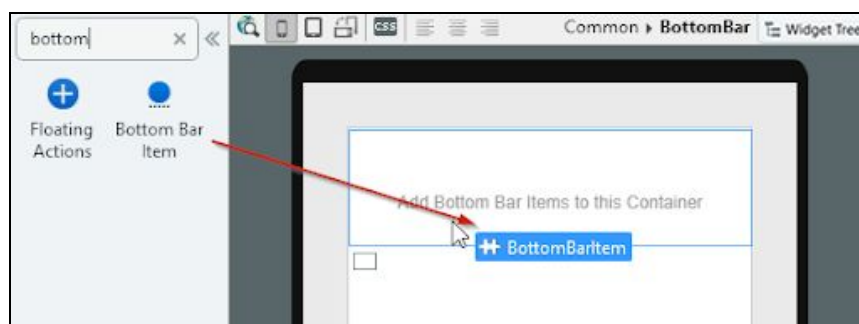
In the previous Section, we added Links to the Menu for the Todos and ToDoDetail Screens. However, we need to open the menu to access these Links, which overlay the current Screen we are on. Some user may prefer a more direct access to the Screens.

This way, in this part of the exercise, we will add Links to the **Bottom Bar** of the application, one for each Screen. Creating these Links in the BottomBar is a task that is not as easy as dragging and dropping the Screen to the BottomBar Block. For that reason, we will also prepare the BottomBar to Link to Screens that will be created in further labs: the **Dashboard**, to display some general information about the Todos, and the **DataManagement**, to help us manage the synchronization of data between the server and the device.

- 1) Add **Bottom Bar Items** for the *Dashboard*, *To Dos*, *Create New To Do* and *Data Management* to the **Bottom Bar**. Use the proper icons to match with the ones chosen for the Menu, and select proper new ones for the new entries.
  - a) Open the **BottomBar** Block, located under the **Common** UI Flow.



- b) Drag a **Bottom Bar Item** from the widget toolbar and drop it inside the existing Container.

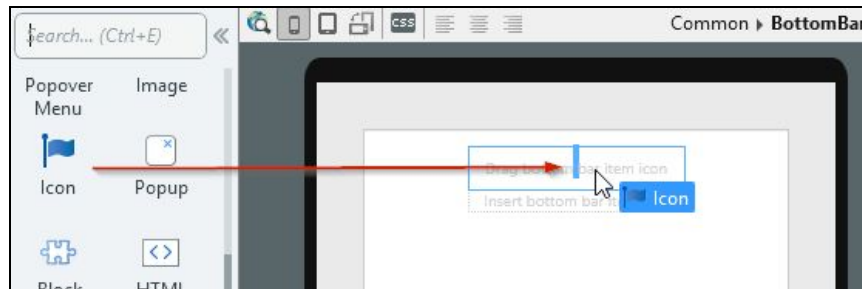


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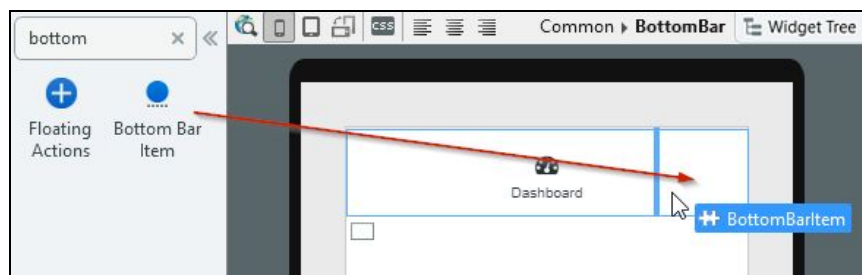
**NOTE:** The **Bottom Bar Item** Widget has two placeholders, one for an **Icon** and another one for a **Text**.

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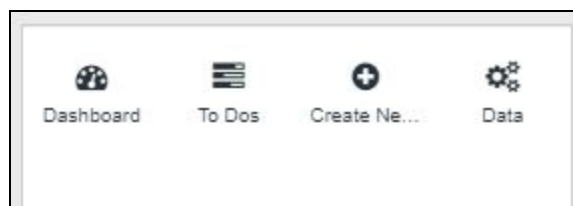
- c) Drag and drop an **Icon** Widget to the **Icon** placeholder of the Bottom Bar Item and choose *dashboard* in the **Pick an Icon** window.



- d) In the **Text** placeholder of the Bottom Bar Item, type *Dashboard*.
- e) Drag another **Bottom Bar Item** and drop it on the right side of the existing one, but still inside the Container.



- f) Drag and drop an **Icon** Widget to the **Icon** placeholder of the last **Bottom Bar Item** and choose *tasks* in the **Pick an Icon** window.
- g) In the **Text** placeholder of the last Bottom Bar Item, type *To Dos*.
- h) Repeat the previous three steps, using the same **Icons** as in the Menu, for the following pages, to achieve the following result

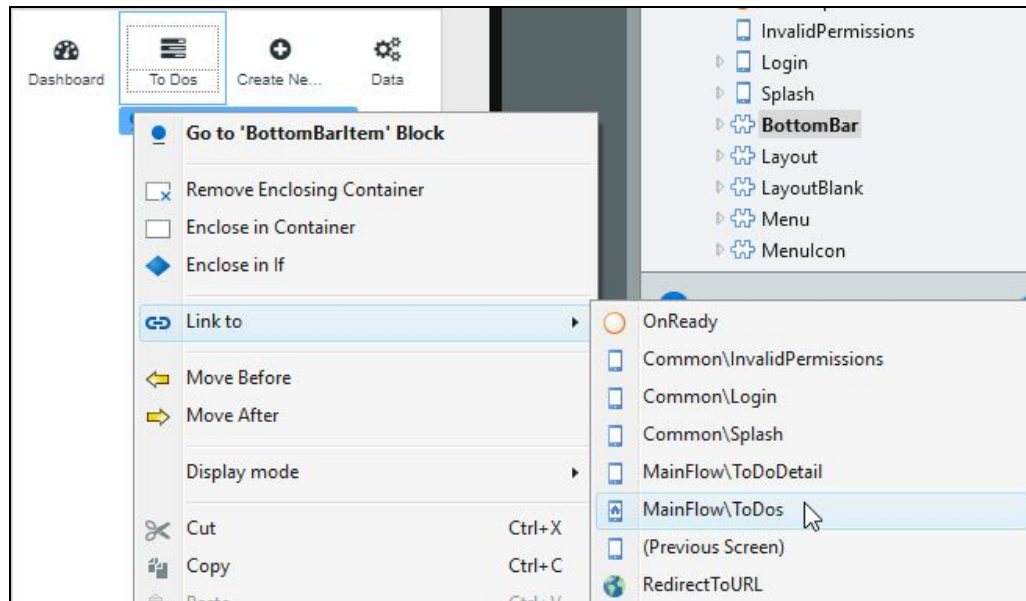



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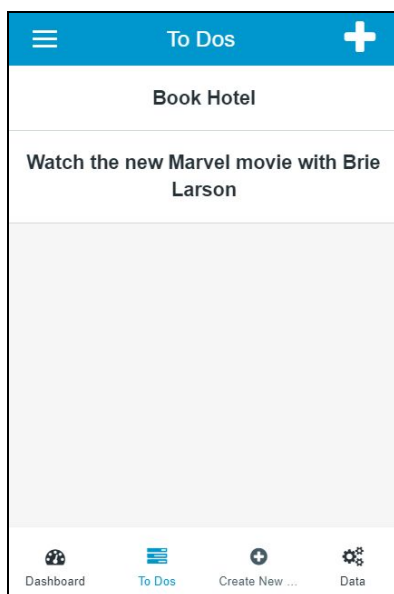
**NOTE:** Although the texts do not appear complete on the preview, they will be shown properly on the mobile device.

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- 2) Create Links for each **Bottom Bar Item** to the respective Screen. Ignore the *Dashboard* and the *DataManagement* Screens for now.
  - a) Right-click the **Bottom Bar Item** that contains the **To Dos** text, then choose the option *Link to > MainFlow\ToDo*.



- b) Repeat the previous step for the **Create New To Do** Bottom Bar Item, linking it to the **ToDoDetail** Screen. Do not forget to fix the error by setting its **ToDoid** property to *NullIdentifier()*.
- 3) Publish the module and make sure that the application works properly and all the Links have the correct Destination. Note that the list of ToDos can be different.



## End of Lab

In this exercise, we continued extending the ToDo mobile application, by tweaking the Splash Screen and adding new entries to the application's Menu and Bottom Bar.

We started by changing the icon in the Splash Screen, to use a transparent one.

Then, we added two Links to the application Menu, one for the ToDos Screen and one to create new To Dos, in the ToDoDetail Screen. We added similar links to the application's Bottom Bar. Since creating Links in the Bottom Bar is not as automatic as in the Menu, we added two new entries to the Bottom Bar (without Link). Those two entries will link to new Screens that will be created in future labs.

Finally, the module was published to the server and we were able to test the changes.

This demonstrates the we can also change and tweak the Common elements in the module.