



Blocks and Events

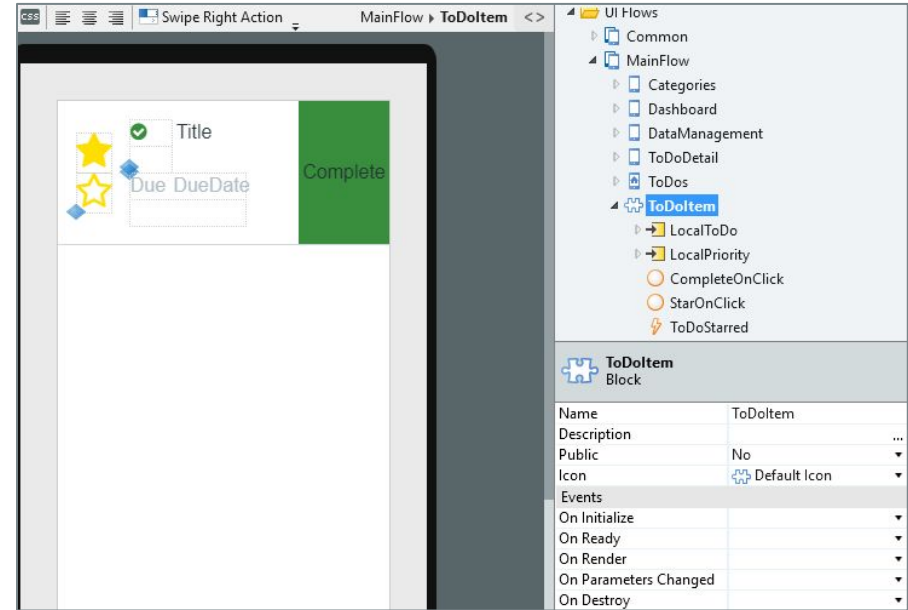


Topics

- What is a Block?
 - Defining and designing Blocks
 - Using Blocks
- Events
 - Triggering Events
 - Handling Events
- Mobile Screen Lifecycle (Revisited)
 - On Parameters Changed Event

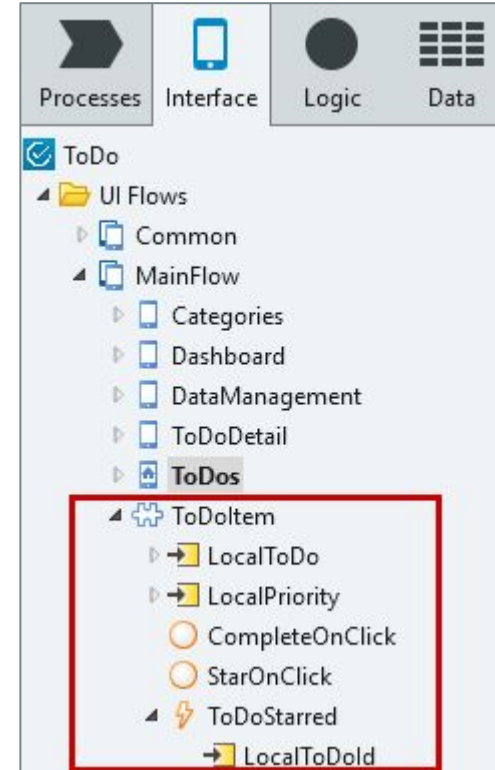
Defining Blocks

- What is a Block?
 - A reusable screen component
 - Blocks can hold Widgets, Patterns and other Blocks
- Blocks can be placed in Screens and other Blocks
 - Promote reusability
 - Developed only once
 - Used in multiple places
 - Improve maintainability
 - Changes are reflected in every parent



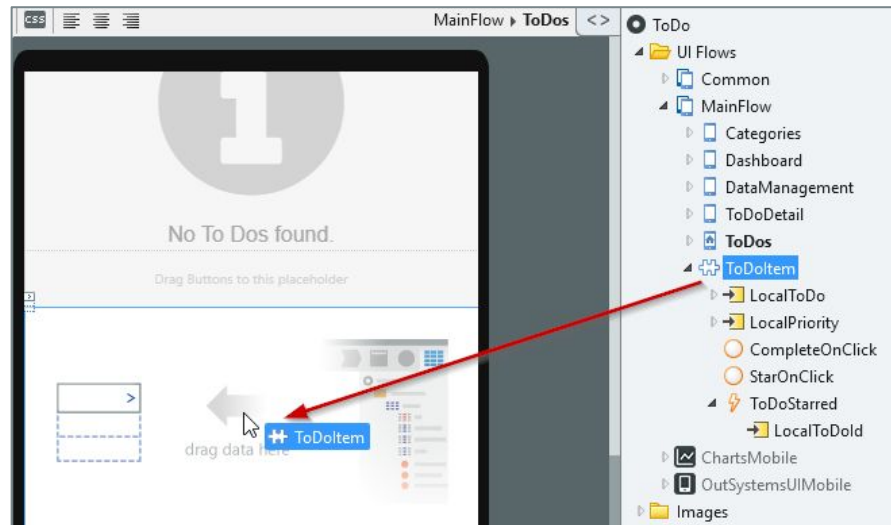
Designing Blocks

- Blocks are designed just like Screens
- Blocks can have its own logic. They can have:
 - Input Parameters
 - Local Variables
 - Screen Actions
 - Events
- Blocks **cannot** have Output Parameters



Using Blocks

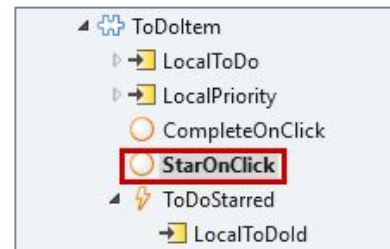
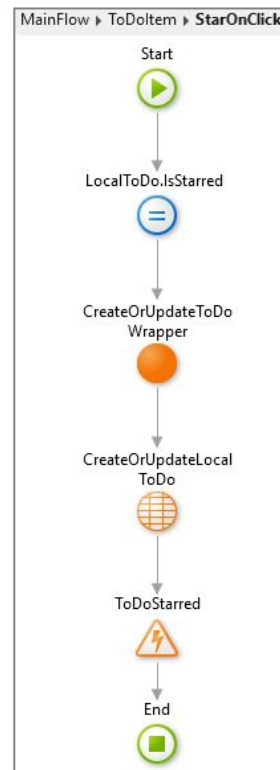
- Blocks can be placed inside
 - Screens
 - Other Blocks (recursion not allowed)
- A new instance of a Block is created when it's placed in the parent
- Blocks have their own scope
 - Parent does not have access to the elements inside the Block and vice-versa





Triggering Events

- Interaction with the parent is done using Events
 - **Block triggers** an Event
 - Triggers are done in Screen Actions
- Events are created in the Blocks and they can:
 - Have Input parameters to send data to the parent
 - Be defined as mandatory
- Every instance of the Block in the parent needs an Event Handler for mandatory events



ToDoStarred Trigger Event	
Name	ToDoStarred
Description	...
Event	ToDoStarred ▼
LocalToDoId	LocalToDo.Id ▼
(New Argument)	▼

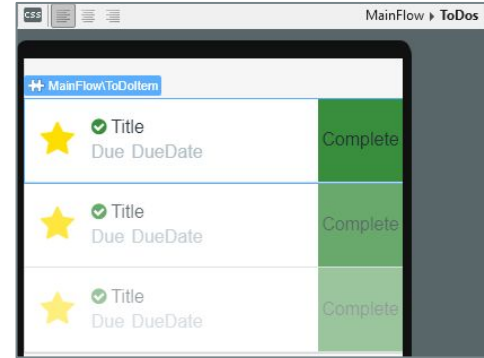
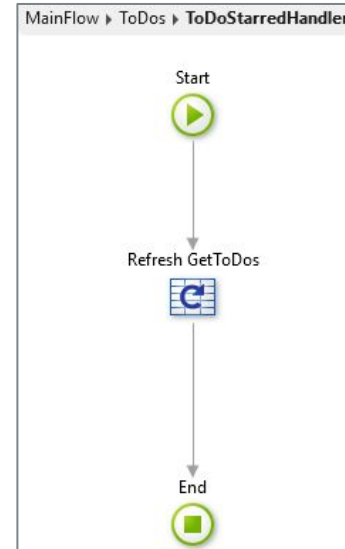
⚡ Handling Events

Event handlers

- Specify the logic to react to an Event
- Have access to the Event Input Parameters
- Have access to parent's scope

When a Block triggers an Event

- The Handler Screen Action is executed
- The same Screen Action can be used in multiple Handlers



MainFlow\ToDoItem	
Name	
Source Block	MainFlow\ToDoItem
LocalToDo	GetToDos.List.Current.Lo
LocalPriority	GetToDos.List.Current.Lo
(New Argument)	
Events	
Event	ToDoStarred
Handler	ToDoStarredHandler
(New Argument)	

Mobile Screen Lifecycle

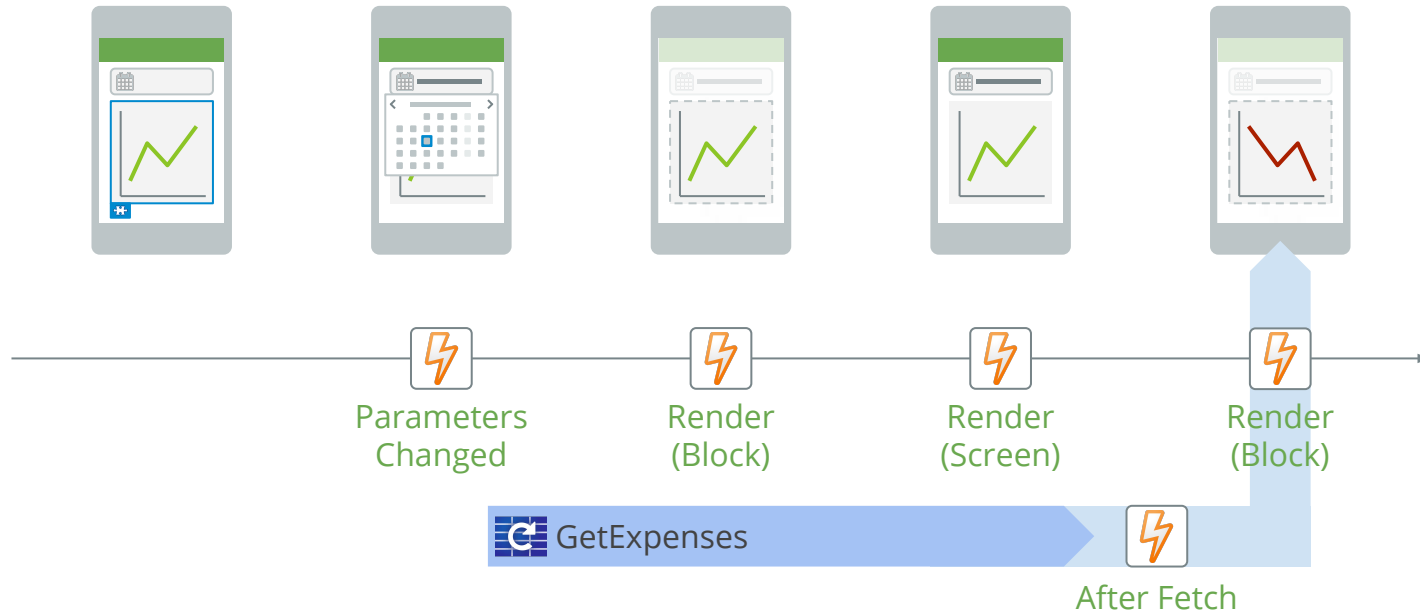


On Parameters Changed Event

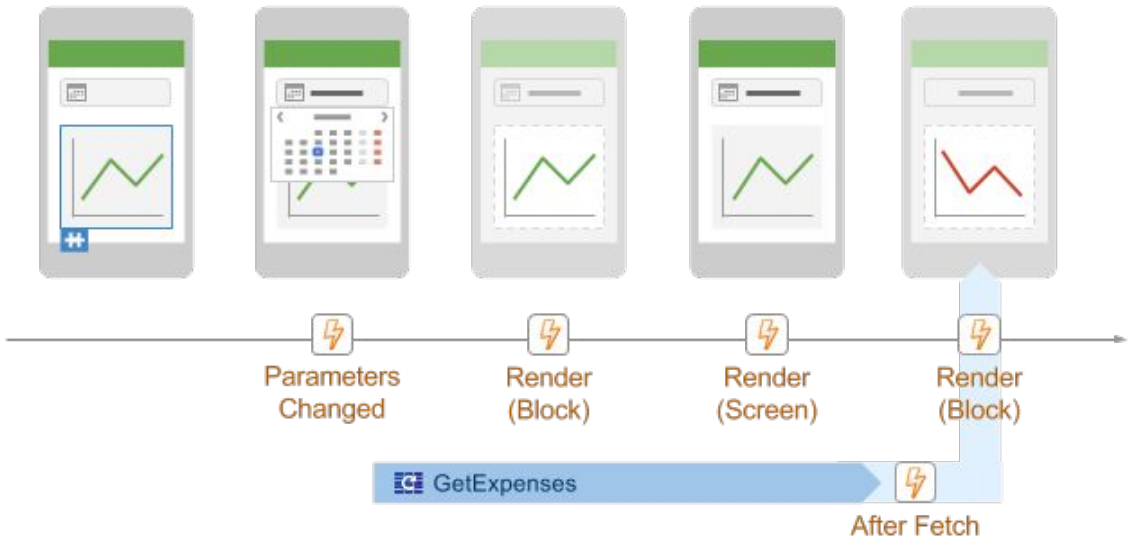
- On Parameters Changed Event
 - Only available for Blocks
 - Occurs anytime the parent changes one of the Block's Input Parameters
- Event handler action can react to the change in the input parameters value
 - Recalculate variables
 - Refresh an Aggregate or Data Action
- Changes to the Input variable **inside** the Block do not trigger the Event Handler action

ToDoItem Block	
Name	ToDoItem
Description	...
Public	No ▼
Icon	⚙️ Default Icon ▼
Events	
On Initialize	▼
On Ready	▼
On Render	▼
On Parameters Changed	▼
On Destroy	▼
Advanced	
Style Sheet	...

Changing parameters of a Block



Changing parameters of a Block



Summary

- What is a Block?
 - Defining and designing Blocks
 - Using Blocks
- Events
 - Triggering Events
 - Event Handlers
- Mobile Screen Lifecycle (Revisited)
 - On Parameters Changed Event

A city skyline at night, featuring several tall skyscrapers. The buildings are illuminated with warm lights, and there are long, bright light trails from traffic and buildings, creating a sense of motion and energy. The sky is a deep blue, and the overall atmosphere is vibrant and modern.

Blocks and Events
Thank You!