outsystems

Screen Interactions

Buttons and Links

Topics

- Interacting with the app
  - Link Widget
  - Button Widget
- Navigate Screen Lifecycle
- Submit Screen Lifecycle
  - Submit to the current Screen
- Download Widget

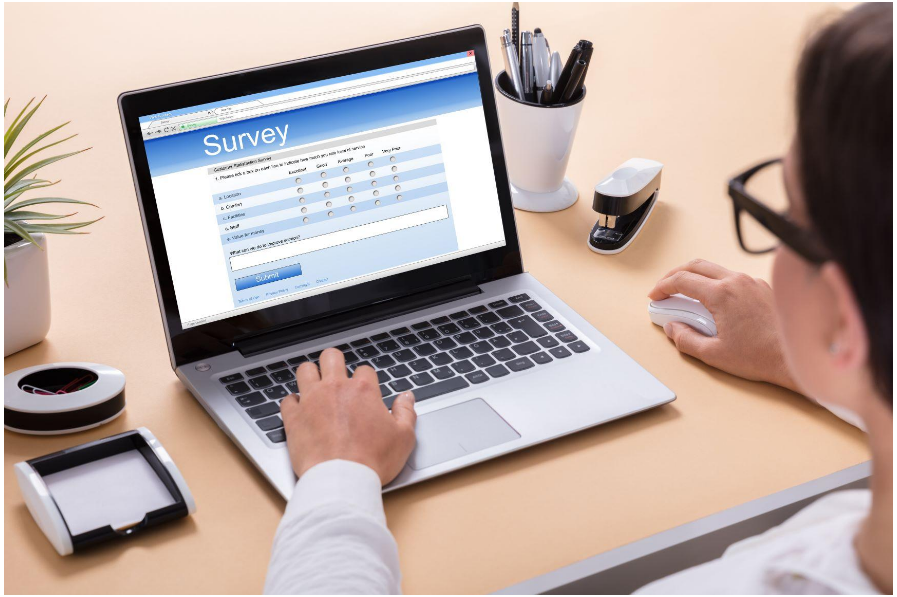
Interacting with the app

When using web applications, end-users don’t just type URLs and wait for the result

It is very common to have other forms of interactions

- Following links
- Filling in forms
- Clicking buttons

Each time the user **navigates** to a new page, or **submits** data do the server, a new request / response cycle starts



Links and Buttons

Links and Buttons have similar behaviors

Links can enclose other widgets

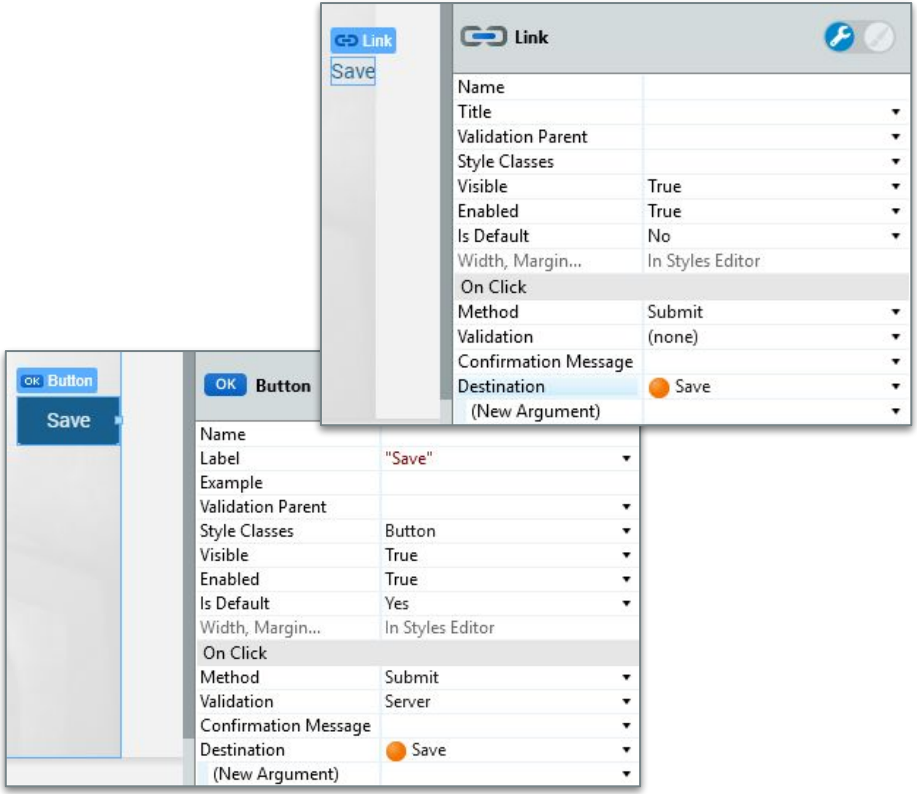
- Visually more flexible than Buttons

On Click: Either submits a request to call an Action or navigates to a Screen

Method property determines how data is submitted to the Server

Destination property can be set to a:

- Screen Action
- Destination



Link

Name	
Title	
Validation Parent	
Style Classes	
Visible	True
Enabled	True
Is Default	No
Width, Margin...	In Styles Editor
On Click	
Method	Submit
Validation	(none)
Confirmation Message	
Destination	● Save
(New Argument)	

OK Button

Name	
Label	"Save"
Example	
Validation Parent	
Style Classes	Button
Visible	True
Enabled	True
Is Default	Yes
Width, Margin...	In Styles Editor
On Click	
Method	Submit
Validation	Server
Confirmation Message	
Destination	● Save
(New Argument)	

Navigate

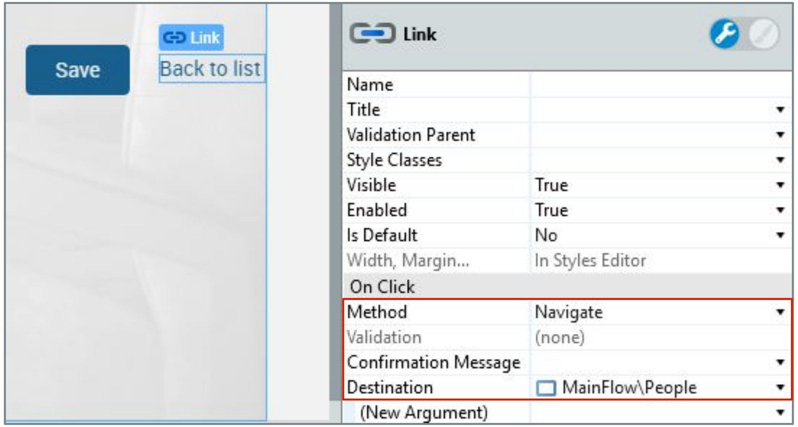
Uses HTTP GET Method

- Requests a specific resource
- Does not submit data to the server
  - Parameters are sent and displayed in the URL
  - Form Input values are not sent in the request

Browser displays the Destination URL

Link / Button Destination can be:

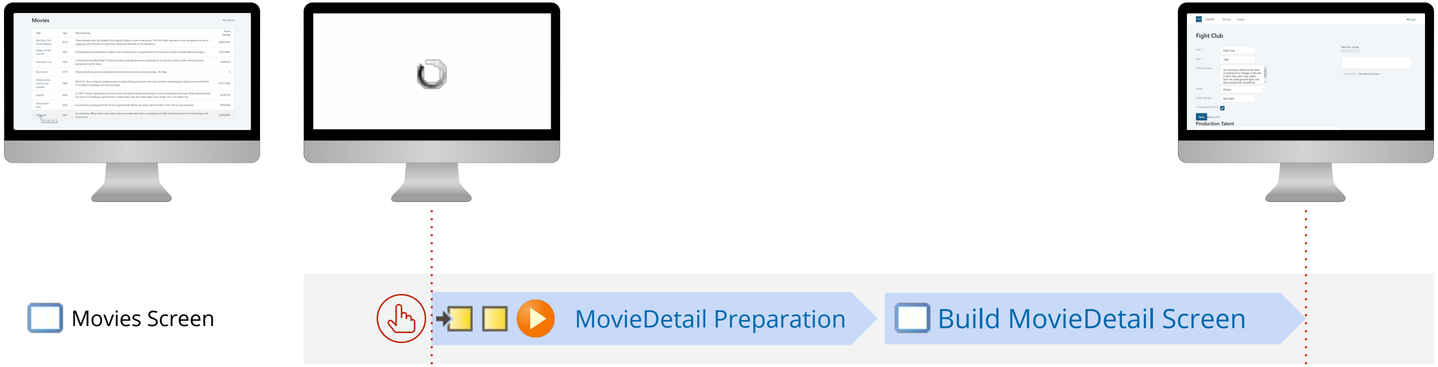
- Target Screen
- External URL



Link

Name	
Title	
Validation Parent	
Style Classes	
Visible	True
Enabled	True
Is Default	No
Width, Margin...	In Styles Editor
On Click	
Method	Navigate
Validation	(none)
Confirmation Message	
Destination	MainFlow\People
(New Argument)	

Navigate Screen Lifecycle



Movies Screen

MovieDetail Preparation

Build MovieDetail Screen

Click with **Navigate** method

MovieDetail Screen content sent to browser

Submit

Uses HTTP POST Method

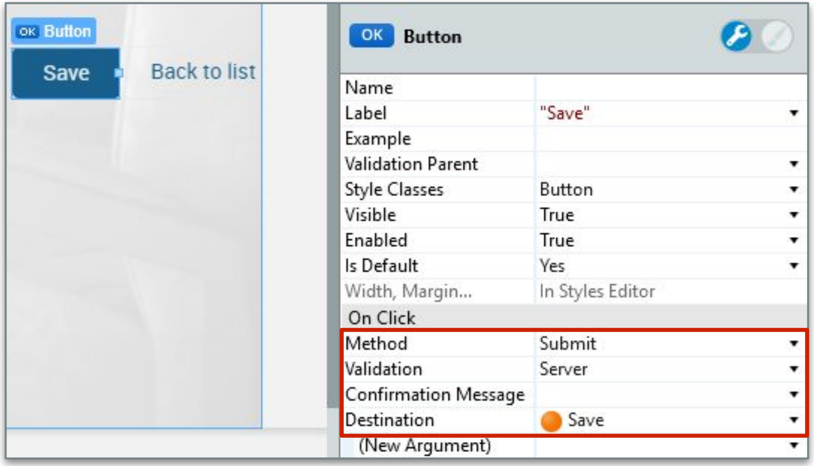
Submits data to the server in the request

- Upload a file
- Send Form Input fields data

Browser shows URL of the Screen that handles the submit request

Link / Button Destination can be:

- **Screen Action** (submits to current Screen)
- Target Screen
- External URL



Name	
Label	"Save"
Example	
Validation Parent	
Style Classes	Button
Visible	True
Enabled	True
Is Default	Yes
Width, Margin...	In Styles Editor
On Click	
Method	Submit
Validation	Server
Confirmation Message	
Destination	● Save
(New Argument)	

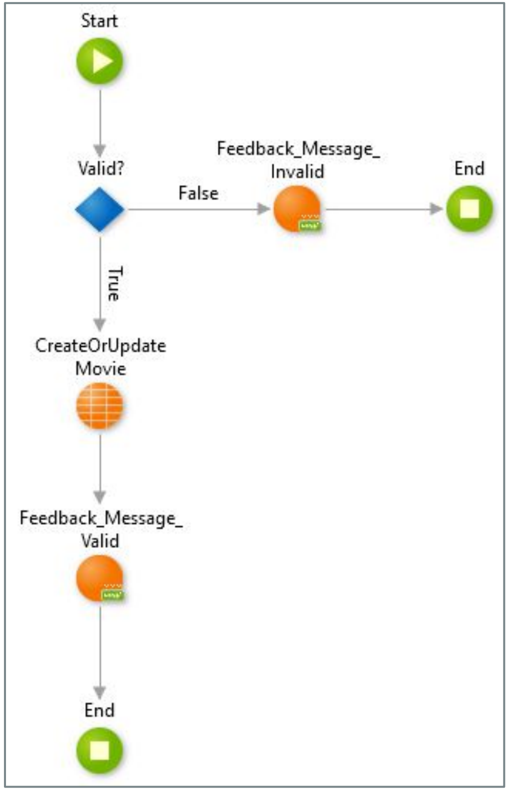
Submitting to a Screen Action

With the Submit Method, the Destination can be a Screen Action

- Runs when the Button / Link is clicked

A Screen Action has a flow of statements that are executed in order

- Has access to all elements in the Screen scope
  - Widgets
  - Preparation elements
  - Screen Variables
- The last node of the Action has impact on the Screen lifecycle

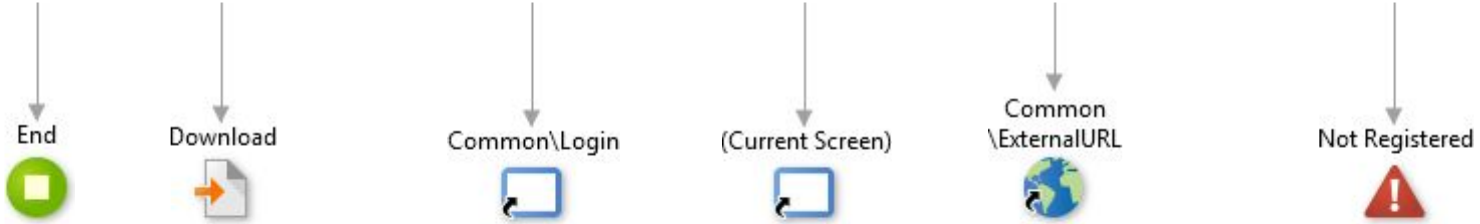


Finishing the Screen Action

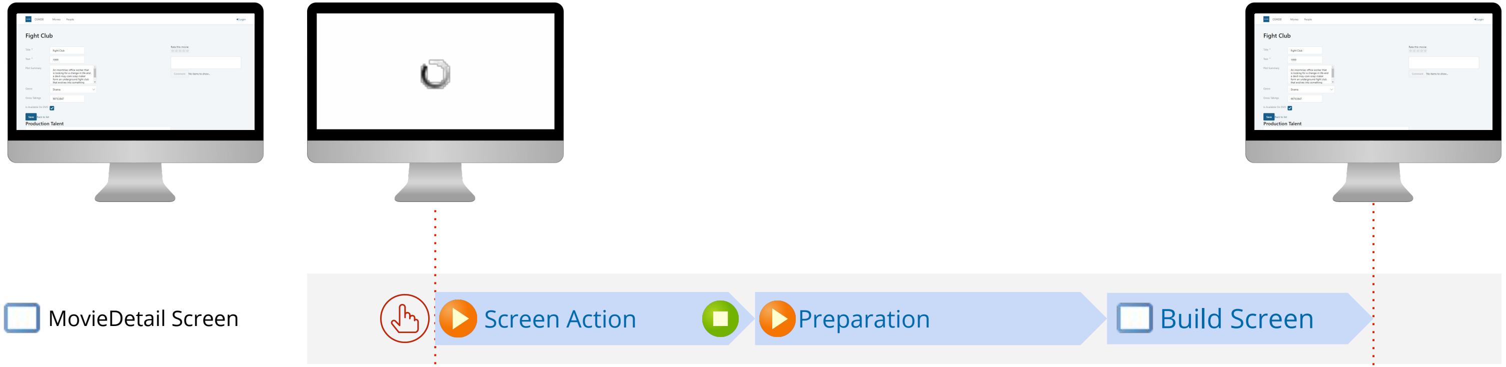
The last widget of a Screen Action flow greatly influences the lifecycle

There are several possibilities

- Stay on the same Screen
  - End, Download (of a file)
- Navigate to a Screen
  - Destination, Current Screen, External URL
- Raise an Exception



Submit Screen Lifecycle: End



MovieDetail Screen

Screen Action

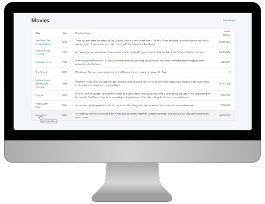
Preparation

Build Screen

Click with **Submit** method

Screen content is sent to the browser

Submit Screen Lifecycle: Destination

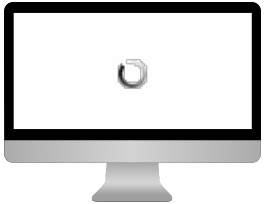


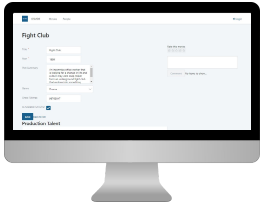
Movies

New Movie

Title	Year	Plot Summary	Gross Takings
Star Wars: The Force Awakens	2015	Three decades after the defeat of the Galactic Empire, a new threat arises. The First Order attempts to rule the galaxy and only a ragtag group of heroes can stop them, along with the help of the Resistance.	936627416
Raiders of the Lost Ark	1981	Archaeologist and adventurer Indiana Jones is hired by the US government to find the Ark of the Covenant before the Nazis.	242374454
Schindler's List	1993	In Poland during World War II, Oskar Schindler gradually becomes concerned for his Jewish workforce after witnessing their persecution by the Nazis.	16439233
Toy Story 4	2019	Woody and Buzz go on an adventure to find the one toy who was given away... Bo Peep	0
Indiana Jones and the Last Crusade	1989	When Dr. Henry Jones Sr. suddenly goes missing while pursuing the Holy Grail, eminent archaeologist Indiana Jones must follow in his father's footsteps and stop the Nazis.	197171806
Capote	2005	In 1959, Truman Capote learns of the murder of a Kansas family and decides to write a book about the case. While researching for his novel In Cold Blood, Capote forms a relationship with one of the killers, Perry Smith, who is on death row.	28747570
Along Came Polly	2004	A buttoned up newlywed finds his too organized life falling into chaos when he falls in love with an old classmate.	87856565
Fight Club	2001	An insomniac office worker and a devil-may-care soapmaker form an underground fight club that evolves into something much, much more.	100000900

Edit 'Fight Club'





Fight Club

Title * Fight Club

Year * 1999

Plot Summary An insomniac office worker that is looking for a change in life and a devil-may-care soap maker form an underground fight club that evolves into something

Genre Drama

Gross Takings 98763847

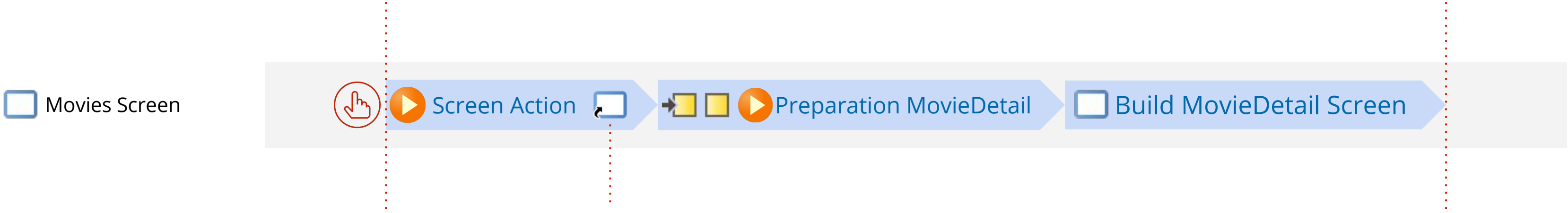
Is Available On DVD ☑

Production Talent

Rate this movie:

☆☆☆☆☆

No items to show...



Click with **Submit** method

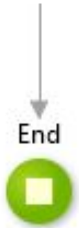
Destination to MovieDetail Screen

MovieDetail Screen content is sent to the browser

Submit Method: End *vs.* (Current Screen)

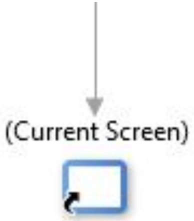
The application stays in the same Screen in both cases:

- Preparation of the Screen runs
- Entire Screen will be rebuilt



What’s the difference?

- End Node
  - Values of Screen Variables and Widgets are preserved
- Destination (Current Screen)
  - Values of Screen Variables and Widgets are reset to their default values



Download

Allows the end-user to download a file

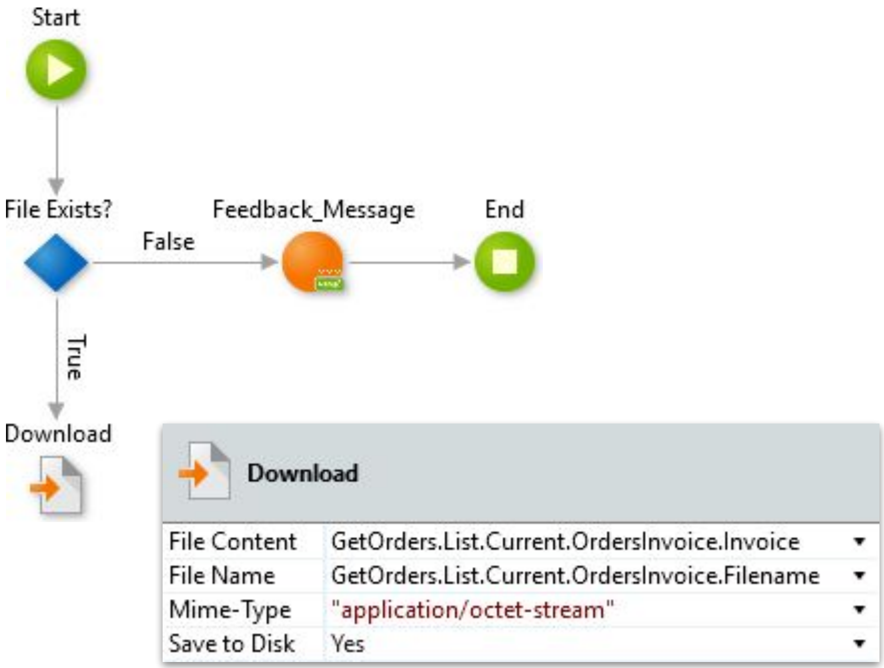
- Can be saved

Download widget properties

- File Content: Expect binary data
- File Name: Text of the file name
- Save to Disk: Or just display the file

Ends the Action Flow

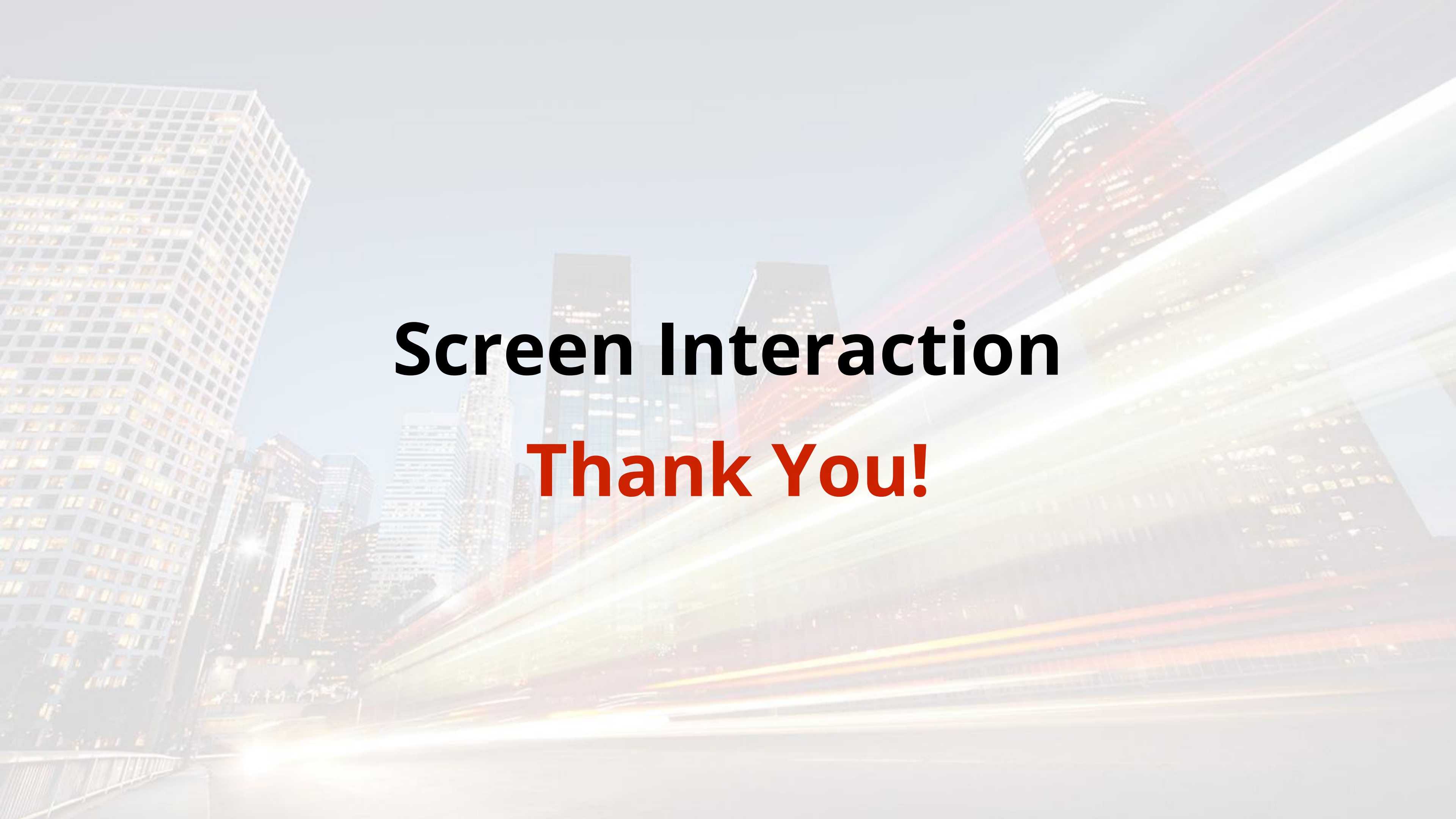
- There can be no other statements after it
- Preparation does not run again



File Content	GetOrders.List.Current.OrdersInvoice.Invoice
File Name	GetOrders.List.Current.OrdersInvoice.Filename
Mime-Type	"application/octet-stream"
Save to Disk	Yes

Summary

- Interacting with the app
    - Link Widget
    - Button Widget
- Navigate Screen Lifecycle
- Submit Screen Lifecycle
    - Submit to the current Screen
- Download Widget



Screen Interaction

Thank You!