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Basic Screen Development

Topics

- Web Screens
    - Screen Templates
    - Screen Content
    - Screen Variables

- Fetching Data
    - Preparation

- Screen Lifecycle

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OutSystems Web Applications

OutSystems Web applications use the HTTP request / response protocol
- User makes a request in a browser
- Server replies with an HTTP response

End-users interact with the applications through web browser's user interface
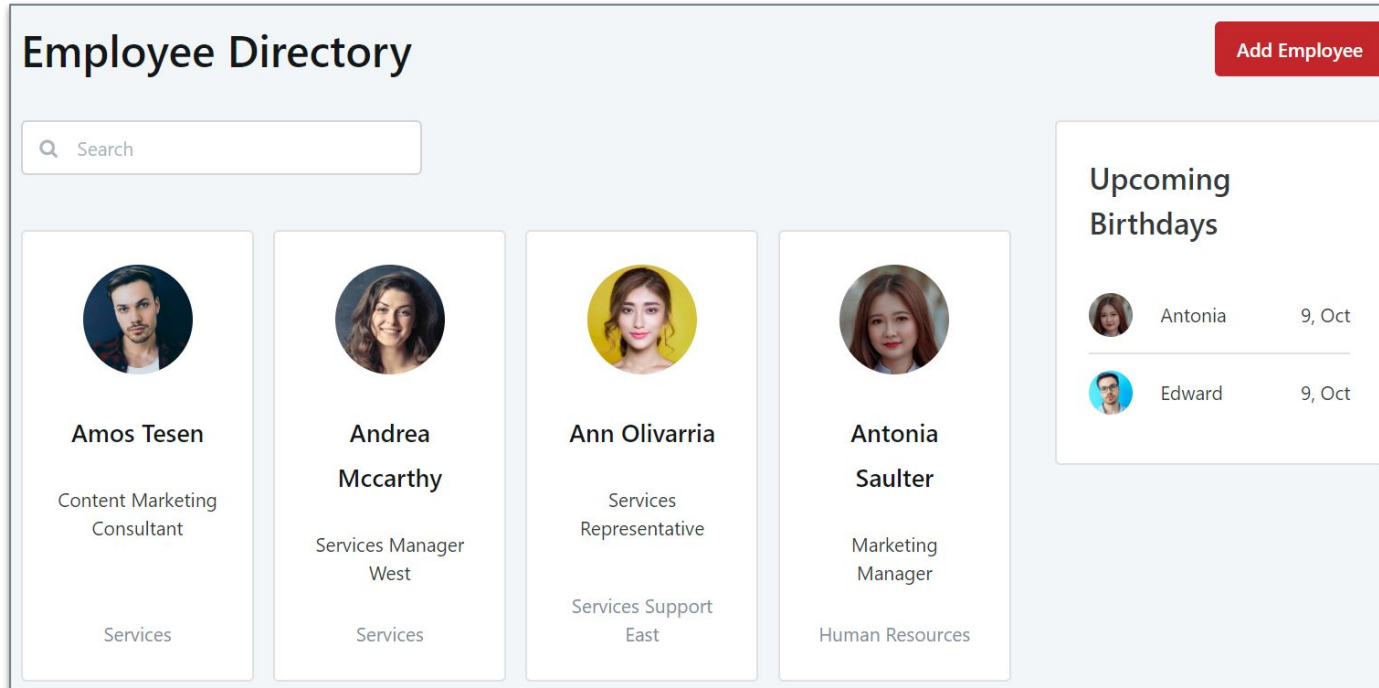- Interact with the HTML page in the browser
- Make new requests and get new responses

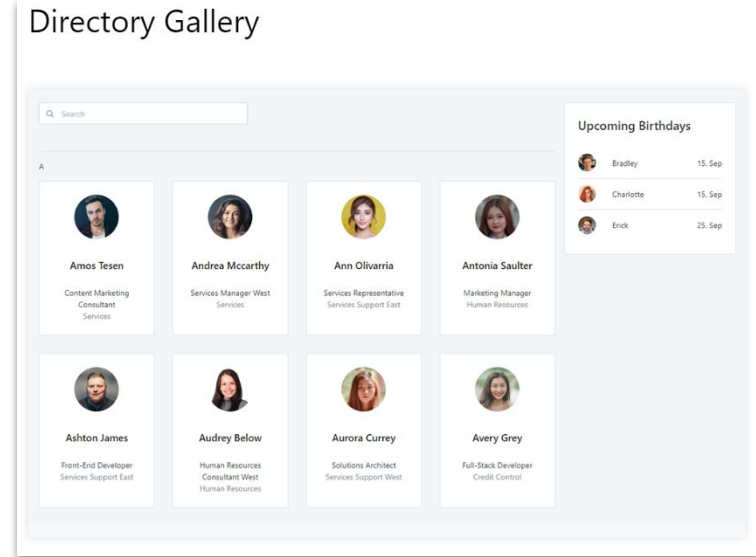Web Screens are the app's user interface. They are a crucial part of any good app!

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Screens

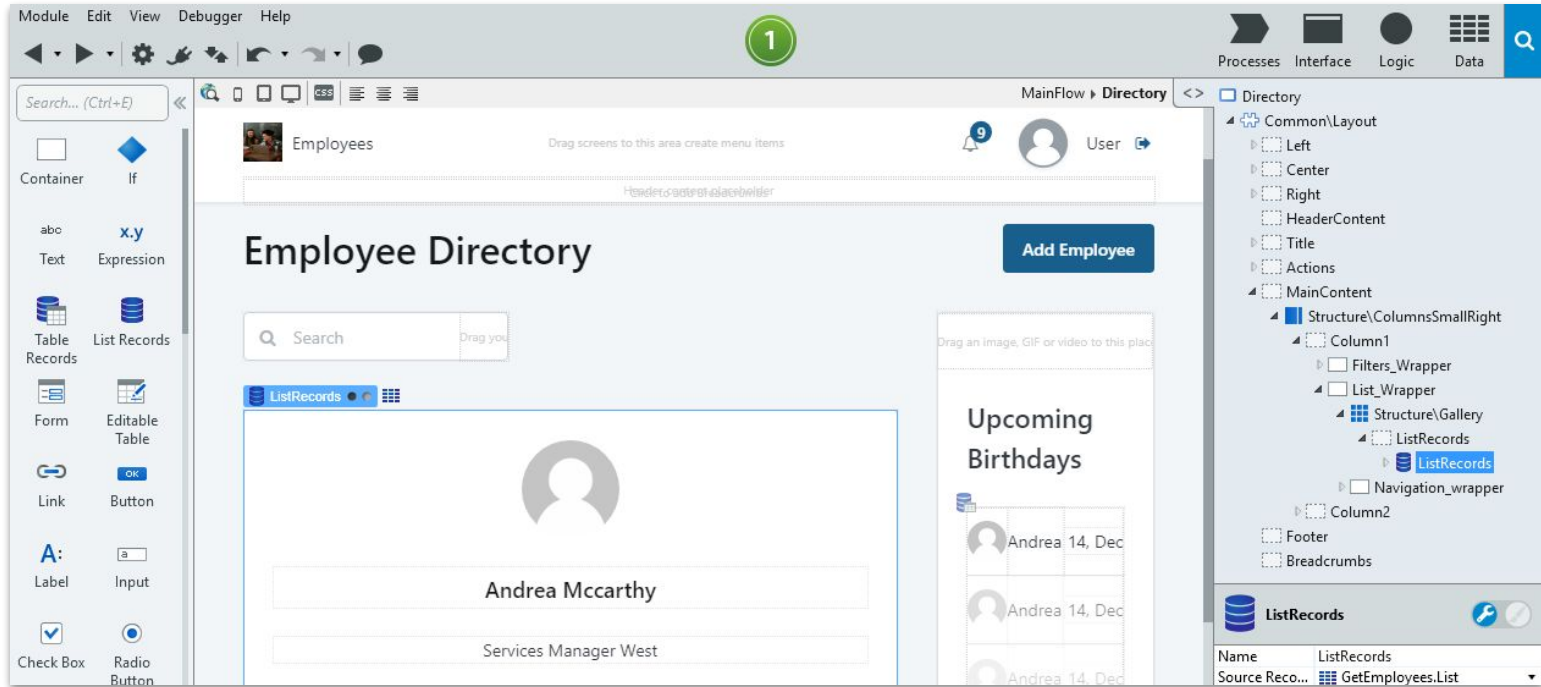OutSystems Screens define the user interface that end-users interact with

Screen Templates

New Screens can be **Empty** or can be created based on an existing **Template**

Empty

Directory Gallery

Search

A

Amos Tesen
Content Marketing Consultant
Services

Andrea Mccarthy
Services Manager West
Services

Ann Olivarria
Services Representative
Services Support East

Antonia Saulter
Marketing Manager
Human Resources

Ashton James
Front-End Developer
Services Support East

Audrey Below
Human Resources Consultant West
Human Resources

Aurora Currey
Solutions Architect
Services Support West

Avery Grey
Full-Stack Developer
Credit Control

Upcoming Birthdays

Bradley   15. Sep
Charlotte   15. Sep
Erick   25. Sep

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Screen Content

Screens are defined by the hierarchy of the various elements that make them up

Screen Variables

What is displayed to the end-user depends on their request
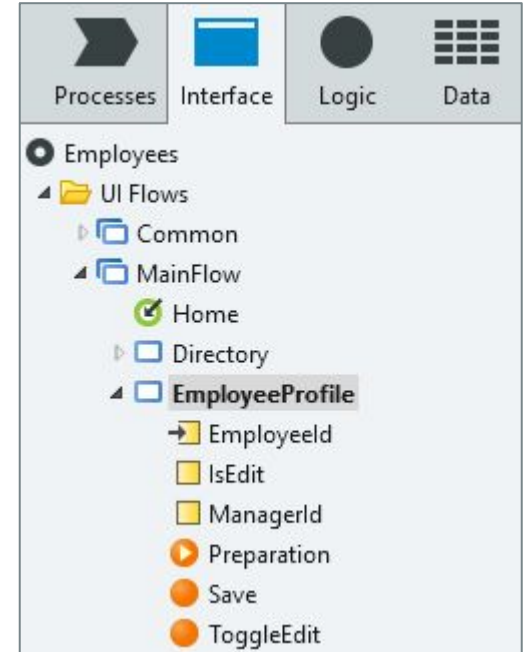
Screens can have **Input Variables**
- Parameters that are passed in with the request for a Screen
- Mandatory input variables must have values assigned to them

Screens can also have **Local Variables**
- Initialized in the scope of the Screen

These variables exist within the scope of the Screen
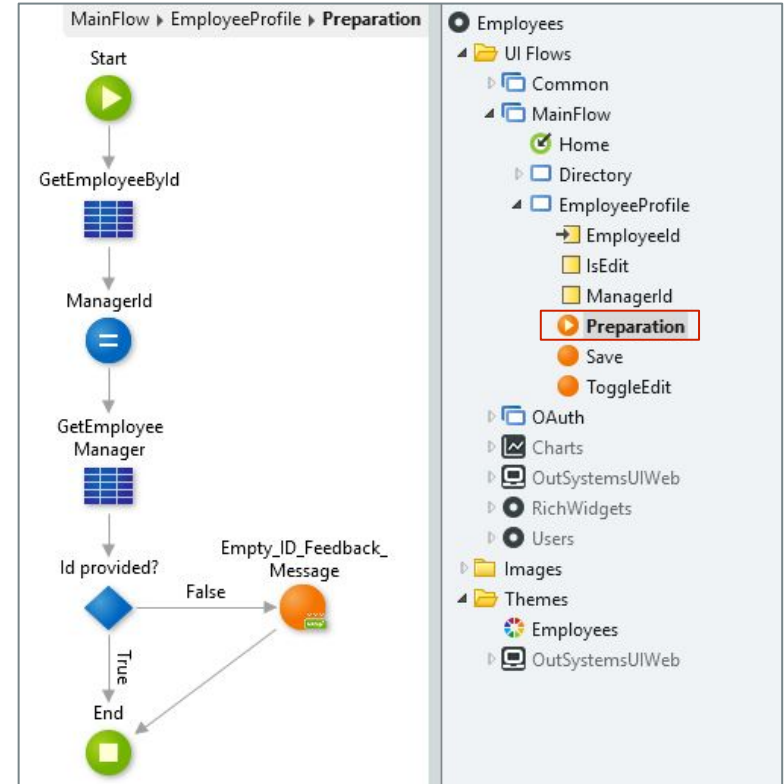The Scope of the Screen is its complete lifecycle

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Fetching Data: Preparation

Screens may need to display "external" data

The **Preparation** is a special **Screen Action** which has access to the Screen Inputs and Local Variables and can access other data

Data needed to help render the Screen should be fetched in the Preparation

- Data can be fetched from multiple sources
  - Databases: Aggregates & SQL
  - Integrations: Web Services, REST, etc.
- Data becomes available for use in the Screen
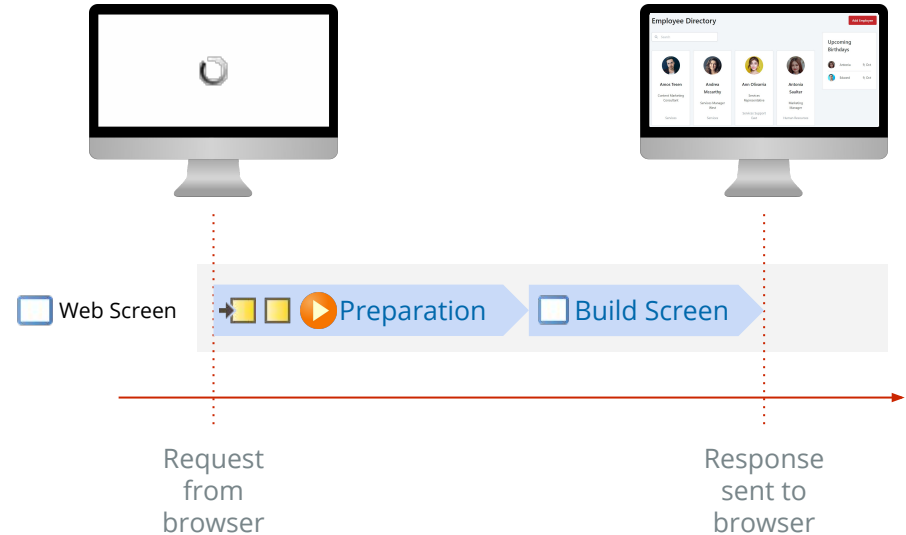
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Screen Lifecycle

When accessing a Screen, it all starts with a
request from the browser

1. Mandatory Input Parameters are set to the
   value sent in the request
2. Empty Non-mandatory Input Parameters and
   Local Variables are set to default values
3. Preparation runs
4. Screen is built (rendered) from top to bottom

When the response gets to the browser, it is
displayed to the user

Web Screen   Preparation   Build Screen

Request
from
browser

Response
sent to
browser

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Summary

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  - Screen Content
  - Screen Variables

- Fetching Data
  - Preparation

- Screen Lifecycle

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Thank You!