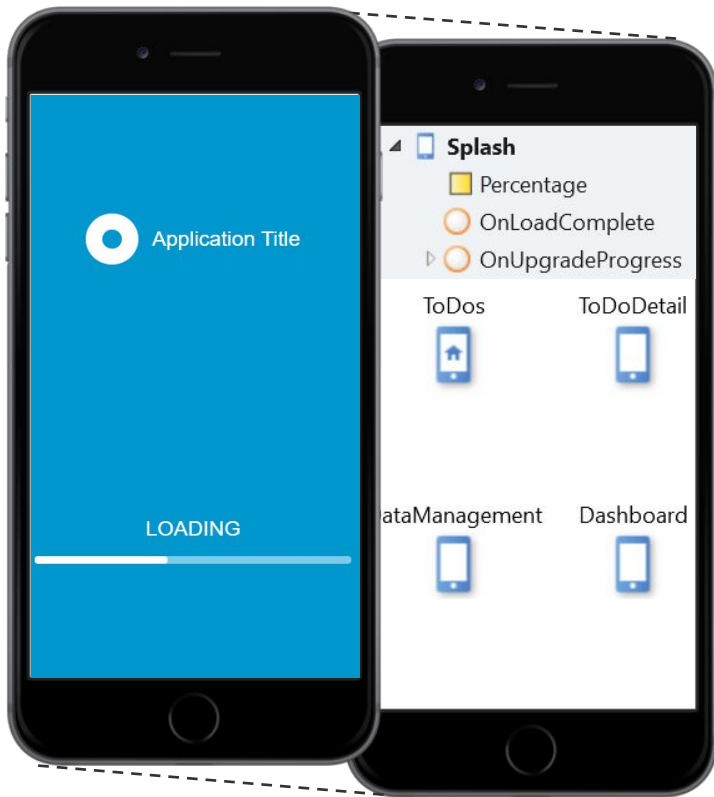# outsystems

Mobile Screens

Topics

- OutSystems Mobile Apps
  - Single Page Applications
  - Runtime Architecture
- Screens
  - Screen Templates
  - Screen Content
- Screen Variables
- Fetching Data to Display on Screen
- Client-side Logic

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OutSystems Mobile Apps

- OutSystems mobile apps can be installed and run on iOS and Android devices

- Generated with optimized JavaScript application at its core
  - Single Page Applications
  - Screen logic runs on the client side

- Requests to server are only made when necessary
  - Data, Server-side logic (.NET)
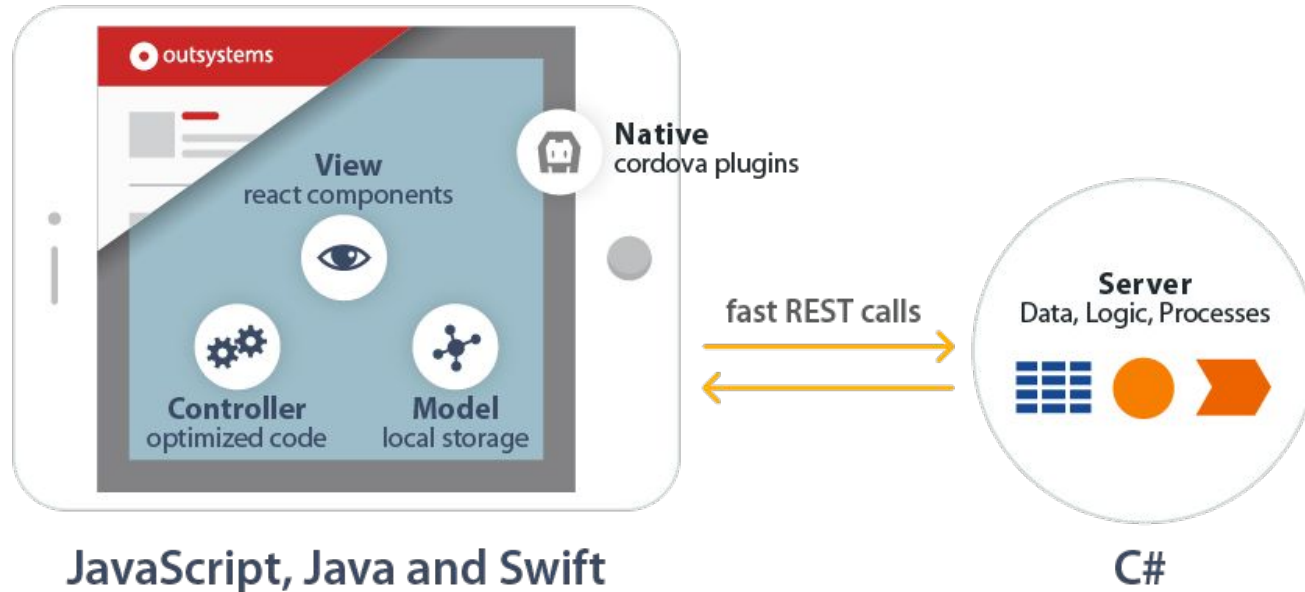 - Automatically created REST Calls

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Single Page Applications

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Runtime Architecture

Cross-Platform, Standards-Based

View
react components

Native
cordova plugins

Controller
optimized code

Model
local storage

fast REST calls

Server
Data, Logic, Processes

JavaScript, Java and Swift
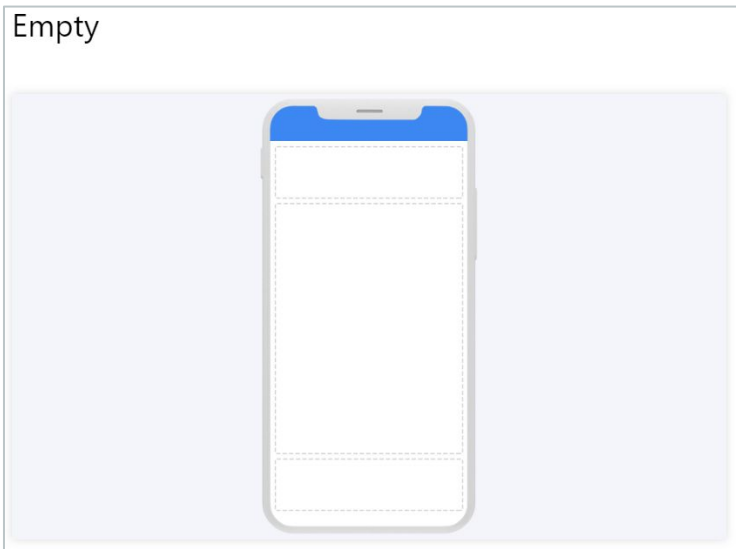
C#

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Screens

Screens define the user interface end-users interact with
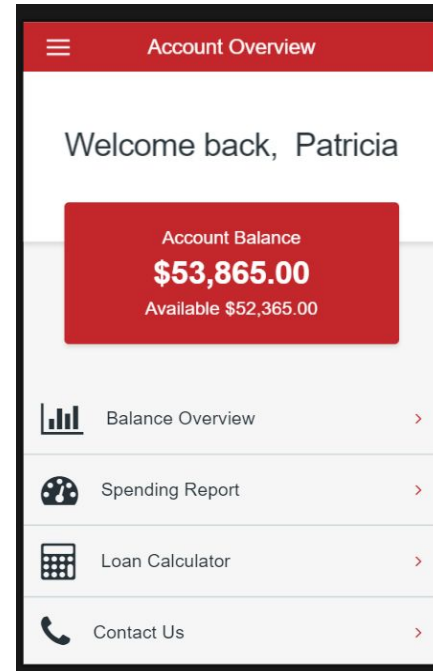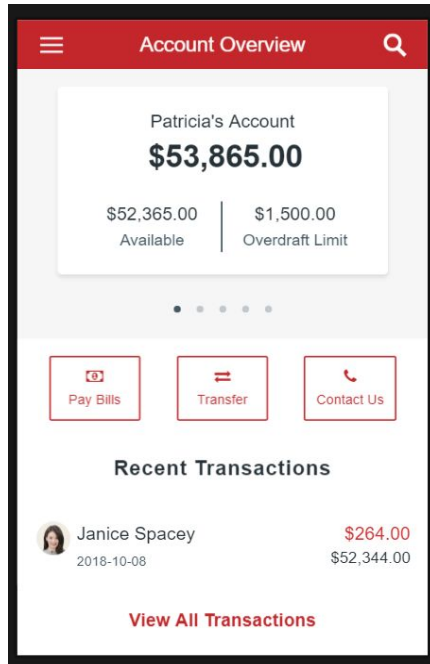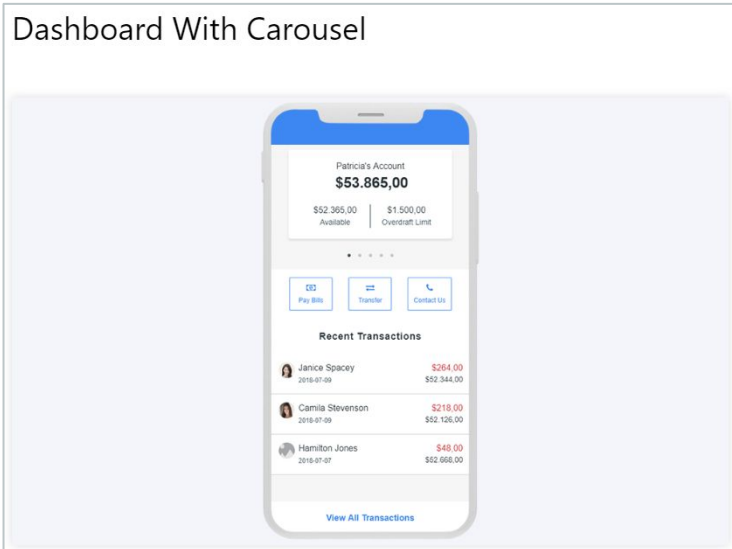
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Screen Templates

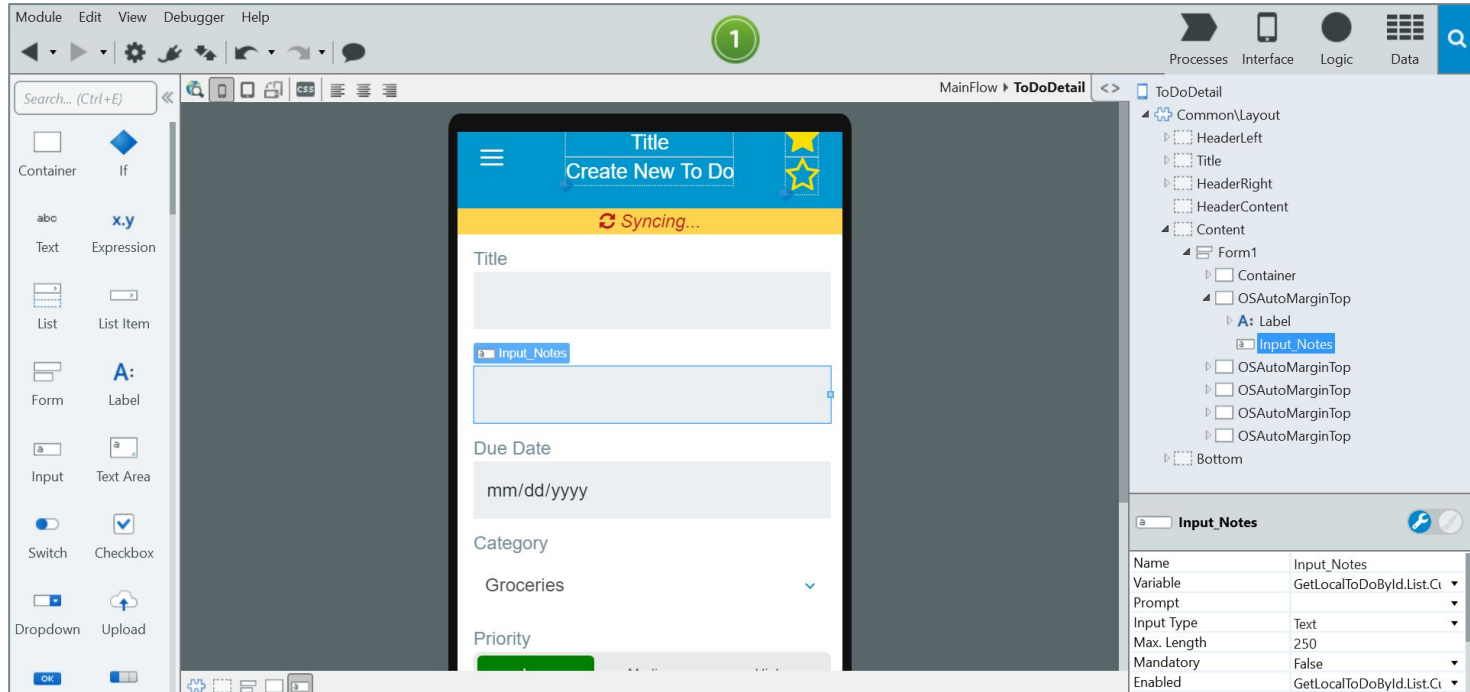Screens can be Empty or based on a Template

Empty

Dashboard With Carousel

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Screen Content

OutSystems Screens are built based on widgets (UI elements)

Screen Variables

- What is displayed to the end-user can depend on data

- Some data can come be passed to the Screen
  - Input Parameters
  - When transitioning to a new Screen, a value must be passed to mandatory Inputs

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

- These variables only exist in the scope of the Screen
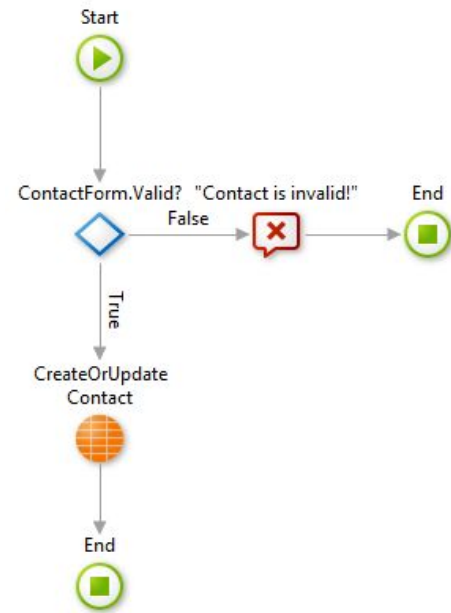
outsystems
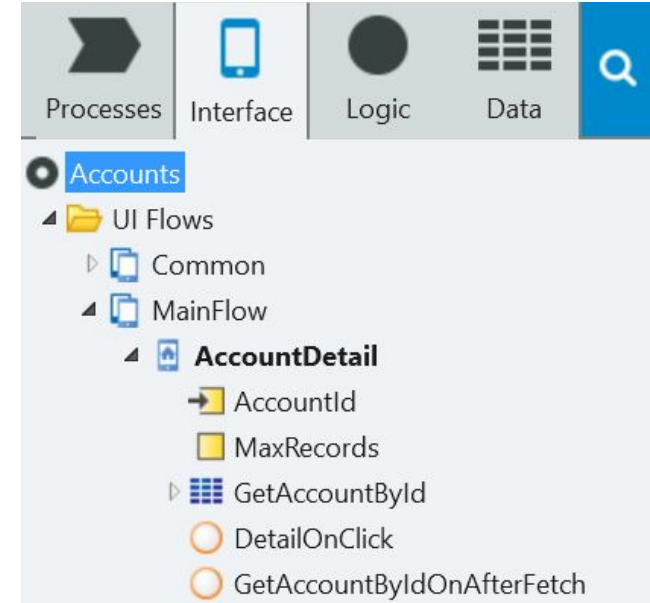
Fetching Data to Display on Screen

- Screens may need to display data available elsewhere

- Aggregates in the Screen
  - Database or Local Storage Entities

- Data Action for advanced cases
  - Server Action
  - Output Data Type by default is Text, but can be changed

- Queries performed asynchronously and in parallel

- Screen Lifecycle Event
  - On After Fetch
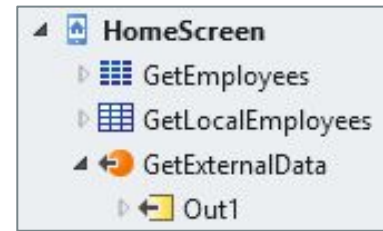
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Client-side Logic

- Screen Actions run client-side logic in the scope of the Screen
  - Triggered within the Screen

- Client Actions
  - Visually modeled logic and data
  - Easy to call server-side logic
    - Drag & drop
    - REST API generated automatically

- Responsiveness
  - UI elements react to data changes
    - Updates occur immediately
  - UI responds while calling server

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Summary

- OutSystems Mobile Apps
  - Single Page Applications
  - Runtime Architecture
- Screens
  - Screen Templates
  - Screen Content
- Screen Variables
- Fetching Data to Display on Screen
- Client-side Logic

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Mobile Screens

Thank You!