



Web Applications in OutSystems

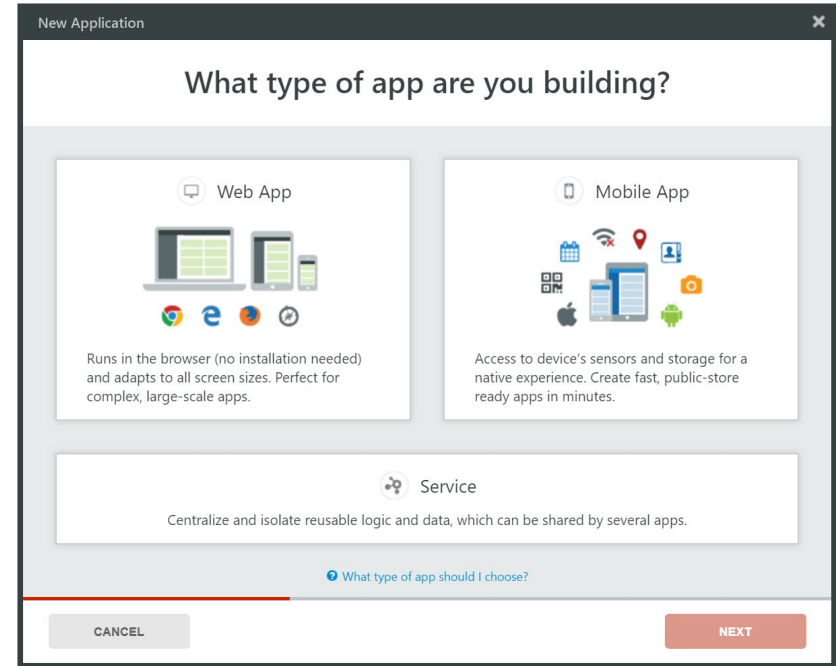


Topics

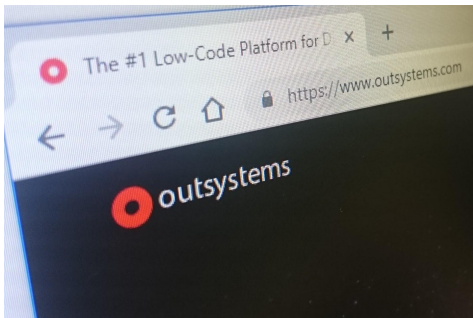
- Web Applications in OutSystems
 - Creating a web application
 - Application modules
- Modular Programming with OutSystems
 - Consumer and producer modules

Application types

- Applications can be...
 - Web apps
 - Mobile apps
 - Service apps
- Web apps and Mobile apps have different programming models
- Applications are the deployment unit in OutSystems
 - Apps can be versioned & tagged for easier management



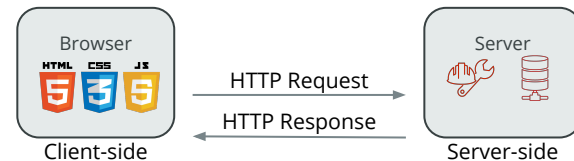
Web Applications in OutSystems



Run in a browser

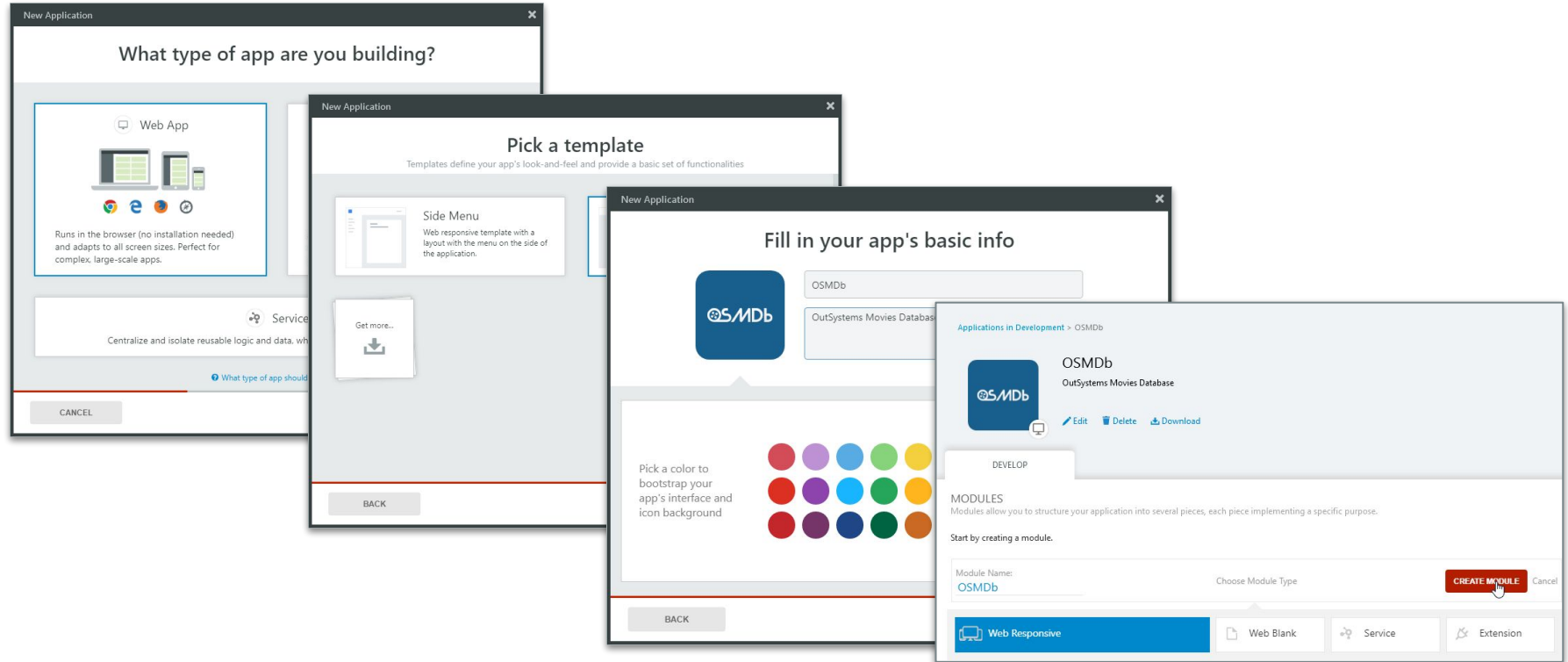


Are Responsive:
adjust the layout depending
on device type & screen size



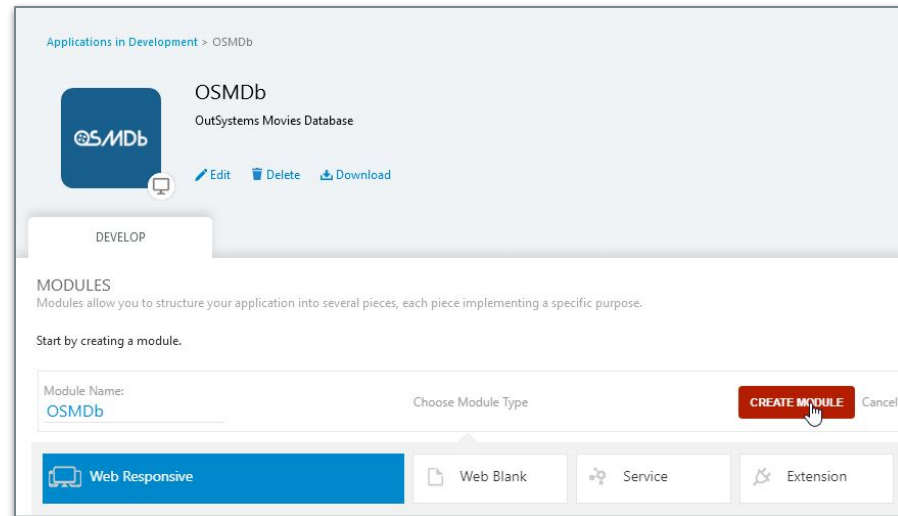
**Request - Response
pattern**

Creating a Web Application



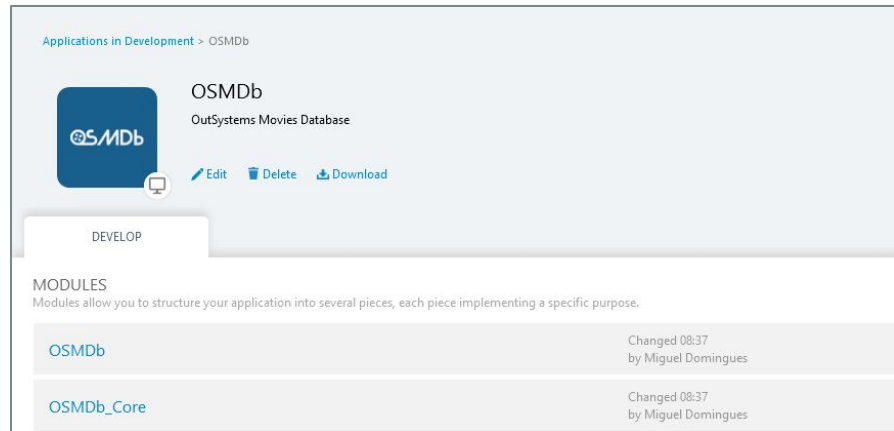
Web Applications: Module types

- Applications should have at least one module
- Web application modules can be:
 - Web Responsive
 - Web Blank
 - Service
 - Extension



Web Applications: Modules

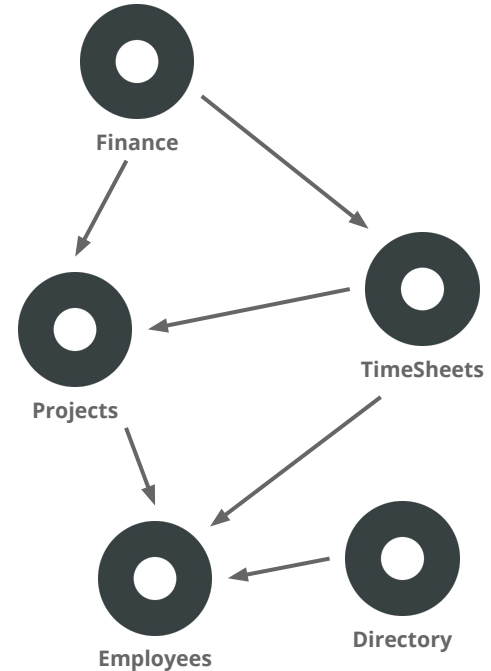
- Applications can have one or more modules
- Modules are where developers:
 - Create the data model
 - Define business logic
 - Build web pages



Modular Programming

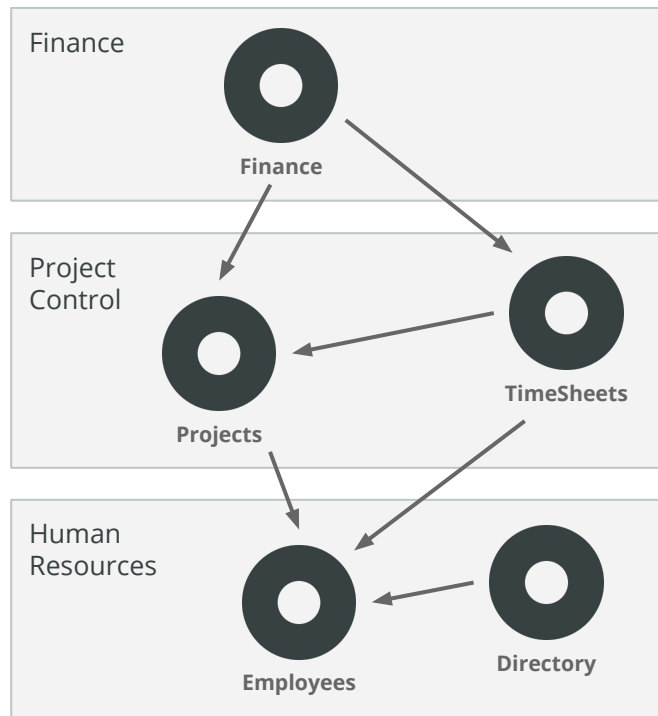
Software design technique that allows each module to...

- **Encapsulate** everything necessary to execute **one aspect** of functionality
- Separate functionality by **independent** and (potentially) **replaceable** pieces of code



Modular Programming in OutSystems

- An **Application** groups a set of related **modules**
- Modules can share elements with other modules
 - **Producers:** Modules that publicly expose and share features
 - **Consumers:** Modules that use public features from other modules
- Producers and Consumers can be in different applications



Producer

Publicly exposes and shares features

The following elements can be set to public:

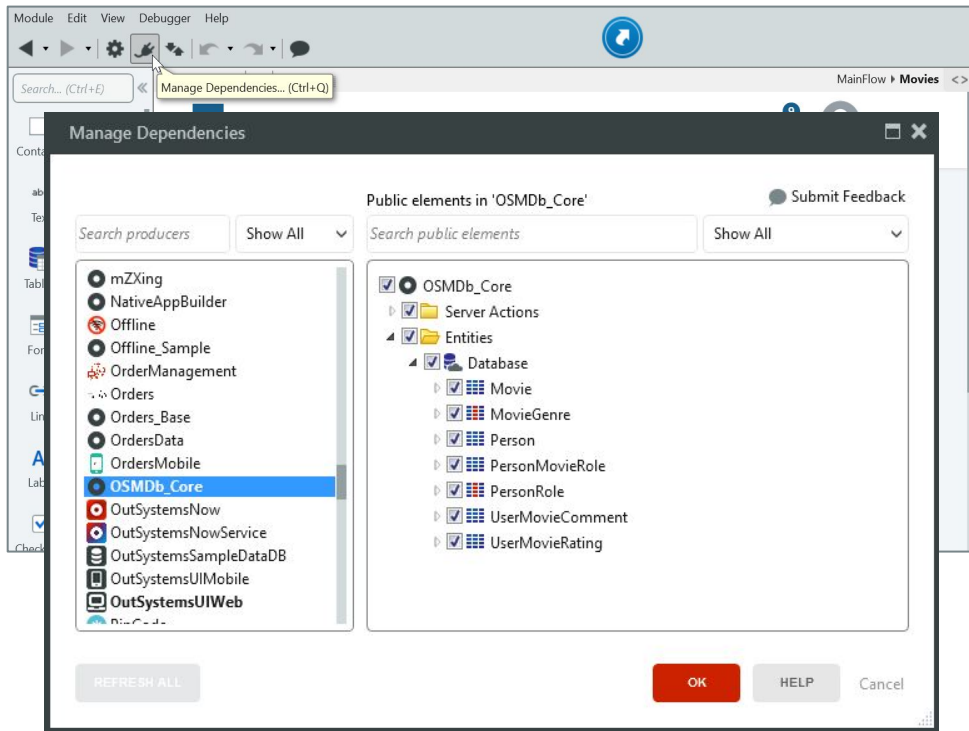
- Data
 - Entities
 - Structures
- Logic
 - Server Actions
 - Roles
- Interface
 - Web Blocks, Web Screens
 - Images
 - Themes
- Processes
 - (Business) Processes

The screenshot shows the OutSystems Studio interface. The top navigation bar includes 'Processes', 'Interface', 'Logic', and 'Data'. The 'Data' tab is selected, showing a tree view of the 'OSMDB_Core' project. The tree view includes 'Entity Diagrams' (containing 'MoviesDB Diagram') and 'Entities' (containing 'Database' and 'Movie'). The 'Movie' entity is selected, and its configuration is displayed in a table below. The table has columns for 'Name' and 'Value'. The 'Public' property is highlighted with a red box and set to 'Yes'.

Name	Value
Description	...
Public	Yes
Expose Read...	No
Indexes	...
More...	...

Consumer

- Reuses public elements from producers
- Manage Dependencies
 - Modules with public features are displayed
 - Select the desired elements to be able to use them (consume)
- Elements consumed become available in the module



Summary

- Web Applications in OutSystems
 - Creating a web application
 - Application modules
- Modular Programming with OutSystems
 - Consumer and producer modules



Web Applications in OutSystems
Thank You!