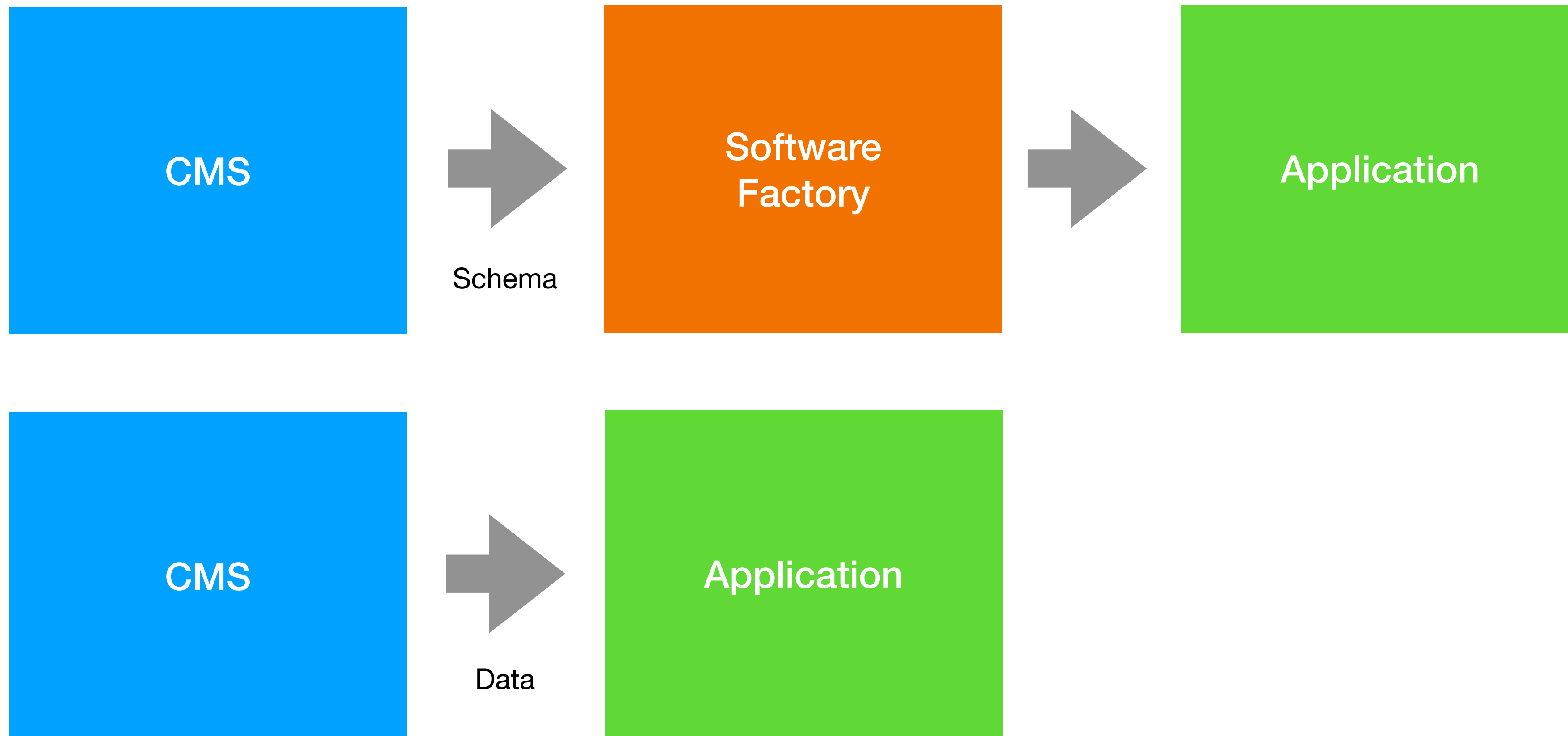


CMS driven Software Factories

Generating application infrastructure with customisations

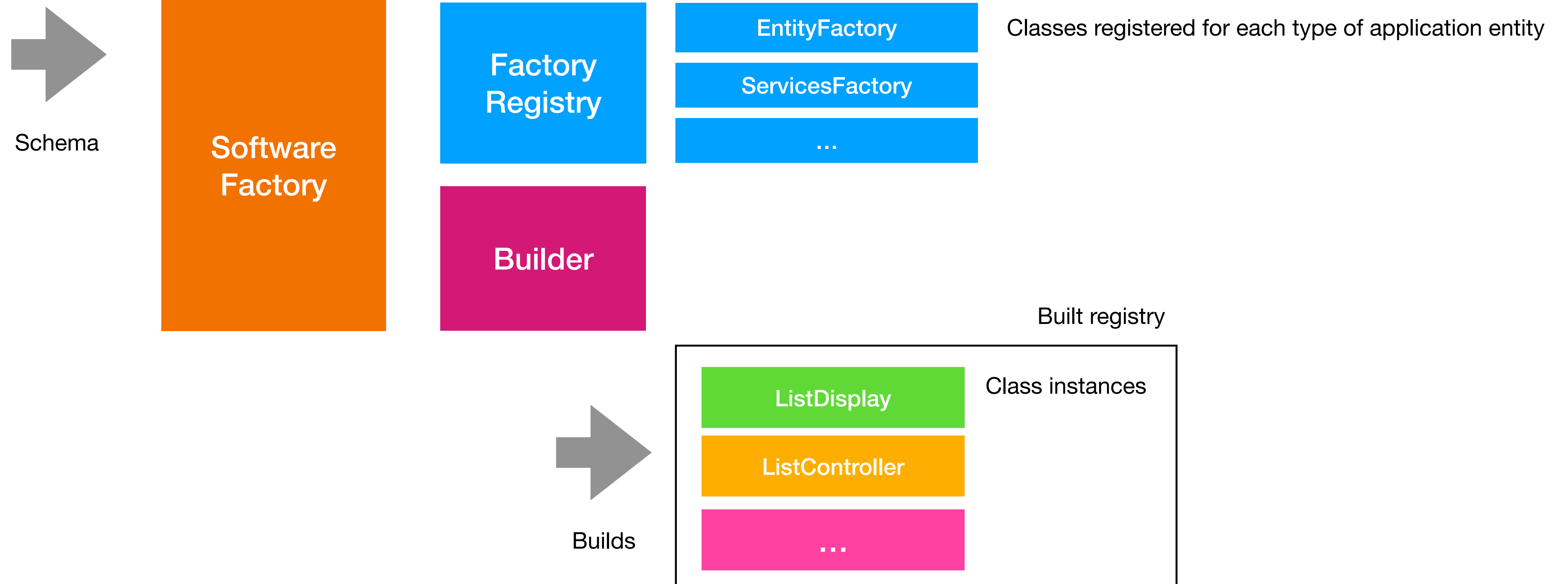
Kristian Mandrup

Runtime Application generation and Assembly

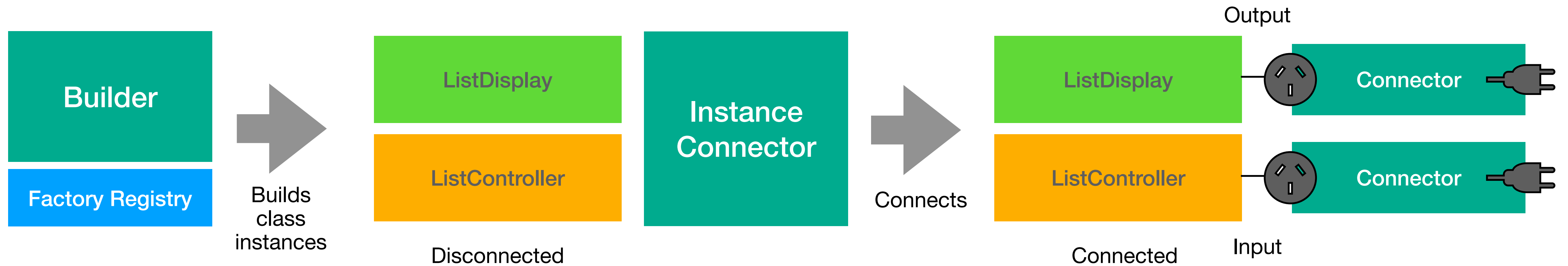
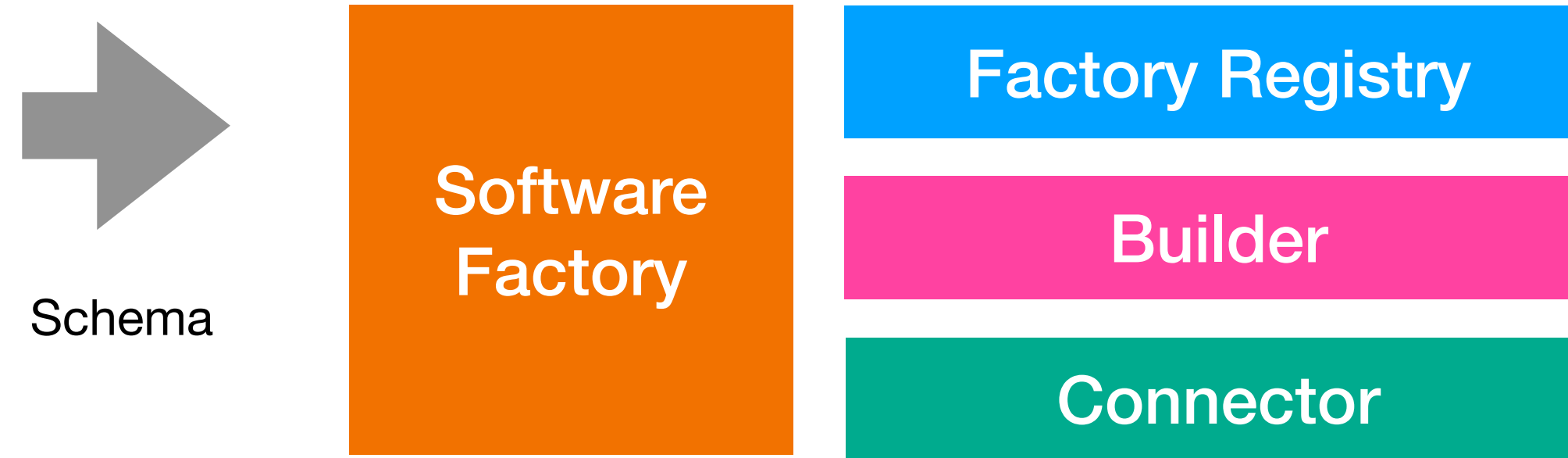


Application Factory

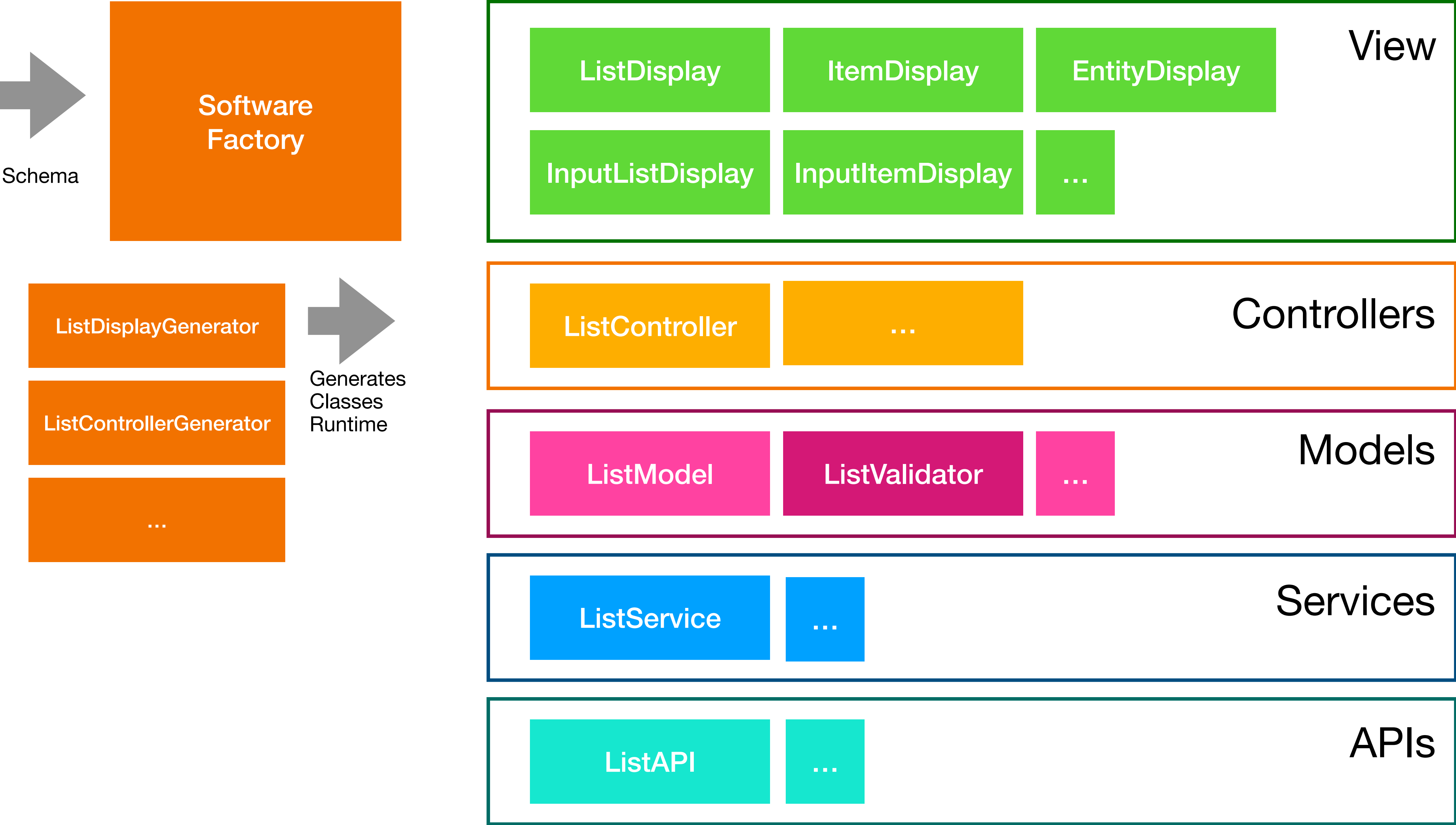
Application Factory



Application Factory

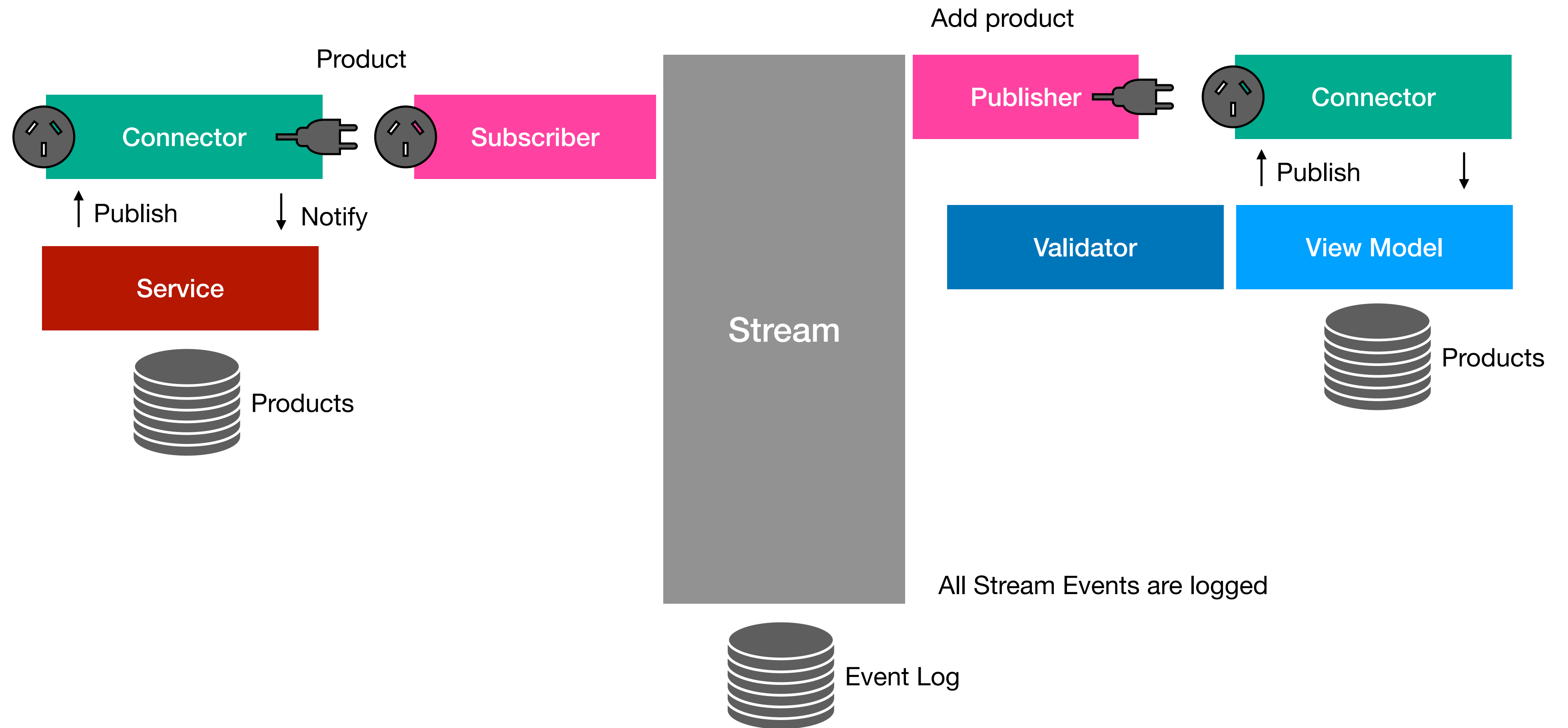


Entity Application outputs

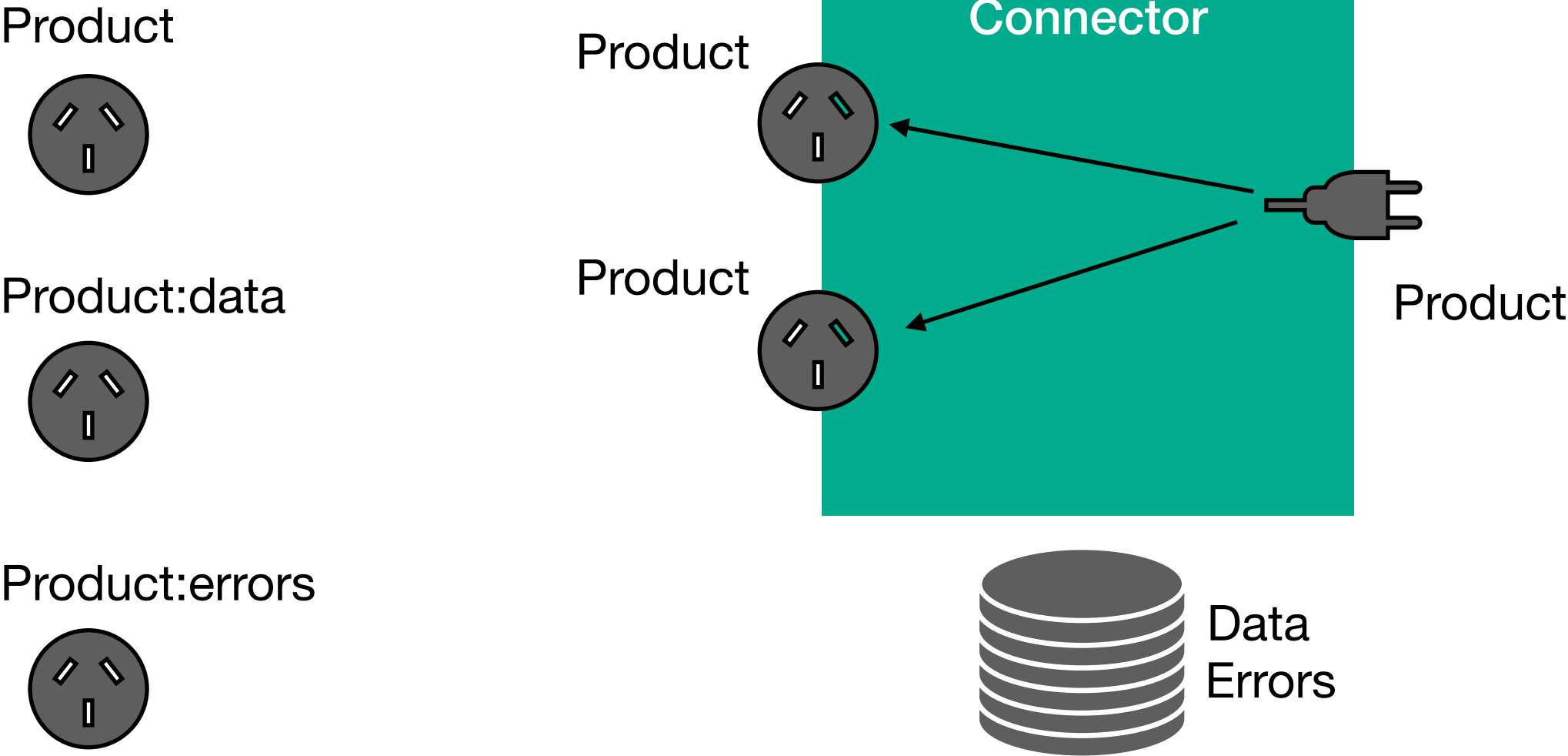


Application Data Flow

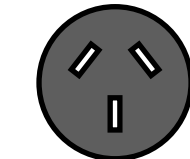
Subscribing and Connecting to Stream Data



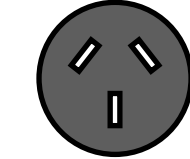
Connector in Detail



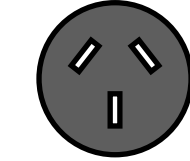
Product



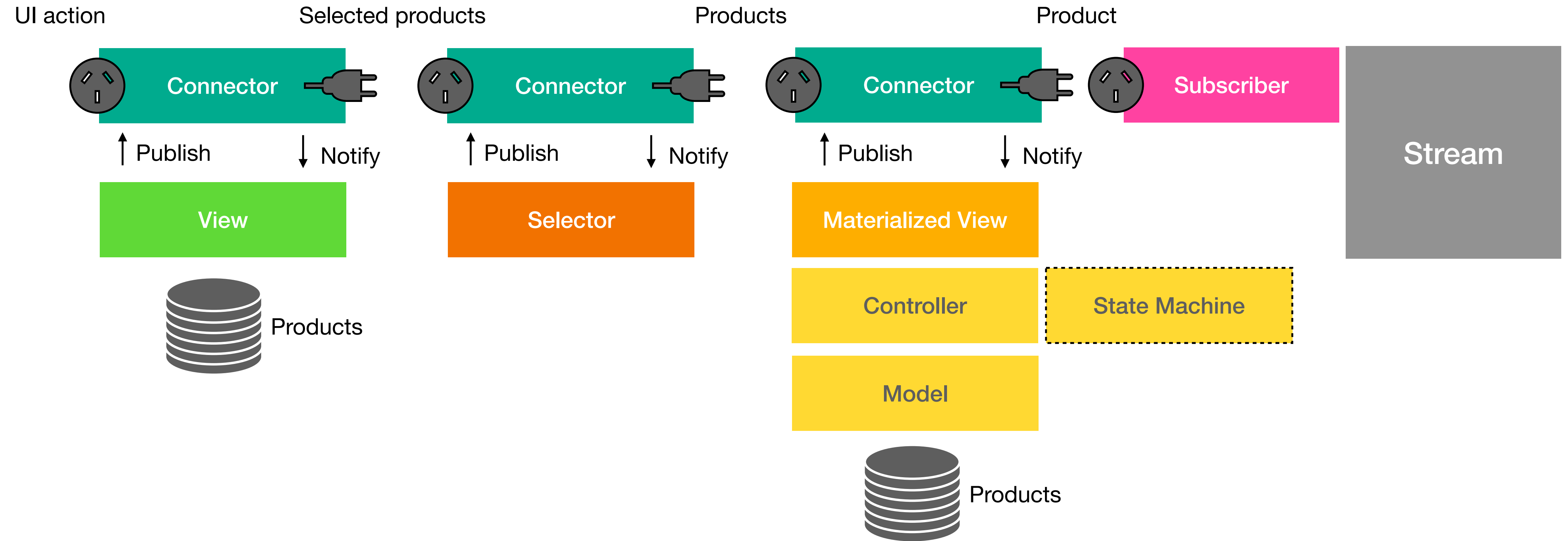
Product:data



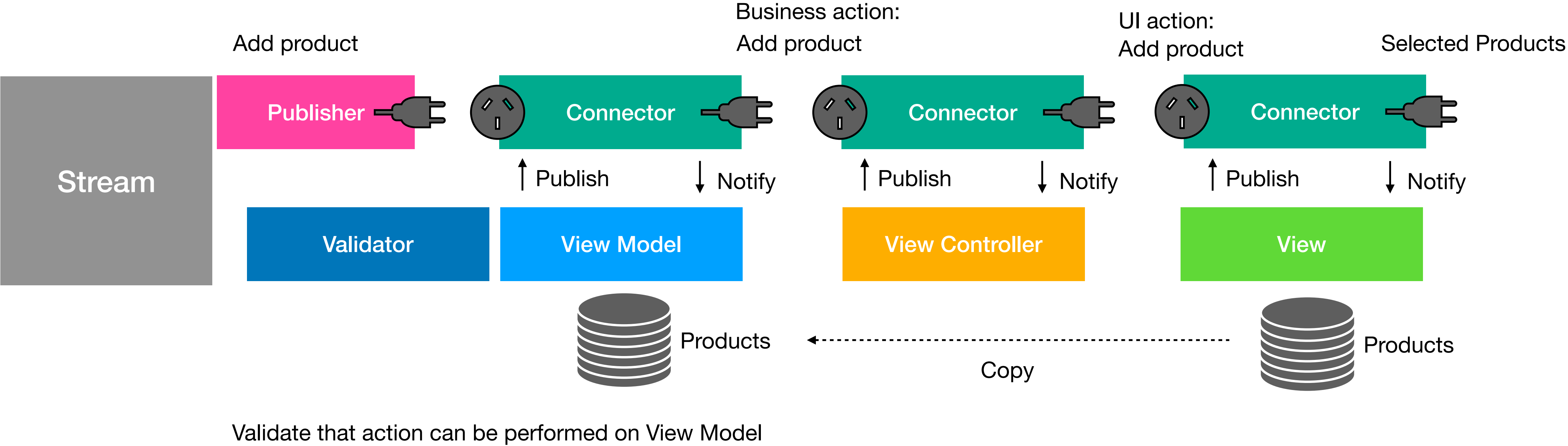
Product:errors



View subscribing to Materialized View

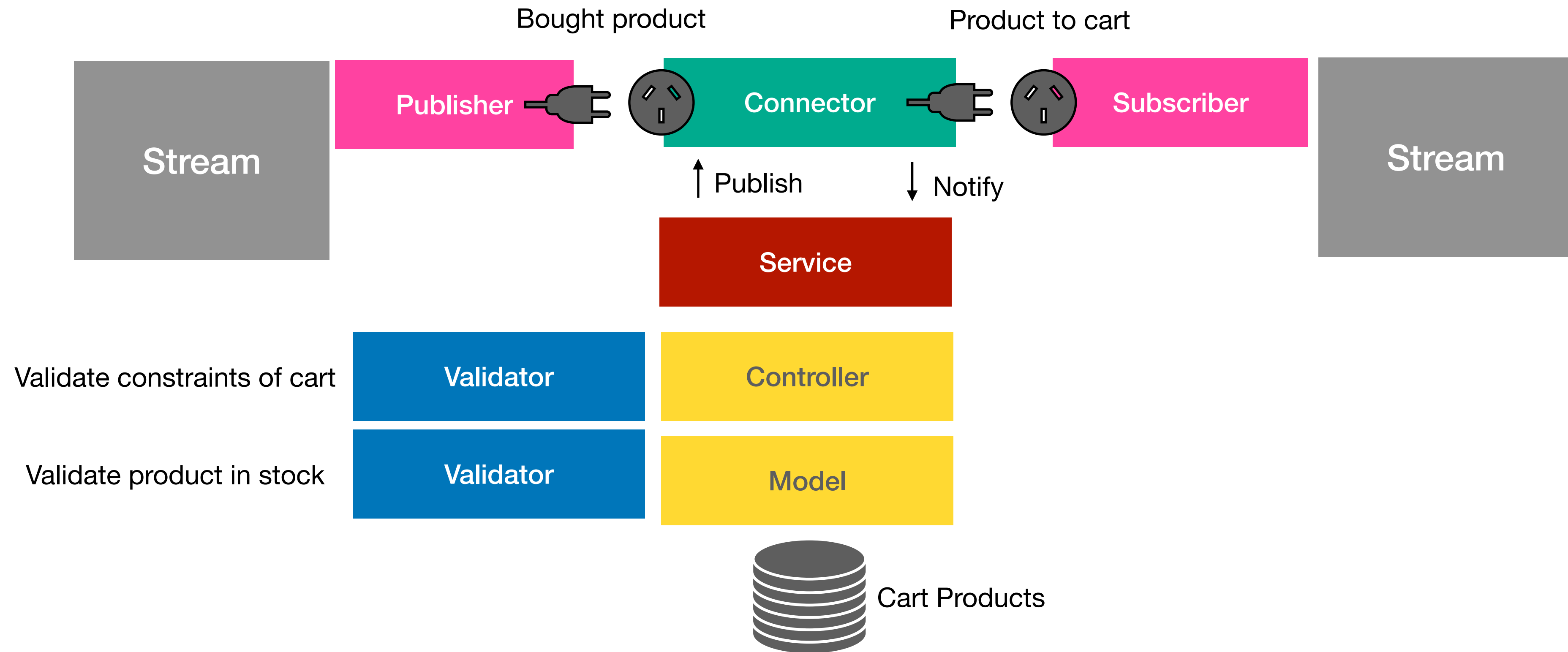


Model-View-Controller data flow

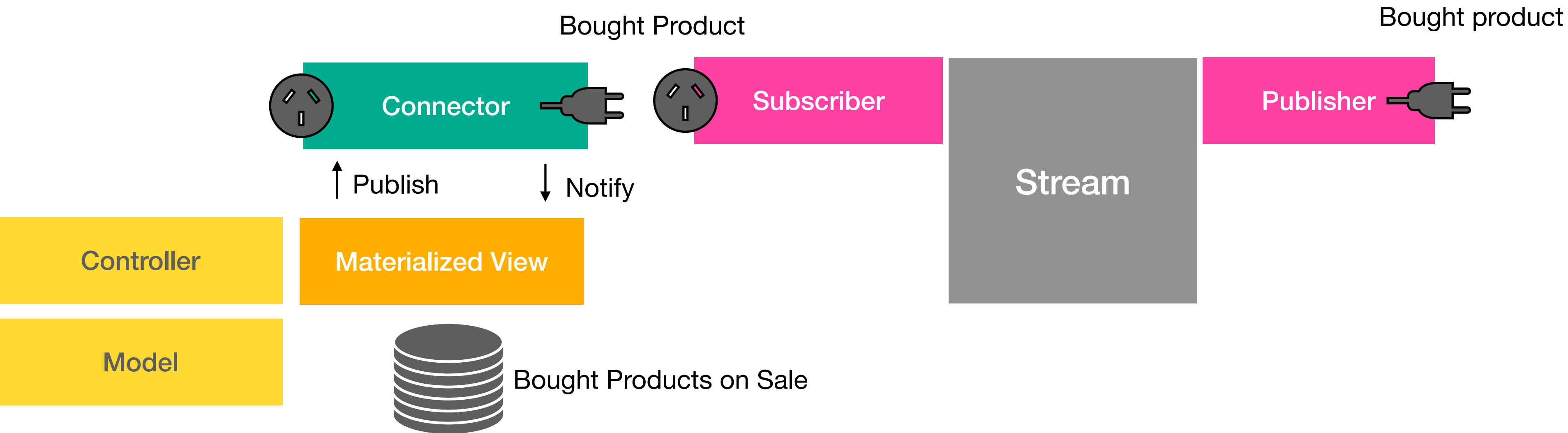


Service subscribing to Stream

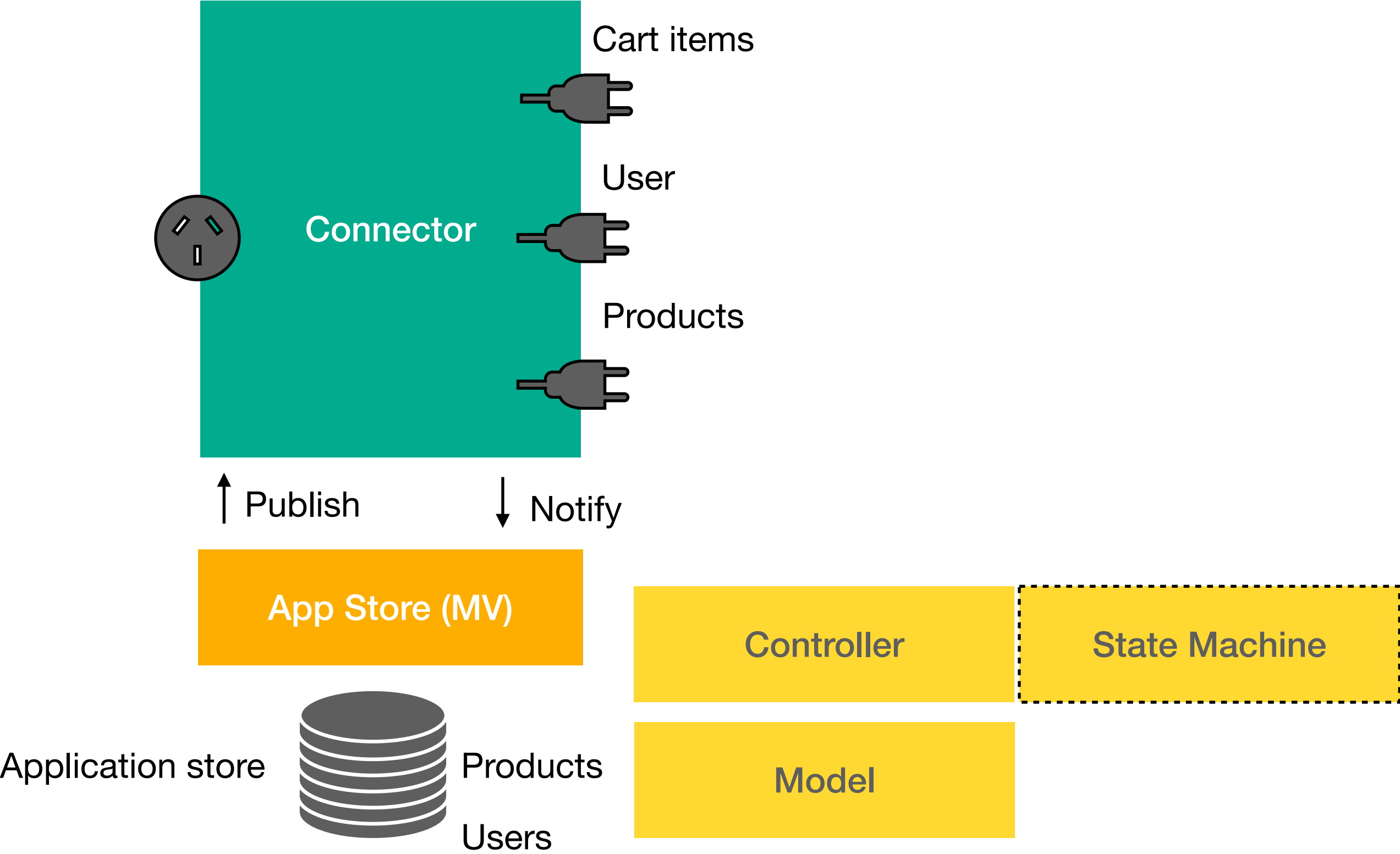
publishes new event - result of service



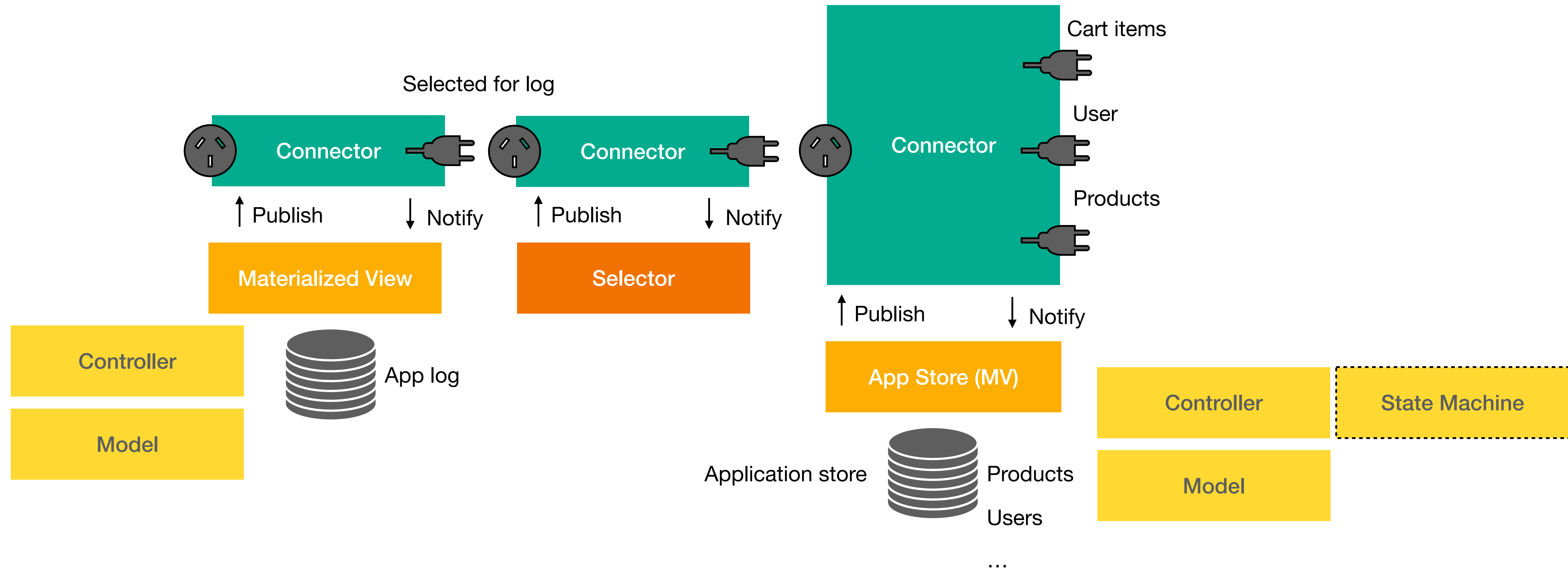
Materialized View subscribing to Stream



App Store as a Materialized View

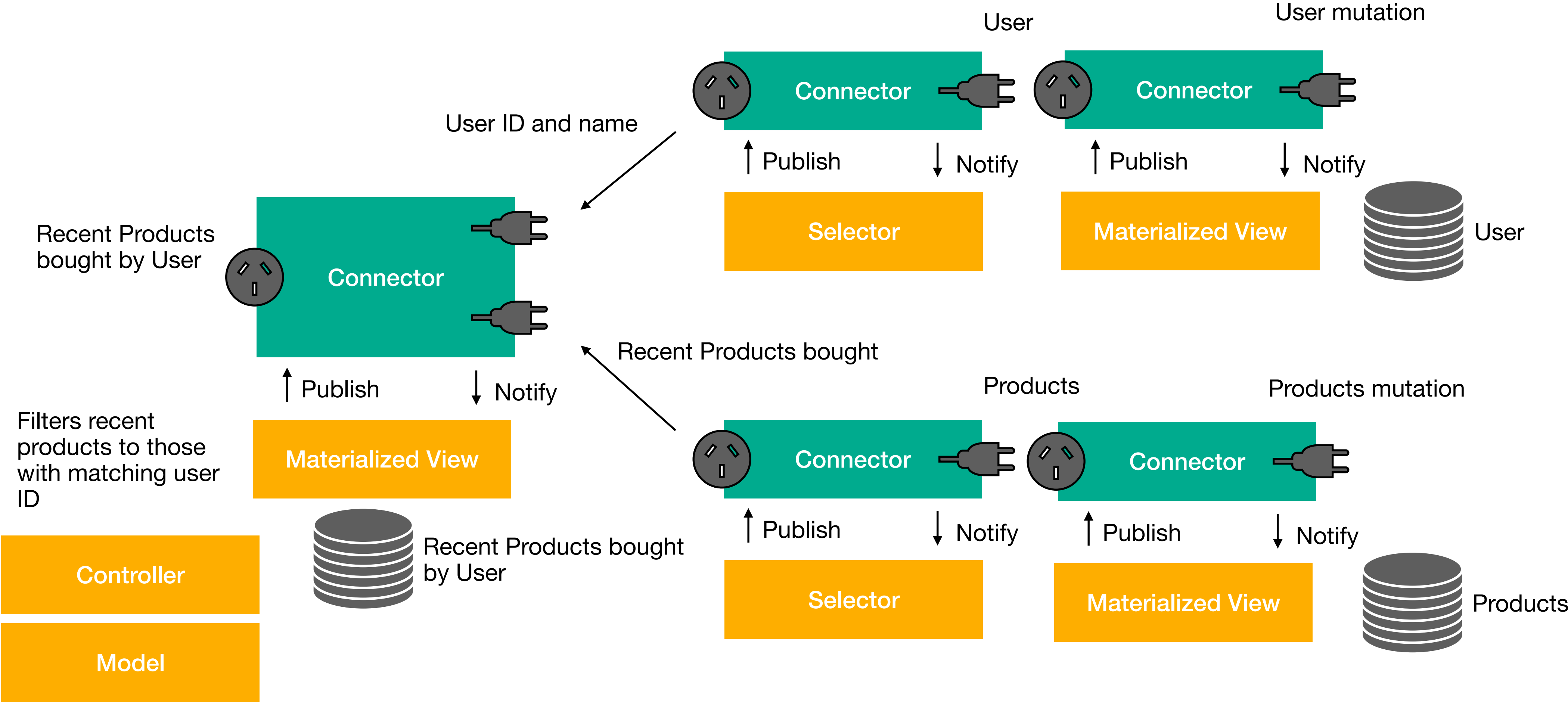


Application store and Application log



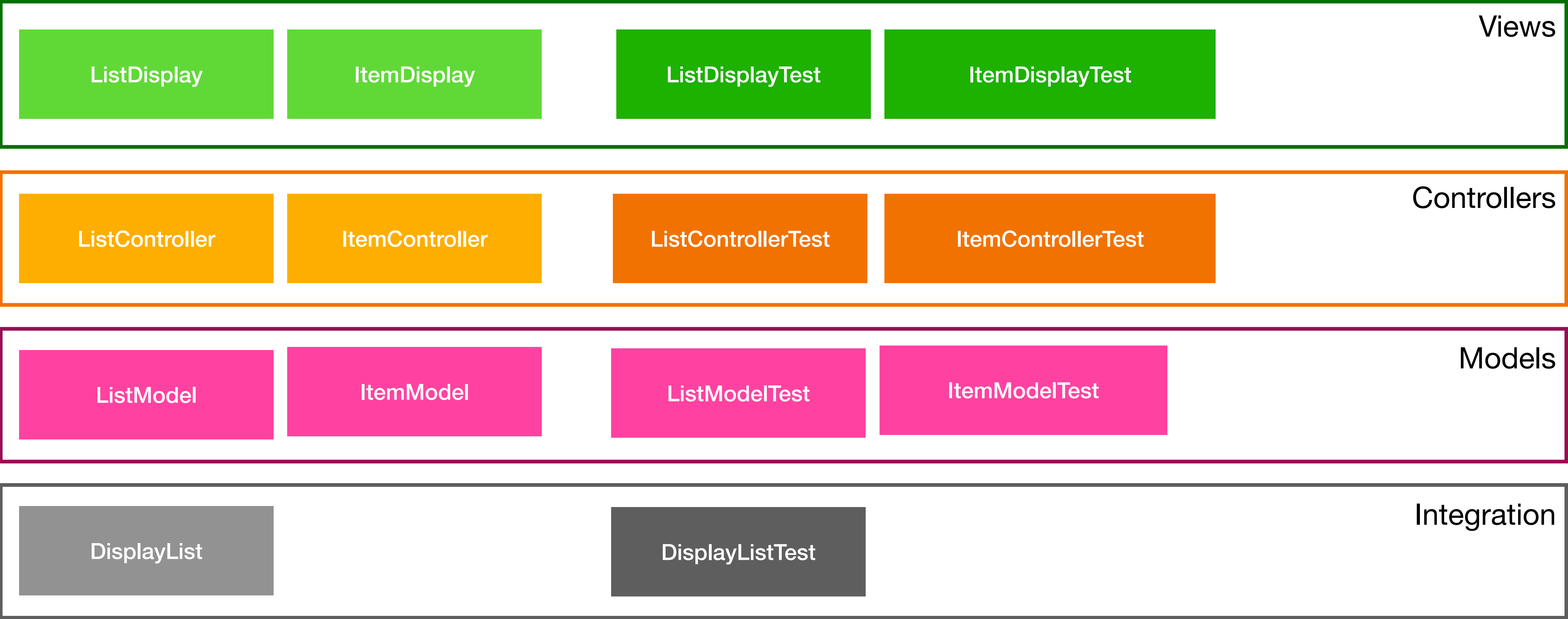
A View should NEVER select directly from Application store
A View should always select from a Materialized View with data specific for that view

Aggregate Material Views

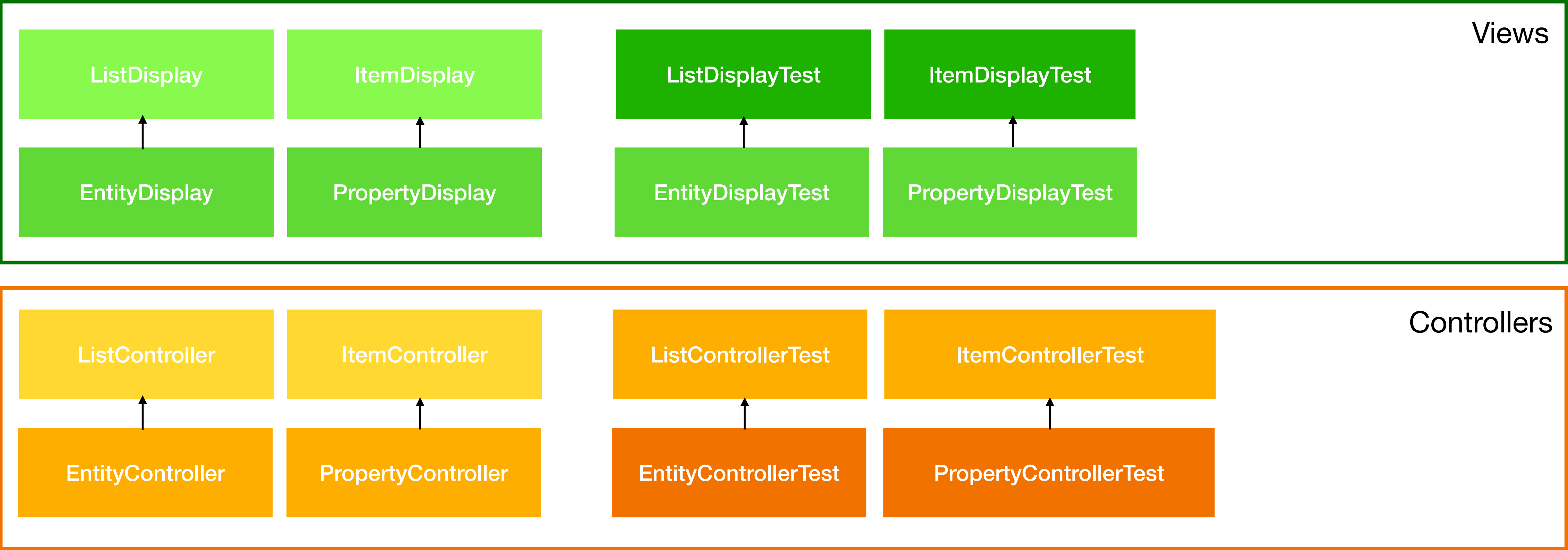


Classes generated

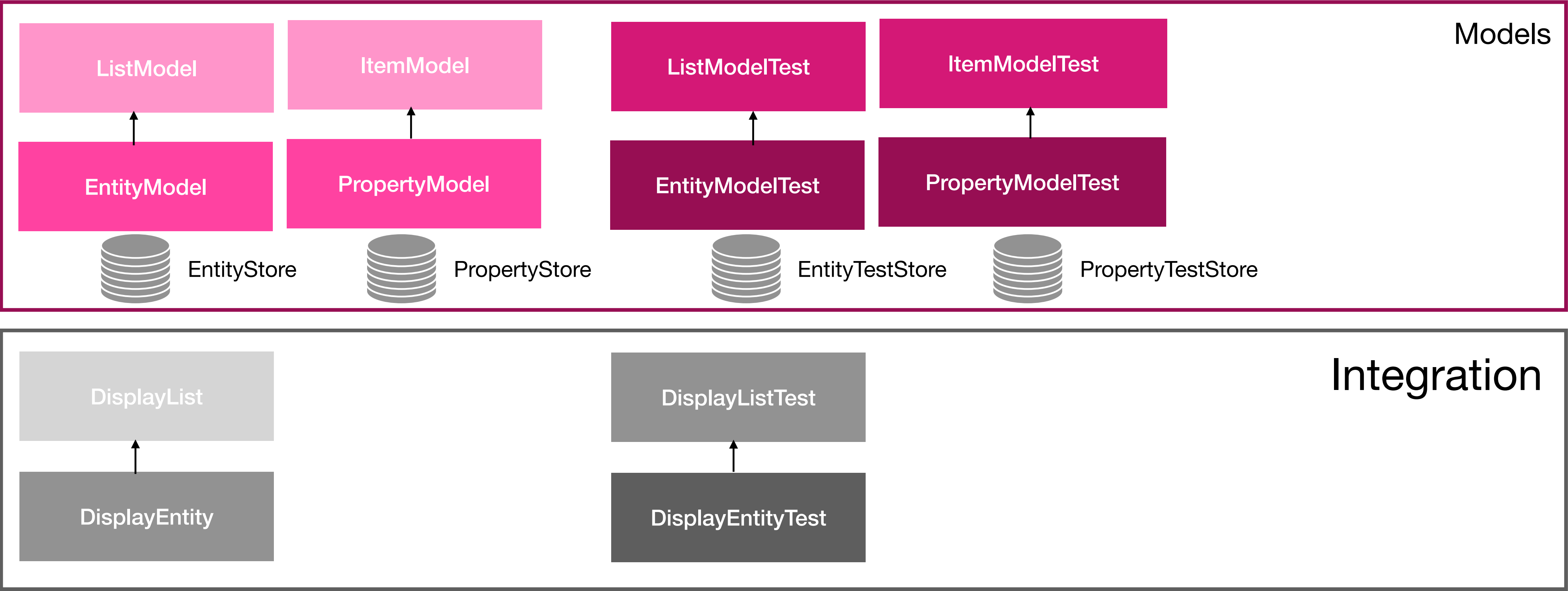
Entity Display Generators



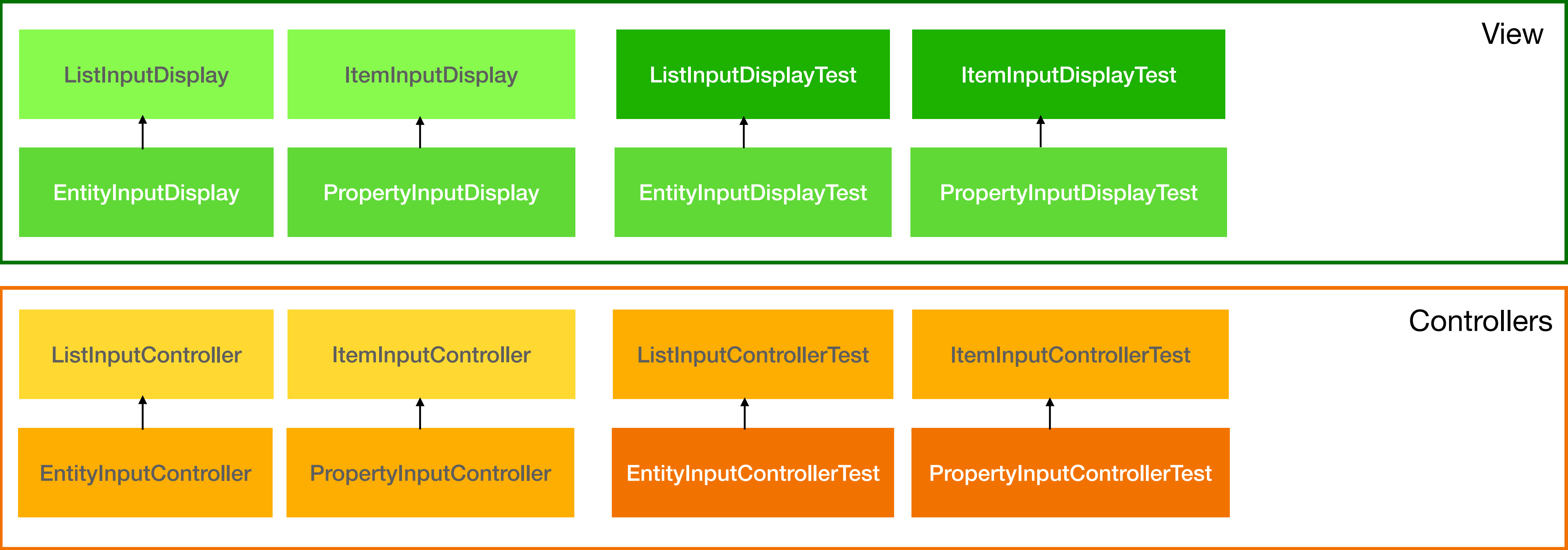
Entity Display Generators



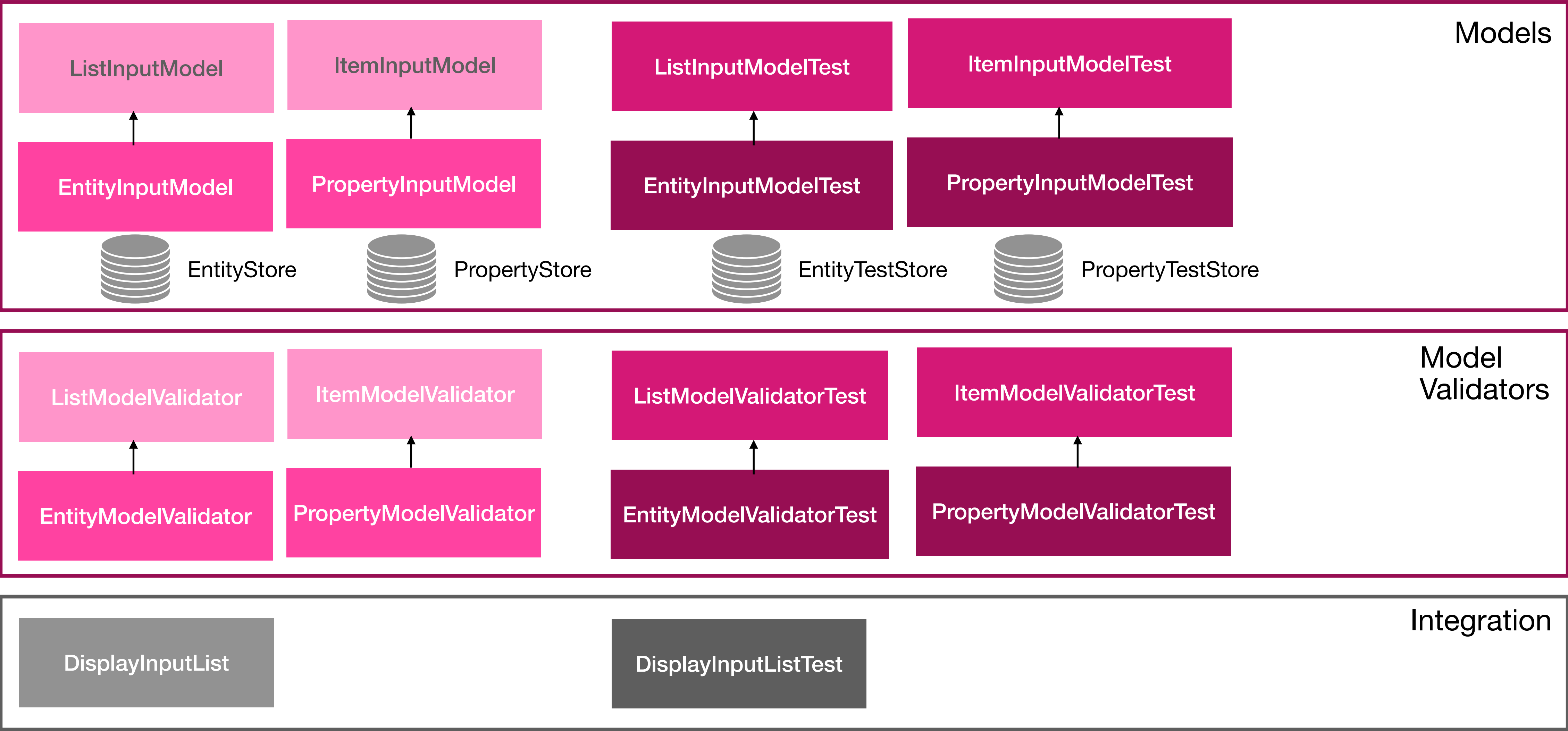
Entity Display Generators



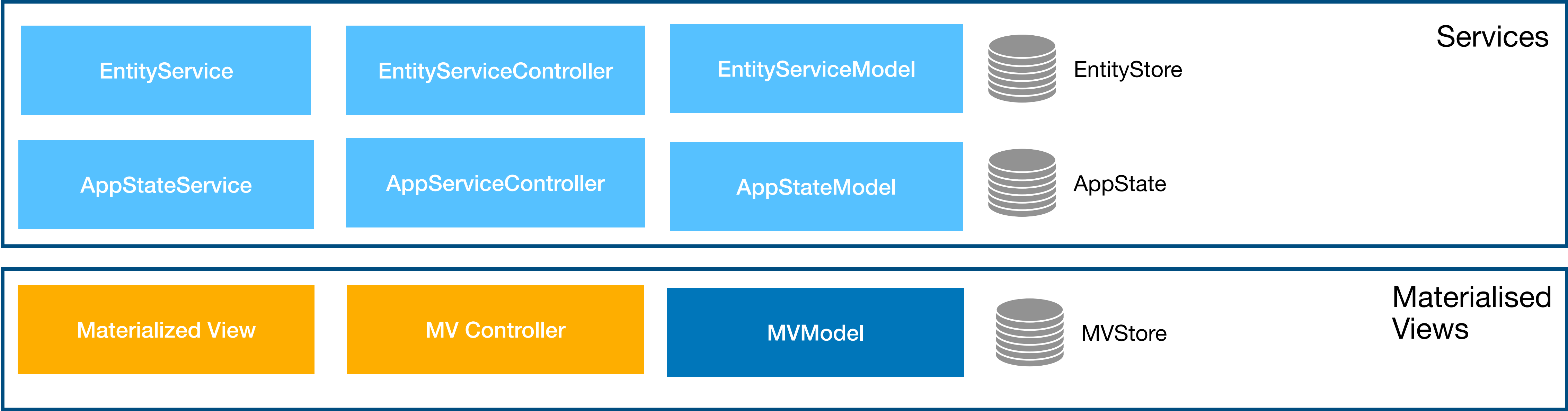
Entity Input Display Generators



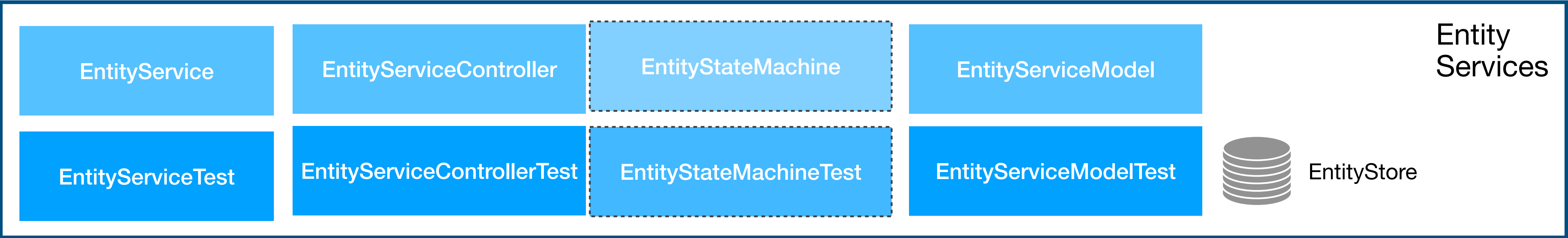
Entity Input Display Generators



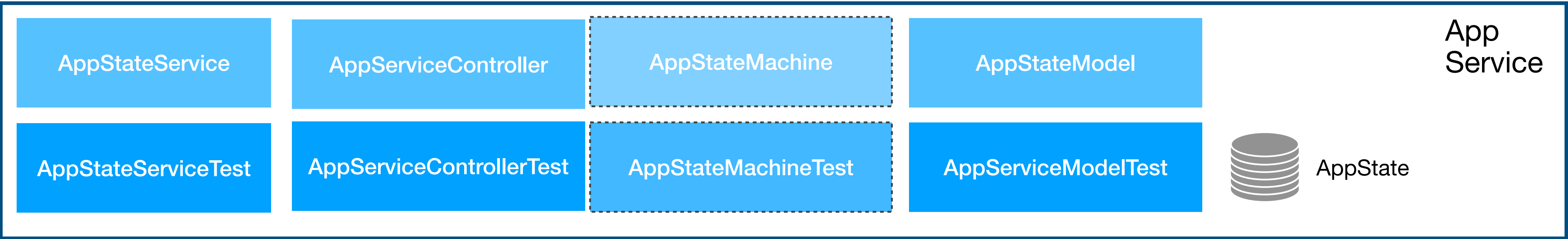
Services & Materialized Views



Entity Services



App Service

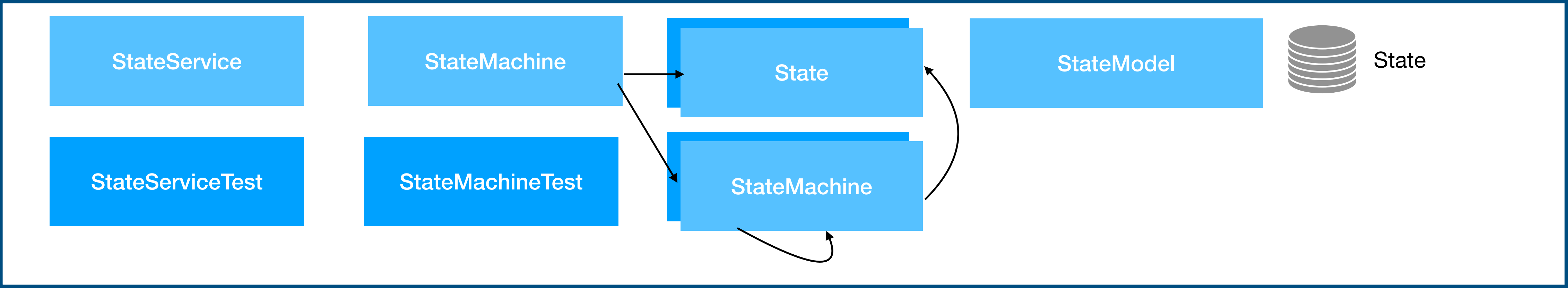


The State Machine:

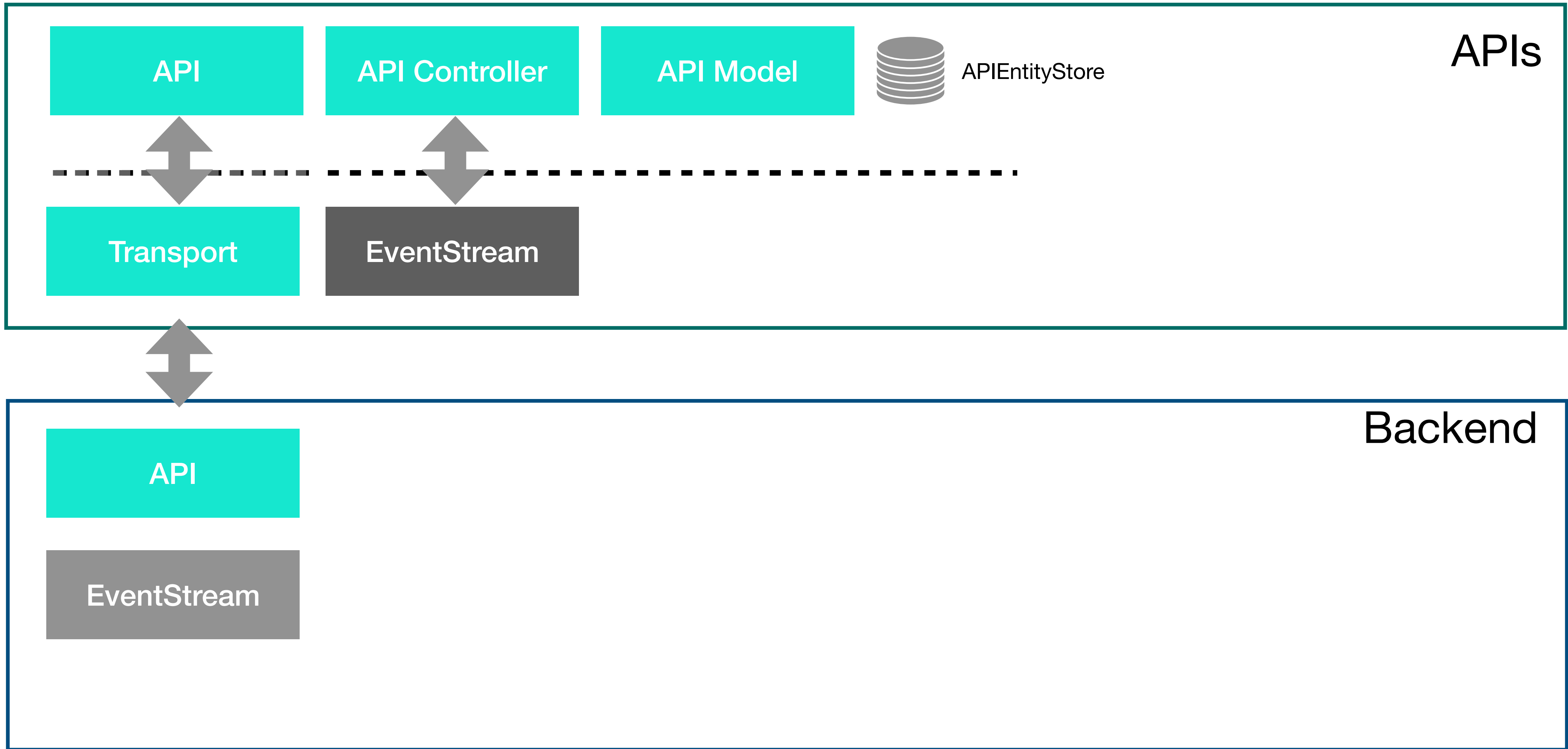
- contains the Business Logic to transition from one state to the next
- acts as a controller

The ServiceController that may contain a State Machine to control more complex state transition logic

State Machines

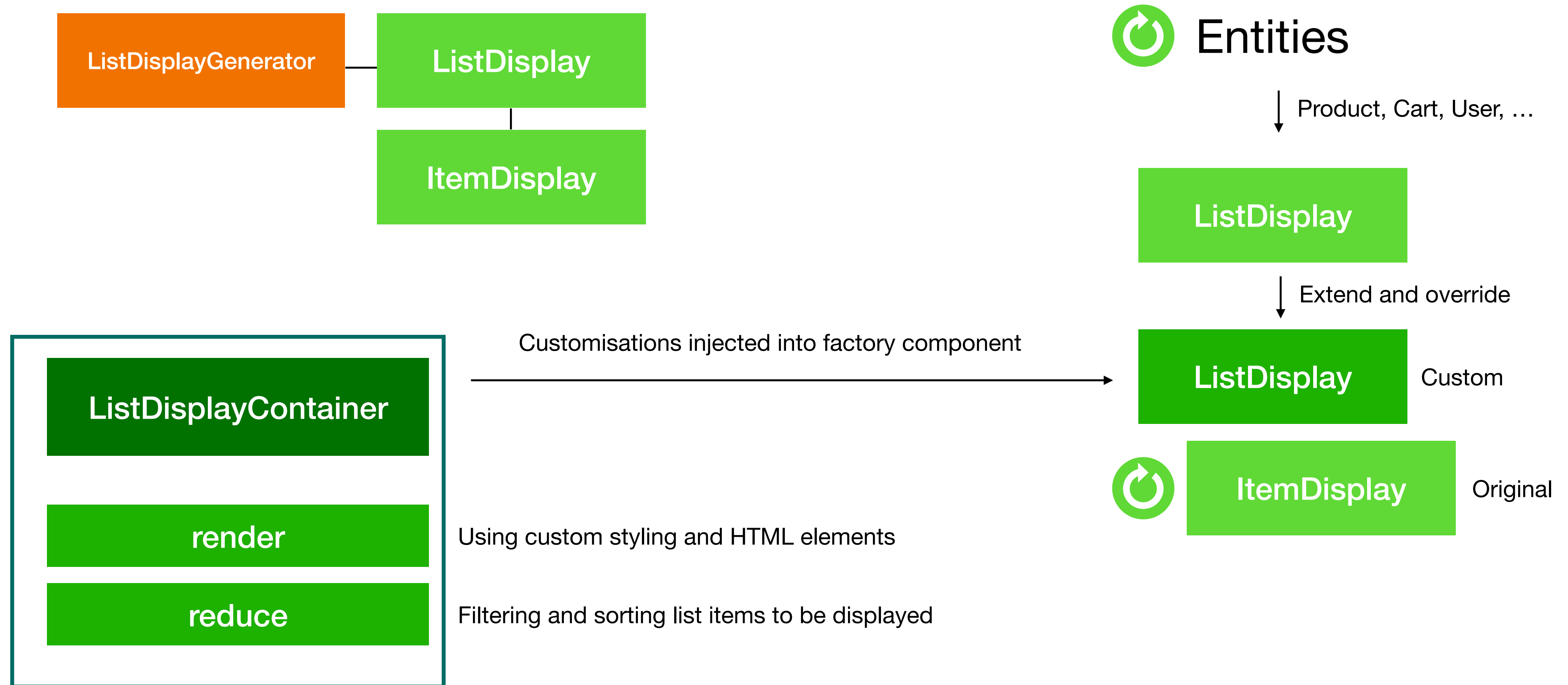


Entity APIs

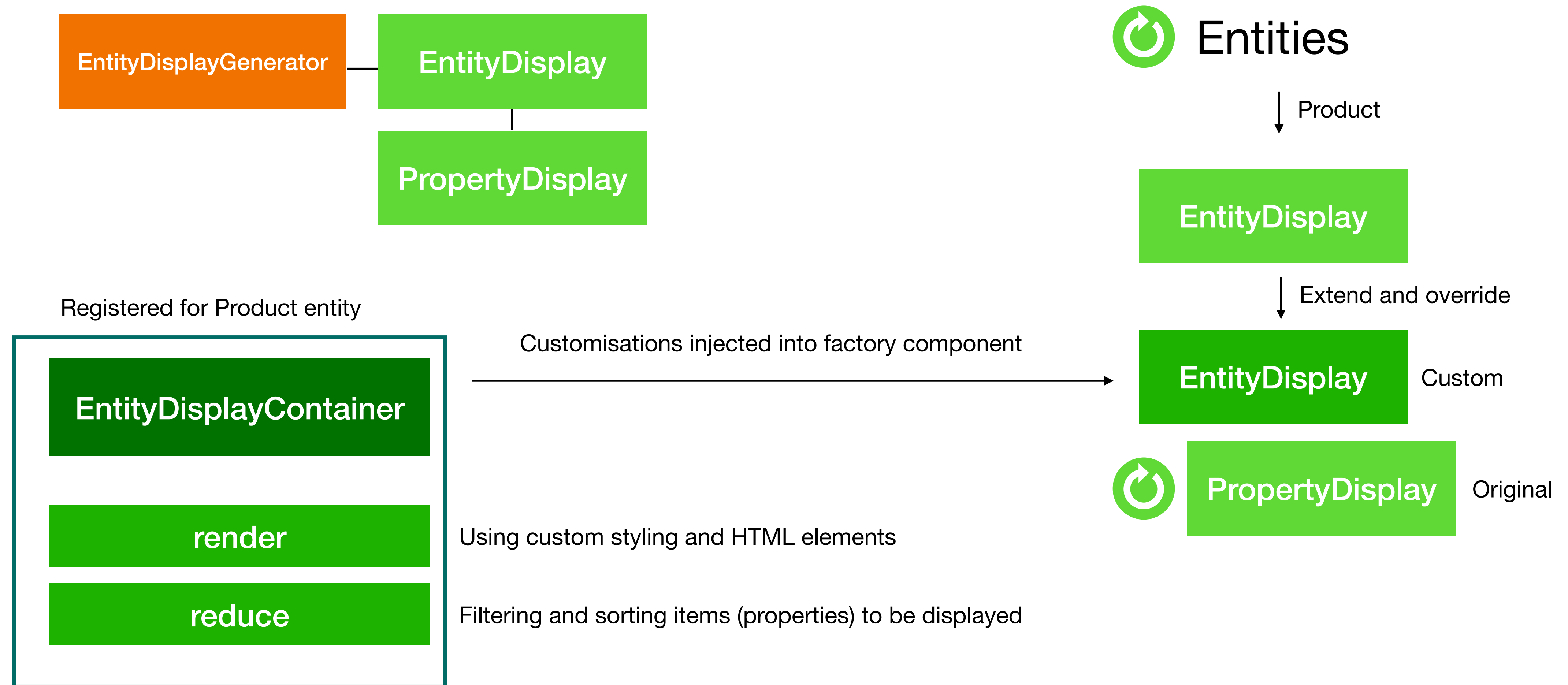


Application Customisations

Customizing all List Displays



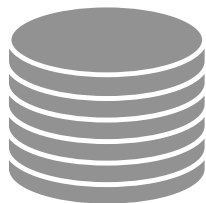
Customising specific Entity Displays



View hooks for specialisation

List Display

Displays list of entities or the properties of a single entity



Data

Selector

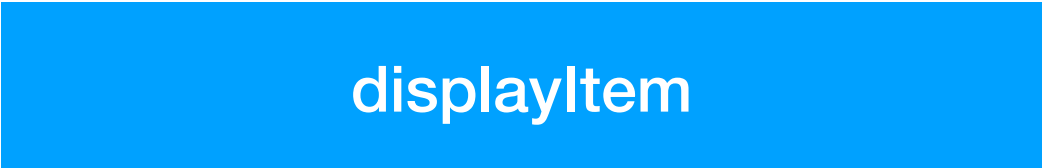


Selects items to display

View methods

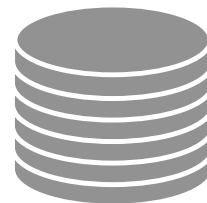


Actions



Input List Display

Displays list of entity properties to edit (create, update or delete)



Data

Selector



Selects items to display

View methods

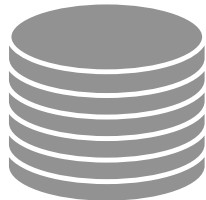


Actions



Item Display

Displays single value, typically an entity property



Data

Selector



Selects items to display

View methods



Actions



Item Display

Rendered and Managed by List Display (acting as a Materialized view)

View methods

render

valueToDisplay

Custom methods

Actions

select

remove

displayDetails

Custom actions

Input Item Display

Rendered and Managed by List Input Display (acting as a Materialized view)

View methods

render

valueToDisplay

Custom methods

Actions

select

remove

displayDetails

updateItemValue

Custom actions