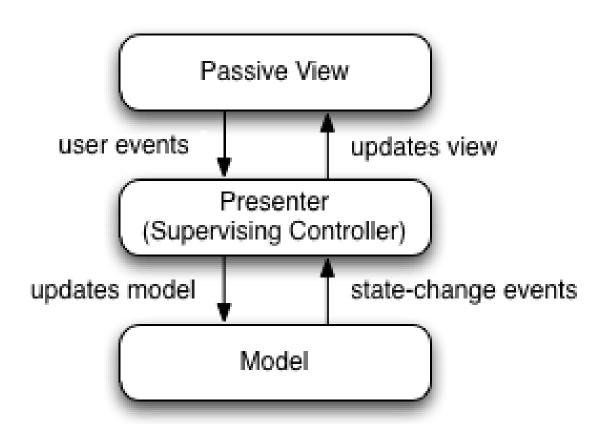
# **Building UIs with Spec**

- Model View Presenter
- Object Oriented

## The MVP pattern

- Model
- View
- Presenter



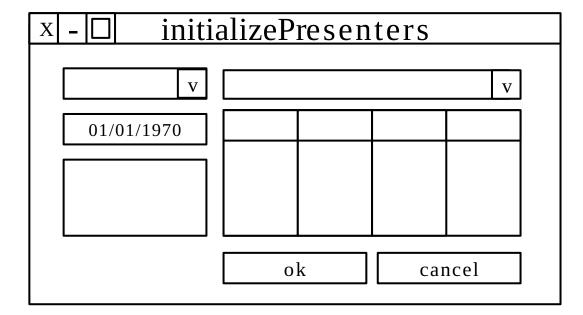
Pharo -- Le langage

### **Defining a presenter**

- Subclass SpPresenter
- Often 1 instance variable per internal wideget
- Overrides methods:
  - #defaultLayout
  - #initializePresenters
  - #connectPresenter

### #initializePresenters

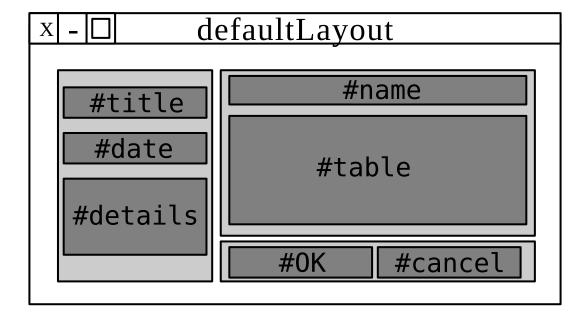
```
initializePresenters
title := self newDropList .
name := self newDropList .
date := self newTextInput .
details := self newText.
table := self newTable.
ok := self newButton
  label:#ok;
      yourself.
cancel := self newButton
  label:#cancel;
      yourself.
```



4

### #defaultLayout

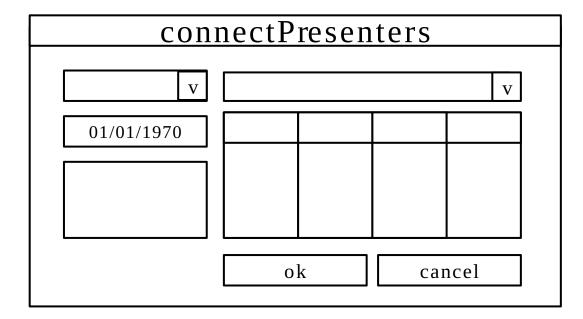
```
defaultLayout
^ SpBoxLayout newLeftToRight
    add: (SpBoxLayout newTopToBottom
      add: #title
        height: self toolbarHeight;
      add: #date
        height: self toolbarHeight;
      add: #details);
    add: (SpBoxLayout newTopToBottom
      add: #name
        height: self toolbarHeight;
      add: #table;
      add: (SpBoxLayout newLeftToRight
        add: #ok;
        add: #cancel));
    yourself
```



5

#### #connectPresenters

```
connectPresenters
ok action: [
  self inform:'Ok'
].
cancel action: [
  self inform:'Cancel'
].
```



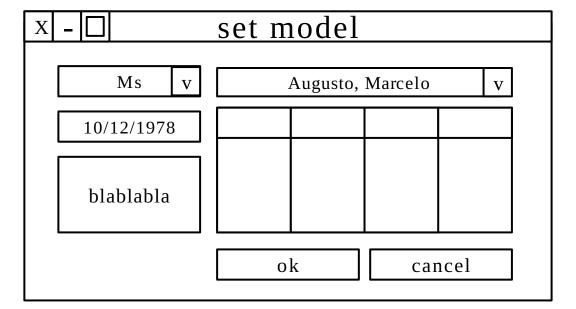
6

## Binding the model

```
model: aModel
model := aModel.
self modelChanged.
```

modelChanged self fillWidgetWithModel

fillWidgetWithModel
title selectedItem: model title.
name selectedItem: model name.
date text: model birthDate.
details text: model details.



Pharo -- Le langage