To do before next session

1 - Watch the following **videos**

Modals

Text Field

Dropdown Button

List View / Builders

List Tile

Checkbox List Tile

MOBILE DEVELOPMENT

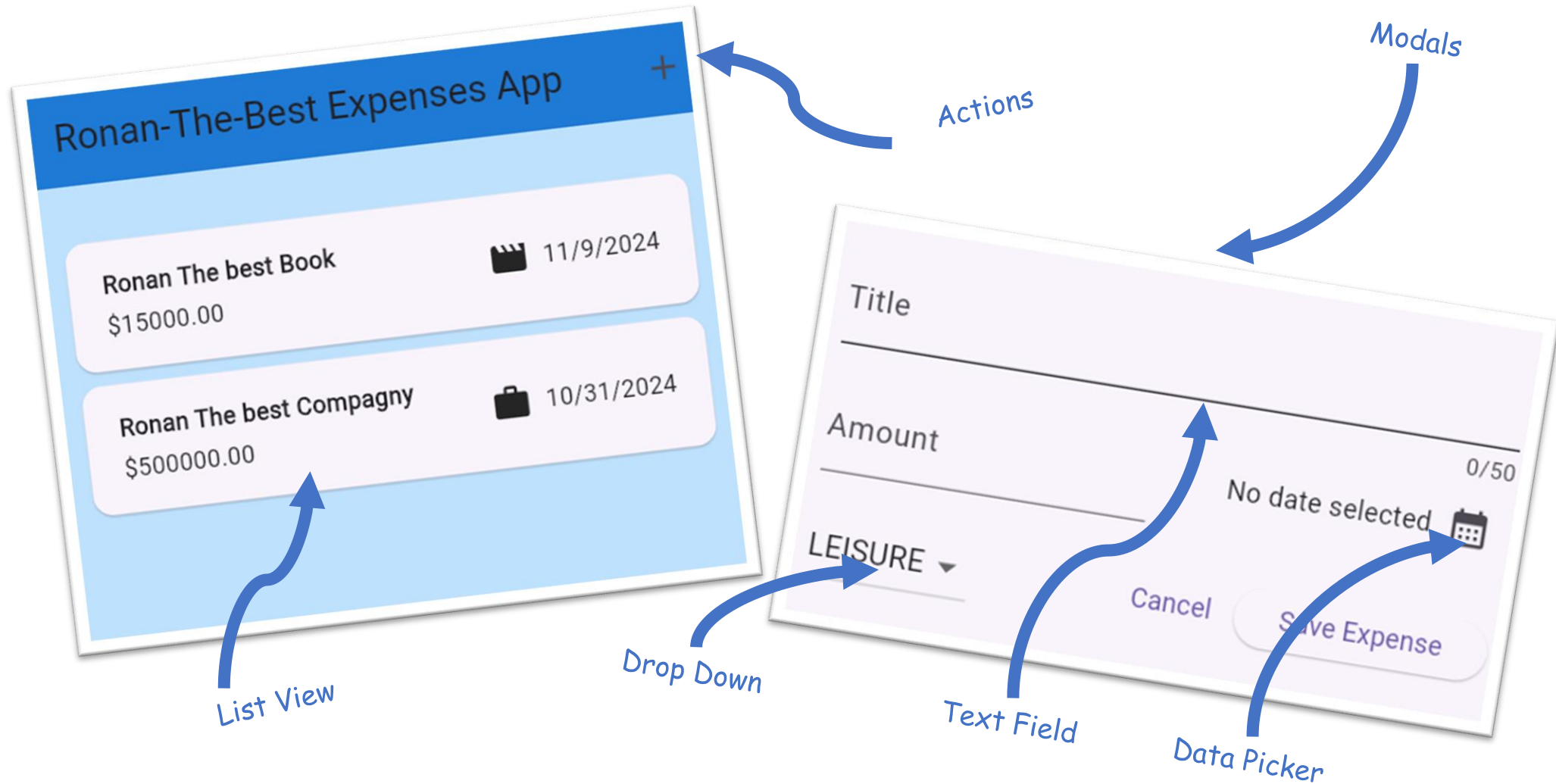## W8-S1 – Modals, inputs, forms

🥇 Course Objectives 🥇

- ✓ Use **modals**
  - ✓ Understand what is a **builder context**
  - ✓ Open and close a modal

- ✓ Handle **basic user inputs**
  - *Text field, date picker, drop down, checkbox...*

- ✓ Validate **user inputs**

- ✓ Implement **Crud** UI actions
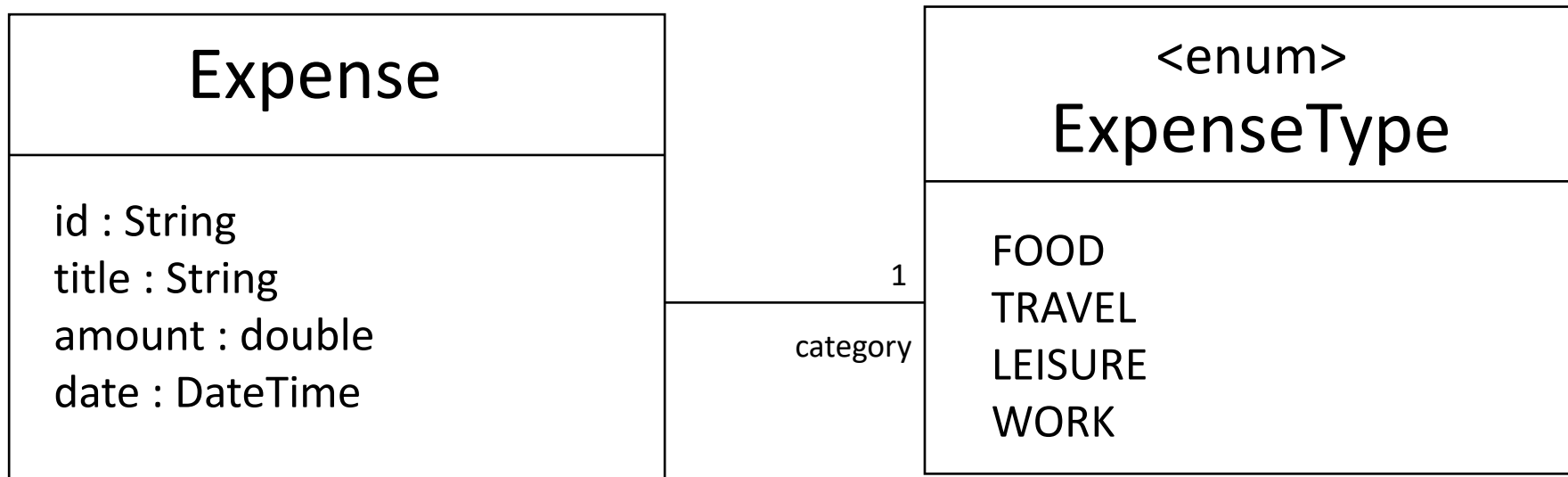 - *Create / Read / Update / Delete*

What will you be able **to do**?

Ronan-The-Best Expenses App

Ronan The best Book
$15000.00
🎬 11/9/2024

Ronan The best Compagny
$500000.00
💼 10/31/2024

Actions

Modals

Title

Amount

0/50

No date selected 📅

LEISURE ▾

Cancel

Save Expense

List View

Drop Down

Text Field

Data Picker

An expense app to manage what you have spent in the month

Part 1 : Create the **Expense Model**

We create Expense and ExpenseType enum

Expense
id : String title : String amount : double date : DateTime

1

category

<enum> ExpenseType
FOOD TRAVEL LEISURE WORK

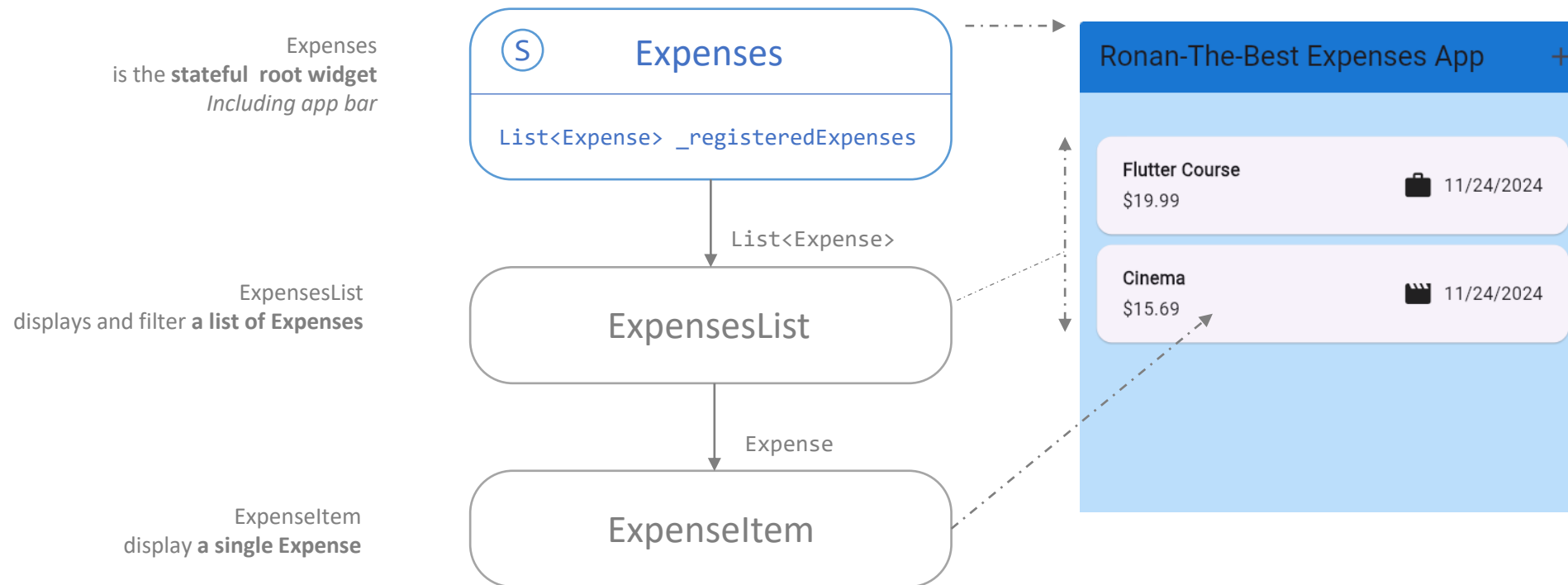⚠️ It s the model layer ! No print, no Flutter, just the logic

⚠️ Use the **UUID package** to manage the expense id - Update pubspec.yaml

Part 2 : Create the **Expense View**

We divide the view into 3 widgets

Expenses
is the **stateful root widget**
Including app bar

(S) **Expenses**

List<Expense> _registeredExpenses

List<Expense>

ExpensesList
displays and filter **a list of Expenses**

ExpensesList

Expense

ExpenseItem
display **a single Expense**

ExpenseItem

Ronan-The-Best Expenses App   +

Flutter Course
$19.99   11/24/2024

Cinema
$15.69   11/24/2024

ListView & ItemBuilder

A FEW WIDGETS

```
@override
 Widget build(BuildContext context) {
   return ListView(
     children: [
       ...expenses.map( (e) => Text(e.title),)
     ],
   );
 }
```

✓ Handle scrollbar
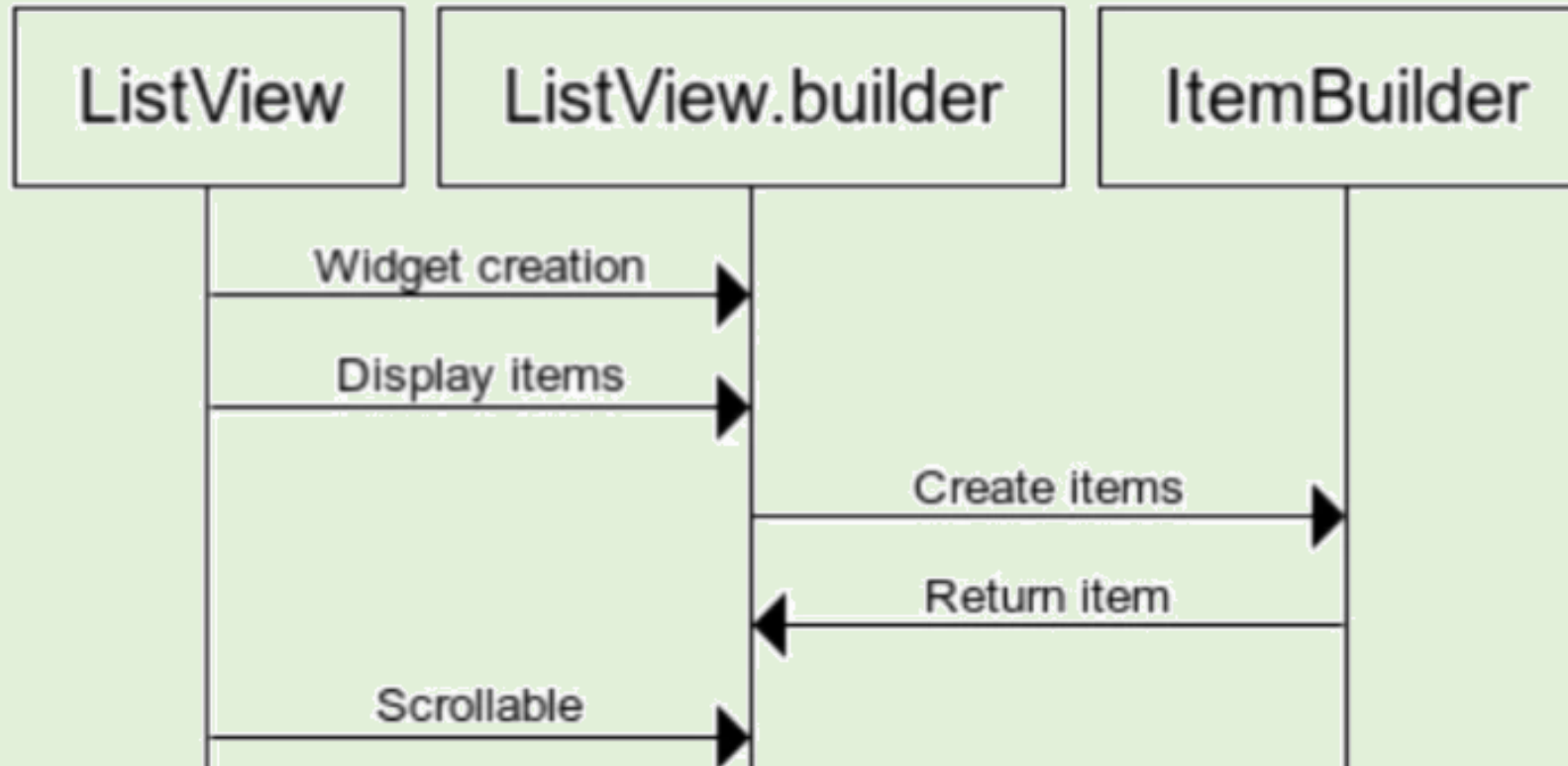✓ Create all list items **immediately**

A LOT OF WIDGETS

```
@override
Widget build(BuildContext context) {
   return ListView.builder(
     itemCount: expenses.length,
     itemBuilder: (context, index) => Text(expenses[index]),
   );
}
```

Inform the List view regarding
the total number of items

A function to
create an item when needed

✓ Handle scrollbar
✓ Create list items **when needed**

ListView & ItemBuilder

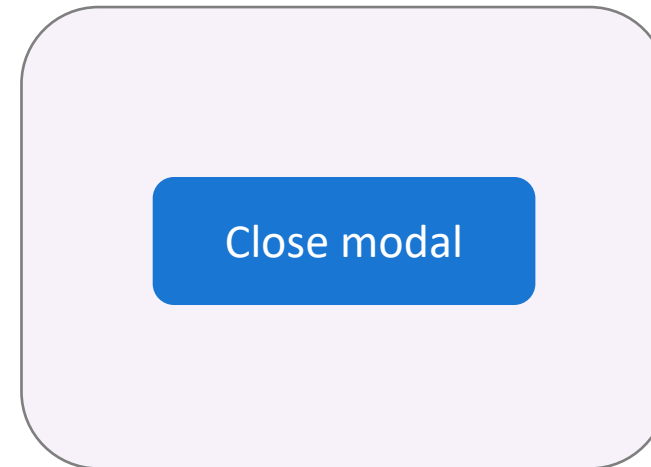*The **Item builder** is called when needed by the **list view builder***

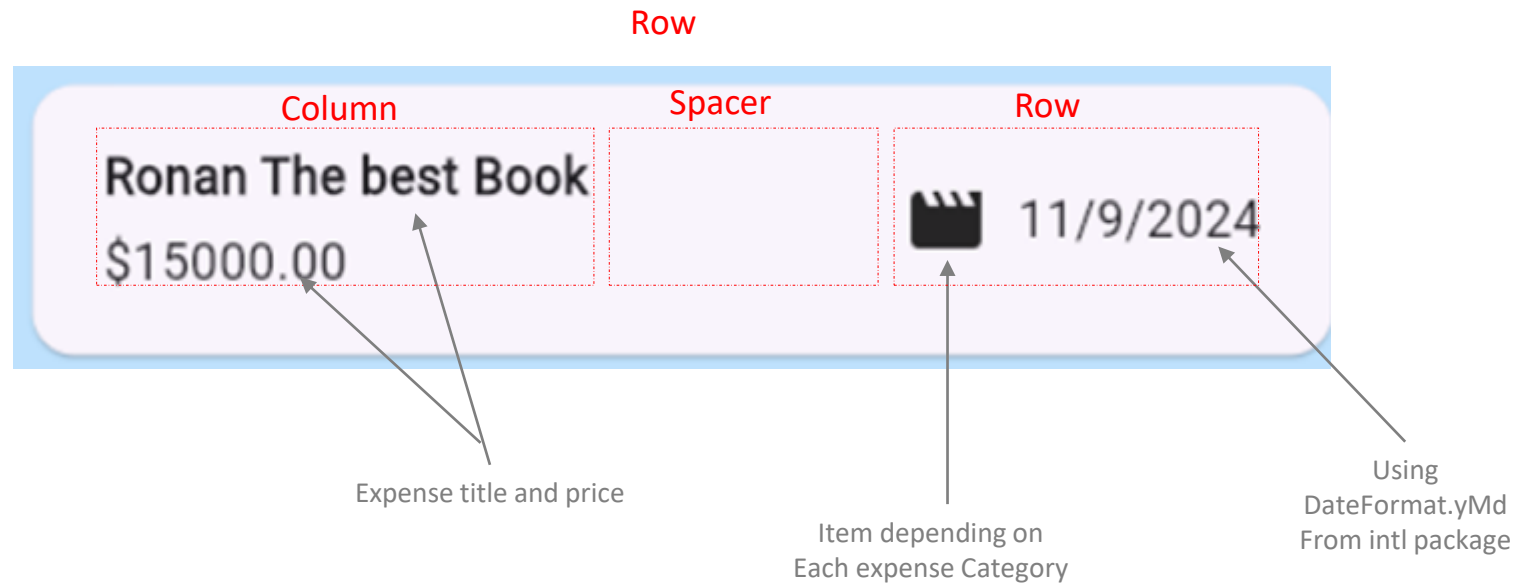# Part 3 : Display a **Bottom Modal**

✓ Add an **Action** on App Bar

✓ Open a **Bottom Modal**

[Check Flutter Doc](#)

[Check Flutter Doc](#)

Part 4 : Create the **Expense Item**

✓ Use the **intl package** to format the Date
✓ Use a **spacer** to handle space in the middle
✓ **Display an icon** depending on the expense category

Row

Column   Spacer   Row

Ronan The best Book   🎬 11/9/2024
$15000.00

Expense title and price

Item depending on
Each expense Category

Using
DateFormat.yMd
From intl package

⚠ Use the **intl package** to manage the date format id - Update pubspec.yaml