

IDATA2503 – Mobile applications – Expense Tracker App

Architecture

Presentation layer:

- Main
- Chart bar
- Chart
- Expenses
- Expenses Last Month
- Expenses List
- Expense Item
- New Expense

Business layer:

- Chart
- Expenses
- Expenses Time Period
- New Expense

Data layer:

- Expense

User stories

- User wants to add an expense.
 - o They want to add name, price, date, and category.
- User wants to remove an expense.
 - o User wants to undo a removal of an expense.
- User wants to see all their registered expenses.
- User wants to see total price of each expense category.
- User wants to compare prices of expense categories.
- User wants to see total price in timeframe.

Specifications

- Add and delete expenses
- Show list of all expenses
- Undo the removal of an expense
- Show chart of each expense category compared to each other
- Show total price for the last month (e.g., the sum of all expenses added in September)

Flow of functions

- In main we run the app and create a Material App.
- In the Material App we have the Expenses screen, which shows a chart of the expense categories, and a list of all expenses.
 - They are shown in a column in portrait mode, and a row in landscape mode.
There is also a button to open an overlay for adding expense.
- In the overlay, there are inputs to add information about an expense, and then add it to the list of expenses.
- The chart gets the list of all expenses, then filters them into separate buckets by category, and sums the prices for each list.
- The expenses list is a list of expense items.
 - Each item can be dragged to the side to be deleted. This action of removing expense shows a snack bar message for a few seconds with the option to undo.

Folder structure

The data layer is under the folder “models”. The presentation layer is under the folder “widgets”. In widgets there are two sub folders: one for the chart and the other for the expenses list. These are widgets that are closely coupled so they are grouped together.