# Split Your Expenses

Design and Implementation of Mobile Application – 2021/2022

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# The Problem

$ Sharing expenses between roommates is complicated, you need to exchange money every time someone does a shopping.

Often if the roommates are students or workers, it is difficult to find a time when everyone is present.

€ When traveling, if payments are made in other currencies, it is uncomfortable to have to calculate the exchange rate each time.

# The Solution



AN APPLICATION THAT GROUPS EXPENSES OF A CERTAIN TYPE IN THE SAME PLACE;



INCLUDE THE PEOPLE YOU WANT TO SPLIT YOUR SPENDING BETWEEN;
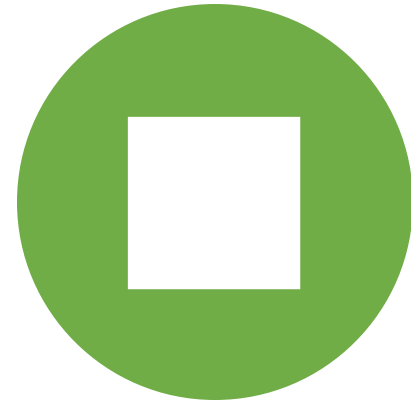


ANALIZE GROUP STATISTICS AND BALANCES.

# Split Your Expenses in 3 steps
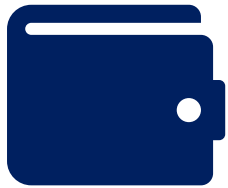


ADD YOUR EXPENSES

CHECK YOUR BALANCE

SQUARE UP

# How does it work?

- Flutter as developing framework;
- Google Firebase as Authentication Service and data manager
- Steady communication with the database;
- No data is saved in local storage;
- The user creates a group and adds expenses to it:
  - o Complete customization of groups and expenses;
  - o Add up to 50 participants to the group;
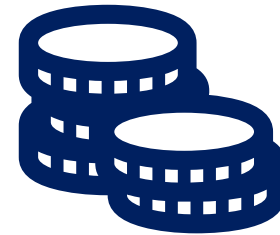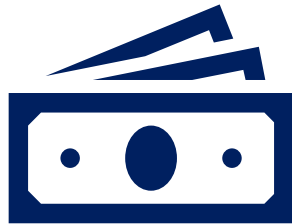  - o Split the expense between all or same users;

# Group Page

- Visualize name and description of all groups;
- FloatingActionButton to add a new group to the list;
- Use the DB class to download the groups' dataset;
- Salient widget:
  - Scaffold
  - GroupList
  - Swipeable Item
  - GroupVisualizer

# Import Group

- Import a new group using a link or id given by a friend

- Validator to check if the link or id is valid;

- When the user provides a valid link or id, the page changes and the user can select who is he.
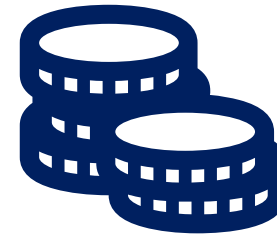
# Expenses Page

- Visualize name, participants amount and date of all the expenses;

- FloatingActionButton to add a new expense to the list;

- Use the DB class to download the expenses' dataset;

- Salient widget:
  - ExpenseList
  - Swipeable Item
  - ExpenseElement

# Expenses Detail

- Visualize the details of the expense

- Edit button to edit the selected expense;

- The edit button open a new page to edit all the info of the expense.

# User Balances



- Visualize users balances in a dynamic Column chart;
- Display clearly all balances in a list of cards;
- Use the DB class to communicate with the external database;
- Salient widget:
    - SfColumnChart
    - ColumnSeries
    - Card

# Group Statistics

- Visualize group's statistics such as the total amount of the expenses;

- Give a clear graphic view of the expense split among users;

- Use the DB class to communicate with the external database;

- Salient widget:
  - SfCircularWidget
  - PieSeries
  - Card