

# BCAA25S Krnčan Tomáš - Homework Solution

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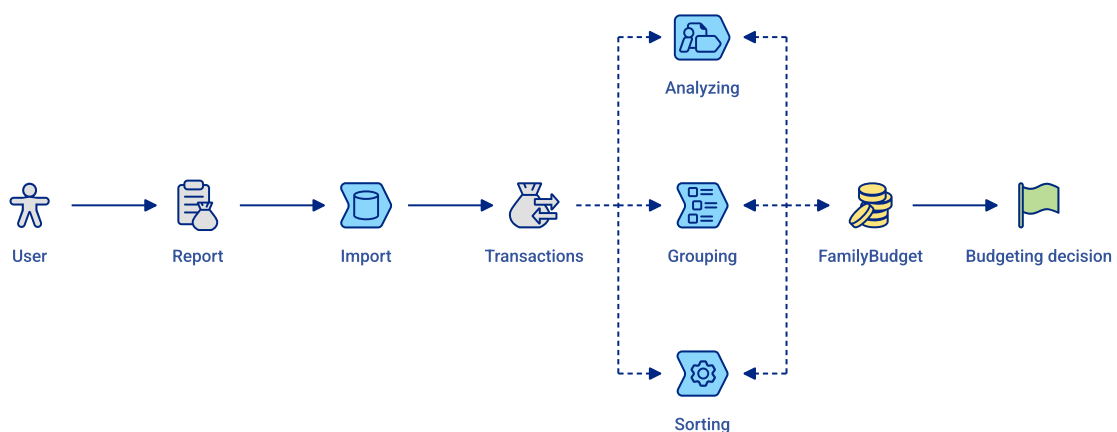
Responsible role

**BCAA25S Course Manager (Natálie Riantová)**

### Description

## Vision

- ✓ The FamilyBudget is application designed to help individuals and families effectively track, categorize, and analyze their monthly expenses. By providing a streamlined way to import bank transaction reports, organize spending into meaningful categories, and generate insightful statistics, the application aims to enhance financial awareness and budgeting decisions.



# Import Monthly Bank Transfers Report

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## Why we need this User Story

Without this functionality, users would have to manually input each transaction, making expense tracking cumbersome and error-prone.

## User Story goal

The goal is to allow users to quickly import their bank statements so that all transactions are automatically recorded for analysis.

## User Story context

A user downloads their monthly bank statement from their online banking portal and wants to upload it to the application to analyze their financial activity.

## User Story initial situation

The user has a CSV file containing their transactions. They need a seamless way to upload and parse the data into the application.

## User Story scenario

**Importing the monthly bank report**

## Happy day scenario

1. The user opens the application and navigates to the "Import Transactions" page.
2. The user selects the file upload option.
  - 2.1. The user clicks the "Choose File" button.
  - 2.2. The user selects their bank statement file from their computer.
  - 2.3. The application processes the file and extracts transaction details. (A1, A2)
    - 2.3.1. **Error Message** If the file format is unsupported or contains errors, the user receives a message indicating the issue and must retry.

Import incomplete
  - 2.4. The user clicks the "Confirm Import" button.
3. The transactions are successfully stored, and the user is notified that the import is complete.
  - 3.1. **Information Message**

Import complete

## Alternative Flows

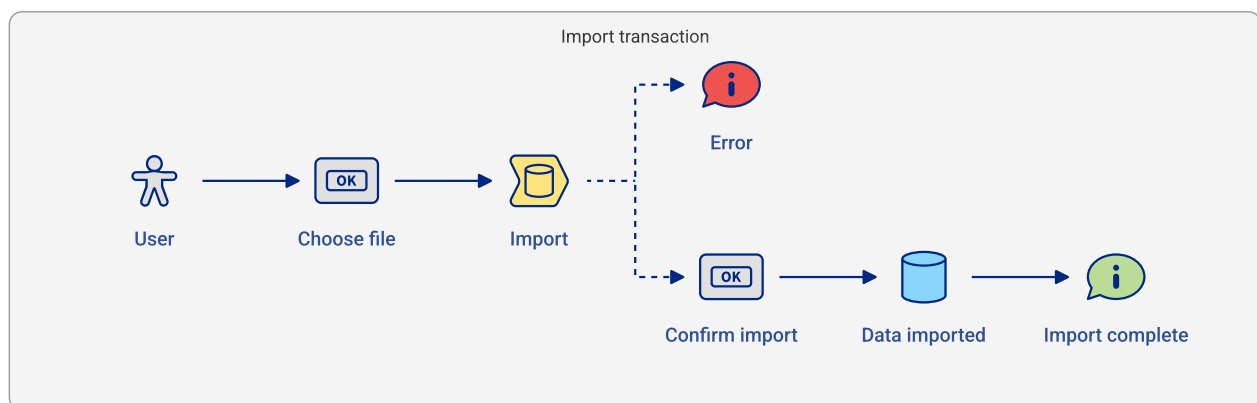
### A1 - (HDS 2.3)

The user reviews the imported transactions before confirming.

### A2 - (HDS 2.3)

If the transactions are correctly parsed, the user confirms the import.

## User Story diagram



# Sorting Monthly Expenses

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## Why we need this User Story

Without sorting functionality, users would struggle to identify spending trends and track their financial status efficiently.

## User Story goal

The goal is to allow users to sort transactions by different parameters to quickly find relevant financial information.

## User Story context

A user wants to review their past month's transactions to check for unusual spending patterns and ensure financial stability.

## User Story initial situation

The user has imported their transactions and now needs to view them sorted by date, amount, or category to analyze their expenses effectively.

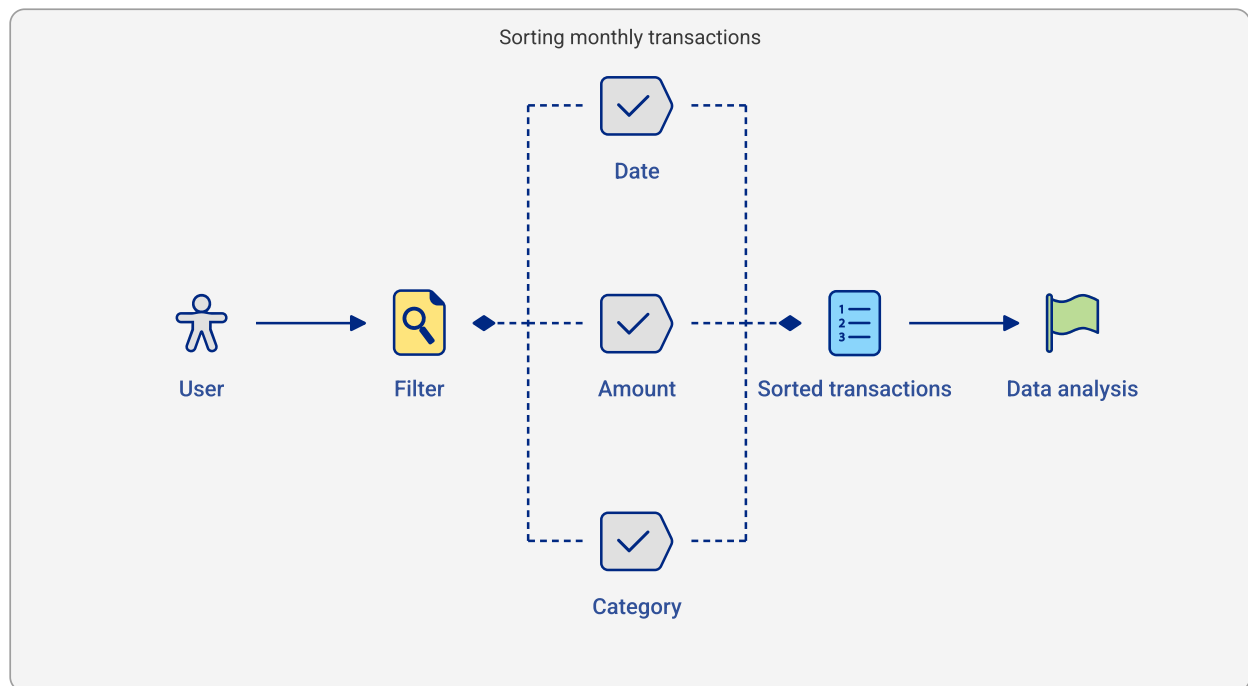
## User Story scenario

### Filter

#### Happy day scenario

1. The user opens the "Transactions" page.
2. The user selects a sorting criteria (filter).
  - 2.1. The user chooses to sort transactions by date, amount, or category.
3. The application sorts and displays transactions accordingly.
4. The user reviews the sorted transactions for analysis.

# User Story diagram



## Groups to Categorize Transactions

### Why we need this User Story

Without categorization, users would not have a clear understanding of their spending habits, making budgeting difficult.

### User Story goal

The goal is to provide users with a way to group transactions into predefined and custom categories to make sense of their spending.

# User Story context

A user wants to see how much they have spent on essential categories like groceries, rent, and entertainment in a given month.

## User Story initial situation

The user has uploaded their transactions and now needs to assign them to relevant categories for meaningful financial insights.

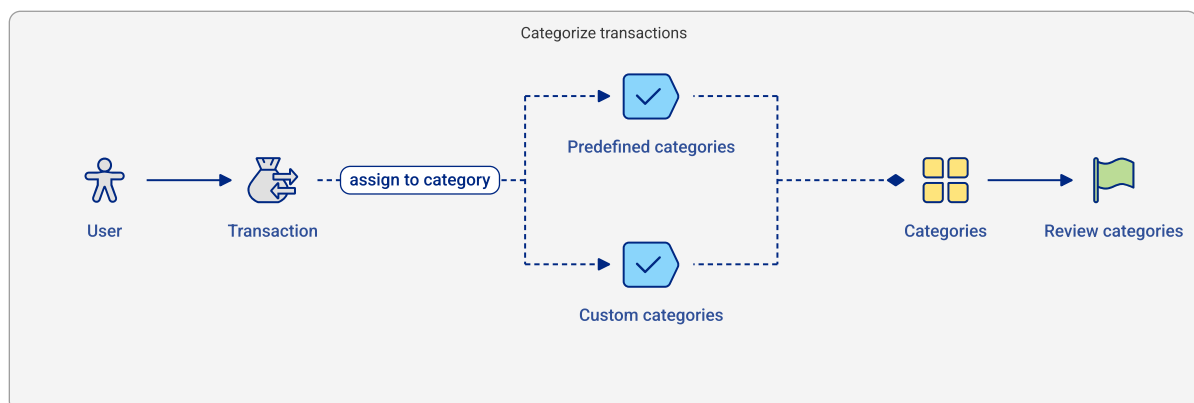
## User Story scenario

### Categories

#### Happy day scenario

1. The user opens the "Categories" section.
2. The user assigns transactions to predefined or custom categories.
  - 2.1. The user selects a transaction.
  - 2.2. The user assigns it to an appropriate category.
  - 2.3. The application updates the transaction with the selected category.
3. The user reviews categorized transactions.

## User Story diagram



# Simple Statistics of the Imported Data

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## Why we need this User Story

Without statistical insights, users would lack a visual and numerical summary of their finances, making it difficult to budget effectively.

## User Story goal

The goal is to provide users with an overview of their financial activity through statistics and visualizations.

## User Story context

A user wants to see how much they earned and spent in a given month, broken down by categories, to understand their financial health.

## User Story initial situation

The user has imported their transactions and categorized them. They now need an overview of income, expenses, and spending trends over time.

## User Story scenario

### Statistics

#### Happy day scenario

1. The user navigates to the "Statistics" page.
2. The user selects a time period for analysis.
  - 2.1. The user chooses a month or a custom date range.
  - 2.2. The application generates visual statistics.
  - 2.3. The user reviews different types of statistics.  
(A1, A2, A3)
3. The user gains financial insights and makes informed budgeting decisions.

## Alternative Flows

### A1 - (HDS 2.3)

The user views income vs. expenses.

### A2 - (HDS 2.3)

The user sees a pie chart of categorized spending.

### A3 - (HDS 2.3)

The user analyzes spending trends over time.

## User Story diagram

