W06 Team Activity: Designer

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This program will help people with how to handle their own money.

Expense: This class represents a single expense, including the amount spent, the date of the expense, and the category to which it belongs.

Attributes:

value: stores the amount spent.

date: stores the date of the expense.

category: stores the category of the expense.

Methods:

getValor(): returns the value of the expense.

getData(): returns the date of the expense.

getCategoria(): returns the category of the expense.

ExpenseManager: This class is responsible for managing the list of expenses, including adding new expenses, retrieving existing expenses, and generating reports on spending.

Attributes:

expenseList: stores the list of expenses.

Methods:

addExpense(expense): adds a new expense to the list.

getExpenses(): returns the list of expenses.

generateReport(): generates a report with total expenses by category.

Here's the class diagram for these two classes:

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| Expense | | ExpenseManager |

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| - value: double | | - expenseList: List<Expense> |

| - date: DateTime | +------------------+

| - category: string |

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| + getValor() : double |

| + getData() : DateTime |

| + getCategory() : string |

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| ExpenseManager |

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| - expenseList: List<Expense> |

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| + addExpense(expense: Expense) : void |

| + getExpenses() : List<Expense> |

| + generateReport() : string |

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The addExpense(expense) method of the ExpenseManager class allows adding new expenses to the expense list.

• The getExpenses() method of the ExpenseManager class allows retrieving the list of expenses.

• The generateReport() method of the ExpenseManager class generates a report with total expenses by category, using the expenses stored in the list.