Final Project Selection Form
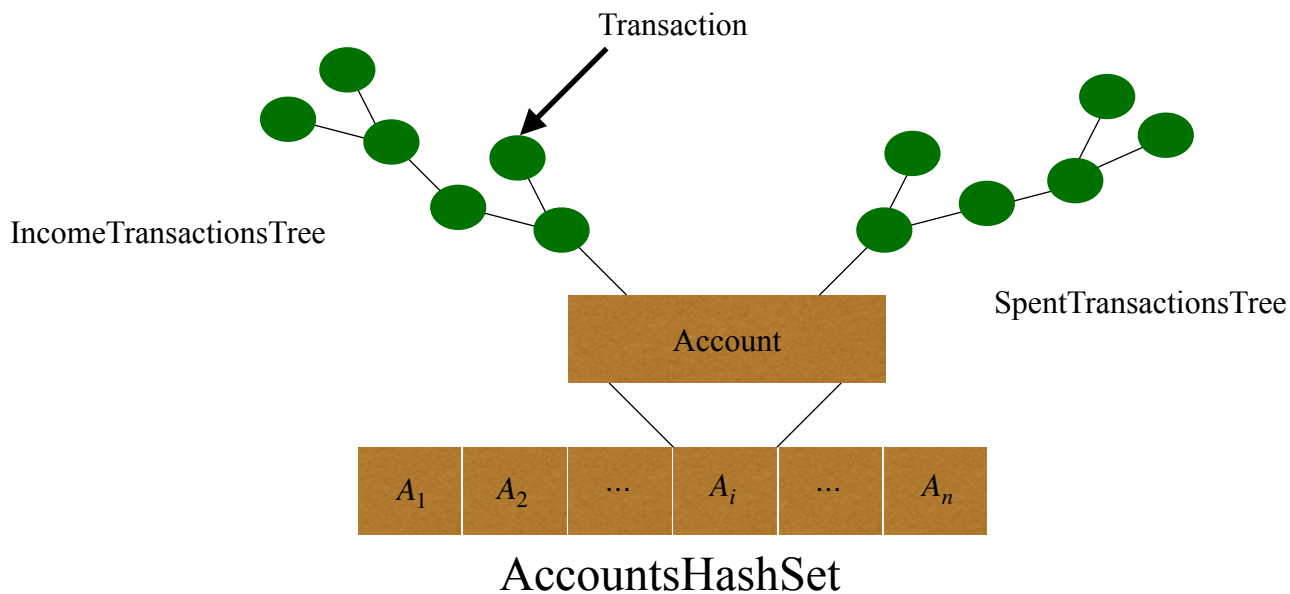
General Informations

Title: **Wallet**

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Specifications

IncomeTransactionsTree

Transaction

SpentTransactionsTree

Account

AccountsHashSet

A_1 A_2 ... A_i ... A_n

Classes:

A.　**Transaction**: representing a single transaction

Fields:

- Amount
- Date
- TransactionID
- Category: like scholarship for income and household for outcome

Methods:

- Different constructors
- Getters, as each field is private (eg. getAmount)

B.　**TransactionsTree**: transactions are stored in a TreeSet, sorted based on the transaction date.

Methods:

Added to the default methods for a TreeSet(put, get,…):

- cumulativeAmount: will be overridden for different scenarios:

    -for a specific date

    -for a period, specified by beginning and end date

    -for a specific category(eg. Income from scholarship)

    -for a category in a specified period(eg. Household last month)

C.　**Account:** representing a single account

Fields:

- Name
- AccountNumber
- AccountHolder
- AccountOpeningDate
- IncomeTransactionsTree: reference to a TreeSet storing income transactions
- SpentTransactionsTree: reference to a TreeSet storing spent transactions

Methods:

- Different constructors
- Getters for fields
- Save and Load: methods for saving/loading data to/from files, objects are going to be Serializable

D.   **AccountsHashSet**: each user can have multiple accounts. Each account is unique

E.   **WalletGraphics**: implementing the graphics using Swing library

F.   **WalletApplication**: will contain main method

Note: there might be some other features added to the program while it is being written

In case there is any ambiguity, lack of information or any suggestion please contact me and I will improve the document as soon as possible.