Documentation

**Introduction**

The application, referred to as "TheDesk," is a simple expense tracker that allows users to manage their financial expenses. It provides features like reviewing, adding, deleting, searching, and sorting expenditures.

**Components**

The application is composed of the following components:

1. **Main Menu**

When the application starts, a main menu is presented to the user with the following options:

1. Review expenditure
2. Add an expense
3. Delete all expenses
4. Sort expenses
5. Search for a particular expense
6. Close the application

2. **Expenditure List**

The application utilizes an **ArrayList<Integer>** named **expenses** to store the user's expenses.

3. **Searching Functionality**

The user can search for a particular expense using option 5 from the main menu. The method responsible for this functionality is **searchExpenses(ArrayList<Integer> arrayList)**.

This method performs a linear search, iterating through the **arrayList** to find the desired expense. If the expense is found, a message is displayed; otherwise, a "not found" message is shown.

4. **Sorting Functionality**

The user can sort the expenses in ascending order using option 4 from the main menu. The method responsible for this functionality is **sortExpenses(ArrayList<Integer> arrayList)**.

This method leverages the **Collections.sort()** function to sort the **arrayList** in ascending order.

**Usage**

1. **Running the Application**: Simply run the **Main** class in an IDE like Eclipse or from the command line using the **java** command.
2. **Navigating the Menu**: Follow the on-screen prompts to review, add, delete, sort, or search for expenses. Enter the corresponding number for the desired action.
3. **Exiting the Application**: Choose option 6 from the main menu to exit the application gracefully.

**Conclusion**

TheDesk is a basic application that demonstrates core Java concepts such as control statements, classes, objects, and working with collections. It provides a simple user interface for managing personal expenses and can be extended with additional features like saving data to a file, providing statistical insights, and implementing more sophisticated search and sorting algorithms.

**Additional Information**

1. **Java Version**: The code is intended to run on Java 8 or higher.
2. **Dependencies**: The code relies on standard Java libraries, and no external dependencies are required.
3. **Authorship**: This code was adapted and fixed as part of a learning exercise.