

ISKOins

Data Design Document

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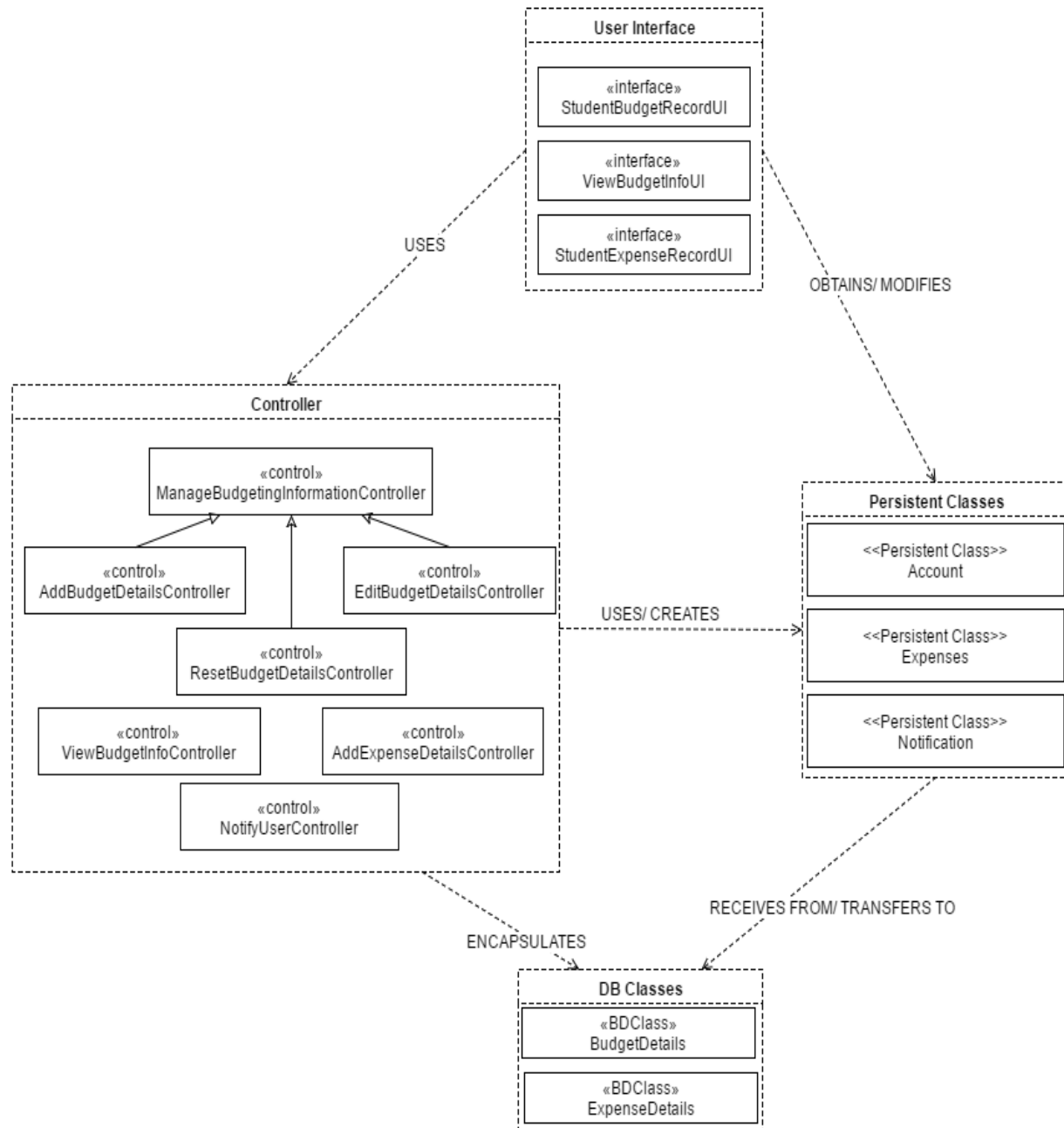
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Revision Control

History Revision:

RevisionDate	Person Responsible	Version Number	Modification
11/17/16	Eunice Angel D. Cruz	1.0	Initial Document; DAO classes
11/17/18	Deanne Faye C. Caingat	1.0	Data Design diagram; Account Details Data Source
11/17/16	Lois Alexis M. Velasco	1.0	TransferObject class; Expense Details Data Source

Data Design:



Data Access Object (DAO) Classes:

Class Name	Description
MaintainBudgetingInformationController	Grouping option for add, edit and reset information.
AddBudgetDetailsController	Creates a persistent object Account and supplies it with budgeting details obtained from the StudentBudgetRecordUI, and then passes it to BudgetDetails to create a new budgeting account.
EditBudgetDetailsController	Creates a persistent object Account and supplies it with budgeting details obtained from the StudentBudgetRecordUI, and then passes it to BudgetDetails to update the current budgeting information.
ResetBudgetDetailsController	Forwards the request to reset current budgeting information to BudgetDetails to reset the prevailing budgeting information.
ViewBudgetInfoController	Creates a temporary class Account to be filled with the current budgeting information, and then passes it to BudgetDetails to supply the necessary information.
AddExpenseDetailsController	Creates a persistent object Expenses and supplies it with exoense details obtained from the StudentExpenseRecordUI, and then passes it to ExpenseDetails to add a new expense detail..
NotifyUserController	Creates a persistent object Notification and gets data from BudgetDetails and ExpenseDetails. Using data from the said classes, each category is checked as to whether its expenses has reached a certain percentage of its expenditure limit. If yes, it prepares a notification message to the user.

TransferObject Classes:

Class Name	Description
Account	Account is in charge of adding account and budget details, editing budget details and resetting budget details. Adding budget details needs complete information for the name, initial amount and duration.
Expenses	Expense Details is in charge of updating the data under expenses. Expenses will keep a list of the current (today) expenses of the users and also a cumulative amount of expenses that the user had. Once reset budget details is chosen, the data in expenses will also be deleted.

List of Data Source:

Data Source Name: AccountDetails.csv

Description:

Account details follows the following format:

Name, Initial Amount, Budget Duration

CategoryListKey, Category, Expenditure Limit

Sample Source File:

```
Kim Myungsoo, 1000, Monthly
0, Food, 150
1, Transportation, 50
2, Groceries, 110
3, School Supplies, 115
4, Health, 0
5, Laundry, 75
6, Dorm Fee, 0
7, Savings, 0
8, New_Category, 0
```

Sample Tables from Database:

User		
Name	Budget	Category
VARCHAR(20)	SMALLINT	VARCHAR(20)
X(20)	X(20)	X(20)
Kim Myungsoo	5000	Monthly
Budget Details		
Category	Expenditure Limit	CategoryListKey
VARCHAR(20)	SMALLINT	SMALLINT
X(20)	10	10
Food	500	0
Dorm	750	1
Groceries	0	2
School Supplies	65	3
Health	0	4
Laundry	75	5
Dorm Fee	0	6
Savings	0	7
New Category	0	8

Data Source Name: ExpenseDetails.csv

Description:

Account details follows the following format:

CategoryListKey, Category, Cumulative Expense, Current Expense

Sample Source File:

```
0, Food, 150, 50
1, Transportation, 50, 0
2, Groceries, 0, 0
3, School Supplies, 65, 15
4, Health, 0, 0
5, Laundry, 75, 75
6, Dorm Fee, 0, 0
7, Savings, 0, 0
8, New_Category, 0, 0
```

Sample Tables from Database:

Expense Details			
Category	Cumulative Expense	Current Expense	CategoryListKey
VARCHAR(20)	SMALLINT	SMALLINT	SMALLINT
X(20)	10	10	10
Food	150	50	0
Dorm	50	0	1
Groceries	0	0	2
School Supplies	65	15	3
Health	0	0	4
Laundry	75	75	5
Dorm Fee	0	0	6
Savings	0	0	7
New Category	0	0	8