SE2203b: Software Design

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Revision History

Date	Issue	Description	Author
February 19th, 2023	Assignment 2	Adding Glossary	Pratik Narendra Gupta
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February 27th, 2023	Assignment 2	Adding System Use Case Description	Pratik Narendra Gupta
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iFINANCE System Glossary

1.1 Introduction

This document is used to define terminology specific to the problem domain, explaining terms, which may be unfamiliar to the reader of the use-case descriptions or other project documents. Often, this document can be used as an informal *data dictionary*, capturing data definitions so that use-case descriptions and other project documents can focus on what the system must do with the information.

1.2 Glossary

The glossary contains the working definitions for the key concepts in the iFINANCE System.

Term	definition
Assets	Assets are economic resources owned by an individual, organization, or government that have the potential to provide future economic benefits. Examples of assets include cash, investments, land, buildings, equipment, intellectual property, inventory, and accounts receivable.
Liabilities	Liabilities are obligations or debts that an individual, organization, or government owes to another party and that are expected to be settled in the future. Examples of liabilities include loans, accounts payable, accrued expenses, taxes payable, and bonds issued.
Balance Sheet	A balance sheet is a financial statement that provides a snapshot of a company's financial position at a particular point in time. It shows the company's assets, liabilities, and equity, and how these items are financed. The balance sheet equation is Assets = Liabilities + Equity.
Trial Balance	A trial balance is a list of all the accounts in a company's general ledger, along with their respective balances, at a specific point in time.
Deposit	A deposit refers to a sum of money that is placed into a bank account, usually for safekeeping, investment, or other financial purposes.
Income	Income refers to the money or revenue that an individual or a business earns from various sources, such as employment, investments, sales of goods or services, rent, and royalties.
Expense	Expenses refer to the costs incurred by an individual or a business to generate revenue or achieve a particular goal. They are the outflows of resources or assets, such as money, time, or effort, in exchange for goods or services that are consumed or used up during the normal course of operations.
Profit / loss	The profit and loss statement, also known as the income statement, is a financial statement that shows the revenues, expenses, and resulting profit or loss of a business over a specific period, such as a month, quarter, or year.
cash flow Statement	A cash flow statement is a financial statement that provides information about a company's cash inflows and outflows over a specific period of time. It shows how cash moves in and out of a company, including its operating activities, investing activities, and financing activities.
Double Entry	Double entry is a fundamental accounting principle that states that every financial transaction affects at least two accounts, with one account debited and the other credited. In other words, for every debit entry made to an account, there must be an equal and opposite credit entry made to another account.

iFINANCE System Actors

Actors	Description
User	This group represent all user who wants to use iFinance Management System to manage their personal finances, keeping track of bank accounts, cash, credit cards, and investment accounts.
System Administrator	This represents the admin who has the privileges to add user accounts into the system, edit and delete their profiles.
Potential User	As, System administer will also access other part of system, and 2 actor can not initiate same class. We had to create a another actor called potential actor who will initiate all the class that are common between user and System Administrator.
Double Entry	As each transaction will always have two effects: a debit entry and a credit entry. When transaction is initiated by Potential User, Double Entry will automatically take care of other parts of transaction by updating respected credit and debit field.

iFINANCE System Use cases

Use Case	Description
Login	This class will handle the login of user into the software. It will also include a class called ValidateUser which will store the database of all the user and their permission in the software.
ValidateUser	This is a database class, It will have all the information about the user and their permission in the system. When user has successfully login, it will update a Boolean field to true and will share that user details with other class when then ask for it.
ManageAccountProfile	This will allow the user to change their password
ManageGroup	This class will handle user's request to add, update, or delete a custom sub-category. It will include Groups class which like ValidateUser will store all the data about the groups
Groups	This will store all the information related to the groups and will share it with the GenerateFinanicalReport and ManageGroup as needed
GenerateFinanicalReport	This will generate valuable financial reports including the Trial Balance, Balance Sheet, a Profit and Loss statement, or a cash flow statement from the user financial data. It will also call ChartOfAccount to perform calculation, i.e., the summation, based on groups and/or sub-groups.
ChartOfAccount	This help the users to add, update, or delete Master Account (e.g., cash, bank, and credit card). It will also perform calculation, i.e., the summation, based on groups and/or sub-group when user requested to generate Financial Report. To help, this will include MasterAccount and Groups class and will get information from there during the calculation and processing
ManageAccountTransaction	This class will manage accounts' transactions, It will have 2 actor, and whenever, a transaction is detected, it will automatically update the the account by accessing MasterAccount
MasterAccount	MasterAccount will keep all the assets and liability in one place so that different class can access it when required. This will be possible by creating generalize class like debit and credit
ManageUserAccount	This will allow system Admin to add user accounts into the system, edit and delete their profiles. It will first check with validate user if the user has permission to access this.

iFINANCE System Use Case Diagram