CNIT 38000: Assignment #4 Use Case Diagram (UCD)

Using the System Narrative & Context Model Diagram (CMD) from Assignment #1, the System Narrative, Requirements (REQ) from Assignment #2, Event Analysis Matrix (EAM) from Assignment #3, the Use Case Diagram, and the following additional banking system information, prepare:

1. A Use Case Diagram (UCD) with packages.

LAB OBJECTIVES

- Analyze a Scenario (a Set of Use Cases).
- Develop a Use Case.
- Define an Association from an Actor to a Use Case.
- Categorize Types of System Actors.
 - Distinguish Initiating Actors.
 - Distinguish Participating Actors.
 - Distinguish the Temporal Actor (Time).
- Model a Use Case Diagram (UCD).

System Narrative

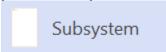
Additional Banking System information:

- For any customer banking transaction, the system will generate a confirmation of the transaction to be presented to the customer. A confirmation can be either a number or a receipt.
- A customer can view (or print) any previous monthly statement on request.
- Checking Account transactions and Savings Account transactions are <u>SEPARATE</u>. Do <u>NOT</u> combine them.
- There are approximately 14 events.
- On the Use Case Diagram, use three (3) subsystems: Checking Account Subsystem, Savings Account Subsystem and Account Management Subsystem (all other transactions). Use the UML package symbol.

REQUIREMENTS:

- 1. You <u>MUST</u> draw your diagram using Microsoft Visio Professional or Upgraded. The templates that your UML or Visual Paradigm. Use Case are to be used. If you use Visual Paradigm, the steps below reflect Visio not Visual Paradigm.
- 2. For document type, use **UML use case.**
- 3. From the search results, select **UML Use Case**.
- 4. Select Create.

- 5. The diagram opens. You should see the Shapes window next to the diagram. A UML Use Case stencil is open in the Shapes window.
- 6. Drag a Subsystem shape onto the drawing page. The subsystem can represent your entire system or a major component.



- 7. Double-click the Subsystem shape, and then type a new name for the for it, or press the Delete key to delete the existing name. Click outside the shape on the drawing page.
- 8. To resize the subsystem, select the shape, and then drag a selection handle.
- 9. Drag Use Case shapes The Use Case shape. from the UML Use Case stencil and place them inside the subsystem boundary, and then
 - drag Actor shapes
 The Actor shape. to the outside of the subsystem boundary.
- 10. Use connector shapes to indicate relationships between shapes in the diagram. There are five connectors available:

There are five connectors available:	
Connector	Description
Association	Shows the relationship of an actor to a use case.
—— Association	
Dependency	Indicates that one use case has a dependency on another.
—— Dependency	
Generalization	Indicates that a use case is a specific way to achieve goals of the general use case.
Generalization	
Include	Shows how a use case is broken into smaller steps.
Include	

Connector	Description
Extend	Shows that one use case adds functionality to another.
Extend	

- 11. Example: To indicate a relationship between an actor and a use case
 - a. In a use case diagram, drag an Association connector shape onto the drawing page.
 - b. Glue one endpoint of the Association shape to a connection point on an Actor shape. Glue the other endpoint to a connection point on a Use Case shape.
- 12. Use a TITLE BLOCK shape to document ALL your assumptions.
- 13. Copy and paste your diagram into the Word document (Assignment #4 Student Answers.doc) where indicated, replacing the three (3) lines of yellow, highlighted text. Add your name to the document header, replacing the yellow, highlighted text. NO .PNG files.
- 14. DO NOT zip your file
- 15. Attach the .VSDX file in case I have questions.
- 16. DO NOT use an old student's file, as there are some changed system, actor, process names, etc. in this semester's assignments.