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| File Name | UC\_TransactionManager\_UpdateTransaction.docx |
| Use Case Name | Transaction Manager |
| Project | Account Project v03 |
| Author | Bob Trapp |
| Date | 2017-11-03 |
| Specification Document | NA (See Assignment for Project Version 3) |
| Parent Document |  |
| Use Case Diagram | TransactionManagementUseCaseDiagram.png |

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| **Mod Date** | **Mod By** | **Mod Description** |
| 2017-11-02 | Bob Trapp | Initial Creation |
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| Goals | The Transaction Manager wishes to Update a Transaction |
| Primary Actor | * Transaction Manager |
| Secondary Actor(s) | * DBMS |
| Pre-Conditions | * The Transaction to be updated exists in the data store * The Transaction Manager is at the Transaction Management Menu |
| Post Conditions | * The changes have been recorded in the data store * There is a record in the data store denoting what was changed, the date, and by whom * The Transaction Manager is taken back to the Transaction Management Menu |
| Basic Flow | 1. The Transaction Manager chooses Update Transaction from the Transaction Management Menu 2. The System displays the available Transactions 3. The System prompt the Transaction Manager to specify a Transaction 4. The Transaction Manager specifies a Transaction and submits 5. The System verifies the Transaction entered 6. The System displays the available Accounts 7. The System displays the current FROM Account 8. The System prompts for the FROM Account 9. The Transaction Manager specifies a FROM Account and submits 10. The System verifies the FROM Account 11. The System displays the available Accounts 12. The System displays the current TO Account 13. The System prompts for a new TO Account 14. The Transaction Manager specifies a TO Account and submits 15. The System verifies the TO Account 16. The System prompts for a reason for the Update 17. The Transaction Manager enters a reason and submits 18. The System verifies the reason 19. The System calls the DBMS procedure for updating the Transaction, sending the data and the reason 20. The DBMS creates a new Transaction record that invalidates the existing Transaction record 21. The DBMS creates a Transaction record to match the updated data 22. The DBMS returns a result with the Transaction ID of the new Transaction Record 23. The System displays a success message 24. The Transaction Manager acknowledges the message 25. The System displays the Transaction Management Menu |
| Alternate Flow(s) | 1. If there are no Transaction records to display (Extension Point: Step 2)    1. The System displays a message stating that there are no available accounts    2. The Transaction Manager acknowledges the message    3. The System goes to Step 25 2. If the Transaction Manager specifies in invalid Transaction (Extension Point: Step 5)    1. The System displays an error message    2. The Transaction Manager acknowledges the error    3. The System returns to Step 2 3. If the FROM Account is blank (Extension Point: Step 10)    1. The System treats the blank to mean “Use the current value”    2. The System copies the current FROM Account to use as the new value.    3. The System continues with Step 11 4. If the FROM Account entered is invalid (Extension Point: Step 10)    1. The System displays an error message    2. The Transaction Manager acknowledges the error    3. The System returns to Step 6 5. If the TO Account entered is blank (Extension Point: Step 15)    1. The System treats the blank to mean “Use the current value”    2. The System copies the current Account Number Range End to the new value    3. The System continues with Step 16 6. If the TO Account entered is invalid (Extension Point: Step 13)    1. The System displays an error message    2. The Transaction Manager acknowledges the error    3. The System returns to Step 11 7. If the FROM Account entered is the same as the TO Account (Extension Point: Step 15)    1. The System displays an error message    2. The Transaction Manager acknowledges the error    3. The System returns to Step 6 8. If the update reason is invalid (Extension Point: Step 18)    1. The System displays an error message    2. The Transaction Manager acknowledges the error    3. The System returns to Step 16 9. If the DBMS cannot update the record (Extension Point: Step 23)    1. The System displays an error message    2. The Transaction Manager acknowledges the error    3. The System goes to Step 25 10. If the Transaction Manager chooses Cancel     1. The System prompt for Confirm     2. If the Transaction Manager confirms, the System goes to Step 25     3. If the Transaction Manager de-confirm the Cancel, the System returns to the step where the cancel was originally chosen. |
| Open Issues | 1. There are no open issues |
| Remarks | 1. The Transaction Manager may choose to Cancel until the Account Number Range End has been submitted successfully and the System is sending the request to the DBMS. 2. To enforce substantial entries, the reason for updating must be at least eight characters long, but can be appreciably longer. 3. The FROM Account must not be the same as the TO Account. 4. The Transaction Amount must be greater than zero. 5. NOTE: Updating a Transaction record is called “Correcting an Entry”. It involves reversing the original transaction and then entering a new transaction with the correct information. |