**Use cases**

|  |  |  |
| --- | --- | --- |
| Use Case Name | Actors | Brief Use Case Description |
| Transfer money | Customer | User/actor enters the number of currency and receiver’s account number; system wire the money to the account. |
| Create/update customer account | Customer, customer service representative | User/actor creates their account with their bank account information and manage input data. |
| Produce customer usage report | Marketing | User/actor enters the customer account number; the system generates and displays customer usage. |
| Track transaction | Customer, management | User/actor enters the account number and system show the history of transactions. |
| Secure user information | Customer | User/actor enters private information and system encrypt the information. |

**Use case diagram** Diagram

Description automatically generated

**List of nouns**

|  |  |
| --- | --- |
| Identified noun | Notes on including noun as a thing to store. |
| Account ID | Yes, need to store the account id to integrate all bank accounts. |
| Account type | Is it special type of account or not? |
| Bank | Need to store for acquiring subordinate bank information. |
| Balance | Is it negative number or not? Display total balance. |
| Bank account | It needs to store for verification. |
| Catalog | No needs to store. |
| Change request | An input resulting in remembering changes to transaction. |
| Confirmation | An output produced from other information. Not stored. |
| Credit transfer | An input resulting from transaction. Needs to store. |
| Customer | Key of other information. Needs to store. |
| Customer account | Needs to store for authorization. |
| Management | We know who they are. No need to store. |
| Marketing | We know who they are. No need to store. |
| Security | Information of encryption and decryption. Research. |
| Transaction history | An output produced from transaction system. Needs to store. |
| Transfer limit | An input resulting in transaction. Needs to store. |
| Transfer type | An input resulting in transaction. Needs to store. |
| Usage report | An output produced from information. Not stored. |
| Verification | An output produced from user check system. Needs to store. |

Provide a final list of all the “Things” for your system for which information will be stored.

|  |  |
| --- | --- |
| Identified noun | Notes on including noun as a thing to store. |
| Account ID | Yes, need to store the account id to integrate all bank accounts. |
| Bank | Need to store for acquiring subordinate bank information. |
| Balance | Is it negative number or not? Display total balance. |
| Bank account | It needs to store for verification. |
| Credit transfer | An input resulting from transaction. Needs to store. |
| Customer | Key of other information. Needs to store. |
| Customer account | Needs to store for authorization. |
| Transaction history | An output produced from transaction system. Needs to store. |
| Transfer limit | An input resulting in transaction. Needs to store. |
| Transfer type | An input resulting in transaction. Needs to store. |
| Verification | An output produced from user check system. Needs to store. |

**Associations**

Diagram

Description automatically generated

**Specializations /Generalization Relationships** Diagram

Description automatically generated

**Whole / Part Relationship**Diagram

Description automatically generated

**List of States and Exit Transitions**

Transfer Credit

|  |  |
| --- | --- |
| State | Transition causing exit from state |
| Open | inputComplete |
| Deposit balance | depositCredit |
| Ready to Transfer | trasnferCredit |
| Transferred | No exit transition defined |

Secure Validation of users

|  |  |
| --- | --- |
| State | Transition causing exit from state |
| Verify email | emailValidated |
| Verify phoneNumber | phoneNumberValidated |
| Verify bankAccount | bankAccountValidated |
| Validated | No exit transition defined |

Transaction history

|  |  |
| --- | --- |
| State | Transition causing exit from state |
| Open | selectPeriod |
| Ready to Collect | collectHistory |
| Ready to Display | displayHistory |
| Displayed | No exit transition defined |

**Final State Machine Diagram for each class:**

**Transfer Credit**Diagram

Description automatically generated

**Secure Validation of users**

Diagram

Description automatically generated

**Transaction history**

Diagram

Description automatically generated