|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Step** | **Test case** | **Initial system State** | **Test data** | **Expected result** |
| **System Startup** | System is started when  the switch is turned  "on" | System is off | Activate the "on"  switch | System requests  initial cash  amount |
|  | System accepts initial  cash amount | System is requesting  cash amount | Enter a legitimate  amount | System is on |
| **System Shutdown** | System is shut down when the switch is  turned "off" | System is on and not servicing a customer | Activate the "off"  switch | System is off |
| **Session** | System reads a  customer's ATM card | System is on and not servicing a customer | Insert a readable card | Card is accepted.  System asks for entry of PIN |
|  | System rejects an unreadable card | System is on and not servicing a customer | Insert an unreadable  card | Card is ejected.  System displays  an error screen.  System is ready  to start a new  session |
|  | System accepts  customer's PIN | System is asking for entry of PIN | Enter a PIN | System displays a  menu of transaction types |
|  | System allows customer  to perform a transaction | System is displaying  menu of transaction  types | Perform a transaction | System asks  whether customer  wants another  transaction |
|  | System allows multiple  transactions in one  session | System is asking  whether customer  wants another  transactio | Answer yes | System displays a  menu of  transaction types |
|  | Session ends when  customer chooses not to  do another transaction | Session ends when  customer chooses not to  do another transaction | Answer no | System ejects  card and is ready  to start a new  session |
| **Withdrawal** | System asks customer  to choose an amount to withdraw | Menu of account  types is being  displayed | Choose checking  account | System displays a  menu of possible  withdrawal  amount |
|  | System performs a  legitimate withdrawal  transaction properly | System is displaying  the menu of  withdrawal amounts | Choose an amount  that the system  currently has and  which is not greater  than the account  balance | - System dispenses  this amount of  cash.  -System prints a  correct receipt  showing amount  and correct  updated balance.  -System records transaction  correctly in the  log (showing both  message to the  bank and  approval back) |
|  | A withdrawal  transaction can be cancelled by the customer any time prior  to choosing the  amount | System is displaying  menu of account types | Press "Cancel" ke | System displays  an appropriate message and  offers customer  the option of  choosing to do  another  transaction or not |
|  | A withdrawal  transaction can be  cancelled by the  customer any time prior  to choosing the  amount | System is displaying  menu of  amount | Press "Cancel" key | System displays  an appropriate  message and  offers customer  the option of  choosing to do  another  transaction or not |
| **Inquiry** | System performs a  legitimate inquiry  transaction properly | System is displaying  menu of account  types | Choose checking  account | System prints a  correct receipt  showing correct  balance.  System records  transaction  correctly in the  log (showing both  message to the  bank and  approval back) |
|  | An inquiry transaction can be cancelled by the customer any time prior  to choosing an account | System is displaying menu of account types. | Press “cancel” key | System displays an appropriate message and offers customer theoption of choosing to do another transaction or not. |
| **Invalid PIN Extension** | Customer is asked to  reenter PIN |  | Enter an incorrect  PIN.  Attempt an inquiry  transaction on the customer's checking account | Customer is asked  to re-enter PIN |
|  | Correct re-entry of PIN  is accepted | Request to re-enter  PIN is being  displayed | Enter correct PIN | Original  transaction  completes  successfully |
|  | A correctly re-entered  PIN is used for  subsequent transactions | An incorrect PIN  has been re-entered  and transaction  completed normally | Perform another  transaction | This transaction  completes  successfully as  well |
|  | Incorrect re-entry of PIN accepted | Requested to re-enter PIN is being displayed | Enter incorrect PIN | An appropriate message is displayed and re-entry of the PIN is again requested. |
|  | Correct re-entry of PIN  on the second try is  accepted | Requested to re-enter PIN is being displayed | Enter incorrect PIN the first time, then correct PIN the second time | Original transaction  completes  successfully |
|  | Correct re-entry of PIN on the third try is accepted | Request to re-enter  PIN is being  displayed | Enter incorrect PIN the first time and second times, then correct PIN the third time | Original  transaction  completes  successfully |
|  | Three incorrect reentries of PIN result in retaining card and aborting transaction | Request to re-enter  PIN is being  displayed | Enter incorrect PIN  three times | An appropriate  message is  displayed.  Card is retained  by machine.  Session is  terminate |