**Test Cases**

# Card – Holder Name Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali | Valid | The length between MAX and MIN |
| Ahmed Abdalsalam Elsaka | Valid | The length between MAX and MIN |
| yasser ahmed Abdalsalam Elsaka | Invalid | The length higher than MAX |
| yasser ahmed | Invalid | The length lower than MIN |
|  | Invalid | The length lower than MIN |

# Card – Expiry Date Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 12/25 | Valid | Right length – Right Format |
| 12/2026 | Invalid | Wrong Format |
| 30/12/2025 | Invalid | Wrong Format |
| 12-22 | Invalid | Wrong Format |
| 35-22 | Invalid | Unreal month |

# Card – PAN Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 075982963293069095 | Valid | The length between MAX and MIN |
| 123456789012345 | Invalid | The length between MAX and MIN |
| 12345678901234567890 | Invalid | The length higher than MAX |
| 1234567890123asd | Invalid | Have characters |
|  | Invalid | The length lower than MIN |

# Terminal – getTransactionDate Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 11/12/2022 | Valid | Right length – Right Format |
| 35/12/2022 | Invalid | Unreal day |
| 12/15/2022 | Invalid | Unreal month |
| 12/22 | Invalid | Wrong format |
| 12-12-2012 | Invalid | Wrong format |

# Terminal – isCardExpired Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 10/25  11/12/2022 | Valid | card |
| 11/22  12/12/2022 | Invalid | Expire month |
| 12/25  11/12/2027 | Invalid | Expire year |

# Terminal – isValidCardPAN Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 0883843610296134 | Valid | Luhn algorithm is satisfy |
| 12345678901234567 | Invalid | Luhn algorithm is not satisfy |
| 12345678906434567 | Invalid | Luhn algorithm is not satisfy |

# Terminal – getTransactionAmount Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 1000 | Valid | More than 0 |
| 12.22 | Valid | More than 0 |
| -1000 | Invalid | Less than 0 |
| 0 | Invalid | Equal zero |

# Terminal – setMaxAmount Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 1000 | Valid | More than 0 |
| 12.22 | Valid | More than 0 |
| -1000 | Invalid | Less than 0 |
| 0 | Invalid | Equal zero |

# Terminal – isBelowMaxAmount Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| 1000  20 | Valid | More than 0 |
| 5000  6000 | Invalid | More than 0 |
| 12  1000 | Invalid | Less than 0 |

# Server – recieveTransactionData Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000 | Valid |  |
| Hussein Abdalsalam Ali 12/25  08328502740064806  11/12/2022  10000 1000 | Invalid | PAN not in database |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 4000 | Invalid | More amount than have in account |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000 | Invalid | Cant save it full of transactions |

# Server – isValidAccount Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000 | Valid |  |
| Hussein Abdalsalam Ali 12/25  08328502740064806  11/12/2022  10000 1000 | Invalid | PAN not in database |

# Server – isAmountAvailable Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000 | Valid |  |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 4000 | Invalid | More amount than have in account |

# Server – saveTransaction Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000 | Valid |  |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000 | Invalid | Cant save it full of transactions |

# Server – getTransaction Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000  Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 500 | Valid |  |

# Application – appStart Function

|  |  |  |
| --- | --- | --- |
| Input | Valid or Not | Description |
| Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 1000  Hussein Abdalsalam Ali 12/25  075982963293069095  11/12/2022  10000 500 | Valid |  |