**AIUB Banking Management** **System**

**Course Name:** Software Quality & Testing

**Section:** A

**Group**: 7

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# **Problem**

The existing payment system that AIUB follows is depended and not personal. Students do their semester payment or other payments throw some selected commercial banks as Dhaka bank or Madhumati bank etc. Most of the time after completing the registration for the upcoming semester and the payment slot comes during the semester break where more than 70% students stay with their family in their hometowns. In addition, most of theme’s hometowns are far from Dhaka. Therefore, this is difficult that the students will go back to Dhaka only because of completing their payments and come back again to the home. On the other hand, if some students lives in Dhaka then also they have to go to the university or nearest banks and if they go to university or banks, they have to stand and wait in the queue, which is also time consuming. Every semester students face various kinds of problems due to this payment system. If there will be the system of AIUB ATM banking service, then students can do their payment by sitting home and going nowhere.

# **Existing Solution**

In the existing system, Students can pay their tuition fees from any branches of Dhaka Bank. But this process is done manually. Employees are also receives their payments from various bank account and also deposit their money in various bank. Everything has to be done manually. The maximum process done manually for the system and various way involve to do the specific tasks mean that this system is not centralize and digital. There have some solutions for this project. We will try to mention it below:-

In the modern era we are prefer online system most which seems to be easy and flexible for all of us. And also this system is centralize, so that user of this system easily done their specific task like transaction. We are try to build up such system that can successfully done any types of transaction by successfully log in to the system.

Our system deal with existing problem and it is give quite complex free solution. User can easily interact with the system. And get a better solution. So, it is quite easier for user to use this system efficiently and it is seems to be quite better solution for user.

# **Our Proposal**

Some problems can be handled by the existing solution. But still, there are many lacking and issues do exist while user do their transaction. Our proposed solution will help people to done their transaction easily. Our proposed system, this is an online banking management system software project that will serve the functionality of banking system. The system will allow users to log in. The project will provide most of the basic functionality required for banking system. It will allow the user to deposit money, withdraw money, transfer money to another bank account. User can pay their payment online, use card to withdraw money. The system ensure all essential component about banking.

# **System Specification**

*Functional Requirements*

1. The system shall accessible via the internet
2. User can login to the system
3. System running on different platform
4. User can deposit money
5. User can withdraw money
6. User can transfer money from AIUB bank account to another account
7. User can pay his/her payment
8. User can pay his/her payment through another bank account to AIUB bank account
9. Verify the card
10. Query of account balance
11. The card used after start date
12. Card expire on expire date
13. User can change his/her password
14. For security purposes, a user’s password will be encrypted by the system.
15. Admin can update policy, package other options.
16. Admin can see/change the withdraw, deposit, payment transaction
17. User can report a problem
18. User get notification about new updates
19. User can request for transaction cancel
20. The system will allow the user to enter the correct PIN in no more three attempts. The failure to provide correct PIN in three attempts will result in the confiscation of the ATM card.
21. The system will ask for the transaction type after satisfactory validation of the user PIN. The user will be given three options: withdrawal transaction, or query transaction, or transfer transaction
22. If a user selects withdrawal transaction, the system will prompt the user to enter account number and amount to be dispensed.
23. If a withdrawal transaction is approved, the requested amount of cash will be dispensed, a receipt will be printed containing information about the transaction, and the card will be ejected. The information printed on the receipt includes transaction number, transaction type, amount withdrawn, and account balance.
24. If a user selects query transaction, the system will prompt the customer to enter account number.
25. If a user selects transfer transaction, the system will prompt the customer to enter from account number, to account number, and amount to be transferred.
26. The system will check if there are enough funds available in the ‘from account’, which are being requested for transfer to the ‘to account’.
27. If the transfer transaction is approved, a receipt will be printed and the card will be ejected. The information printed on the receipt includes transaction number, transaction type, amount type, and account balance.
28. The system will cancel any transaction if it has not been completed if the user presses the Cancel button.

*Non-Functional Requirements*

1. The system can handle 10000 hits at a time.
2. A user will be Session out after 10 mins.
3. The system will be verified an account within 5 sec.
4. One user can complete registration within 2 minutes.
5. The system is supported by all browsers and OS.
6. The system needs to be reliable.
7. If unable to process than correct error messages.
8. The database must be kept backed up
9. The details of the user must be safe and secure
10. Web pages will be loaded within a few seconds.

# **Test Plan**

# *Test Cases:*

Case- 1:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Bizary | | |
| Test Case ID: FR\_1 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: shanjida hride | | |
| Module Name: Login session | | Test Execution date: 20/03/2020 | | |
| Test Title: Verify the login with valid username and password | |  | | |
| Description: Test the ATM login page | |  | | |
| Precondition: User has valid username and password  Dependencies: Cannot access via offline. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1. Go to the site  2. Enter username  3. Enter password  4. Submit | Username: Prava  Password: 4567a | User should login in to the page | As expected | Pass. |
| Post Condition: User is validated with database and successfully login to account. | | | | |

Case-2:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Shanjida Hride | | |
| Test Case ID: FR\_2 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: Nakibul | | |
| Module Name: Login Session | | Test Execution date: 20/03/2020 | | |
| Test Title: Verify Login with valid account no and pin | |  | | |
| Description: Users can log in to the system if the user has valid account No and pin | |  | | |
| Precondition: The user needs a valid account No and pin. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Connect to the internet and browse the website.  2) Go to the site  3) Enter username and Password  4) click submit | Account no : 21324  Pin : 1234 | Login Successfully |  |  |
| Post Condition: User can login successfully | | | | |

Case-3:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Bizary | | |
| Test Case ID: FR\_3 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by: nakib | | |
| Module Name: Login Session | | Test Execution date: 20/03/2020 | | |
| Test Title: Report a problem throw problem button | |  | | |
| Description: Users can report a problem if they face any | |  | | |
| Precondition: The user needs a valid account | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Connect to the internet and browse the website.  2) Go to the site/ VUES  3) Press report button  4) Write down the problem  5) Submit | Login test | Report Successfully |  |  |
| Post Condition: User can report the problem to the admin successfully. | | | | |

Case-4:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Nakibul Islam | | |
| Test Case ID: FR\_4 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by: Shanjida Hride | | |
| Module Name: Login Session | | Test Execution date: 20/03/2020 | | |
| Test Title: Incorrect password attempt freeze the system for 30 minutes. | |  | | |
| Description: By providing incorrect password lock the system for 30 minutes for maintains security. | |  | | |
| Precondition: Provide valid and invalid password  Dependencies: can’t access without providing valid password | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1. Go to the system login section  2. Provide valid password  3. Provide invalid password for checking whether system freeze 30 minutes or not.  4.Click submit | Valid password:135  Invalid password:246 | Freeze the system for exact 30 minutes. |  |  |
| Post Condition: Lock out for 30 minutes. | | | | |

Case-5:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Shanjida Hride | | |
| Test Case ID: FR\_5 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: Bizary | | |
| Module Name: System access | | Test Execution date: 20/03/2020 | | |
| Test Title: The system shall accessible via the internet. | |  | | |
| Description: Test the system which is accessed via the internet. | |  | | |
| Precondition: Need an internet connection.  Dependencies: can’t access via offline. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1. At first connect with the internet.  2. Access the system from a browser. | System address/IP address. | User can see the login page. |  |  |
| Post Condition: User can see the system login page. | | | | |

Case-6:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Bizary | | |
| Test Case ID: FR\_6 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: shanjida hride | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: Withdraw money from ATM machine | |  | | |
| Description: Users can withdraw money from ATM booth via login to the account | |  | | |
| Precondition: The withdrawal amount should be greater than 500 taka  Dependencies: In the account there should have money more than 1000 taka | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Login in the account  2) Fill the amount of withdrawal  3) click to withdraw | Amount : 500 | Successfully Withdraw |  |  |
| Post Condition: Print a cash receipt of the transaction | | | | |

Case-7:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Shanjida Hride | | |
| Test Case ID: FR\_7 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: Anamika | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: Deposit money to AIUB bank | |  | | |
| Description: Users can deposit money in bank via login in the system | |  | | |
| Precondition: The withdrawal amount should be greater than 1000 taka  Dependencies: In the account there should have money more than 1500 taka | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Login in the account  2) Fill the amount that want to withdraw  3) click to withdraw | Amount want to withdraw | Successfully Withdraw |  |  |
| Post Condition: A can print a cash receipt | | | | |

Case-8:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Nakibul Islam | | |
| Test Case ID: FR\_8 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: Bizary Prava | | |
| Module Name: Transaction Session | | Test Execution date: 20/03/2020 | | |
| Test Title: Payment by account | |  | | |
| Description: Student can pay their fees in the bank via login the system | |  | | |
| Precondition: Minimum payment amount 20,000tk , must remain in account. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Login the account  2) Fill the amount that want to pay.  4) Click payment option. | Amount want to pay | Successfully payment complete. |  |  |
| Post Condition: Students must print payment slip and Account balance remains 1000tk at least. | | | | |

Case-9:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by:Nakibul Islam | | |
| Test Case ID: FR\_9 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): High | | Test Executed by: Anamika Basak | | |
| Module Name:-Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: Transfer money to another account | |  | | |
| Description: User can transfer their available money to another account for any needs. | |  | | |
| Precondition: For transfer money to another account user amount should be greater than 1000 taka  Dependencies: In the account there should have money more than 2000 taka | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Login in the account  2) Fill the amount that want to transfer  3) click to transfer | Amount want to transfer | Successfully transfer |  |  |
| Post Condition: A user can print a transfer receipt | | | | |

Case- 10:

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| Project Name: AIUB Banking Management System | | Test Designed by: Bizary | | |
| Test Case ID: FR\_10 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by: nakib | | |
| Module Name: System access | | Test Execution date: 23/03/2020 | | |
| Test Title: Card activation | |  | | |
| Description: The ATM booth will not accept any command if the card is inactive. | |  | | |
| Precondition: A valid ATM card | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Insert the card  2) Try to login | Login in the system | Successfully login |  |  |
| Post Condition: User has an inactive card. Activate the card again from admin. | | | | |

Case-11:

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| Project Name: AIUB Banking Management System | | Test Designed by: Bizary | | |
| Test Case ID: FR\_11 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Low | | Test Executed by: shanjida hride | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: print transaction receipt | |  | | |
| Description: Users can get a receipt after complete a transaction | |  | | |
| Precondition: user should successfully login the system and make a transaction. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) ) Login in the account  2) Go to withdraw  3) Fill the amount of withdrawal  3) Click ‘yes’ when the system will ask for a payment receipt. | Withdraw money request | Print a receipt |  |  |
| Post Condition: Can get a receipt of current transection. | | | | |

Case- 12:

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| Project Name: AIUB Banking Management System | | Test Designed by:Shanjida Hride | | |
| Test Case ID: FR\_12 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by: Shahariar Tehjib | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: Expired Time & Date | |  | | |
| Description: The system will check expired time and date of the card which is use for transaction. | |  | | |
| Precondition: A specific valid time and date | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Login in the account  2) check starting date and time of the card.  3) check expired date and time  4) Verify valid time and date | Starting valid date and time; Expire valid date and time | Expired time and date confirm. |  |  |
| Post Condition: Modify with new date and time for the card | | | | |

Case- 13:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by: Nakibul | | |
| Test Case ID: FR\_13 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by: Shanjida Hride | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: cancel transaction | |  | | |
| Description: The system will cancel any transaction if it has not been completed if the user presses the Cancel button. | |  | | |
| Precondition: A Transaction request in the system | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) Login in the account  2) Make a transaction request  3) something not complete  4) cancel transaction | Done something wrong or incomplete any info | Cancel transaction |  |  |
| Post Condition: User can again make request for transaction. | | | | |

Case-14:

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by:Bizary | | |
| Test Case ID: FR\_14 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by: Shanjida Hride | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: Check balance | |  | | |
| Description: Users can login his/her account and check balance | |  | | |
| Precondition: user should successfully login the system. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1) ) Login in the account  2) Make a check balance request  3) click submit | Balance amount | Balance is 10000 |  |  |
| Post Condition: Can show balance successfully | | | | |

Case-15 :

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| --- | --- | --- | --- | --- |
| Project Name: AIUB Banking Management System | | Test Designed by:Bizary Prava | | |
| Test Case ID: FR\_15 | | Test Designed date:16/03/2020 | | |
| Test Priority (Low, Medium, High): Medium | | Test Executed by:Nakibul Islam | | |
| Module Name: Transaction Session | | Test Execution date: 23/03/2020 | | |
| Test Title: Check Record of transaction. | |  | | |
| Description: Users can login his/her account and to check record | |  | | |
| Precondition: Smart database management system for store record. | | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1)) Login in the account  2) click view button for check record of his/her transaction  3) click status button. | User name: arrow  Password: 135 | List of transfe , deposit, pay amounts. |  |  |
| Post Condition: Can view record of his/her transaction successfully | | | | |