Table 4.1: Login as a Student UC-01

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – I** | Login as a Student | | |
| **Brief Description** | Student wish to login account by giving the necessary data | | |
| **Goal** | The goal of this use case is to login. | | |
| **Pre-conditions** | Student must have Registered themselves. | | |
| **Post conditions** | Login successful. Dashboard page will be displayed. | | |
| **Failed End Condition** | Retry Login an account. | | |
| **Primary Actors**  **Secondary Actors** | Students  Database | | |
| **Dependency** | All the fields should be filled properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The website has been opened by a user. | Please enter your NUML Id and password. |
|  | **2.** | The student clicks the Login button after entering credentials. | The student is redirected to the dashboard by the system if credentials are correct. else alert shows. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The student has no account. | The student is redirected to the registration page by the system. |
|  | **3b.** | The student inputs incorrect information. | The system alerts the student with a prompt asking them to enter valid information. |
|  | **3c** | The admin does not verify students accounts. | The system displays an error message that your account is not verified. |

Table 4.2: Login as an Admin UC-02

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – II** | Login as an Admin | | |
| **Brief Description** | Admin wish to login account by giving the necessary data. | | |
| **Goal** | The goal of this use case is to login. | | |
| **Pre-conditions** | Admin must have Registered. | | |
| **Post conditions** | Login successful. Dashboard page will be displayed. | | |
| **Failed End Condition** | Retry Login an account. | | |
| **Primary Actors**  **Secondary Actors** | Admin  Database | | |
| **Dependency** | All the fields should be filled properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The website has been opened by a Admin. | Please enter your email address and password. |
|  | **2.** | The admin clicks the Login button after entering credentials. | The admin is redirected to the dashboard by the system if credentials are correct. else alert shows. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin has no account. | The admin must request registration from the super admin. |
|  | **3b.** | The admin inputs incorrect information. | The system alerts the admin with a prompt asking them to enter valid information. |

Table 4.3: User Registration UC-03

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – III** | Register as Student | | |
| **Brief Description** | Students wish to create accounts by giving the necessary data. Following admin approval, student gets registered. | | |
| **Goal** | The goal of this case is student registration. | | |
| **Pre-conditions** | Student must have opened the website registration page. | | |
| **Post conditions** | Registration successful. Confirmation message will be displayed. | | |
| **Failed End Condition** | Retry registering an account. | | |
| **Primary Actors**  **Secondary Actors** | Students  Database | | |
| **Dependency** | All the fields should be filled properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The website registration page has been opened by a student. | Please enter all the necessary details. |
|  | **2.** | The student clicks the “Register” button after adding all the data. | The system will show a confirmation message that Student registered successfully else alert shows. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The student clicks the “Register” button. | The student is already registered and will take to login page. |
|  | **3b.** | The student inputs incorrect information. | The system alerts the student with a prompt asking them to enter valid information. |

Table 4.4: Generate Challan UC-04

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – IV** | Generate Challan | | |
| **Brief Description** | Student will be able to generate challan. | | |
| **Goal** | The goal of this use case is to generate challan. | | |
| **Pre-conditions** | Student must be logged in. | | |
| **Post conditions** | Challan Generated successfully. | | |
| **Failed End Condition** | Retry Generating Challan. | | |
| **Primary Actors**  **Secondary Actors** | Student  Database | | |
| **Dependency** | Student must be logged in successfully before they can generate challan. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | Student should open the website. | Please enter your NUML Id and password. |
|  | **2.** | Student should click on generate challan button. | Challan generated successfully. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | If the user is not logged in. | The system redirects the user to the login page. |

Table 4.5: View Account Book UC-05

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – V** | View Account Book. | | |
| **Brief Description** | User can view account book after login. | | |
| **Goal** | The goal is to view account book. | | |
| **Pre-conditions** | User must be logged In. | | |
| **Post conditions** | Logged In successfully. Confirmation will be displayed. | | |
| **Failed End Condition** | Incorrect credentials. Retry logging In. | | |
| **Primary Actors**  **Secondary Actors** | Student.  Database. | | |
| **Dependency** | Credentials should be entered properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Login” page has been opened by user. | Please enter correct credentials to view account book. |
|  | **2.** | The user clicks the “Login” button after entering all the data. | The system will show a confirmation message that logged in successfully and will show the dashboard else alert shows. |
|  | **3.** | Then user will click “Account Book” button. | The system will show account book. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The user clicks the “Login” button. | The system will show message that user does not exist. |
|  | **3b.** | The user inputs incorrect information. | The system alerts the user with a prompt asking them to enter valid details. |

Table 4.6: Print Challan UC-06

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – VI** | Print Challan. | | |
| **Brief Description** | User can print challan if available. | | |
| **Goal** | The goal is to print challan. | | |
| **Pre-conditions** | User must be logged In. Challan must be generated. | | |
| **Post conditions** | Logged In successfully. Challan generated successfully. Printed successfully. Confirmation message will be displayed. | | |
| **Failed End Condition** | Error occurred. | | |
| **Primary Actors**  **Secondary Actors** | Student.  Database. | | |
| **Dependency** | Credentials should be entered properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Login” page has been opened by user. | Please enter correct credentials to open dashboard. |
|  | **2.** | The user clicks the “Login” button after entering all the data. | The system will show a confirmation message that logged in successfully and will show the dashboard else alert shows. |
|  | **3.** | Then user will click “Print” button. | The system will print the challan. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The user clicks the “Login” button. | The system will show message that user does not exist or incorrect credentials. |
|  | **3b.** | The user clicks the “Print” button. | The system will through error to not generate challan and ask to download library. |

Table 4.7: Payment UC-07

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – VII** | Payment. | | |
| **Brief Description** | User can pay fee online or by bank. | | |
| **Goal** | The goal is to pay fee. | | |
| **Pre-conditions** | User must be logged In. Challan must be generated. | | |
| **Post conditions** | Logged In successfully. Challan generated successfully.  Paid successfully. Confirmation will be displayed. | | |
| **Failed End Condition** | Incorrect credentials. Enter correct payment method. | | |
| **Primary Actors**  **Secondary Actors** | Student.  Database. | | |
| **Dependency** | All the data should be entered properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Login” page has been opened by user. | Please enter correct credentials to view dashboard. |
|  | **2.** | The user clicks the “Login” button after entering all the data. | The system will show a confirmation message that logged in successfully and will show the dashboard else alert shows. |
|  | **3.** | Then user will click “Pay” button. | The system will ask to select the payment method, online or by bank. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The user clicks the “Login” button. | The system will show message that user does not exist or incorrect credentials. |
|  | **3b.** | The user enters payment method. | The system will ask to enter correct payment method. |

Table 4.8: View Unpaid Fee UC-08

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – VIII** | View Unpaid Fee. | | |
| **Brief Description** | User can view unpaid fee on dashboard. | | |
| **Goal** | The goal is to view unpaid fee. | | |
| **Pre-conditions** | User must be logged In. Challan must be generated. | | |
| **Post conditions** | Logged In successfully. Challan generated successfully. Confirmation message will be displayed. | | |
| **Failed End Condition** | Retry logging in. | | |
| **Primary Actors**  **Secondary Actors** | Student.  Database. | | |
| **Dependency** | Credentials should be entered properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Login” page has been opened by user. | Please enter correct credentials to open dashboard. |
|  | **2.** | The user clicks the “Login” button after entering all the data. | The system will show a confirmation message that logged in successfully and will show the dashboard for unpaid fee else alert shows. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The user clicks the “Login” button. | The system will show message that user does not exist or incorrect credentials. |

Table 4.9: Add Installment UC-09

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – IX** | Add Installment. | | |
| **Brief Description** | Admin can add installment. | | |
| **Goal** | The goal is to add installment. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Installments added. Confirmation message will be displayed. | | |
| **Failed End Condition** | **Please select an installment to add.** | | |
| **Primary Actors**  **Secondary Actors** | Admin.  Database. | | |
| **Dependency** | All the data should be entered properly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | Then admin will click “Add Installment” button in Installment Management. | Enter all data to add installments. |
|  | **2.** | The admin clicks the “Add Installment” button after adding all the data. | The system will show a confirmation message that installment added successfully else alert shows. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Add Installment” button. | The system will show message to select an installment. |

Table 4.10: Verify Paid Fee UC-10

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – X** | Verify Paid Fee. | | |
| **Brief Description** | Admin can verify paid fee. | | |
| **Goal** | The goal is to verify fee. | | |
| **Pre-conditions** | Admin must be logged In. There must be paid challans. | | |
| **Post conditions** | Logged In successfully. Paid challan verified.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to verify. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super, Campus and Department Admin.  Database. | | |
| **Dependency** | All the data should be verified. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Unverified Challan Management” page has been opened by admin. | The system will open the page to verify challans. |
|  | **2.** | The admin clicks the “Verify” button. | The system will open paid challan and details to verify. |
|  | **3.** | Then admin will select the option and click “Update” button. | The system will update the verification details. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Verify” button. | The system will show could not verify. |
|  | **3b.** | The admin clicks “Update” Button. | The system will ask to select option to whether verify or unverify. |

Table 4.11: Verify Student UC-11

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XI** | Verify Student. | | |
| **Brief Description** | Admin can verify student. | | |
| **Goal** | The goal is to verify student. | | |
| **Pre-conditions** | Admin must be logged In. Student must be registered. | | |
| **Post conditions** | Logged In successfully. Student verified.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to verify. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super, Campus and Department Admin.  Database. | | |
| **Dependency** | All the data should be verified. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Users Management” page has been opened by admin. | The system will open the page to verify student. |
|  | **2.** | The admin clicks the “Update” button. | The system will open student details to verify. |
|  | **3.** | Then admin will select the option and click “Update User” button. | The system will update the verification details. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Update” button. | The system will show could not update. |
|  | **3b.** | The admin clicks “Update User” Button. | The system will ask to select option to whether verify or unverify. |

Table 4.12: Seize Degree UC-12

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XII** | Seize Degree. | | |
| **Brief Description** | Admin can seize degree of student. | | |
| **Goal** | The goal is to seize degree. | | |
| **Pre-conditions** | Admin must be logged In. Student must be studying. | | |
| **Post conditions** | Logged In successfully. Degree has been seized.  Confirmation will be displayed. | | |
| **Failed End Condition** | Could not seize degree. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super, Campus and Department Admin.  Database. | | |
| **Dependency** | Seized option should be selected. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Users Management” page has been opened by admin. | The system will open the page to seize degree. |
|  | **2.** | The admin clicks the “Update” button. | The system will open student details to seize degree. |
|  | **3.** | Then admin will select the option and click “Update User” button. | The system will update the seized degree details. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Update” button. | The system will show could not update. |
|  | **3b.** | The admin clicks “Update User” Button. | The system will ask to select option to whether seize or not. |

Table 4.13: Add Dept Admin UC-13

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XIII** | Add Dept Admin. | | |
| **Brief Description** | Admin can add department admin. | | |
| **Goal** | The goal is to add department admin. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Department admin added successfully.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to add department admin. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super, and Campus Admin.  Database. | | |
| **Dependency** | All the details should be filled correctly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Admin Management” page has been opened by admin. | The system will open the page to add admin after filling the details. |
|  | **2.** | The admin clicks the “Add Admin” button. | The system will show message that admin added successfully. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Add Admin” button. | The system will show message to fill all details. |
|  | **3b.** | The admin clicks “Add Admin” Button. | The system will ask to enter correct details. |

Table 4.14: Add Campus Admin UC-14

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XIV** | Add Campus Admin. | | |
| **Brief Description** | Admin can add campus admin. | | |
| **Goal** | The goal is to add campus admin. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Campus admin added successfully.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to add campus admin. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super Admin.  Database. | | |
| **Dependency** | All the details should be filled correctly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Admin Management” page has been opened by admin. | The system will open the page to add admin after filling the details. |
|  | **2.** | The admin clicks the “Add Admin” button. | The system will show message that admin added successfully. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Add Admin” button. | The system will show message to fill all details. |
|  | **3b.** | The admin clicks “Add Admin” Button. | The system will ask to enter correct details. |

Table 4.15: Download Unpaid Fee Report UC-15

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XV** | Download Unpaid Fee Report. | | |
| **Brief Description** | Admin can download report of students with unpaid fee. | | |
| **Goal** | The goal is to download report of students with unpaid fee. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Report has been downloaded.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to download report. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super, Campus and Department Admin.  Database. | | |
| **Dependency** | There should be unpaid fee report. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Unpaid Fee Report” page has been opened by admin. | The system will open the page to download report. |
|  | **2.** | The admin clicks the “Download” button. | The system will show message that report downloaded successfully. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Download” button. | The system will show message that report not available or could not download. |

Table 4.16: View Big Data Analytics UC-16

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XVI** | View Big Data Analytics. | | |
| **Brief Description** | Admin can view big data analytics. | | |
| **Goal** | The goal is to view all the data of system. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Confirmation will be displayed.  Big data Analytics opened. | | |
| **Failed End Condition** | Failed to open big data analytics. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Super, Campus, Department Admin and Accountant.  Database. | | |
| **Dependency** | There should be data available. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Big Data Analytics” page has been opened by admin. | The system will open the page to view the data. |
|  | **2.** | The admin clicks the “View” button. | The system will show all the data available in system. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “View” button. | The system will show message that could not open the page. |

Table 4.17: Add Fee UC-17

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XVII** | Add Fee. | | |
| **Brief Description** | Admin can add fee. | | |
| **Goal** | The goal is to add fee. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Fee added successfully.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to add fee. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Department Admin, Accountant.  Database. | | |
| **Dependency** | All the details should be filled correctly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Fee Management” page has been opened by admin. | The system will open the page to add fee after filling the details. |
|  | **2.** | The admin clicks the “Add Fee” button. | The system will show message that fee added successfully. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Add Fee” button. | The system will show message to fill all details. |
|  | **3b.** | The admin clicks the “Add Fee” Button. | The system will ask to enter correct details. |

Table 4.18: Add Fine UC-18

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case – XVIII** | Add Fine. | | |
| **Brief Description** | Admin can add fine. | | |
| **Goal** | The goal is to add fee. | | |
| **Pre-conditions** | Admin must be logged In. | | |
| **Post conditions** | Logged In successfully. Fine added successfully.  Confirmation will be displayed. | | |
| **Failed End Condition** | Failed to add fine. Retry. | | |
| **Primary Actors**  **Secondary Actors** | Accountant.  Database. | | |
| **Dependency** | All the details should be filled correctly. | | |
| **Basic Events Flow** | **Steps** | **Actions** | **System Response** |
|  | **1.** | The “Fine Management” page has been opened by admin. | The system will open the page to add fine after filling the details. |
|  | **2.** | The admin clicks the “Add Fine” button. | The system will show message that fine added successfully. |
| **Alternative Flow** | **Steps** | **Actions** | **System Response** |
|  | **3a.** | The admin clicks the “Add Fine” button. | The system will show message to fill all details. |
|  | **3b.** | The admin clicks the “Add Fine” Button. | The system will ask to enter correct details. |