**1.6 Use Case Descriptions and Template Table**

This section provides detailed narratives for each use case, explaining the behavior.

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| **Use Case ID** | UC-01 | |
| **Use Case Name** | Register user | |
| **Actor** | Administrator | |
| **Summary** | This use case allows the administrator to register new users (parents, teachers, or other administrators) within the kindergarten management system. | |
| **Precondition** | The administrator has logged into the Kindergarten Management System. | |
| **Basic Scenario** | Actor Action | System Response |
| **Step 1**:The administrator navigates to the "User Registration" section.  Step 3:The administrator fills out the registration form with the required information for the new user. | **Step 2:**The system displays a user registration form, prompting for details such as the user's role, name,contact information, username, and initia password.  **Step 4:**The system validates the entered information, ensuring that required fields are filled and that the username is unique.  Step 5:Uponsuccessful validation, the system creates a new user account with the provided details.  Step 6:The system may notify the administrator of the successful registration. |
| **Alternative Scenario** | **Step 7:** If the administrator provides invalid or incomplete details in Step 3, the system displays an error message and prompts for corrections.  **Step 8:** If the chosen username already exists, the system displays an error message and asks the administrator to choose a different username.  **Step 9:** If an error occurs during account creation in Step 5, the system displays an error message to the administrator. | |
| **Post Condition** | 1. A new user account is created in the system with the specified role and details.   2. The new user may need to be reviewed and activated by the administrator. | |

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| **Use Case ID** | UC-02 | |
| **Use Case Name** | Assign/Revoke Role | |
| **Actor** | Administrator | |
| **Summary** | This use case allows the administrator to assign specific roles and associated permissions to existing users or revoke roles from them. | |
| **Precondition** | 1. The administrator has logged into the Kindergarten Management System.   2. There are existing user accounts in the system. | |
| **Basic Scenario** | Actor Action | System Response |
| **Step1:** The administrator navigates to the "Manage User Roles" section.  Step3:The administrator selects a user whose role needs to be assigned or revoked.  Step5:The administrator assigns a new role to the user or revokes an existing role. | Step2:The system displays a list of existing users and their current roles.  Step4:The system displays the current role(s) of the selected user and a list of available roles.  Step6:The system updates the user's role information in the database.  Step7:The system may notify the administrator of the successful role assignment or revocation. |
| **Alternative Scenario** | **Step 8:** If the administrator attempts to assign an invalid role, the system displays an error message. ;  **Step 9:** If an error occurs while updating the user's role in Step 6, the system displays an error message to the administrator. | |
| **Post Condition** | 1. The selected user's role(s) in the system are updated according to the administrator's actions.   2. The user's access permissions within the system will be based on their assigned role(s). | |

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| **Use Case ID** | UC-03 | |
| **Use Case Name** | Manage Attendance Records | |
| **Actor** | Administrator | |
| **Summary** | This use case allows the administrator to view, and potentially modify or generate reports on the overall attendance records of students. | |
| **Precondition** | 1. The administrator has logged into the Kindergarten Management System. &lt;br> 2. Attendance records have been recorded by teachers. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| Step1:The administrator navigates to the "Manage Attendance Records" section.  Step3:The administrator selects criteria (e.g., date range, class) to view attendance records.  **Step 3b:** The administrator selects report parameters (e.g., absent students for a week) and requests a report. | Step2:The system displays options to view attendance records by date, class, student, or generate attendance reports.  **Step 4a (System Response - View):** The system displays the attendance records matching the selected criteria.  **Step 4b (System Response - Generate Report):** The system generates and displays or provides a download of the requested attendance report. |
| **Alternative**  **Scenario** | **Step 7:** If the administrator selects invalid criteria for viewing or generating reports, the system displays an error message.  **Step 8:** If an error occurs while retrieving or generating attendance data, the system displays an error message to the administrator. | |
| **Post Condition** | 1. The administrator can view the required attendance information. 2. Attendance reports are generated as requested.   3. If modifications are allowed, attendance records are updated. | |

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| **Use Case ID** | UC-04 | |
| **Use Case Name** | Manage Permissions | |
| **Actor** | Administrator | |
| **Summary** | Allows the administrator to define and modify the access rights and privileges associated with different user roles in the system. | |
| **Precondition** | 1. Administrator is logged in. 2. 2. User roles exist. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| Step1:Admin navigates to "Manage Permissions.  Step2:Admin selects a role.  Step5: Admin modifies permissions (grant/revoke). | Step2:System displays roles and their current permissions.  Step4: System shows modifiable permissions.  Step6: System saves changes. |
| **Alternative Scenario** | Invalid permission selection; error saving changes. | |
| **Post Condition** | Role permissions are updated in the system. | |

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| **Use Case ID** | UC-05 | |
| **Use Case Name** | Manage Student Records | |
| **Actor** | Administrator | |
| **Summary** | Enables the administrator to create, view, update, and delete student information within the system. | |
| **Precondition** | 1. Administrator is logged in. | |
| **Basic Scenario** | 1. Admin goes to "Manage Student Records."   3. Admin selects an action and interacts with forms/lists. | 2. System shows options (add, view, edit, delete)  4. System validates and saves/retrieves/updates/deletes student data. |
| **Alternative Scenario** | Invalid data input; student not found (for edit/delete); error during data operation. | |
| **Post Condition** | Student records are created, updated, viewed, or deleted. | |

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| **Use Case ID** | UC-06 | |
| **Use Case Name** | Verify Payment | |
| **Actor** | Administrator | |
| **Summary** | Allows the administrator to confirm the receipt and validity of payments made by parents through the integrated payment system. | |
| **Precondition** | 1. Administrator is logged in.   2. Payment records exist (initiated by parents). | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Admin navigates to "Verify Payment."   3. Admin selects a payment to verify.  5. Admin marks the payment as "Verified." 6. System updates the payment status. | 2. System displays pending payments.  4. System shows payment details (including confirmation from TeleBirr)  6. System updates the payment status. |
| **Alternative Scenario** | Payment not found; discrepancy in payment details; error updating payment status. | |
| **Post Condition** | Payment status is updated to "Verified." | |

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| **Use Case ID** | UC-07 | |
| **Use Case Name** | Schedule Events | |
| **Actor** | Administrator | |
| **Summary** | Enables the administrator to create, manage, and publish information about school events (e.g., holidays, meetings, activities). | |
| **Precondition** | 1. Administrator is logged in. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Admin goes to "Schedule Events."   3.Admin selects "Add Event" or edits an existing one.   1. Admin fills/modifies event details (name, date, time, description). | 2. System shows a calendar or list of events.  4. System displays an event details form. |
| **Alternative Scenario** | Invalid date/time input; error saving event details. | |
| **Post Condition** | Event is scheduled/updated in the system and visible on the event calendar. | |

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| **Use Case ID** | UC-08 | |
| **Use Case Name** | Recovery Password,Teacher | |
| **Actor** | Administrator | |
| **Summary** | Allows the administrator to recover their password if it is forgotten or lost. | |
| **Precondition** | 1. The administrator has a registered account in the system. 2. The administrator cannot log in due to a forgotten password.   3. The system provides a "Forgot Password" option on the login page. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| **Step 1 (Actor Action):** The administrator navigates to the login page and clicks on the "Forgot Password" or similar link/button. &lt;br> **Step 4 (Actor Action):** The administrator enters their username or email address. &lt;br>  **Step 5 (Actor Action):** The administrator submits the account identification information. &lt;br>  **Step 7 (Actor Action):** The administrator accesses their email or SMS and retrieves the reset link or verification code. &lt;br> **Step 8 (Actor Action):** The administrator follows the reset link or enters the verification code on the system's password reset page. &lt;br>  **Step 10 (Actor Action):** The administrator enters and confirms their new password. | **Step 2 (System Response):** The system redirects the administrator to the password recovery interface. &lt;br>  **Step 3 (System Response):** The system prompts the administrator to identify their account, typically by entering their username or registered email address. &lt;br>  **Step 6 (System Response):** The system verifies the provided information. If found, the system initiates the password recovery process  **Step 9 (System Response):** The system prompts the administrator to enter a new password and confirm it.  **Step 11 (System Response):** The system validates the new password  **Step 12 (System Response):** The system confirms the successful password reset and may redirect the administrator back to the login page. |
| **Alternative Scenario** | **Step 13:** If the entered username/email is not found, the system displays an error message. | |
| **Post Condition** | 1. The administrator's password is successfully reset in the system.   2. The administrator can now log in with their new password. | |

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| **Use Case ID** | UC-09 | |
| **Use Case Name** | Login | |
| **Actor** | Parent, Teacher, Administrator | |
| **Summary** | Allows authorized users to access the Kindergarten Management System by providing their credentials. | |
| **Precondition** | Allows the administrator to recover their password if it is forgotten or lost. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| **Step 1:** The user opens the login page/dialog. **Step 3 (Actor Action):** The user enters their username and password.  **Step 4 (Actor Action):** The user submits the login credentials. | **Step 2 (System Response):** The system displays fields for username and password.  **Step 5 (System Response):** The system authenticates the provided username and password against the stored user accounts.  **Step 6 (System Response):** Upon successful authentication, the system grants the user access to their designated area of the system based on their role. |
| **Alternative Scenario** | **Step 7:** If the entered username is incorrect, the system displays an "Invalid Username" error. &lt;br>  **Step 8:** If the entered password is incorrect, the system displays an "Invalid Password" error. &lt;br>  **Step 9:** If the user's account is inactive or suspended, the system displays an appropriate message. &lt;br>  **Step 10 (Extension Point - Reset Password):** If the user has forgotten their password, they can initiate the "Reset Password" process. &lt;br>  **Step 11 (Extension Point - extension points Login):** There might be other extensions related to login (though not explicitly detailed in the main diagram). | |
| **Post Condition** | |  | | --- | | The user is successfully logged into the system. 2. The system displays the user's dashboard or main interface based on their role. | | |

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| **Use Case ID** | UC-10 | |
| **Use Case Name** | View Student Information | |
| **Actor** | Teacher | |
| **Summary** | Allows teachers to access relevant information about the students in their assigned classes. | |
| **Precondition** | 1. Teacher is logged in.   2. The system has student data associated with the teacher's classes. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Teacher navigates to "View Student Information."   3. Teacher selects a student. | 2. System displays a list of the teacher's students.  4. System shows the selected student's details (e.g., contact info, medical notes) |
| **Alternative Scenario** | Student data not found; error retrieving student information. | |
| **Post Condition** | Teacher can view the selected student's information. | |

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| **Use Case ID** | UC-11 | |
| **Use Case Name** | Mark Attendance | |
| **Actor** | Teacher | |
| **Summary** | Enables teachers to record the attendance of students in their assigned classes for a given date. | |
| **Precondition** | 1. Teacher is logged in.   2. The system has a list of students in the teacher's current class. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Teacher goes to "Mark Attendance." 2. Teacher marks each student's attendance (e.g., Present, Absent, Late).   4. Teacher saves the attendance records. | 2. System displays the class roster for the current date (or allows date selection) |
| **Alternative Scenario** | Attempting to mark attendance for a future date; error saving attendance records. | |
| **Post Condition** | Attendance records for the selected date and class are updated. | |

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| **Use Case ID** | UC-12 | |
| **Use Case Name** | Record Student Progress | |
| **Actor** | Teacher | |
| **Summary** | Allows teachers to document and update the progress of individual students in various areas. | |
| **Precondition** | 1. Teacher is logged in. 2. The system has student data associated with the teacher's classes. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Teacher navigates to "Record Student Progress." 2. Teacher selects a student.   5. Teacher enters progress notes or ratings. 6. Teacher saves the progress updates. | 1. System displays a list of the teacher's students.   4. System shows areas for progress recording (e.g., academic, social) |
| **Alternative Scenario** | Student data not found; error saving progress updates. | |
| **Post Condition** | Student progress records are updated in the system. | |

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| **Use Case ID** | UC-13 | |
| **Use Case Name** | Submit Report | |
| **Actor** | Teacher | |
| **Summary** | Enables teachers to submit various reports related to student performance or classroom activities. | |
| **Precondition** | 1. Teacher is logged in. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Teacher goes to "Submit Report."   5. Teacher fills out the report. 6. Teacher submits the report. | 2. System displays available report types. 3. Teacher selects a report type.  4. System presents a form or interface for the report data. |
| **Alternative Scenario** | Invalid data in the report; error submitting the report. | |
| **Post Condition** | The report is submitted and stored in the system. | |

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| **Use Case ID** | UC-14 | |
| **Use Case Name** | Communicate with Parent | |
| **Actor** | Teacher | |
| **Summary** | Facilitates direct communication between teachers and parents regarding a student's progress or other relevant matters. | |
| **Precondition** | 1. Teacher is logged in. 2. The system has contact information for parents of the teacher's students. | |
| **Basic Scenario** |  |  |
| 1. Teacher navigates to "Communicate with Parent."   3 Teacher selects a parent. 5. Teacher composes and sends a message.  5. Teacher composes and send message | 1. System displays a list of the teacher's students and their parents.   4.System provides options for communication (e.g., messaging). |
| **Alternative Scenario** | Parent contact information not found; error sending the message. | |
| **Post Condition** | |  | | --- | | The message is sent to the selected parent through the system. | | |

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| **Use Case ID** | UC-13 | |
| **Use Case Name** | Submit Report | |
| **Actor** | Teacher | |
| **Summary** | Enables teachers to submit various reports related to student performance or classroom activities. | |
| **Precondition** | 1. Teacher is logged in. | |
| **Basic Scenario** | **Actor Action** | **System Response** |
| 1. Teacher goes to "Submit Report."   3. Teacher selects a report type  5.Teacher fills out the report. 6. Teacher submits the report. | 2. System displays available report types. .  4. System presents a form or interface for the report data. |
| **Alternative Scenario** | Invalid data in the report; error submitting the report. | |
| **Post Condition** | The report is submitted and stored in the system. | |

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