

American International University-Bangladesh (AIUB)  
**Department of Computer Science  
Faculty of Science & Technology (FST)**

**Project Title:   
Integrated Application Usage Tracking & Parental Control System**

**Supervised by:**

TONNY SHEKHA KAR

A Software Engineering Project Submitted

By

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| **Semester: Summer\_23\_24** | | **Section: H** | **Group Number: 09** | |
| SN | Student Name | Student ID | Contribution (CO3+CO4) | Individual Marks |
| 1 | A. F. M. RAFIUL HASSAN | 22-47048-1 |  |  |
| 2 | MD. ASHIKUZZAMAN ABIR | 22-47006-1 |  |  |
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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: MD. ASHIKUZZAMAN ABIR | |
| Test Case ID: UTP-1 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: The user sign- up session | | | Test Execution date: 18/09/2024 | |
| Test Title: Verify sign-up with a valid email address, phone number, and unique username, date of birth, and a valid password. | | | | |
| Description: Test the application sign-up page | | | | |
| Pre Condition (if any): The user must have a valid email address, and unique username, date of birth, and password | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the application 2. Enter email address 3. Enter a phone number 4. Enter username 5. Enter the date of birth 6. Enter password 7. Click the sign-up button | Email: [abir.aiub@gmail.com](mailto:abir.aiub@gmail.com)  Username: Abir604  Date of Birth: 15/09/2005 Password: amiabirnah | The user should sign up for the application |  |  |
| Post Condition: The user is validated with the database and successfully signed up for the application. The account session details are saved in the database. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: A. F. M. RAFIUL HASSAN | |
| Test Case ID: UTP-2 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Sign In Session | | | Test Execution date: 18/09/2024 | |
| Test Title: Verify sign-in session with valid email address, and password | | | | |
| Description: Test the application page | | | | |
| Pre Condition (if any): User must have a valid email address and password | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the sign-in page 2. Enter email address or username 3. Enter password 4. Click the sign in button | Email: [rafi.aiub@gmail.com](mailto:rafi.aiub@gmail.com)  Password: rafibhai | The user should sign-in into the application |  |  |
| Post Condition: The user is validated with the database and successfully signed in to the application. The account session details are saved in the database. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: A. F. M. RAFIUL HASSAN | |
| Test Case ID: UTP-3 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: MD. ASHIKUZZAMAN ABIR | |
| Module Name: OTP Verification | | | Test Execution date: 19/09/2024 | |
| Test Title: Verify OTP verification process during login. | | | | |
| Description: Test OTP authentication during login. | | | | |
| Precondition: The user must receive an OTP after entering valid credentials. | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Complete login credentials entry. 2. Wait for OTP. 3. Enter the OTP in the provided field. 4. Submit OTP. | OTP: 8374 | The user is successfully authenticated and redirected to the dashboard. |  |  |
| Post Condition: user access is granted | | | | |

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| Test Case ID: UTP-4 | | | Test designed date: 18/09/2024 | |
| Test Priority: Medium | | | Test Executed by: MD. ASHIKUZZAMAN ABIR | |
| Module Name: Customize Profile | | | Test Execution date: 19/09/2024 | |
| Test Title: Verify profile customization functionality | | | | |
| Description: Test if users can update their profile information and preferences | | | | |
| Precondition: The user must be logged into the system. | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the profile section. 2. Select the "Edit Profile" option. 3. Update personal information (e.g., username, email). 4. Save changes. | New Username: amimosha  New Email: mosha.aiub@gmail.com | The user's profile is successfully updated. |  |  |
| Post Condition: The updated profile is saved in the database. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: A. F. M. RAFIUL HASSAN | |
| Test Case ID: UTP-5 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Usage Monitoring | | | Test Execution date: 19/09/2024 | |
| Test Title: Verify daily app usage monitoring | | | | |
| Description: Test if the system monitors and logs application usage | | | | |
| Precondition: The user (child) must be logged into their phone | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the usage monitoring section. 2. Select the "Daily Usage Limits" option. 3. Check the app usage logs. | No specific data required. | The system displays a log of app usage. |  |  |
| Post Condition: The usage history is saved in the system for future reference. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: A. F. M. RAFIUL HASSAN | |
| Test Case ID: UTP-6 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: MD. ASHIKUZZAMAN ABIR | |
| Module Name: App Blocking | | | Test Execution date: 19/09/2024 | |
| Test Title: Verify the app blocking feature | | | | |
| Description: Test if parents can block specific apps on the child’s device | | | | |
| Precondition: The user (parent) must have control over the child’s device | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the in-app blocking section. 2. Select the apps to block. 3. Apply the block. | App to Block: YouTube | The selected app is successfully blocked on the child’s device. |  |  |
| Post Condition: The blocked app list is updated in the system. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: A. F. M. RAFIUL HASSAN | |
| Test Case ID: UTP-7 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Daily Usage Limits - Management | | | Test Execution date: 19/09/2024 | |
| Test Title: Verify daily usage with time scheduling | | | | |
| Description: Test if parents can set screen time limits on the child’s device | | | | |
| Precondition: The user (parent) must have access to screen time controls | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the daily usage limits section. 2. Click on the app that you want to limits. 3. Set time limits for specific apps or the device. 4. Save and set the schedule. | App: Instagram  Limit: 2 hours/day | The daily usage is successfully managed, and the child’s access is restricted after reaching the limit. |  |  |
| Post Condition: The daily usage screen time limits are stored in the database. | | | | |

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| Test Case ID: UTP-8 | | | Test designed date: 18/09/2024 | |
| Test Priority: Medium | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Application Access Request | | | Test Execution date: 20/09/2024 | |
| Test Title: Verify access request approval from child’s device | | | | |
| Description: Test if the child can send an access request to parents for new application | | | | |
| Precondition: The child must have restricted access | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Child attempts to use a restricted app. 2. Child sends an access request. 3. Parent receives the request. 4. Parent approves or denies the request. | App: Instagram | The access request is processed, and the parent can approve or deny it. |  |  |
| Post Condition: The access request status is updated in the system. | | | | |

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| Test Case ID: UTP-9 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Location Tracking | | | Test Execution date: 20/09/2024 | |
| Test Title: Verify location tracking of child’s device | | | | |
| Description: Test if the system accurately tracks the child’s device location and sends alerts for geofencing violations. | | | | |
| Precondition: The child’s device must have GPS enabled, and the user must have location tracking permissions. | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the location tracking section. 2. Enable location tracking for the child’s device. 3. Set a geofencing area (e.g., home, school). 4. Check the location logs and alerts. | Geofencing Area: Home (100m radius) | The system accurately tracks the child’s location and sends an alert when they leave the geofenced area. |  |  |
| Post Condition: The location history is logged, and alerts are sent to the parent if the child exits the geofenced area. | | | | |

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| Test Case ID: UTP-10 | | | Test designed date: 18/09/2024 | |
| Test Priority: Medium | | | Test Executed by: MD. ASHIKUZZAMAN ABIR | |
| Module Name: Customization | | | Test Execution date: 20/09/2024 | |
| Test Title: Verify customization feature functionality | | | | |
| Description: Test if the user can able to change the theme and language properly. | | | | |
| Precondition: The user must have signed in. | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the Customization section. 2. Press the theme button. 3. Press the language button. 4. Verify if the feature performs properly. | No specific data required. | The user successfully changed the language or theme. |  |  |
| Post Condition: The emergency event is logged in the system, and the parent is notified. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: MD. ASHIKUZZAMAN ABIR | |
| Test Case ID: UTP-11 | | | Test designed date: 18/09/2024 | |
| Test Priority: High | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Role-Based Dashboard | | | Test Execution date: 20/09/2024 | |
| Test Title: Verify dashboard access for non-parent users. | | | | |
| Description: Test role-based access restrictions. | | | | |
| Precondition: Child user signs into the device. | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Sign in with child credentials. 2. Attempt to access the parental dashboard. | User Role: Child. | Access is denied, reinforcing role-based restrictions. |  |  |
| Post Condition: Child cannot modify settings. | | | | |

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| Project Name: Integrated Application Usage Tracking & Parental Control System | | | Test designed by: MD. ASHIKUZZAMAN ABIR | |
| Test Case ID: UTP-12 | | | Test designed date: 18/09/2024 | |
| Test Priority: Medium | | | Test Executed by: A. F. M. RAFIUL HASSAN | |
| Module Name: Sign-out | | | Test Execution date: 20/09/2024 | |
| Test Title: Verify the sign-out functionality | | | | |
| Description: Test if users can successfully sign out of the parental control app. | | | | |
| Precondition: The user must be signed into the system. | | | | |
| Test Steps | Test Data | Expected Result | Actual Result | Status(pass/fail) |
| 1. Go to the profile or settings section. 2. Select the "sign out" option. 3. Confirm the signout action. | No specific data required. | The user is successfully signed out of the application. |  |  |
| Post Condition: The session is terminated, and the user is redirected to the sign-in page. | | | | |