Requirements ID

1.1

1.2 1.3 1.4 1.5 2.1.1

2.1.2 2.1.3 2.2 2.3 3.1 3.2 3.3 3.4 4.1

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| --- | --- | --- | --- | --- | --- | --- |
| Requirements Description | UC1 | UC2 | UC3 | UC4 | UC5 | Check |
| Automated attendance tracking for university lecturers | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE |
| Support multiple registered devices (smartphones, tablets, computers) | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE |
| Restrict attendance recording to registered devices | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Store attendance records in a cloud-hosted MySQL database | FALSE | TRUE | TRUE | FALSE | FALSE | TRUE |
| Provide REST API endpoints for data access and modification | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Lecturers can register devices, record attendance, manage students, and generate reports | TRUE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Administrators can manage lecturers, students, courses, and attendance records | FALSE | TRUE | TRUE | FALSE | FALSE | TRUE |
| Students are identified in the system and associated with attendance records | FALSE | TRUE | FALSE | FALSE | TRUE | TRUE |
| Only registered devices can record attendance | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Persist user-related data (lecturers, students, courses) | FALSE | TRUE | TRUE | FALSE | FALSE | TRUE |
| Lecturers can record attendance using a registered device | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE |
| Attendance records are stored in a database | FALSE | TRUE | TRUE | FALSE | FALSE | TRUE |
| Prevent unauthorized devices from recording attendance | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Generate attendance reports | FALSE | FALSE | TRUE | FALSE | TRUE | TRUE |
| Lecturers can register one or more devices | TRUE | FALSE | FALSE | FALSE | FALSE | TRUE |
| Functionality to locate a registered device | FALSE | TRUE | FALSE | TRUE | FALSE | TRUE |
| Store student profiles (name, university ID) | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Capture and store passport-style photos for students | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Store and manage courses | FALSE | TRUE | FALSE | FALSE | FALSE | TRUE |
| Associate students with courses | FALSE | TRUE | FALSE | FALSE | TRUE | TRUE |
| Associate lecturers with courses | FALSE | TRUE | FALSE | FALSE | TRUE | TRUE |
| Generate attendance records reports | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Generate student lists | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Generate lecturer lists | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Generate course lists | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Generate student enrollments in courses | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Support adding new records | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Support modifying records | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Support deleting records | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Support viewing records | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Use a cloud-hosted MySQL database | FALSE | TRUE | TRUE | FALSE | FALSE | TRUE |
| Provide database access via a REST API | FALSE | FALSE | TRUE | FALSE | FALSE | TRUE |
| Conduct User Acceptance Testing (UAT) | FALSE | FALSE | FALSE | FALSE | TRUE | TRUE |
| Conduct System Testing | FALSE | FALSE | FALSE | TRUE | FALSE | TRUE |
| Conduct Unit Testing (where applicable) | FALSE | FALSE | FALSE | TRUE | FALSE | TRUE |