Data Dictionary

Table 5.0: AcademicCalender Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: AcademicCalender** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| AcademicCalenderGUID  (PK) | UNIQUEIDENTIFIER | - | The GUID for the academic calendar. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER | - | The GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CalenderName | varchar | 100 | The name of the calendar. | Example:  January 2021 Intake |
| CalenderType | varchar | 100 | The type of the calendar. | Example:  DipUnderPost |
| SemesterStartDate | date | - | The start date of the semester. | Example:  1/18/2021 |
| SemesterEndDate | date | - | The end date of the semester. | Example:  6/20/2021 |
| SemesterStudyDuration | int | - | The total study duration of the semester | Example:  4 |
| SemesterExaminationDuration | int | - | The examination duration during the semester. | Example:  13 |
| SemesterBreakDuration | int | - | The semester break duration. | Example:  39 |

Table 5.1: Assessment Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Assessment** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| AssessmentGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the assessment. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| GroupGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the group. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ProgrammeGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the programme. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SemesterGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the semester. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CourseGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| AssessmentTitle | varchar | 50 | The title of the assessment. | Example:  Assessment Title 1 |
| AssessmentDesc | varchar | 150 | The description of the assessment. | Example:  Please submit this assessment… |
| DueDate | datetime | - | The due date of the assessment set by the staff. | Example:  11/26/2021 12:06:00 PM |
| CreatedDate | datetime | - | The assessment date time created by the staff. | Example:  11/22/2021 12:06:58 PM |
| LastUpdateDate | datetime | - | The date and time after the staff update the assessment details. | Example:  11/23/2021 10:06:58 AM |
| UploadMaterials | varchar | 500 | The assessment file uploaded by the staff. | Format:  The starting of the name (Assessment\_) and followed by the file upload name.  Example:  Assessment\_submit.png |

Table 5.2: Attendance Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Attendance** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| AttendanceGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the attendance. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ExamTimetableGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam timetable. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| AttendanceCategory | varchar | 10 | The category of the attendance. | Example:  Exam, Course |
| AttendanceStatus | varchar | 30 | The attendance status of the student. | Example:  Absent, present, leave |
| AttendanceDateTime | datetime | - | The date and time of the attendance taken. | Example:  11/23/2021 10:06:58 AM |
| LastUpdateDate | datetime | - | The date and time of the last update. | Example:  11/23/2021 10:06:58 AM |

Table 5.3: Branches Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Branches** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| BranchesGUID (PK) | UNIQUEIDENTIFIER |  | A unique GUID of the branch. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| BranchesName | varchar | 50 | The name of the branch. | Example:  KUALA LUMPUR MAIN CAMPUS |
| BranchesAddress | varchar | 200 | The address of the branch location. | Example:  Jalan Genting Kelang, Setapak,  53300 Kuala Lumpur. |
| BranchesEmail | varchar | 100 | The email of the particular branch. | Example:  info@tarc.edu.my |
| BranchesTel | varchar | 100 | The contact number of the branch. | Example:  60123456789 |

Table 5.4: Chat Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Chat** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ChatGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the chat. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ChatStatus | varchar | 30 | The status of the chat. | Example:  Pending, closed, active |
| CreatedDate | datetime | - | The date and time of the created chat. | Example:  10/23/2021 8:39:44 PM |
| EndDate | datetime | - | The end date when the chat session is ended. | Example:  10/25/2021 8:00:00 PM |

Table 5.5: Course Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Course** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| CourseGUID (PK) | UNIQUEIDENTIFIER |  | A unique GUID of the course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CourseAbbrv | varchar | 9 | The course abbreviation of the course. | Example:  MPU-3232 |
| CourseName | varchar | 45 | The name of the course. | Example:  ENTREPRENEURSHIP |
| CourseDesc | varchar | 80 | The description of the course. | Example:  Entrepreneurship is a course... |
| CreditHour | int | - | The credit hour of the course. | Example:  3 |
| Category | varchar | 30 | The category of the course. | Format:  “Main” and  “Elective” |

Table 5.6: Course\_In\_Charge Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Course\_In\_Charge** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| CourseInChargeGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the course in charge. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CourseGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |

Table 5.7: CurrentSessionSemester Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: CurrentSessionSemester** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| CurrentSessionSemesterGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the current session semester. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SemesterGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the semester. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| Status | varchar | 20 | The status of the current session semester student. | NULL |
| Reason | varchar | 100 | The reason of the current session semester student of having the specific status. | NULL |

Table 5.8: Discussion Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Discussion** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| DiscGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the discussion. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ForumGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the forum. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| DiscTopic | varchar | 100 | The topic of discussion. | Example:  Javascript |
| DiscDesc | varchar | 100 | The description of the discussion. | Example:  What can Javascript do? |
| DiscContent | varchar | 999 | The content of the discussion. | Example:  This is a discussion content… |
| DiscStatus | varchar | 10 | The status of the discussion. | Example:  Active, Inactive |
| DiscIsPinned | varchar | 4 | To show whether the discussion is being pinned or not. | Example:  Yes, no |
| DiscIsLocked | varchar | 4 | To show whether the discussion is being locked or not. | Example:  Yes, no |
| DiscCreatedBy | varchar | 50 | The discussion is being created by which staff. | Format:  The username of the staff will be used to store in the database  Example:  jerry1234 |
| DiscCreatedDate | datetime | - | The creation date of the discussion. | Example:  11/7/2021 4:29:54 PM |
| DiscLastUpdatedBy | varchar | 50 | The staff who update the discussion details. | Format:  The username of the staff will be used to store in the database  Example:  jerry1234 |
| DiscLastUpdatedDate | datetime | - | The date time of the updated discussion. | Example:  11/7/2021 4:29:54 PM |

Table 5.9: ExamInvigilatorsList Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ExamInvigilatorsList** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ExamInvigilatorsListGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam invigilator list. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ExamTimetableGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam timetable. | Format:  Has 32 hexadecimal characters, divided with a “-”. |

Table 5.10: ExamPreparation Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ExamPreparation** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ExaminationPreparationGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the examination preparation. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ExamTimetableGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam timetable. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| QuestionPaper | varchar | 500 | The answer paper of the exam provided by the staff. | Example:  Questionpaper\_BAIT2073\_Question.pdf |
| AnswerSheet | varchar | 500 | The answer paper of the exam provided by the staff. | Example:  AnswerSheet\_BAIT2073\_AnswerSheet.docx |

Table 5.11: ExamResult Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ExamResult** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ExamResultGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam result. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| GPA | decimal | 5,4 | The GPA of the particular student. | Example:  4.0000 |
| CGPA | decimal | 5,4 | The CGPA of the particular student. | Example:  3.5625 |
| Status | varchar | 50 | The exam result status of the particular student. | Example:  Release/ Unrelease |
| ReleaseDate | datetime | - | The release date of the student exam result. | Example:  11/17/2021 8:32:53 PM |

Table 5.12: ExamResultPerCourse Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ExamResultPerCourse** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ExamResultPerCourseGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam result per course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ExamResultGUID | UNIQUEIDENTIFIER | - | A unique GUID for the exam result. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CourseGUID | UNIQUEIDENTIFIER | - | A unique GUID for the course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| Mark | int | - | The exam mark of a course. | Example:  81 |
| Grade | varchar | 3 | The grade for the course exam result. | Example:  A, A-, B+, B, B-, C+, C, F |
| Remarks | varchar | 100 | The remarks of the course exam result. | Example:  You have failed the course. You’re required to retake the examination. |

Table 5.13: ExamSubmission Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ExamSubmission** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ExamSubmissionGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam submission. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ExamTimetableGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam timetable. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SubmissionDate | datetime | - | The exam submission date time. | Example: |
| SubmissionFile | varchar | 300 | The file submitted by the student during exam. | Example:  ExamSubmission\_LauPinJian\_AnswerSheet.docx |
| SubmissionStatus | varchar | 15 | The submission status of the student during exam. | Example:  Submitted |

Table 5.14: ExamTimetable Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ExamTimetable** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ExamTimetableGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the exam timetable. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CourseGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| MeetingLinkGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the meeting link. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ExamStartDateTime | datetime | - | The examination starts date and time. | Example:  11/23/2021 10:06:58 AM |
| ExamEndDateTime | datetime | - | The examination end date and time. | Example:  11/23/2021 10:06:58 AM |

Table 5.15: ExamTimetable Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Faculty** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| FacultyGUID (PK) | UNIQUEIDENTIFIER |  | A unique GUID of the faculty. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| FacultyAbbrv | varchar | 5 | The faculty abbreviation. | Example:  FOCS, FAFB and etc. |
| FacultyName | varchar | 100 | The name of the faculty. | Example:  Faculty of Computing and Information Technology |
| FacultyDesc | varchar | 399 | The description of the faculty. | Example:  The Faculty of Computing and Information Technology is... |

Table 5.16: FAQ Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: FAQ** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| FAQGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the FAQ. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| FAQTitle | varchar | 50 | The title of the FAQ. | Example:  FAQ Title 1 |
| FAQDescription | varchar | 300 | The description of the FAQ. | Example:  FAQ Description 1 |
| FAQCategory | varchar | 50 | The category of the FAQ. | Example:  Category 1 |
| FAQStatus | varchar | 20 | The status of the FAQ. | Example:  Active, inactive |
| CreatedBy | varchar | 50 | The FAQ created by which user. | Format:  The user’s username  Example:  jerry1234 |
| CreatedDate | datetime | - | The FAQ created date and time. | Example:  8/10/2021 1:54:41 PM |
| LastUpdatedBy | varchar | 50 | The FAQ last updated by which user. | Format:  The user’s username  Example:  jerry1234 |
| LastUpdatedDate | datetime | - | The FAQ last updated date and time. | Example:  8/10/2021 1:54:41 PM |

Table 5.17: Forum Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Forum** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ForumGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the forum. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ForumTopic | varchar | 100 | The topic of the forum. | Example:  General Discussion |
| ForumDesc | varchar | 999 | The description of the forum. | Example:  Discuss School Related |
| ForumCategory | varchar | 100 | The category of the forum. | Example:  General, Announcements |
| ForumStatus | varchar | 10 | The status of the forum. | Example:  Active, inactive |
| ForumType | varchar | 10 | The type of the forum. | Example:  Public, Private |
| ForumCreatedBy | varchar | 50 | The forum created by which user. | Example:  jerry1234 |
| ForumCreatedDate | datetime | - | The forum created date and time. | Example:  10/18/2021 5:17:57 PM |
| ForumLastUpdatedBy | varchar | 505 | The forum last updated by which user. | Example:  jerry1234 |
| ForumLastUpdatedDate | datetime | - | The forum last updated date and time. | Example:  10/18/2021 5:17:57 PM |

Table 5.18: ForumReport Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ForumReport** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ForumReportGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the forum report. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| DiscGUID | UNIQUEIDENTIFIER | - | A unique GUID for the discussion. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ReplyGUID | UNIQUEIDENTIFIER | - | A unique GUID for the reply. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ReplyBy | varchar | 999 | The forum is replied by which user. | Example: |
| ReplyContent | varchar | 999 | The replied content. | Example: |
| ReportReason | varchar | 999 | The reported reason of the forum. | Example:  Advertising |
| ReportStatus | varchar | 20 | The reported status of the forum. | Example:  In Progress |
| ReportBy | varchar | 50 | The forum reported by which user. | Example:  jerry1234 |
| ReportDate | datetime | - | The forum reported date and time. | Example:  10/30/2021 6:47:37 PM |

Table 5.19: Group Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Group** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| GroupGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the group. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| GroupNo | int | - | The group number of the group. | Example:  1, 2, 3, 4 and so on. |
| GroupCapacity | int | - | The capacity of the group. | Example:  4 |

Table 5.20: GroupStudentList Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: GroupStudentList** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| GroupStudentListGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the group student list. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| GroupGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the group. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |

Table 5.21: MeetingLink Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: MeetingLink** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| MeetingLinkGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the meeting link. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| RoomTopic | varchar | 100 | The topic of the room meeting. | Example:  BAIT 2023 |
| RoomID | varchar | 100 | The room meeting ID. | Example:  72286778066 |
| RoomPass | varchar | 100 | The room meeting password. | Example:  bzVkKy9sazhWOVFlenQzSHNQUGdOUT09 |
| CreatedDate | datetime | - | The created date of the meeting link. | Example:  20/11/2021 4:46:12 PM |

Table 5.22: Message Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Message** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| MessageGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the message. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ChatGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the chat. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| MessageDetail | varchar | 300 | The message that sends by a user. | Example:  Hi, I am Cui Yen… |
| MessageType | varchar | 30 | The type of message sent by a user. | Example: File, Text |
| UserType | varchar | 30 | The user type that sends message. | Example:  Staff, student |
| SendDate | datetime | - | The date and time of the message sent. | Example:  10/24/2021 3:50:18 PM |

Table 5.23: Notification Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Notification** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| NotificationGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the notification. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| UserGUID | UNIQUEIDENTIFIER | - | A unique GUID for the user. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| NotificationSubject | varchar | 50 | The notification subject (similar as notification title) | Example: |
| NotificationContent | varchar | 500 | The notification contents. | Example: |
| ReadFlag | char | 1 | The notification has already been read or not. | Example:  Y (represent Yes), and N (represent No) |
| SentDate | datetime | - | The notification sent date and time. | Example:  10/28/2021 10:52:39 PM |
| SentBy | varchar | 50 | The notification sent by which user. | Example:  jerry1234 |
| NotificationDescription | varchar | 300 | The notification description. | Example:  Notification 1 |

Table 5.24: Payment Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Payment** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| PaymentGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the payment. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| PaymentNo | char | 15 | The payment reference number. | Format:  Start with a letter “P” and followed by the current date and time in “yyyyMMddHHmmss” date format.  Example:  P20211120154706 |
| PaymentMethod | varchar | 30 | The payment method used to pay the student bill. | Example:  PayPal |
| PaymentStatus | varchar | 10 | The student payment status. | Example:  Pending, paid |
| PaymentDate | datetime | - | The date and time of the payment made. | Example:  11/22/2021 3:49:38 PM |
| TotalAmount | decimal | 10,2 | The actual total amount of the student bill. | Example:  2331.00 |
| TotalPaid | decimal | 10,2 | The total amount paid by the student. | Example:  2331.00 |
| DateIssued | datetime | - | The date issue of the student bill to students. | Example:  11/22/2021 3:41:28 PM |
| DateOverdue | datetime | - | The overdue of the payment. | Example:  12/23/2021 12:00:00 AM |

Table 5.25: Programme Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Programme** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ProgrammeGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the programme. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| FacultyGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the faculty. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ProgrammeAbbrv | varchar | 4 | The programme abbreviation. | Format:  Not more than 4 characters.  Example:  RSD |
| ProgrammeName | varchar | 100 | The name of the programme. | Example:  Bachelor of Information Technology (Honours) in Software System Development |
| ProgrammeDesc | varchar | 999 | The description of the programme. | Example:  It's a Bachelor Degree programme that covered different course such as Web Application Development and so on. |
| ProgrammeDuration | varchar | 30 | The programme duration. | Example:  2 |
| ProgrammeCategory | varchar | 30 | The category of the programme. | Example:  Foundation, Diploma, Bachelor Degree |
| ProgrammeFullorPart | varchar | 10 | Determine whether the programme is full time or part time. | Example:  Full Time |

Table 5.26: ProgrammeCourse Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ProgrammeCourse** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ProgrammeCourseGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the programme course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| CourseGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SemesterGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the semester. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ProgrammeGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the programme. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionMonth | int | - | The programme course that belongs to which session month of student. | Example:  1, 5, 9 |

Table 5.27: Receipt Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Receipt** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ReceiptGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the receipt. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| PaymentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the payment. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ReceiptNo | char | 15 | The receipt reference number. | Format:  Starts with letter “R” followed by the current date and time in “yyyyMMddHHmmss” date format.  Example:  R20211120154849 |
| DateIssued | datetime | - | The receipt date issued to the student. | Example:  11/20/2021 3:48:49 PM |

Table 5.28: Replies Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Replies** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ReplyGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the reply. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| DiscGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the discussion. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ReplyContent | varchar | 999 | The content replied by the user. | Example:  I want to inquiry regarding the… |
| ReplyDate | datetime | - | The date and time of user reply. | Example:  10/19/2021 10:12:23 PM |
| ReplyBy | varchar | 50 | The message was reply by which user. | Example:  jerry1234 |

Table 5.29: ResetPassword Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: ResetPassword** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| ResetPasswordGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the reset password. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffGUID | UNIQUEIDENTIFIER | - | A unique GUID for the staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| Status | varchar | 20 | The status of the user after they reset the password successfully. | Example:  Completed |
| LinkToken | varchar | 6 | A unique random 6 digits number will be generated when user click on reset password. It will update the link token if the user request reset password again. | Example:  987408 |
| CreatedTime | datetime | - | The created date and time of the reset password URL. | Example:  11/20/2021 3:15:58 PM |
| ExpiredTime | datetime | - | The expired date and time of the reset password URL. The URL will be expired after 15 minutes. | Example:  11/20/2021 3:30:58 PM |

Table 5.30: Semester Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Semester** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| SemesterGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the semester. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SemesterYear | varchar | 2 | The semester year. | Example:  1 |
| SemesterSem | varchar | 2 | The semester. | Example:  1 |
| SemesterType | varchar | 10 | The semester types. | Example:  Long, short |

Table 5.31: Session Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Session** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| SessionGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionYear | int | - | The year of the session. | Example:  2021 |
| SessionMonth | int | - | The month of the session. | Example:  1 (01) |

Table 5.32: Staff Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Staff** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| StaffGUID (PK) | UNIQUEIDENTIFIER |  | A GUID for staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffUsername | varchar | 30 | The staff username for authenticating the staff identity. | Example:  jerry1234 |
| StaffPassword | varchar | 30 | The staff password for authenticating the staff identity. | Format:  8-20 characters and must contain at least one uppercase and one digit.  Example:  Asdf1234 |
| StaffFullName | varchar | 50 | The full name of the staff. | Example:  Jerry Lau |
| Gender | varchar | 10 | The gender of the staff. | Format:  Male, Female |
| Staff Role | varchar | 50 | The staff role to identify which role they are responsible for. | Format:  Academic Staff,  Non-academic Staff |
| StaffPosition | varchar | 100 | The job position of the staff. | Example:  Lecturer, Tutor and etc. |
| PhoneNumber | varchar | 15 | The staff phone number. | Format:  Malaysia phone number 10 to 11 digits without ‘-’and must start with “01”  Example:  01126085647 or 0123366793 |
| Email | varchar | 100 | The staff email. | Format:  A valid email address must consist of “@” and “.com”  Example:  julie09@staff.edu.my |
| NRIC | varchar | 15 | The Malaysian IC number of the staff. | Format:  Total of 12 digits with “-”.  Example:  001225-14-1234 |
| ProfileImage | varchar | 500 | The profile image of the staff. | Format when save in database:  ProfileImg\_‘newID()’  Example:  ProfileImg\_b2d4a114-910d-4d8d-8532-e22e8b4c6448.jpg |
| LastUpdateInfo | datetime |  | The date and time of last update profile information. | Format:  mm/dd/yyyy hh:mm:ss  10/20/2021 1:10:55 AM |
| Specialization | varchar | 399 | The specialization of a staff. | Example:  Computer science, Accounting and etc. |
| BranchesGUID (FK) | UNIQUEIDENTIFIER |  | A unique GUID of the branch. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| FacultyID (FK) | UNIQUEIDENTIFIER |  | A unique GUID of the faculty. | Format:  Has 32 hexadecimal characters, divided with a “-”. |

Table 5.33: Student Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Student** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| StudentGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for a student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentUsername | varchar | 30 | Student username used to authenticate the student identity. | Example:  wooncuiyen |
| StudentPassword | varchar | 50 | Student password used to authenticate the student identity. | Format:  8-20 characters and must contain at least one uppercase and one digit.  Example:  Asdf1234 |
| StudentFullName | varchar | 50 | The full name of the student. | Example:  Woon Cui Yen |
| Gender | varchar | 10 | The gender of the student. | Format:  Male, Female |
| DOB | date | - | The date of birth of the student. | Format:  DD/MM/YYYY  Example:  25/12/2000 |
| PhoneNumber | varchar | 15 | The phone number of the student | Format:  Malaysia phone number 10 to 11 digits without ‘-’ and must start with “01”.  Example:  01126085647 or 0128844759 |
| Email | varchar | 100 | The email of the student. | Format:  A valid email address must consist of “@” and “.com”  Example:  lkk123@gmail.com |
| NRIC | varchar | 15 | The Malaysian IC number of students. | Format:  Total of 12 digits with “-”.  Example:  000123-10-1234 |
| Address | varchar | 150 | The home address of the student. | Example:  123, Jalan Banting, 51200, KL |
| ProfileImage | varchar | 500 | The profile image of the student. | Format when save in database:  ProfileImg\_‘newID()’  Example:  ProfileImg\_b2d4a114-910d-4d8d-8532-e22e8b4c6448.jpg |
| AccountRegisterDate | datetime |  | The account registration date for the student. | Format:  dd/mm/yyyy  Example:  13/10/2021 |
| LastUpdateInfo | datetime |  | The date and time of last update profile information. | Format:  mm/dd/yyyy hh:mm:ss  10/20/2021 1:10:55 AM |
| StudyStatus | varchar | 20 | The study status of the student. | Format:  Studying or graduated |
| BranchesGUID (FK) | UNIQUEIDENTIFIER |  | A unique GUID of the branch. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| FacultyGUID (FK) | UNIQUEIDENTIFIER |  | A unique GUID of the faculty. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER |  | A unique GUID of the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |

Table 5.34: Student\_Programme\_Register Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Student\_Programme\_Register** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| RegisterGUID (PK) | UNIQUEIDENTIFIER | - | The unique GUID for the student course register. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID | UNIQUEIDENTIFIER | - | The unique GUID of the student. | Has 32 hexadecimal characters, divided with a “-”. |
| ProgrammeGUID (FK) | UNIQUEIDENTIFIER | - | The unique GUID of the programme. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID (FK) | UNIQUEIDENTIFIER | - | The unique GUID of the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SemesterGUID (FK) | UNIQUEIDENTIFIER | - | The unique GUID of the semester. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| BranchesGUID | UNIQUEIDENTIFIER | - | The unique GUID of the branches. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ProgrammeRegisterDate | datetime | - | The date and time of the student programme registration. | Example:  11/4/2021 5:44:42 PM |
| Status | varchar | 10 | The registration status of the student. | Example:  Pending and approved |
| UploadIcImage | varchar | 500 | The student’s copy of IC. | Format of saving into the database:  IC\_WOON CUI YEN.pdf |
| UploadResult | varchar | 500 | The student’s result image. | Format of saving into the database:  Result\_WOON CUI YEN.pdf |
| UploadMedical | varchar | 500 | The student’s medical image. | Format of saving into the database:  Medical\_WOON CUI YEN.pdf |

Table 5.35: Submission Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: Submission** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| SubmissionGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the submission. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StudentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the student. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| AssessmentGUID (FK) | UNIQUEIDENTIFIER | - | A unique GUID for the assessment. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SubmissionDate | datetime | - | The submission date and time of the student. | Example:  11/23/2021 12:14:05 PM |
| SubmissionFile | varchar | 300 | The file submitted by the student. | Example:  Submission\_assessment1.jpg |
| SubmissionStatus | varchar | 15 | The assessment submission status. | Example:  Submitted, submitted late |

Table 5.36: TimetableCourse Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table Name: TimetableCourse** | | | | |
| Attributes | Data Type | Field Length | Description | Example |
| TimetableCourseGUID (PK) | UNIQUEIDENTIFIER | - | A unique GUID for the timetable course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ProgrammeCourseGUID | UNIQUEIDENTIFIER | - | A unique GUID for the programme course. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| SessionGUID | UNIQUEIDENTIFIER | - | A unique GUID for the session. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| GroupGUID | UNIQUEIDENTIFIER | - | A unique GUID for the group. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| StaffGUID | UNIQUEIDENTIFIER | - | A unique GUID for the staff. | Format:  Has 32 hexadecimal characters, divided with a “-”. |
| ClassStartTime | datetime | - | The start time of the class. | Example:  1/1/1900 11:00:00 AM |
| ClassEndTime | datetime | - | The end time of the class. | Example:  1/1/1900 1:00:00 PM |
| DaysOfWeek | varchar | 10 | The days of week. | Example:  Monday, to Saturday |
| ClassType | varchar | 20 | The type of classes. | Example:  Main, Replacement |
| ClassCategory | varchar | 20 | The category of the class. | Example  Lecture, Tutorial, Practical,  Blended (T/P) |