Project Functionality

The Cybersecurity Center Student Tracking and Reporting Tool is a database management system designed to streamline the Texas A&M Cybersecurity Center (TAMCC) data management process. The tool aims to centralize and automate data management for the TAMCC's programs, ultimately contributing to the development of future cyber leaders. This outlines the major functionalities for both the admin and user sides of the TAMCC Student Tracking and Reporting Tool. Each functionality involves inserting, updating, selecting, and deleting data from the MySQL database. The technology stack includes HTML, CSS, PHP, and a MySQL database hosted on a local machine or a web hosting service like 000webhost (web hosting is not required, and you are not expected to spend money. The following are the details related to the project functionalities. Students are expected to program one admin functionality and one student functionality. In addition, each group member must implement at least one view and index that supports their functionality.

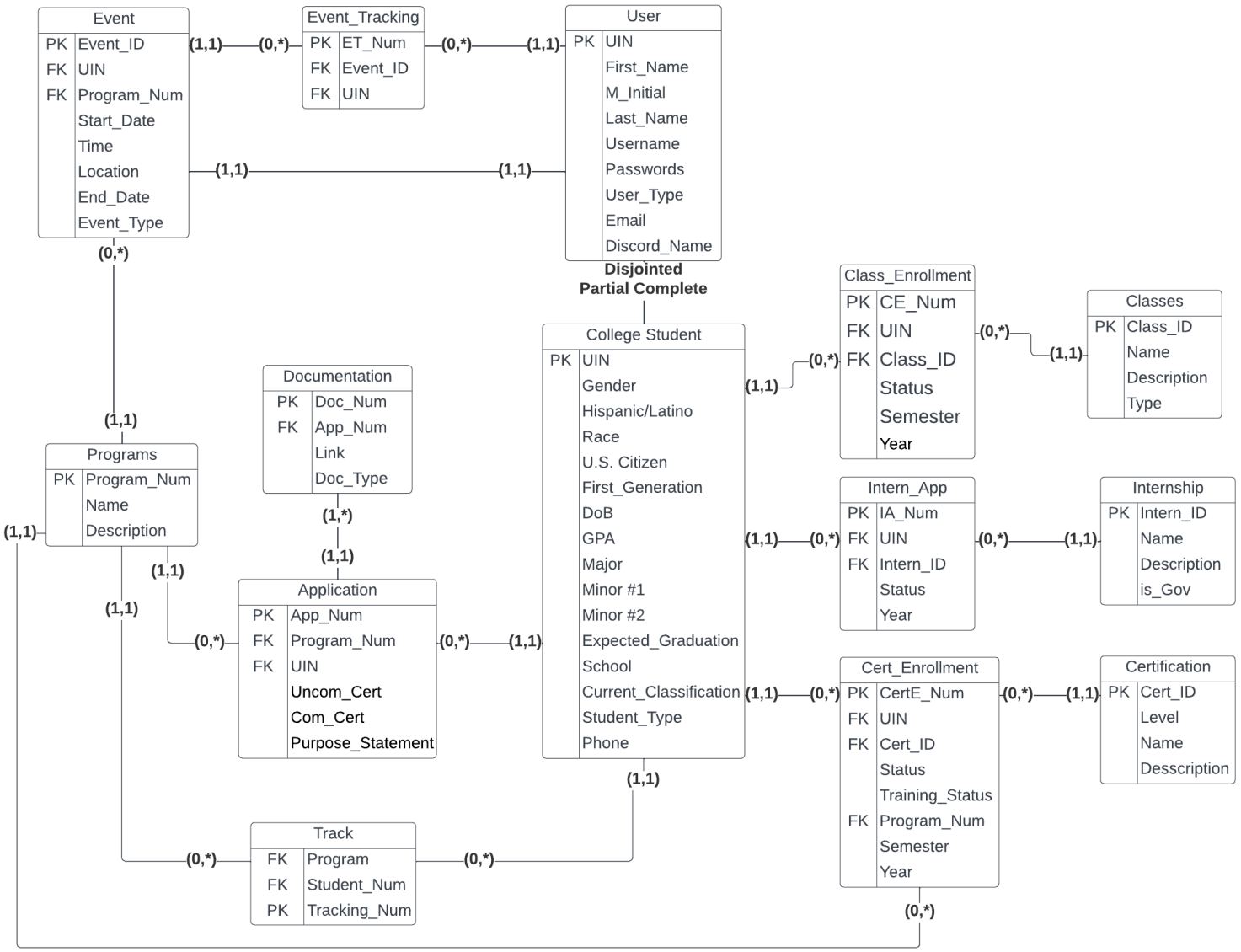
Admin Functionalities:

- **User Authentication and Roles**
    a. Insert: Add new administrators with their respective roles.
    b. Update: Modify roles or details of existing user types
    c. Select: View a list of all user types along with their roles.
    d. Delete: Remove all user types from the system.
        i. In our system, we have two delete types. The first delete is removing access to the system for a given account. The second is a full delete with corresponding data.
- **Program Information Management**
    a. Insert: Add a new program with its details.
    b. Update: Edit existing programs.
    c. Select: Create a report for each program.
    d. Delete: Remove a program from the system.
        i. In our system, we have two delete types. The first delete is removing access to a given program. The second is a full delete with corresponding data.
- **Program Progress Tracking**
    a. Insert: Record a student's progress within various programs.
    b. Update: Edit a student's progress (e.g., course enrollments, certifications).
    c. Select: Retrieve progress information for a specific student related to a program.
    d. Delete: Remove a specific report.
- **Event management**
    a. Insert: Create an event for various programs.
    b. Update: Edit an event's details, including student attendance information.
    c. Select: Retrieve information for each event.

d. Delete: Remove an event.

Student Functionalities:

1. **User Authentication and Roles**
    a. Insert: Create a new student for the tracking system.
    b. Update: Change login credentials or update personal information.
    c. Select: Access their own profile information.
    d. Delete: Deactivate their own account.
2. **Application Information Management**
    a. Insert: Submit application forms for various programs.
    b. Update: Edit application details as needed.
    c. Select: Review their own application information and status.
    d. Delete: Remove a program application.
3. **Program Progress Tracking**
    a. Insert: Add new progress records (e.g., course enrollments, certifications).
    b. Update: Edit their own progress records.
    c. Select: View their own progress within TAMCC's programs.
    d. Delete: Remove a specific progress record.
4. **Document Upload and Management**
    a. Insert: Upload resumes and other documents for program opportunities.
    b. Update: Replace or edit uploaded documents.
    c. Select: View their uploaded documents.
    d. Delete: Remove a specific document.


Event
PK Event_ID
FK UIN
FK Program_Num
Start_Date
Time
Location
End_Date
Event_Type
Event_Tracking
PK ET_Num
FK Event_ID
FK UIN
User
PK UIN
First_Name
M_Initial
Last_Name
Username
Passwords
User_Type
Email
Discord_Name
(1,1)
(0,*)
(0,*)
(1,1)
(1,1)
(1,1)
(0,*)
Disjointed
Partial Complete
College Student
PK UIN
Gender
Hispanic/Latino
Race
U.S. Citizen
First_Generation
DoB
GPA
Major
Minor #1
Minor #2
Expected_Graduation
School
Current_Classification
Student_Type
Phone
Class_Enrollment
PK CE_Num
FK UIN
FK Class_ID
Status
Semester
Year
Classes
PK Class_ID
Name
Description
Type
Documentation
PK Doc_Num
FK App_Num
Link
Doc_Type
Programs
PK Program_Num
Name
Description
Application
PK App_Num
FK Program_Num
FK UIN
Uncom_Cert
Com_Cert
Purpose_Statement
Intern_App
PK IA_Num
FK UIN
FK Intern_ID
Status
Year
Internship
PK Intern_ID
Name
Description
is_Gov
Cert_Enrollment
PK CertE_Num
FK UIN
FK Cert_ID
Status
Training_Status
FK Program_Num
Semester
Year
Certification
PK Cert_ID
Level
Name
Desscription
Track
FK Program
FK Student_Num
PK Tracking_Num

- Users
  - UIN (INT)
  - First_Name (VARCHAR)
  - M_Initial (CHAR)
  - Last_Name (VARCHAR)
  - Username (VARCHAR)
  - Passwords (VARCHAR)
  - User_Type (VARCHAR)
  - Email (VARCHAR)
  - Discord_Name (VARCHAR)

- College Student
  - UIN (INT)
  - Gender (VARCHAR)
  - Hispanic/Latino (BINARY)
  - Race (VARCHAR)
  - U.S. Citizen (BINARY)
  - First_Generation (BINARY)
    - This is asking if the student is a first-time college student.
  - DoB, Date of Birth (DATE)
  - GPA (FLOAT)
  - Major (VARCHAR)
  - Minor #1 (VARCHAR)
  - Minor #2 (VARCHAR)
  - Expected_Graduation (SMALLINT)
  - School (VARCHAR)
  - Classification (VARCHAR)
  - Phone (INT)
  - Student_Type (VARCHAR)

- Class_Enrollment
  - CE_NUM (INT)
  - UIN (INT)
  - Class_ID (INT)
  - Status (VARCHAR)
  - Semester (VARCHAR)
    - Ex. Fall, Spring, Summer
  - Year (YEAR)

- Classes
  - Class_ID (INT)
  - Name (VARCHAR)
  - Description (VARCHAR)
  - Type (VARCHAR)
- Intern_App
  - IA_Num (INT)
  - UIN (INT)
  - Intern_ID (INT)
  - Status (VARCHAR)
  - Year (YEAR)

- Internship
  - Intern_ID (INT)
  - Name (VARCHAR)
  - Description (VARCHAR)
  - Is_Gov (BINARY)

- Cert_Enrollment
  - CertE_Num (INT)
  - UIN (INT)
  - Cert_ID (INT)
  - Status (VARCHAR)
  - Training_Status (VARCHAR)
  - Program_Num (INT)
  - Semester (VARCHAR)
  - YEAR (YEAR)

- Certification
  - Cert_ID (INT)
  - Level (VARCHAR)
  - Name (VARCHAR)
  - Description (VARCHAR)

- Track
  - Program_Num (INT)
  - Student_Num (INT)
  - Tracking_Num (INT)

- Programs
  - Program_Num (INT)
  - Name (VARCHAR)
  - Description (VARCHAR)

- Applications
  - App_Num (INT)
  - Program _Num (INT)
  - UIN (INT)

- Uncom_Cert (VARCHAR)
  - Are you currently enrolled in other uncompleted certifications sponsored by the Cybersecurity Center? (Student expected to leave black or provide details)
- Com_Cert (VARCHAR)
  - Have you completed any cybersecurity industry certifications via the Cybersecurity Center? (Student expected to leave black or provide details)
- Purpose_Statement (LONGTEXT)

- Document
  - Doc_Num (INT)
  - App_Num (INT)
  - Link (VARCHAR)
  - Doc_Type (VARCHAR)

- Event
  - Event_ID (INT)
  - UIN (INT)
  - Program_Num (INT)
  - Start_Date (DATE)
  - Time (TIME)
  - Location (VARCHAR)
  - End_Date (DATE)
  - Time (TIME)
  - Event_Type (VARCHAR)

- Event_Tracking
  - ET_Num (INT)
  - Event_ID (INT)
  - UIN (INT)