



ASRE Co-Curricular Management

ABSTRACT

ASRE Co-Curricular Management is a dynamic web application project developed for the Student Center Research, Creativity, and Scholarship at the University of Louisiana at Lafayette. The application will serve students and departments at the university. This documentation is included in the design process of the database.

Ipek Kaya

Master's Project

ASRE MANAGEMENT PROJECT

A. Flowchart (Business Process)

Departmental Pathways are created and approved (Department, Dean, Advance)

- Two pathways from each department include co-curricular events as requirements
- Repeated events can be stored in the program and updated each semester or year
- Each co-curricular event type is identified as approved by a department's pathway
- Each identified co-curricular event is assigned to faculty or staff as the approver for completion of the event (assigns satisfactory or unsatisfactory grade)
- Each department has at least one faculty or staff that approves co-curricular events that were not preapproved individually, but do count as a specific type of event (i.e., professional conference)

Students register to complete an Advance SRE Pathway of distinction or excellence that includes multiple co-curricular events.

- Advance basic pathways include curricular activity only
- Advance pathways of distinction and excellence include co-curricular and curricular activities
- Students completing pathways are assigned an attribute that matches them to a group of co-curricular events that are required for completion of a pathway they choose in their major

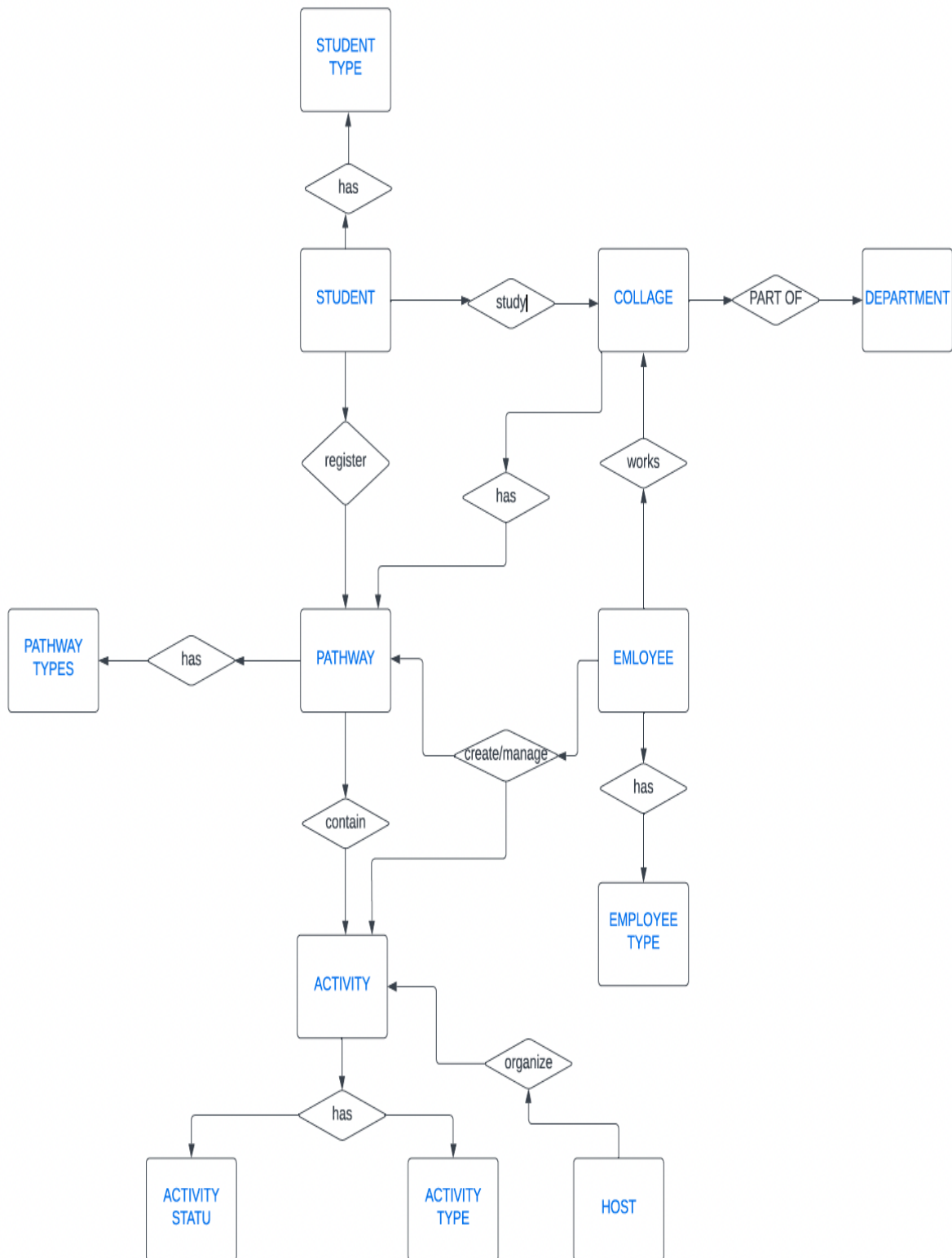
A qualifying co-curricular event takes place

- Faculty/staff member creates/sponsors/mentors an event/activity and serves as the approver for that pre-registered event that exists in the co-curricular transcript.
- Faculty/staff member records students' attendance and completion of the pre-approved event (above) for pathway requirements.
- Students attend activities that are not pre-registered. The event could meet a co-curricular requirement type.
- Student provides proof of their attendance and completion of an event to an approver in the department that can add/override a qualifying co-curricular event that is not pre-approved (example a conference counts as a pre-approved event type, the specific conference is not pre-approved but can be approved by designated faculty from a department).

SCRCS using the appropriate software tracks co-curricular transcripts (produced by Modern Campus or another company) The current software is being used by the Dean of Students and has the capacity to produce co-curricular transcripts and curricular transcripts. (Curriculum is automatically produced by Banner with Degree Works).

Completed pathways are approved by SCRCS and sent to the Registrar's office for processing and designation on the formal transcript.

B. Workflow



C. Responsibilities and Roles

Student

- Graduate and undergraduate students can register for the pathways.
- Students can sign up for the pathway website even if they do not register for a pathway.
- One student cannot register for more than one pathway.
- Students may switch their pathway type after registering a pathway.

- Students must mark a co-curricular activity as a completed activity when they completed it.
- Students are only allowed to mark on their part.
- Students must provide proof of their attendance and completion of an event to an approver in the department.

Pathway

- There are two pathways; the Advance Pathway of Excellence, and the Advance Pathway of Distinction.
- Two pathways from each department must include at least one co-curricular event as a requirement.
- Different pathways may have the same co-curricular events even if they are part of different departments.
- Pathways must be created by deans, faculty, staff, graduate assistants, or SCRCs staff.

SCRCs

- Completed pathways must be approved by SCRCs and sent to the Registrar's office for processing and designation on the formal transcript.

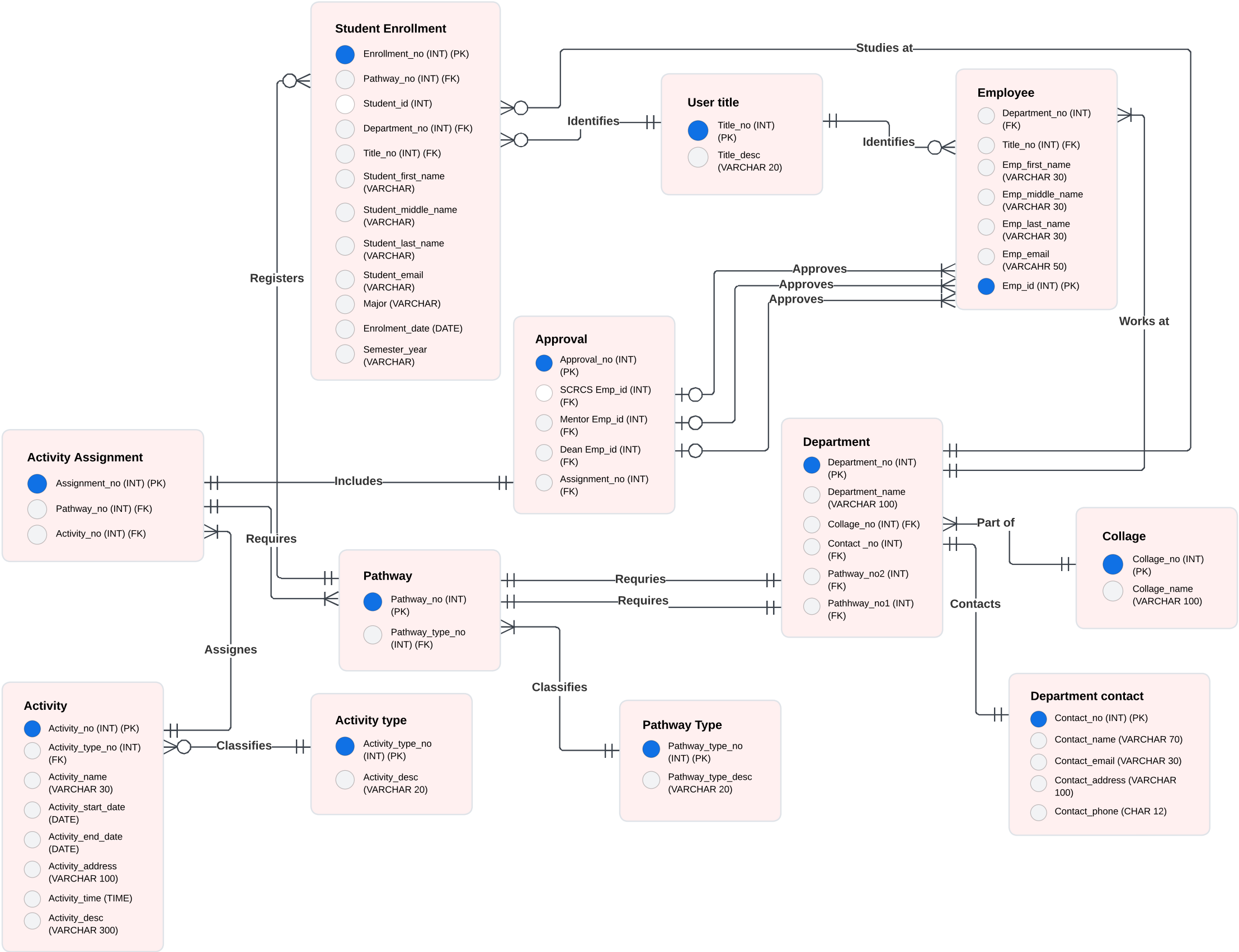
Department

- Each department must have 2 pathways; Advance Pathway of Excellence, and Advance Pathway of Distinction.
- Faculty/staff must record students' attendance and completion of the pre-approved event for pathway requirements.
- Each department must assign staff to manage its pathway.
- Each department must have at least one faculty or staff that approves of co-curricular events.
- Deans and Mentors are responsible for checking the activity participation of students on their part.

Co-curricular Activity (Event)

- Each co-curricular activity must have an activity type.
- Every activity should be part of at least one pathway.
- Activity can be part of more than one pathway.

D. Entity Relationship Diagram



E. Business Rules

Activity-Activity Type Entity

- Each activity must have one activity type.
- Multiple activity can have the same activity type.

Activity Entity – Activity Assignment Entity

- Each assignment must be assigned at least and only one activity.
- Each activity must be assigned at least one and may assign multiple assignments.

Activity Assignment Entity – Pathway Entity

- Each assignment must be assigned at least and only one pathway no.
- Each pathway must have at least one and may have multiple assignments no.

Activity Assignment Entity – Approval Entity

- Each activity assignment must have at least and only one approval.
- Each approval must have at least and only one activity assignment.

Pathway Entity – Pathway Type Entity

- Each pathway must have only one pathway type.
- Multiple pathways can have the same pathway type.

Pathway Entity – Department Entity

- Each department must have only two pathways; pathway no1 and pathway no2. These two pathways must be different pathways.
- Each pathway must be assigned only one department's pathway.
- Departments cannot have the same pathway.

Department Entity – Department Contact Entity

- Each department must have at least and only one department contact.
- Departments cannot have the same department contact.

Department Entity – Collage Entity

- One college can have multiple departments.
- Departments must have at least and only one college.

Department Entity – Employees Entity

- Each department can have multiple employees.
- Each employee can only work/study in one department.

Employee Entity – User Title Entity

- Each employee must have at least and only one user title.
- Multiple employees can have the same user title.

Employee Entity – Approval Entity

- Activity can be approved by many employees.
- There are three specific employee approval processes and each of them must be approved by at least and only one employee. These three employees cannot be the same employee.

Student Enrollment Entity – User Title Entity

- Each student must have at least and only one user title.
- Multiple students can have the same user title.

Student Enrollment Entity – Department Entity

- Each student can study at least and only one department.
- Multiple students can study at the same department.

Student Enrollment Entity – Activity Assignments Entity

- Each student can have multiple activity assignments.
- Each activity assignment can be assigned at least and only one student.

Additional Rules

- When students enroll in Pathways, they will be assigned to multiple activities. Each assignment will have a different assignment no and approval no.
- Same student can have multiple enrolment no.
- Employee expresses deans, faculty, staff, graduate assistants, and SCRCS staff for this project.

D. Database statements

```
CREATE DATABASE ASRE_Management;
```

1. Collage Entity Strings

```
CREATE TABLE Collage(
Collage_no INT,
Collage_name VARCHAR(100) NOT NULL,
PRIMARY KEY (Collage_no)
);
```

```
SELECT *
FROM Activity_type;
```

2. Department Contact Entity Strings

```
CREATE TABLE Department_contact(
Contact_no INT,
Contact_name VARCHAR(70) NOT NULL,
Contact_email VARCHAR(20) NOT NULL,
Contact_address VARCHAR(50),
Contact_phone CHAR(12),
PRIMARY KEY (Contact_no)
);
```

```
SELECT *
FROM Department_contact;
```

3. Pathway Type Entity Strings

```
CREATE TABLE Pathway_type(
Pathway_type_no INT,
Pathway_type_desc VARCHAR(20),
PRIMARY KEY (Pathway_type_no)
);
```

```
SELECT *  
FROM Pathway_type;
```

4. User Title Entity Strings

```
CREATE TABLE User_title(  
Title_no INT,  
Title_desc VARCHAR(20),  
  
PRIMARY KEY (Title_no)  
);
```

```
SELECT *  
FROM User_title;
```

5. Activity Type Entity Strings

```
CREATE TABLE Activity_type(  
Activity_type_no INT,  
Activity_type_desc VARCHAR(20),  
PRIMARY KEY (Activity_type_no)  
);
```

```
SELECT *  
FROM Activity_type;
```

6. Department Entity Strings

```
CREATE TABLE Department(  
Department_no INT,  
Department_name varchar(100) NOT NULL,  
Collage_no INT NOT NULL,  
Contact_no INT NOT NULL,  
Pathway_no1 INT NOT NULL,  
Pathway_no2 INT NOT NULL,  
PRIMARY KEY (Department_no),  
FOREIGN KEY (Collage_no) REFERENCES Collage(Collage_no),  
FOREIGN KEY (Contact_no) REFERENCES Department_contact(Contact_no),  
FOREIGN KEY (Pathway_no1) REFERENCES Pathway(Pathway_no),  
FOREIGN KEY (Pathway_no2) REFERENCES Pathway(Pathway_no)  
);
```

```
SELECT *  
FROM Department;
```


7. Pathway Entity Strings

```
CREATE TABLE Pathway(  
  Pathway_no INT,  
  Pathway_type_no INT NOT NULL,  
  PRIMARY KEY (Pathway_no),  
  FOREIGN KEY (Pathway_type_no) REFERENCES Pathway_type(Pathway_type_no)  
);
```

```
SELECT *  
FROM Pathway;
```

8. Activity Entity Strings

```
CREATE TABLE Activity(  
  Activity_no INT,  
  Activity_type_no INT NOT NULL,  
  Activity_name VARCHAR(30) NOT NULL,  
  Activity_start_date DATE NOT NULL,  
  Activity_end_date DATE NOT NULL,  
  Activity_address VARCHAR(100) NOT NULL,  
  Activity_time TIME NOT NULL,  
  Activity_desc VARCHAR(300),  
  PRIMARY KEY (Activity_no),  
  FOREIGN KEY (Activity_type_no) REFERENCES Activity_type(Activity_type_no)  
);
```

```
SELECT *  
FROM Activity;
```

9. Activity Assignment Entity Strings

```
CREATE TABLE Activity_Assignment (  
  Assign_no INT,  
  Pathway_no INT NOT NULL,  
  Activity_no INT NOT NULL,  
  PRIMARY KEY (Assign_no),  
  FOREIGN KEY (Pathway_no) REFERENCES Pathway(Pathway_no),  
  FOREIGN KEY (Activity_no) REFERENCES Activity(Activity_no)  
);
```

```
SELECT *  
FROM Activity_Assignment;
```

10. Student Enrollment Entity Strings

```
CREATE TABLE Student_Enrollment(  
  Enrollment_no INT,  
  Pathway_no INT NOT NULL,  
  Student_id INT NOT NULL,  
  Title_no INT NOT NULL,  
  Department_no INT NOT NULL,  
  Student_first_name VARCHAR(30) NOT NULL,  
  Student_middle_name VARCHAR(30),  
  Student_last_name VARCHAR(30) NOT NULL,  
  Student_email VARCHAR(50) NOT NULL,  
  Major VARCHAR(20),  
  Enrollment_date DATE NOT NULL,  
  Semester_year CHAR(4) NOT NULL,  
  PRIMARY KEY (Enrollment_no),  
  FOREIGN KEY (Title_no) REFERENCES User_title(Title_no),  
  FOREIGN KEY (Pathway_no) REFERENCES Pathway(Pathway_no),  
  FOREIGN KEY (Department_no) REFERENCES Department(Department_no)  
);
```

```
SELECT *  
FROM Student_Enrollment;
```

11. Employee Entity Strings

```
CREATE TABLE Employee(  
  Emp_id INT,  
  Title_no INT NOT NULL,  
  Department_no INT NOT NULL,  
  Emp_first_name VARCHAR(30) NOT NULL,  
  Emp_middle_name VARCHAR(30),  
  Emp_last_name VARCHAR(30) NOT NULL,  
  Emp_email VARCHAR(50) NOT NULL,  
  PRIMARY KEY (Emp_id ),  
  FOREIGN KEY (Department_no) REFERENCES Department(Department_no),  
  FOREIGN KEY (Title_no) REFERENCES User_title(Title_no)  
);
```

```
SELECT *  
FROM Employee;
```

12. Approval Entity Strings

```
CREATE TABLE Approval(  
  Approval_no INT,
```

```
Mentor_EmpID INT NOT NULL,  
Dean_EmpID INT NOT NULL,  
SCRCS_EmpID INT NOT NULL,  
Assign_no INT NOT NULL,  
PRIMARY KEY (Approval_no),  
FOREIGN KEY (Mentor_EmpID) REFERENCES Employee(Emp_id),  
FOREIGN KEY (Dean_EmpID) REFERENCES Employee(Emp_id),  
FOREIGN KEY (SCRCS_EmpID) REFERENCES Employee(Emp_id)  
);
```

```
SELECT *  
FROM Approval;
```