

Chapter 1 : Introduction

In the digital age , the majority of institutions rely heavily on web based platforms to insure a structured management and reliable services . The official website of the American University in Iraq Baghdad (AUIB) is one such platform, serving as a gateway to the user to academic programs, news, events, administration and much more .

This project aims to reverse engineer and construct a relational database for AUIB Website by analyzing its content, structure, and functions . The goal is to design and build a backend data system that would store the website data, supporting the website's component and features if it were to be built from ground up .

AUIB Website should open up to an interface displaying news and variation of college programs . It should contain links to selected website sections and components LI . It must contain various sections which are : About us , Academics , Admissions , continuing Education institute , Engage , Human Resources , My AUIB , Research and institutional centers , and Student Affairs . Each one of those section could have its own description and content . Sections are divided into other section that also contain different content . In each section there are different components of text , pictures , and sometime videos and other types of media .

General information about the University Should be stored in the database in the About US Section L2 and the Sections that this Section makes. In this section, information about the University is presented such as its partnerships, Leadership, Faculty, and administration, policies and procedures, and many more.

Academics L3 Sections in AUIB Website Should store information about academic programs offered in AUIB, including Colleges and master programs. Colleges themselves, are an extremely critical component of AUIB institution. Several data about colleges should be stored in the database. This data would be used as a reference to the user to gain information about colleges from both, AUIB website and Student information System (SIS) L4.

In AUIB, many colleges must offer many courses. Each college has a tuition and many majors. Majors also contain many courses student need to complete before getting their degree. Courses make up classes. Classes are taught by instructors. Instructors advice students via their majors. Each instructor has a single work email. However, students can have more than one email and also phones L4.

Moreover, AUIB website contains Admissions Section L5. Through Admissions Sections, the website would provide information about Enrollment and Registrar Services, Graduate, Undergraduate, and Tuition fees. Undergraduate L6 section will display information about the admission requirements which are crucial for users considering joining AUIB for undergraduate studies.

Application Steps for both national and international students are presented also in the same section. Information about tuition and fees should also be a part of AVIB database. each college and major has a tuition along with ELA levels and general fees for services L7.

Continuing Education Institute L8 is another yet vital part of AVIB. The English Language Academy L9 (ELA) with all of its programs is a part of the CEI. It consists of several programs that have their own details. The CEI also possesses a wide range of relationships with various partners and clients L10. Lastly, CEI has a professional Development Center L11 which contains a list of center's specializations.

AVIB website should also allow its users to engage L12 with the university by showing information about its radio (AVIB FM L13) and by encouraging the user to support AVIB L14 by showing the user ways to support AVIB and priorities of its campaigns.

Human Resources L15 section should display some information about AVIB's administrative departments. It also displays faculty's Testimonials L16 about AVIB. Most importantly, information about career opportunities L17 are displayed. Career opportunities section displays information such as benefit snapshots and open vacancies. Each position contains the qualifications needed for that position along with duties and responsibilities as well as an application form allowing user to apply for the published position.

My AVIB L18 Section in AVIB Website does not have a description. Rather, It Contains a variety of links used by both faculty and students. Links to SIS, LMS, and more are displayed in this Section to allow users to access and navigate the respected systems.

Furthermore, AVIB Website Contains Sections for a number of Research and institutional Centers L19. an example is the American Space L20 Section that contain information about AVIB's American Space. It contains descriptions, objectives, links to Scholarships provided, etc. There also exist a Section for AVIB press L21. It includes information about AVIB's press Such as their values, responsibilities, and members. Another Section is AVIB's Institutional Review Board L22 (IRB). It encompasses a list of IRB members, a list of cases where application review would be expedited, a list of application evaluation Criteria, etc.

Finally, AVIB's Website holds dedicated Sections related to Student Affairs L23 . Student affairs is a section itself that contains some information about Selected students, activities, Clubs, Student Services Center, etc. A Section for Academic Writing Unit L24 (AWU), and Math Tutoring Unit L25 (MTU) is presented. Both of these Sections contain information about Units' operational overview . There are also sections for National Student Information L26 and International Student Information L27 which both contain key information about registration

along side other distinct information. Another section that falls within Student affairs Category is a section for Student code of conduct L28. This section outlines the behavioral standards and responsibilities students are expected to follow, structured into articles with specific enforceable guidelines. Lastly, Student life L29 is a notable department at AVIB, it has a dedicated section that highlights its activities, most notably, its diverse student clubs.

In Summary, AVIB Website presents a structured overview of academic services and institutional policies. This content serves as a solid foundation for identifying and organizing database requirements accordingly.

Links

1. <https://auib.edu.iq/>
2. <https://auib.edu.iq/about-us/>
3. <https://auib.edu.iq/academics/>
4. https://sis.auib.edu.iq:8443/psc/ps/EMPLOYEE/SA/c/NUI_FRAMEWORK.PT_LANDINGPAGE.GBL
5. <https://auib.edu.iq/admissions/>
6. <https://auib.edu.iq/admissions/undergraduate/>
7. <https://auib.edu.iq/admissions/tuition-and-fees/>
8. <https://auib.edu.iq/continuing-education-institute/>
9. <https://auib.edu.iq/continuing-education-institute/english-language-academy/>
10. <https://auib.edu.iq/continuing-education-institute/our-partners-and-clients/>
11. <https://auib.edu.iq/continuing-education-institute/professional-development-center/>
12. <https://auib.edu.iq/engage/>
13. <https://auib.edu.iq/engage/auib-fm/>
14. <https://auib.edu.iq/engage/support-auib/>
15. <https://auib.edu.iq/human-resources/>
16. <https://auib.edu.iq/human-resources/testimonials-from-current-employed-people/>
17. <https://auib.edu.iq/human-resources/open-opportunities/>
18. <https://auib.edu.iq/my-auib/>
19. <https://auib.edu.iq/research-and-institutional-centers/>
20. <https://auib.edu.iq/research-and-institutional-centers/american-space/>
21. <https://auib.edu.iq/research-and-institutional-centers/auib-press/>
22. <https://auib.edu.iq/research-and-institutional-centers/institutional-review-board/>
23. <https://auib.edu.iq/student-affairs/>
24. <https://auib.edu.iq/student-affairs/academic-writing-unit/>
25. <https://auib.edu.iq/student-affairs/math-tutoring-unit/>
26. <https://auib.edu.iq/student-affairs/national-student-information/>
27. <https://auib.edu.iq/student-affairs/international-students/>
28. <https://auib.edu.iq/student-affairs/student-code-of-conduct/>
29. <https://auib.edu.iq/student-affairs/students-life/>

Formal Abbreviations

CEI	: Continuous Education Institute
ELA	: English Language <u>Academy</u>
CEP	: <u>Community</u> Education program
ASP	: Academic Success program
EFP	: English Fundamentals program
CTP	: Corporate <u>Training</u> program
PDC	: Professional Development Center
IRB	: International Review Board
CSO	: Career Services Office
ESDC	: Entrepreneurship and Sustainable Development Center
MTU	: Math <u>Tutoring</u> Unit
AWU	: Academic <u>Writing</u> Unit
CCWSES	: Center for climate change, Water Security, and Environmental Sustainability

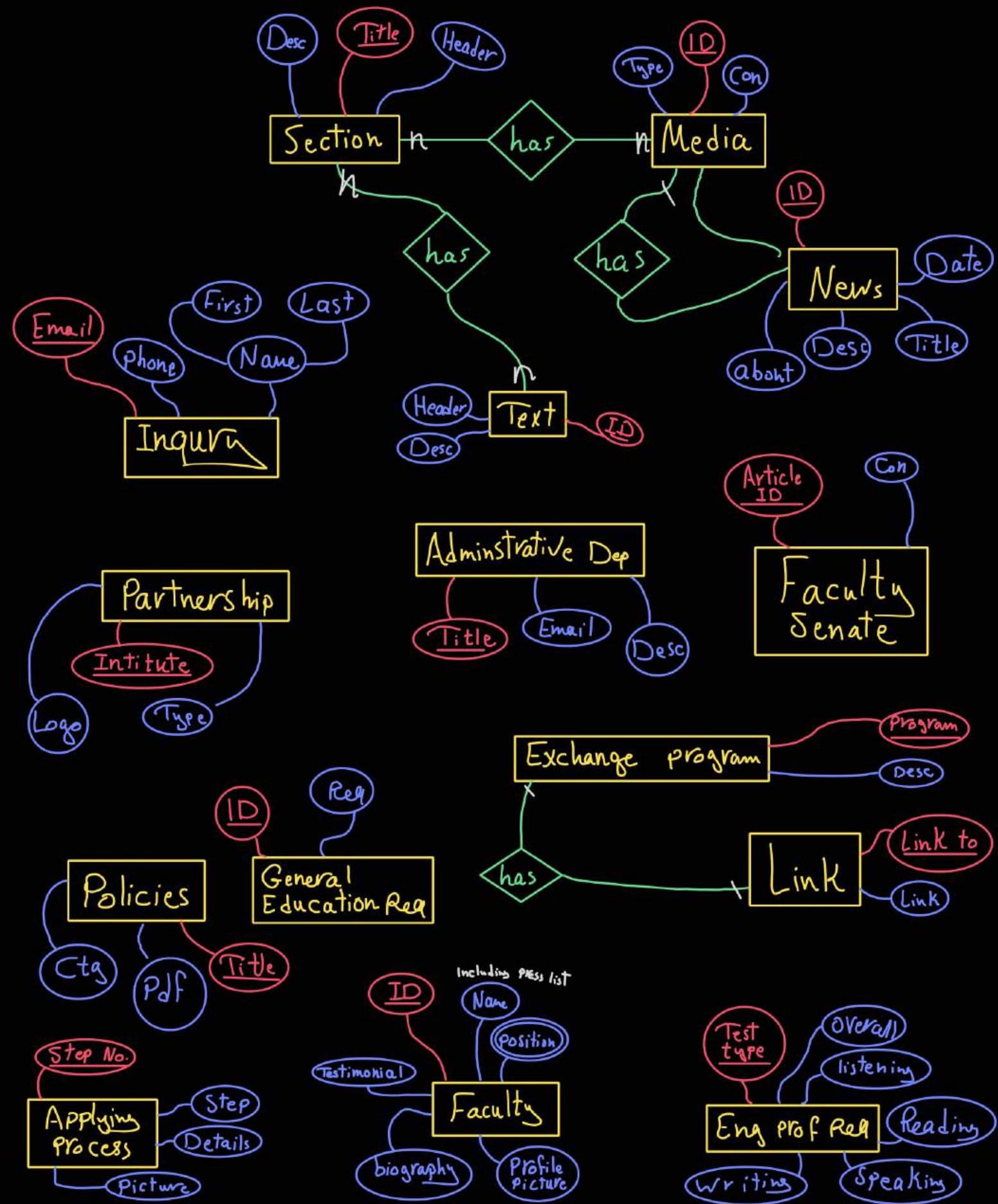
Notes & Assumptions

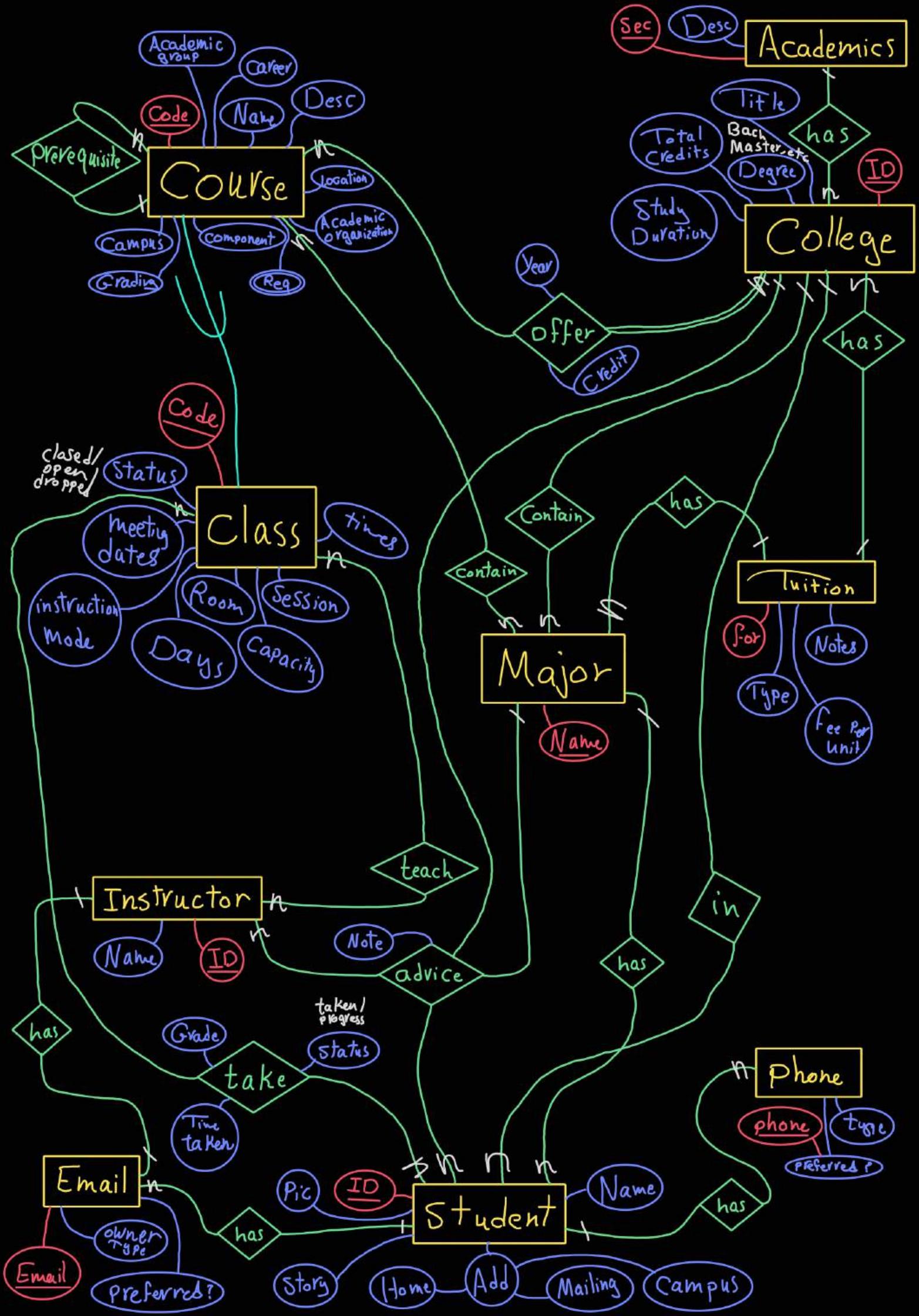
- My AVIB Section in AVIB is ignored; only SIS is implemented.
- Some IDs and key attributes are assumed when appropriate.
- CEI calendar is ignored for it is not a part of AVIB website.

General Shorthands

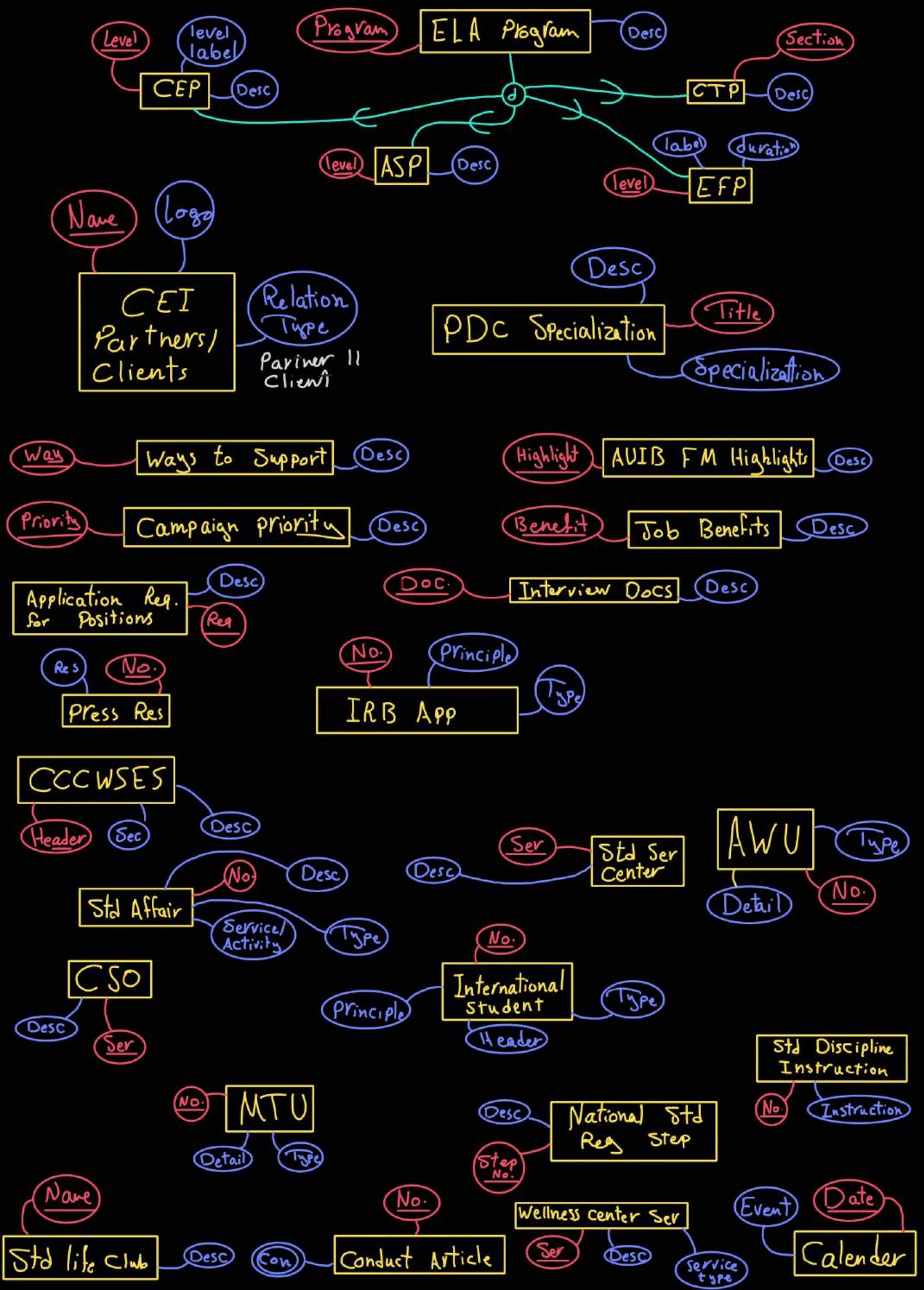
Desc	: Description	Add	: Address
Std	: Student	Avg	: Average
Req	: Requirement	Eng	: English
Intl	: International	Prof	: Proficiency
Con	: Content	Res	: Responsibility
Dep	: Department	Sec	: Section
SS	: Scholarship	Ser	: Service
HS	: HighSchool	Ctg	: Category

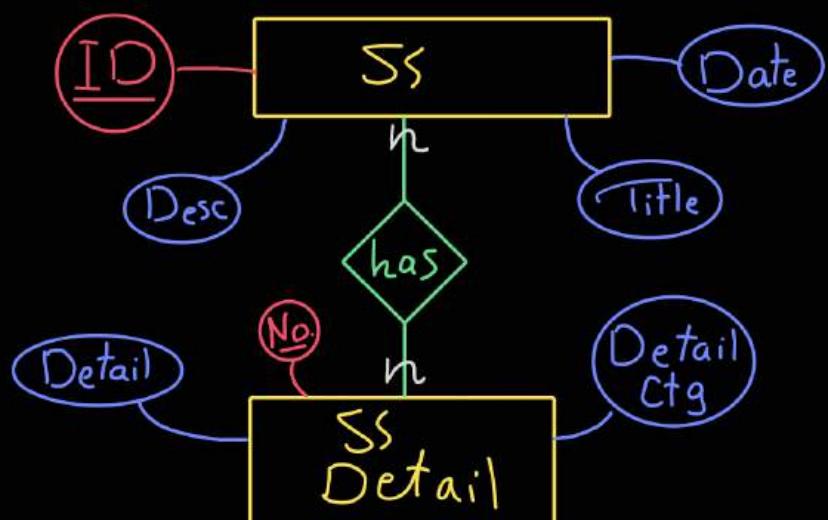
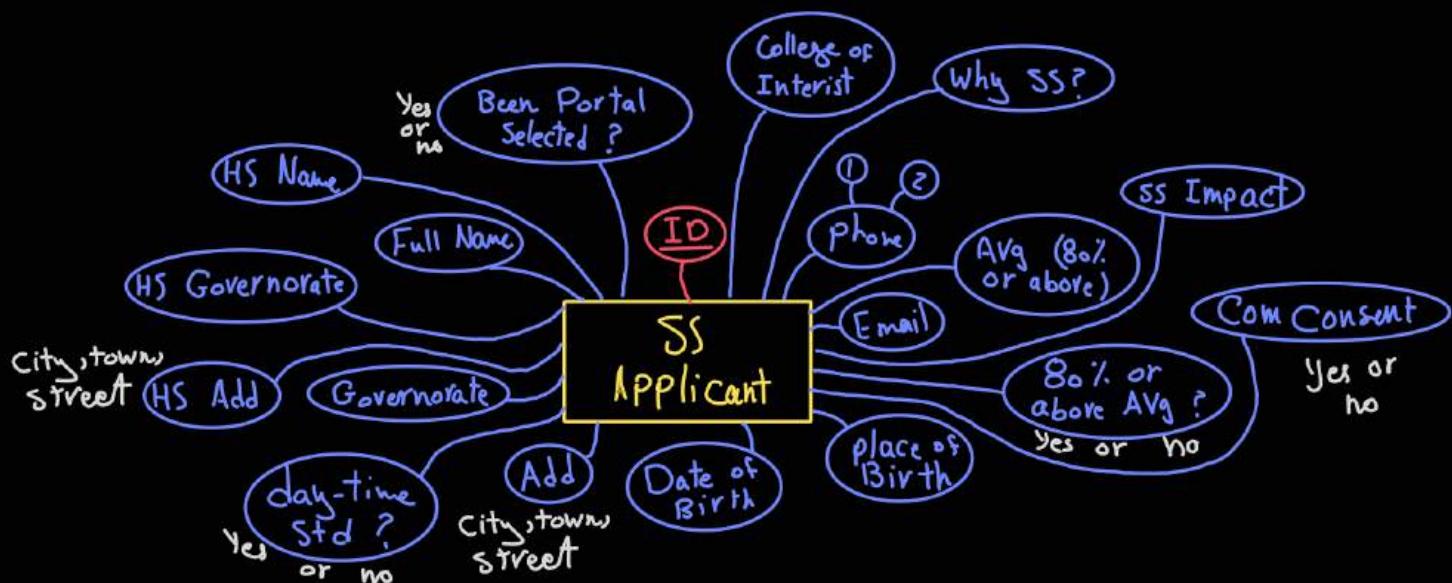
Chapter 2 : ER Modeling











Inquiry (Email, First Name, Last Name, phone)
 Section (Title, Desc, Header)
 Media (ID, Type, Content)
 Text (ID, Header, Desc)
 Section has Media (Section Title, Media ID)
 Section has Text (Section Title, Text ID)
 News (ID, Date, Title, Desc, About, Media ID)
 Partnership (Institute, Type, Logo)
 Administrative Dep (Title, Email, Description)
 Policies (Title, Category, PDF)
 Faculty Senate (Article ID, Content)
 Faculty (ID, Name, Biography, Testimonial, profile Picture)
 Faculty Position (Faculty ID, Position)
 General Education Req (ID, Req)
 Link (Link to, Link)
 English Prof Req (Test Type, overall, Listening, Speaking, Reading, Writing)
 Applying Process (Step No., Step, Details, Picture)

Chapter 3: Relational Model

Course (Code, Name, Desc, Grading, Academic Group, Component, Campus, Location, Career, Academic Organization)
 Course Req (Course Code, Req)
 Course Prerequisite (Course Code, Prerequisite Course Code)
 Academics (Sec, Description)
 Tuition (For, Type, Fee Per Unit, Notes)
 College (ID, Title, Total Credits, Study Duration, ^{Bach./Master} Degree, Academics Sec, Tuition For)
 College offer course (College ID, Course Code, Year, Credit)
 Major (Name, College ID, Tuition For)
 Major Contain Course (Major Name, Course Code)

Class (Course Code, Code, Session, Instruction Mode, Room, Status, Capacity, times, meeting dates)
Capacity ↑
Status, Closed / open / dropped

Student (ID, Name, Home, Mailing, Campus, Store, Picture, Major Name, College ID)
Major Name ↑
taken / progress

Student take class (Student ID, Course Code, class code, Status, Grade, Time Taken)

Email (Email, Type → Preferred, Owner Type, Student ID)

Phone (Phone, Type → Preferred, Student ID)

Instructor (ID, Name, Email)

Instructor teach class (Course Code, class code, Instructor ID)

Instructor advice
Student - Major (ID, Instructor ID, Student ID, College ID, Major Name, Note)

Intl Std Add Req (ID, Req)

AUIB Admission Req (ID, Details)

Administrative Dep (Dep Name, Description)

IT Service (Service, Type)

Job (ID, Title, Date, Location, Target, Summary, Key Responsibility)

Job Qualification (Type, Description)

Job has Job Qualification (Job ID, Job Qualification Type)

Job Application Form (ID, Name, Family Name, Home Address, Country Code, def. Val. + 964
Phone, Email, Country of Origin, Position Applied, Relative Working AUIB,
Start Date, Current position, Academic Qualification, Highest Completed Degree
College / UNI Attended + Country, Desired Monthly Gross Salary, No, def. Val. No
Vacancy Source, Current AUIB Employee?, Ever AUIB Employee?, File
Ever Government Employee?, Passport Bio page / Nat. ID Card, File
Cover Letter, CV Resumes, References, File
Transcripts / Education Record, Certificates, Teaching philosophy / File
Research Statement, Job ID)

CEI Training (ID, Name, Specialization, State, Category
Program, Level, Sector, Vendor)

- ELA Program (Program , Description)
- CEP ELA Prog (ELA Program , Level , Level Label , Description)
- CTP ELA Prog (ELA Program , Section , Description)
- ASP ELA Prog (ELA Program , Level , Description)
- EFP ELA Prog (ELA Program , Level , ^{Partner or Client} Level Label , Duration)
- CEI Partner/Client (Name , Logo , Relation Type)
- PDC Specialization(Title , Description , Specialization)
- Way to Support (Was , Description)
- AUIB FM Highlight (Highlight , Description)
- Campaign Priority (Priority , Description)
- Job Benefit (Benefit , Description)
- Application Req for Positions (Req , Description)
- Interview Doc (Doc , Description)
- Exchange Program (Program , Description , Link link to)
- Press Responsibility (No. , Responsibility)
- IRB Application (No. , Principle , Type)
- CCWSES (Header , Section , Description)
- Student Affair (No. , Description , Type , Service / Activity)
- Student Service Center (Service , Description)
- AWU (No. , Type , Detail)
- CSO (Service , Description)
- International Student (No. , Header , Type , Principal)
- MTU (No. , Detail , Type)
- National Std Req Step(Step No. , Description)
- Std Discipline Instruction(No. , Instruction)
- Conduct Article (No.)
- Conduct Article Content (Conduct Article No. , Content)
- Student Life Club (Name , Description)
- Wellness Center Service(Service , Description , Service Type)
- Calender (Date , Event)

SS Applicant (ID , Full Name , Governorate , Address, Date of Birth ,
 Place of Birth , Email , Phone 1 , Phone 2 ,
yes or No
 Been Portal Selected? , College List , Highschool Name ,
City, town, Street
 Highschool Governorate , Highschool Address , Day-time Student? ,
yes or No
 80% or above Avg? , Avg (80% or above) , When SS? ,
 SS Impact , Communication Consent)
 Scholarship (ID , Title , Date , Description)
 Scholarship Detail (No. , Detail , Detail Category)
 SS has SS Detail (SS ID , SS Detail No.)

- | | |
|--------------------------|-------------------|
| <input type="checkbox"/> | Tables |
| <input type="checkbox"/> | Attributes |
| <input type="checkbox"/> | Primary Keys |
| <input type="checkbox"/> | Foreign Keys |
| <input type="checkbox"/> | Organizationalies |
| <input type="checkbox"/> | Notes |

Chapter 4 : Implementation

- The following tables are selected to be implemented from the relational model in chapter 3 ; Selected tables' titles are also highlighted for them to be more convenient to find :

1. Partnership
2. English Prof Req
3. Course
4. Course preRequisite
5. Academics
6. Tuition
7. College
8. College offer Course
9. Major
10. Major contain course
11. Class
12. Student
13. Student take Class
14. Email
15. Phone
16. Instructor
17. Instructor teach Class
18. Instructor advice student - Major
19. CEI Training
20. Calender

- Below , provided the SQL Code used to for database implementation : (Database and Table Creation)

```
CREATE DATABASE AUIB_Website;
```

```
CREATE TABLE Partnership (
Institute nvarchar(250) PRIMARY KEY,
PType nvarchar(50),
Logo nvarchar(2083) );
```

```
CREATE TABLE English_Proficiency_Req (
Test_Type nvarchar(100) PRIMARY KEY,
Overall real,
Listening real,
Reading real,
Speaking real,
Writing real );
```

```
CREATE TABLE Course (
    Code varchar(10) PRIMARY KEY,
    CName nvarchar(100),
    Descr nvarchar(max),
    Grading nvarchar(100),
    Academic_Group nvarchar(100),
    Component nvarchar(50),
    Campus nvarchar(200),
    CLocation nvarchar(200),
    Career nvarchar(100),
    Academic_Organization nvarchar(500) );
```

3

```
CREATE TABLE Course_Prerequisite (
    Course_Code varchar(10),
    Prerequisite_Course_Code varchar(10),
    PRIMARY KEY(Course_Code, Prerequisite_Course_Code),
    FOREIGN KEY(Course_Code) REFERENCES Course(Code),
    FOREIGN KEY(Prerequisite_Course_Code) REFERENCES Course(Code) );
```

4

```
CREATE TABLE Academics (
    Section nvarchar(200) PRIMARY KEY,
    Descr nvarchar(max) );
```

5

```
CREATE TABLE Tuition (
    Tuition_For nvarchar(200) PRIMARY KEY,
    TType nvarchar(200),
    Fee_Per_Unit int,
    Currency_Code nvarchar(5) DEFAULT 'IQD',
    Notes nvarchar(500) );
```

6

```
CREATE TABLE College (
    ID int PRIMARY KEY,
    Title nvarchar(200),
    Total_Credits int,
    Study_Duration int,
    Drgree nvarchar(50),
    Academics_Section nvarchar(200),
    Tuition_For nvarchar(200),
    FOREIGN KEY (Academics_Section) REFERENCES Academics(Section),
    FOREIGN KEY (Tuition_For) REFERENCES Tuition(Tuition_For) );
```

7

```
CREATE TABLE College_Offer_Course (
    College_ID int,
    Course_Code varchar(10),
    Academic_Year int,
    Credit int,
    PRIMARY KEY(College_ID,Course_Code),
    FOREIGN KEY (College_ID) REFERENCES College(ID),
    FOREIGN KEY (Course_Code) REFERENCES Course(Code) );
```

8

```
CREATE TABLE Major (
    Major_Name nvarchar(200) PRIMARY KEY,
    College_ID int,
    Tuition_For nvarchar(200),
    FOREIGN KEY (College_ID) REFERENCES College(ID),
    FOREIGN KEY (Tuition_For) REFERENCES Tuition(Tuition_For) );
```

9

```
CREATE TABLE Major_Contain_Course (
    Major_Name nvarchar(200),
    Course_Code varchar(10),
    PRIMARY KEY(Major_Name,Course_Code),
    FOREIGN KEY(Major_Name) REFERENCES Major(Major_Name),
    FOREIGN KEY(Course_Code) REFERENCES Course(Code) );
```

10

```
CREATE TABLE Class (
    Course_Code varchar(10),
    Code int,
    CSession nvarchar(100),
    Instructuion_Mode nvarchar(50),
    CStatus nvarchar(10),
    Room nvarchar(20),
    Capacity int,
    Times nvarchar(100),
    CDays nvarchar(50),
    Meeting_Dates nvarchar(25),
    PRIMARY KEY(Course_Code, Code),
    FOREIGN KEY(Course_Code) REFERENCES Course(Code) );
```

11

```
CREATE TABLE Student (
    ID int PRIMARY KEY,
    SName nvarchar(200),
    Home_Address nvarchar(500),
    Mailing_Address nvarchar(500),
    Campus_Address nvarchar(500),
    Story nvarchar(max),
    Picture nvarchar(2083),
    College_ID int,
    Major_Name nvarchar(200),
    FOREIGN KEY (College_ID) REFERENCES College(ID),
    FOREIGN KEY(Major_Name) REFERENCES Major(Major_Name) );
```

12

```
CREATE TABLE Student_take_Class (
    Student_ID int,
    Course_Code varchar(10),
    Class_Code int,
    StCStatus nvarchar(15),
    Grade real, Grade is assumed to be a number for calculative purposes.
    Time_Taken nvarchar(20), It can be displayed as a letter using queries.
    FOREIGN KEY(Student_ID) REFERENCES Student(ID),
    FOREIGN KEY(Course_Code) REFERENCES Course(Code),
    FOREIGN KEY (Course_Code, Class_Code) REFERENCES Class(Course_Code, Code) );
```

13

```
CREATE TABLE Email (
    Email nvarchar(320) PRIMARY KEY,
    EType nvarchar(10),
    IsPreferred bit,
    Owner_Type nvarchar(20),
    Student_ID int,
    FOREIGN KEY(Student_ID) REFERENCES Student(ID) );
```

14

```
CREATE TABLE Phone (
    Phone nvarchar(20) PRIMARY KEY,
    PType nvarchar(10),
    IsPreferred bit,
    Student_ID int,
    FOREIGN KEY(Student_ID) REFERENCES Student(ID) );
```

15

```
CREATE TABLE Instructor (
    ID int PRIMARY KEY,
    IName nvarchar(200),
    Email nvarchar(320),
    FOREIGN KEY(Email) REFERENCES Email(Email) );
```

16

```
CREATE TABLE Instructor_teach_Class (
    Course_Code varchar(10),
    Class_Code int,
    Instructor_ID int,
    FOREIGN KEY(Course_Code) REFERENCES Course(Code),
    FOREIGN KEY (Course_Code, Class_Code) REFERENCES Class(Course_Code, Code),
    FOREIGN KEY(Instructor_ID) REFERENCES Instructor(ID) );
```

17

```
CREATE TABLE Instructor_Advise_Student_Major (
    ID int PRIMARY KEY,
    Instructor_ID int,
    Student_ID int,
    College_ID int,
    Major_Name nvarchar(200),
    Note nvarchar(1000),
    UNIQUE(Instructor_ID, Student_ID, College_ID, Major_Name),
    FOREIGN KEY(Instructor_ID) REFERENCES Instructor(ID),
    FOREIGN KEY(Student_ID) REFERENCES Student(ID),
    FOREIGN KEY (College_ID) REFERENCES College(ID),
    FOREIGN KEY(Major_Name) REFERENCES Major(Major_Name) );
```

18

```
CREATE TABLE CEI_Training (
    ID int PRIMARY KEY,
    TName nvarchar(200),
    Specialization nvarchar(100),
    TState nvarchar(15),
    Category nvarchar(100),
    Program nvarchar(100),
    TLevel nvarchar(15),
    Sector nvarchar(100),
    Vendor nvarchar(100) );
```

19

```
CREATE TABLE Calender (
    CDate date PRIMARY KEY,
    CEvent nvarchar(100) );
```

20

★ Subtle changes with names has occurred to prevent using reserved words.

- Below, provided the SQL Code used to for data insertion : (Data Insertion)

Table No. : No. of entries

```
INSERT INTO Partnership VALUES ('Charles University', 'International Academic Partnerships', 'https://auib.edu.iq/wp-content/uploads/2024/06/charles-university-logo.png');  
INSERT INTO Partnership VALUES ('George Mason University', 'International Academic Partnerships', 'https://auib.edu.iq/wp-content/uploads/2023/11/george-mason-v2-768x432.png');  
INSERT INTO Partnership VALUES ('American Council on Education', 'International Academic Memberships', 'https://auib.edu.iq/wp-content/uploads/2024/04/ACE-768x266.png');  
INSERT INTO Partnership VALUES ('University of Fallujah', 'National Academic Partnerships', 'https://auib.edu.iq/wp-content/uploads/2023/11/0-150x150.jpg');  
INSERT INTO Partnership VALUES ('University of Technology', 'National Academic Partnerships', 'https://auib.edu.iq/wp-content/uploads/2023/11/31.jpg');  
INSERT INTO Partnership VALUES ('Amideast', 'Non Governmental and Community Partnerships', 'https://auib.edu.iq/wp-content/uploads/2024/01/Amideast-300x145.png');  
INSERT INTO Partnership VALUES ('Tree of Life', 'Non Governmental and Community Partnerships', 'https://auib.edu.iq/wp-content/uploads/2024/09/Asset-10-768x236.png');  
INSERT INTO Partnership VALUES ('Iraqi Bar Association', 'Government and Public Sector Partnerships', 'https://auib.edu.iq/wp-content/uploads/2024/01/Iraqi-Bar-Association-logo.png');  
INSERT INTO Partnership VALUES ('Ministry of Planning', 'Government and Public Sector Partnerships', 'https://auib.edu.iq/wp-content/uploads/2024/01/6-A.jpg');  
INSERT INTO Partnership VALUES ('National Security Advisory', 'Government and Public Sector Partnerships', 'https://auib.edu.iq/wp-content/uploads/2024/09/national-300x297.png');  
| : | 10
```

```
INSERT INTO English_Proficiency_Req VALUES ('TOEFL iBT', 70.0, 17, 18, 20, 17);  
INSERT INTO English_Proficiency_Req VALUES ('IELTS', 6.0, 6.0, 6.0, 6.0, 6.0); 2 : 6  
INSERT INTO English_Proficiency_Req VALUES ('IELTS Indicator', 6.0, 6.0, 6.0, 6.0, 6.0);  
INSERT INTO English_Proficiency_Req VALUES ('iTEP', 3.8, 3.8, 3.8, 3.8, 3.8);  
INSERT INTO English_Proficiency_Req VALUES ('Duolingo English Test', 105.0, 95, 95, 95, 95);  
INSERT INTO English_Proficiency_Req VALUES ('Pearson Test Academic', 55.0, NULL, NULL, NULL, NULL);
```

```
INSERT INTO Course VALUES ('CSC 101', 'Introduction to Computer Science', 'Course Description', 'Graded-Undergraduate', 'Arts and Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Arts and Sciences');  
INSERT INTO Course VALUES ('MAT 111', 'Calculus I', 'Course Description', 'Graded-Undergraduate', 'Arts and Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Arts and Sciences');  
INSERT INTO Course VALUES ('CHE 101', 'General Chemistry', 'Course Description', 'Graded-Undergraduate', 'Arts and Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Arts and Sciences');  
INSERT INTO Course VALUES ('BUS 112', 'Introduction to Business', 'Course Description', 'Graded-Undergraduate', 'Business',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Business');  
INSERT INTO Course VALUES ('CSC 345', 'Introduction to Database', 'Course Description', 'Graded-Undergraduate', 'Arts and Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'Arts and Sciences');  
INSERT INTO Course VALUES ('PHA 101', 'Introduction to Pharmacy', 'Course Description', 'Graded-Undergraduate', 'Pharmacy',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Pharmacy');  
INSERT INTO Course VALUES ('ECO 107', 'Principles of Microeconomics', 'Course Description', 'Graded-Undergraduate', 'Business and Economics',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Business and Economics');  
INSERT INTO Course VALUES ('PSY 108', 'Introduction to Psychology', 'Course Description', 'Graded-Undergraduate', 'Social Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Social Sciences');  
INSERT INTO Course VALUES ('SOC 109', 'Sociology Basics', 'Course Description', 'Graded-Undergraduate', 'Social Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Social Sciences');  
INSERT INTO Course VALUES ('HIS 110', 'World History Overview', 'Course Description', 'Graded-Undergraduate', 'Arts and Humanities',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Arts and Humanities');  
INSERT INTO Course VALUES ('MGT 111', 'Principles of Management', 'Course Description', 'Graded-Undergraduate', 'Business and Economics',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Business and Economics');  
INSERT INTO Course VALUES ('CSC 231', 'Data Structer', 'Course Description', 'Graded-Undergraduate', 'Arts and Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Arts and Sciences');  
INSERT INTO Course VALUES ('ART 113', 'Introduction to Visual Arts', 'Course Description', 'Graded-Undergraduate', 'Humanities',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'Humanities');  
INSERT INTO Course VALUES ('CSC 445', 'Introduction to Computer Networks', 'Course Description', 'Graded-Undergraduate', 'Arts and Sciences',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Arts and Sciences');  
INSERT INTO Course VALUES ('STA 115', 'Statistics I', 'Course Description', 'Graded-Undergraduate', 'Engineering',  
'Lecture', 'IRAQ-Baghdad Main Campus', 'IRAQ-Baghdad', 'Undergraduate', 'College of Engineering');  
3:15
```

★ Course description for each course will be replaced by 'Course Description' Values .

4 : 11

```

INSERT INTO Course_Prerequisite VALUES ('CSC 231', 'CSC 101');
INSERT INTO Course_Prerequisite VALUES ('CSC 345', 'CSC 101');
INSERT INTO Course_Prerequisite VALUES ('CSC 345', 'CSC 231');
INSERT INTO Course_Prerequisite VALUES ('CSC 445', 'CSC 231');
INSERT INTO Course_Prerequisite VALUES ('STA 115', 'MAT 111');
INSERT INTO Course_Prerequisite VALUES ('BUS 112', 'ECO 107');
INSERT INTO Course_Prerequisite VALUES ('MGT 111', 'BUS 112');
INSERT INTO Course_Prerequisite VALUES ('PHA 101', 'CHE 101');
INSERT INTO Course_Prerequisite VALUES ('PSY 108', 'SOC 109');
INSERT INTO Course_Prerequisite VALUES ('ECO 107', 'MAT 111');
INSERT INTO Course_Prerequisite VALUES ('HIS 110', 'ART 113');

```

5 : 11

```

INSERT INTO Academics VALUES ('College of Arts & Sciences', 'College of Arts & Sciences Description');
INSERT INTO Academics VALUES ('College of Business', 'College of Business Description');
INSERT INTO Academics VALUES ('College of Dentistry', 'College of Dentistry Description');
INSERT INTO Academics VALUES ('College of Education and Human Development', 'College of Education and Human Development Description');
INSERT INTO Academics VALUES ('College of Engineering', 'College of Engineering Description');
INSERT INTO Academics VALUES ('College of Healthcare Technologies', 'College of Healthcare Technologies Description');
INSERT INTO Academics VALUES ('College of International Studies', 'College of International Studies Description');
INSERT INTO Academics VALUES ('College of Law', 'College of Law Description');
INSERT INTO Academics VALUES ('College of Pharmacy', 'College of Pharmacy Description');
INSERT INTO Academics VALUES ('Master of Business Administration (MBA)', 'Master of Business Administration (MBA) Description');
INSERT INTO Academics VALUES ('How to Apply', 'How to Apply Description');

```

★ Academics description for each section in the Website
Will be replaced by '*<Section Name> Description*'.

6 : 40

```

INSERT INTO Tuition VALUES ('College of Business', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of International Studies', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Arts and Science - Biology', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Arts and Science - Chemistry', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Arts and Science - Physics', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Arts and Science - English Literature', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Arts and Science - Psychology', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Arts and Science - Computer Science', 'Per Credit', 182000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Pharmacy', 'Per Credit', 315000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Dentistry', 'Per Credit', 315000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Law', 'Per Credit', 220000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Health Care Technologies - Dental Technology', 'Per Credit', 220000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Health Care Technologies - Radiology and Sonar', 'Per Credit', 220000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Health Care Technologies - Optometry and Vision Sciences', 'Per Credit', 220000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Health Care Technologies - Anesthesia', 'Per Credit', 220000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Education', 'Per Credit', 176000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Engineering', 'Per Credit', 243000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('College of Business - MBA', 'Full Year', 16500000, 'IQD', 'All Inclusive');
INSERT INTO Tuition VALUES ('Printing', 'Per Request', 20000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('ID Card', 'One Time Charge', 40000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Admission', 'One Time Charge', 80000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Placement Test', 'Per Test', 70000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Writing Test', 'Per Test', 70000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Dorm Fee', 'Per Semester', 1125000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Student Activity', 'Per Semester', 35000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Library', 'Per Semester', 40000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Health Services', 'Per Semester', 40000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Technology', 'Per Semester', 80000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Lab Fees CAS', 'Per Semester', 100000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Lab Fees COD, COPH, COHCT', 'Per Semester', 165000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Lab Fees COEng', 'Per Semester', NULL, 'IQD', 'TBD');
INSERT INTO Tuition VALUES ('Foundation Level (EFP A)', 'Per Level', 795000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Foundation Level (EFP B)', 'Per Level', 795000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Academic Success Program - ASP2', 'Per Level', 1600000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Academic Success Program - ASP3A', 'Per Level', 935000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Academic Success Program - ASP3B', 'Per Level', 925000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Academic Success Program - ASP4', 'Per Level', 1600000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Academic Success Program - ASP5', 'Per Level', 1600000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Academic Success Program - ASP6', 'Per Level', 925000, 'IQD', NULL);
INSERT INTO Tuition VALUES ('Community Education Program - CEP (Below 1 to 6B)', 'Per Level', 1120000, 'IQD', NULL);

```

7 : 10

```
INSERT INTO College VALUES (1, 'College of Arts & Sciences', 120, 4, 'Bachelor', 'College of Arts & Sciences', NULL);
INSERT INTO College VALUES (2, 'College of Business', 120, 4, 'Bachelor', 'College of Business', 'College of Business');
INSERT INTO College VALUES (3, 'College of Business', 30, 2, 'Master', 'College of Business', 'College of Business - MBA');
INSERT INTO College VALUES (4, 'College of Dentistry', 180, 5, 'Bachelor', 'College of Dentistry', 'College of Dentistry');
INSERT INTO College VALUES (5, 'College of Education and Human Development', 120, 4, 'Bachelor', 'College of Education and Human Development', 'College of Education');
INSERT INTO College VALUES (6, 'College of Engineering', 120, 4, 'Bachelor', 'College of Engineering', 'College of Engineering');
INSERT INTO College VALUES (7, 'College of Healthcare Technologies', 120, 4, 'Bachelor', 'College of Healthcare Technologies', 'College of Health Care Technologies - Dental Technology');
INSERT INTO College VALUES (8, 'College of International Studies', 120, 4, 'Bachelor', 'College of International Studies', 'College of International Studies');
INSERT INTO College VALUES (9, 'College of Law', 120, 4, 'Bachelor', 'College of Law', 'College of Law');
INSERT INTO College VALUES (10, 'College of Pharmacy', 180, 5, 'Bachelor', 'College of Pharmacy', 'College of Pharmacy');
```

```
INSERT INTO College_Offer_Course VALUES (1, 'CSC 101', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'CSC 231', 2, 3);
INSERT INTO College_Offer_Course VALUES (2, 'BUS 112', 1, 3);
INSERT INTO College_Offer_Course VALUES (7, 'CHE 101', 1, 3);
INSERT INTO College_Offer_Course VALUES (9, 'SOC 109', 1, 3);
INSERT INTO College_Offer_Course VALUES (2, 'MGT 111', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'STA 115', 2, 3);
INSERT INTO College_Offer_Course VALUES (8, 'ECO 107', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'HIS 110', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'CSC 345', 3, 3);
INSERT INTO College_Offer_Course VALUES (10, 'PHA 101', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'ART 113', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'CSC 445', 4, 3);
INSERT INTO College_Offer_Course VALUES (9, 'PSY 108', 1, 3);
INSERT INTO College_Offer_Course VALUES (1, 'MAT 111', 1, 3);
```

8 : 15

```
INSERT INTO Major VALUES ('Biology', 1, 'College of Arts and Science - Biology');
INSERT INTO Major VALUES ('Chemistry', 1, 'College of Arts and Science - Chemistry');
INSERT INTO Major VALUES ('Computer Science', 1, 'College of Arts and Science - Computer Science');
INSERT INTO Major VALUES ('English Literature', 1, 'College of Arts and Science - English Literature');
INSERT INTO Major VALUES ('Physics', 1, 'College of Arts and Science - Physics');
INSERT INTO Major VALUES ('Psychology', 1, 'College of Arts and Science - Psychology');
INSERT INTO Major VALUES ('Management', 2, 'College of Business');
INSERT INTO Major VALUES ('Accounting', 2, 'College of Business');
INSERT INTO Major VALUES ('Marketing', 2, 'College of Business');
INSERT INTO Major VALUES ('Entrepreneurship', 2, 'College of Business');
INSERT INTO Major VALUES ('Management Information Systems', 2, 'College of Business');
INSERT INTO Major VALUES ('Finance and Banking', 2, 'College of Business');
INSERT INTO Major VALUES ('Anesthesia', 7, 'College of Health Care Technologies - Anesthesia');
INSERT INTO Major VALUES ('Dental Sciences Technology', 7, 'College of Health Care Technologies - Dental Technology');
INSERT INTO Major VALUES ('Optometry and Vision Science', 7, 'College of Health Care Technologies - Optometry and Vision Sciences');
INSERT INTO Major VALUES ('Radiologic Sciences & Technology', 7, 'College of Health Care Technologies - Radiology and Sonar');
```

9 : 16

```
INSERT INTO Major_Contain_Course VALUES ('Biology', 'CHE 101');
INSERT INTO Major_Contain_Course VALUES ('Biology', 'MAT 111');
INSERT INTO Major_Contain_Course VALUES ('Chemistry', 'CHE 101');
INSERT INTO Major_Contain_Course VALUES ('Computer Science', 'CSC 101');
INSERT INTO Major_Contain_Course VALUES ('Computer Science', 'CSC 345');
INSERT INTO Major_Contain_Course VALUES ('Physics', 'MAT 111');
INSERT INTO Major_Contain_Course VALUES ('Physics', 'STA 115');
INSERT INTO Major_Contain_Course VALUES ('Psychology', 'SOC 109');
INSERT INTO Major_Contain_Course VALUES ('Management', 'BUS 112');
INSERT INTO Major_Contain_Course VALUES ('Management', 'MGT 111');
INSERT INTO Major_Contain_Course VALUES ('Accounting', 'ECO 107');
INSERT INTO Major_Contain_Course VALUES ('Entrepreneurship', 'BUS 112');
INSERT INTO Major_Contain_Course VALUES ('Management Information Systems', 'CSC 101');
INSERT INTO Major_Contain_Course VALUES ('Anesthesia', 'CHE 101');
INSERT INTO Major_Contain_Course VALUES ('Optometry and Vision Science', 'CHE 101');
```

10 : 15

```

INSERT INTO Class VALUES ('CSC 101', 1357, 'Regular', 'In Person', 'Closed', 'ASC_65_102', 20, '8:00 am to 9:15 am', 'Monday Wednesday', '01/21/2024 - 05/25/2024');
INSERT INTO Class VALUES ('MAT 111', 2845, 'Regular', 'In Person', 'Closed', 'ISL_82_104', 35, '9:30 am to 10:45 am', 'Sunday Tuesday', '08/25/2024 - 12/12/2024');
INSERT INTO Class VALUES ('CHE 101', 4921, 'Regular', 'In Person', 'Closed', 'ASC_65_102', 15, '11:00 am to 12:15 pm', 'Monday Wednesday', '08/25/2024 - 12/12/2024');
INSERT INTO Class VALUES ('BUS 112', 3719, 'Regular', 'In Person', 'Open', 'ASC_65_102', 40, '12:30 pm to 1:45 pm', 'Sunday Tuesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('CSC 345', 5810, 'Regular', 'In Person', 'Closed', 'ASC_65_102', 20, '2:00 pm to 3:15 pm', 'Monday Wednesday', '08/25/2024 - 12/12/2024');
INSERT INTO Class VALUES ('PHA 101', 6742, 'Regular', 'In Person', 'Open', 'COB_58_200', 20, '9:30 am to 10:45 am', 'Sunday Tuesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('ECO 107', 7135, 'Regular', 'In Person', 'Closed', 'ISL_82_104', 15, '11:00 am to 12:15 pm', 'Monday Wednesday', '01/21/2024 - 05/25/2024');
INSERT INTO Class VALUES ('PSY 108', 8420, 'Regular', 'In Person', 'Open', 'ISL_82_104', 35, '8:00 am to 9:15 am', 'Sunday Tuesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('SOC 109', 9217, 'Regular', 'In Person', 'Open', 'COB_58_107', 40, '12:30 pm to 1:45 pm', 'Monday Wednesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('HIS 110', 1035, 'Regular', 'Online', 'Closed', NULL, 15, '2:00 pm to 3:15 pm', 'Sunday Tuesday', '08/25/2024 - 12/12/2024');
INSERT INTO Class VALUES ('MGT 111', 1158, 'Regular', 'In Person', 'Open', 'COB_58_103', 20, '9:30 am to 10:45 am', 'Monday Wednesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('CSC 231', 1267, 'Regular', 'In Person', 'Closed', 'COB_58_200', 35, '8:00 am to 9:15 am', 'Sunday Tuesday', '08/25/2024 - 12/12/2024');
INSERT INTO Class VALUES ('ART 113', 1382, 'Regular', 'In Person', 'Open', 'ISL_82_206', 20, '11:00 am to 12:15 pm', 'Monday Wednesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('CSC 445', 1486, 'Regular', 'In Person', 'Open', NULL, 40, '12:30 pm to 1:45 pm', 'Sunday Tuesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('STA 115', 1599, 'Regular', 'In Person', 'Closed', 'CHT_00_108', 20, '2:00 pm to 3:15 pm', 'Monday Wednesday', '01/21/2024 - 05/25/2024');
INSERT INTO Class VALUES ('CHE 101', 2684, 'Regular', 'Online', 'Open', NULL, 15, '8:00 am to 9:15 am', 'Sunday Tuesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('PSY 108', 3571, 'Regular', 'In Person', 'Closed', 'CHT_05_103', 20, '9:30 am to 10:45 am', 'Monday Wednesday', '08/25/2024 - 12/12/2024');
INSERT INTO Class VALUES ('MAT 111', 4742, 'Regular', 'In Person', 'Open', 'CHT_03_104', 35, '11:00 am to 12:15 pm', 'Sunday Tuesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('SOC 109', 5217, 'Regular', 'In Person', 'Open', NULL, 40, '12:30 pm to 1:45 pm', 'Monday Wednesday', '01/19/2025 - 05/31/2025');
INSERT INTO Class VALUES ('MGT 111', 6851, 'Regular', 'In Person', 'Closed', 'CHT_02_207', 15, '2:00 pm to 3:15 pm', 'Sunday Tuesday', '08/25/2024 - 12/12/2024');

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INSERT INTO Student VALUES (1, 'Emma Johnson', 'IQ-Baghdad-23:45', 'IQ-Baghdad-23:45', 'AUIB', 'Emma Johnson Story', 'Emma Johnson Picture URL', 'Biology', 1);
INSERT INTO Student VALUES (2, 'Liam Smith', 'IQ-Baghdad-11:34', 'IQ-Baghdad-11:34', 'AUIB', 'Liam Smith Story', 'Liam Smith Picture URL', 'Computer Science', 1);
INSERT INTO Student VALUES (3, 'Olivia Brown', 'IQ-Baghdad-56:17', 'IQ-Baghdad-56:17', 'AUIB', 'Olivia Brown Story', 'Olivia Brown Picture URL', 'Marketing', 2);
INSERT INTO Student VALUES (4, 'Ethan Garcia', 'IQ-Baghdad-55:12', 'IQ-Baghdad-55:12', 'AUIB', 'Ethan Garcia Story', 'Ethan Garcia Picture URL', NULL, 5);
INSERT INTO Student VALUES (5, 'Noah Davis', 'IQ-Baghdad-89:18', 'IQ-Baghdad-89:19', 'AUIB', 'Noah Davis Story', 'Noah Davis Picture URL', 'Management Information Systems', 2);
INSERT INTO Student VALUES (6, 'Harper Martinez', 'IQ-Baghdad-19:27', 'IQ-Baghdad-19:27', 'AUIB', 'Harper Martinez Story', 'Harper Martinez Picture URL', NULL, 9);
INSERT INTO Student VALUES (7, 'Ava Miller', 'IQ-Baghdad-77:88', 'IQ-Baghdad-12:34', 'AUIB', 'Ava Miller Story', 'Ava Miller Picture URL', 'Accounting', 2);
INSERT INTO Student VALUES (8, 'William Wilson', 'IQ-Baghdad-65:24', 'IQ-Baghdad-65:24', 'AUIB', 'William Wilson Story', 'William Wilson Picture URL', 'Finance and Banking', 2);
INSERT INTO Student VALUES (9, 'Sophia Moore', 'IQ-Baghdad-12:57', 'IQ-Baghdad-12:57', 'AUIB', 'Sophia Moore Story', 'Sophia Moore Picture URL', 'Entrepreneurship', 2);
INSERT INTO Student VALUES (10, 'James Taylor', 'IQ-Baghdad-48:39', 'IQ-Baghdad-91:19', 'AUIB', 'James Taylor Story', 'James Taylor Picture URL', 'Anesthesia', 7);
INSERT INTO Student VALUES (11, 'Mia Jackson', 'IQ-Baghdad-29:48', 'IQ-Baghdad-29:48', 'AUIB', 'Mia Jackson Story', 'Mia Jackson Picture URL', 'Optometry and Vision Science', 7);
INSERT INTO Student VALUES (12, 'Lucas White', 'IQ-Baghdad-87:26', 'IQ-Baghdad-42:68', 'AUIB', 'Lucas White Story', 'Lucas White Picture URL', 'Chemistry', 1);
INSERT INTO Student VALUES (13, 'Alexander Robinson', 'IQ-Baghdad-67:31', 'IQ-Baghdad-67:31', 'AUIB', 'Alexander Robinson Story', 'Alexander Robinson Picture URL', NULL, 4);
INSERT INTO Student VALUES (14, 'Amelia Harris', 'IQ-Baghdad-39:49', 'IQ-Baghdad-39:49', 'AUIB', 'Amelia Harris Story', 'Amelia Harris Picture URL', 'Physics', 1);
INSERT INTO Student VALUES (15, 'Benjamin Thomas', 'IQ-Baghdad-78:56', 'IQ-Baghdad-78:56', 'AUIB', 'Benjamin Thomas Story', 'Benjamin Thomas Picture URL', 'Radiologic Sciences & Technology', 7);
INSERT INTO Student VALUES (16, 'Evelyn Clark', 'IQ-Baghdad-34:76', 'IQ-Baghdad-99:81', 'AUIB', 'Evelyn Clark Story', 'Evelyn Clark Picture URL', NULL, 8);
INSERT INTO Student VALUES (17, 'Isabella Anderson', 'IQ-Baghdad-14:32', 'IQ-Baghdad-14:32', 'AUIB', 'Isabella Anderson Story', 'Isabella Anderson Picture URL', 'Dental Sciences Technology', 7);
INSERT INTO Student VALUES (18, 'Henry Lewis', 'IQ-Baghdad-82:90', 'IQ-Baghdad-82:90', 'AUIB', 'Henry Lewis Story', 'Henry Lewis Picture URL', NULL, 6);
INSERT INTO Student VALUES (19, 'Charlotte Thompson', 'IQ-Baghdad-18:76', 'IQ-Baghdad-18:76', 'AUIB', 'Charlotte Thompson Story', 'Charlotte Thompson Picture URL', 'English Literature', 1);
INSERT INTO Student VALUES (20, 'John Carpenter', 'IQ-Baghdad-91:24', 'IQ-Baghdad-91:24', 'AUIB', 'John Carpenter Story', 'John Carpenter Picture URL', NULL, 10);

```

```

[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (1, 'CHE 101', 4921, 'Taken', 88.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (9, 'CHE 101', 4921, 'Dropped', NULL, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (18, 'MAT 111', 2845, 'Taken', 81.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (2, 'CSC 231', 1267, 'Taken', 87.0, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (2, 'STA 115', 1599, 'In Progress', NULL, 'Spring 2025');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (3, 'BUS 112', 3719, 'Taken', 85.2, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (5, 'MAT 111', 4742, 'Taken', 78.5, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (4, 'MGT 111', 1158, 'Taken', 89.9, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (5, 'ECO 107', 7135, 'Taken', 82.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (6, 'MGT 111', 1158, 'Taken', 90.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (8, 'MAT 111', 2845, 'In Progress', NULL, 'Spring 2025');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (6, 'ECO 107', 7135, 'Dropped', NULL, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (2, 'CSC 101', 1357, 'Taken', 91.5, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (7, 'BUS 112', 3719, 'Taken', 77.7, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (8, 'CHE 101', 2684, 'Taken', 81.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (14, 'STA 115', 1599, 'In Progress', NULL, 'Spring 2025');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (12, 'MAT 111', 4742, 'Taken', 85.3, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (9, 'MAT 111', 2845, 'Taken', 79.0, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (10, 'CHE 101', 2684, 'Taken', 84.5, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (11, 'CHE 101', 4921, 'Taken', 86.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (3, 'ECO 107', 7135, 'Taken', 80.7, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (12, 'CHE 101', 4921, 'Taken', 90.1, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (19, 'ART 113', 1382, 'Taken', 88.5, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (13, 'HIS 110', 1035, 'Taken', 78.0, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (14, 'MAT 111', 2845, 'Taken', 92.5, 'Spring 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (1, 'MAT 111', 2845, 'Taken', 84.0, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (16, 'HIS 110', 1035, 'Dropped', NULL, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (6, 'BUS 112', 3719, 'Taken', 88.5, 'Spring 2025');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (11, 'ECO 107', 7135, 'Dropped', NULL, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (19, 'HIS 110', 1035, 'Taken', 84.2, 'Fall 2024');
[REPEATED 20 TIMES] INSERT INTO Student_take_Class VALUES (20, 'CHE 101', 4921, 'In Progress', NULL, 'Spring 2025');

```

★ Grade isn't a letter for calculative purposes ; however it can be displayed as a letter using if statements .

```
INSERT INTO Email VALUES ('998877@AUIB.edu.iq', 'Work', 1, 'Student', 10);
INSERT INTO Email VALUES ('999111@AUIB.edu.iq', 'Work', 1, 'Instructor', NULL);
INSERT INTO Email VALUES ('112233@AUIB.edu.iq', 'Work', 1, 'Student', 5);
INSERT INTO Email VALUES ('778899@gmail.com', 'Home', 0, 'Student', 6);
INSERT INTO Email VALUES ('778866@AUIB.edu.iq', 'Work', 1, 'Student', 9);
INSERT INTO Email VALUES ('123456@AUIB.edu.iq', 'Work', 1, 'Student', 1);
INSERT INTO Email VALUES ('963852@gmail.com', 'Home', 0, 'Student', 20);
INSERT INTO Email VALUES ('667788@gmail.com', 'Home', 0, 'Student', 8);
INSERT INTO Email VALUES ('741852@gmail.com', 'Home', 0, 'Instructor', NULL);
INSERT INTO Email VALUES ('789012@AUIB.edu.iq', 'Work', 1, 'Student', 2);
INSERT INTO Email VALUES ('223344@AUIB.edu.iq', 'Work', 1, 'Student', 7);
INSERT INTO Email VALUES ('345678@gmail.com', 'Home', 0, 'Student', 4);
INSERT INTO Email VALUES ('334455@AUIB.edu.iq', 'Work', 1, 'Student', 6);
INSERT INTO Email VALUES ('555666@AUIB.edu.iq', 'Work', 1, 'Instructor', NULL);
INSERT INTO Email VALUES ('987654@gmail.com', 'Home', 0, 'Student', 1);
INSERT INTO Email VALUES ('654321@gmail.com', 'Home', 0, 'Student', 1); 14:30
INSERT INTO Email VALUES ('567890@gmail.com', 'Home', 0, 'Student', 2);
INSERT INTO Email VALUES ('890123@AUIB.edu.iq', 'Work', 1, 'Student', 3);
INSERT INTO Email VALUES ('889977@gmail.com', 'Home', 0, 'Student', 9);
INSERT INTO Email VALUES ('901234@AUIB.edu.iq', 'Work', 1, 'Student', 4);
INSERT INTO Email VALUES ('333444@AUIB.edu.iq', 'Work', 1, 'Student', 12);
INSERT INTO Email VALUES ('778899@AUIB.edu.iq', 'Work', 1, 'Student', 14);
INSERT INTO Email VALUES ('889900@gmail.com', 'Home', 0, 'Student', 6);
INSERT INTO Email VALUES ('147258@AUIB.edu.iq', 'Work', 1, 'Student', 19);
INSERT INTO Email VALUES ('444555@gmail.com', 'Home', 0, 'Instructor', NULL);
INSERT INTO Email VALUES ('556677@AUIB.edu.iq', 'Work', 1, 'Student', 8);
INSERT INTO Email VALUES ('321654@AUIB.edu.iq', 'Work', 1, 'Instructor', NULL);
INSERT INTO Email VALUES ('445566@gmail.com', 'Home', 0, 'Student', 11);
INSERT INTO Email VALUES ('666999@AUIB.edu.iq', 'Work', 1, 'Instructor', NULL);
INSERT INTO Email VALUES ('111222@gmail.com', 'Home', 0, 'Student', 11);
```

```
INSERT INTO Phone VALUES ('0759876543', 'Mobile', 1, 2);
INSERT INTO Phone VALUES ('0790123456', 'Mobile', 1, 1);
INSERT INTO Phone VALUES ('0776543210', 'Mobile', 0, 1);
INSERT INTO Phone VALUES ('0799988776', 'Mobile', 1, 3);
INSERT INTO Phone VALUES ('0787654321', 'Mobile', 1, 4);
INSERT INTO Phone VALUES ('0755566778', 'Mobile', 0, 4);
INSERT INTO Phone VALUES ('0788889990', 'Mobile', 1, 6);
INSERT INTO Phone VALUES ('0791112223', 'Mobile', 0, 6);
INSERT INTO Phone VALUES ('0753332221', 'Mobile', 0, 6);
INSERT INTO Phone VALUES ('0794455667', 'Mobile', 1, 7);
INSERT INTO Phone VALUES ('0785554443', 'Mobile', 1, 8);
INSERT INTO Phone VALUES ('0772233445', 'Mobile', 0, 8);
INSERT INTO Phone VALUES ('0791239876', 'Mobile', 1, 9);
INSERT INTO Phone VALUES ('0783322114', 'Mobile', 0, 9);
INSERT INTO Phone VALUES ('0757778889', 'Mobile', 0, 6);
INSERT INTO Phone VALUES ('0787654320', 'Mobile', 1, 11);
INSERT INTO Phone VALUES ('0778765432', 'Mobile', 1, 12);
INSERT INTO Phone VALUES ('0796677885', 'Mobile', 1, 13);
INSERT INTO Phone VALUES ('0783344556', 'Mobile', 0, 13);
INSERT INTO Phone VALUES ('0751234568', 'Mobile', 1, 14);
INSERT INTO Phone VALUES ('0792244668', 'Mobile', 1, 19);
INSERT INTO Phone VALUES ('0784455667', 'Mobile', 1, 18);
INSERT INTO Phone VALUES ('0791122335', 'Mobile', 1, 20);
INSERT INTO Phone VALUES ('0781234567', 'Mobile', 0, 2);
INSERT INTO Phone VALUES ('0771122334', 'Mobile', 0, 2);
```

15 : 25

```

INSERT INTO Instructor VALUES (1, 'Michael Carter', '555666@AUIB.edu.iq');
INSERT INTO Instructor VALUES (2, 'Jessica Turner', '444555@gmail.com');
INSERT INTO Instructor VALUES (3, 'Daniel Brooks', '999111@AUIB.edu.iq');
INSERT INTO Instructor VALUES (4, 'Ashley Stewart', '666999@AUIB.edu.iq');
INSERT INTO Instructor VALUES (5, 'Matthew Morris', '321654@AUIB.edu.iq');
INSERT INTO Instructor VALUES (6, 'Brittany Reed', '741852@gmail.com');

```

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```

INSERT INTO Instructor_teach_Class VALUES ('BUS 112', 3719, 6);
INSERT INTO Instructor_teach_Class VALUES ('SOC 109', 5217, 4);
INSERT INTO Instructor_teach_Class VALUES ('CHE 101', 4921, 2);
INSERT INTO Instructor_teach_Class VALUES ('HIS 110', 1035, 5);
INSERT INTO Instructor_teach_Class VALUES ('CSC 445', 1486, 1);
INSERT INTO Instructor_teach_Class VALUES ('ART 113', 1382, 5);
INSERT INTO Instructor_teach_Class VALUES ('MAT 111', 2845, 1);
INSERT INTO Instructor_teach_Class VALUES ('PSY 108', 8420, 4);
INSERT INTO Instructor_teach_Class VALUES ('MGT 111', 1158, 3);
INSERT INTO Instructor_teach_Class VALUES ('CSC 231', 1267, 1);
INSERT INTO Instructor_teach_Class VALUES ('CHE 101', 2684, 2);
INSERT INTO Instructor_teach_Class VALUES ('PSY 108', 3571, 4);
INSERT INTO Instructor_teach_Class VALUES ('ECO 107', 7135, 3);
INSERT INTO Instructor_teach_Class VALUES ('ECO 107', 7135, 6);
INSERT INTO Instructor_teach_Class VALUES ('BUS 112', 3719, 3);
INSERT INTO Instructor_teach_Class VALUES ('STA 115', 1599, 1);
INSERT INTO Instructor_teach_Class VALUES ('BUS 112', 3719, 3);
INSERT INTO Instructor_teach_Class VALUES ('HIS 110', 1035, 5);
INSERT INTO Instructor_teach_Class VALUES ('SOC 109', 9217, 4);
INSERT INTO Instructor_teach_Class VALUES ('MGT 111', 6851, 3);
INSERT INTO Instructor_teach_Class VALUES ('CHE 101', 4921, 2);
INSERT INTO Instructor_teach_Class VALUES ('ART 113', 1382, 5);
INSERT INTO Instructor_teach_Class VALUES ('MGT 111', 1158, 6);
INSERT INTO Instructor_teach_Class VALUES ('CSC 101', 1357, 1);
INSERT INTO Instructor_teach_Class VALUES ('PHA 101', 6742, 2);

```

18 : 19

```

INSERT INTO Instructor_Advise_Student_Major VALUES (1, 6, 17, 8, NULL, NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (2, 4, 11, 7, 'Optometry and Vision Science', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (3, 3, 6, 2, 'Finance and Banking', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (4, 1, 2, 1, 'Computer Science', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (5, 2, 9, 7, 'Dental Sciences Technology', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (6, 4, 7, 2, 'Entrepreneurship', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (7, 5, 19, 1, 'English Literature', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (8, 6, 16, 8, NULL, NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (9, 2, 8, 7, 'Anesthesia', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (10, 3, 4, 2, NULL, NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (11, 5, 15, 1, 'English Literature', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (12, 6, 20, 10, NULL, NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (13, 1, 13, 1, 'Physics', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (14, 3, 5, 2, 'Accounting', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (15, 2, 10, 7, NULL, NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (16, 4, 14, 1, 'Psychology', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (17, 1, 12, 1, 'Chemistry', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (18, 3, 3, 2, 'Marketing', NULL);
INSERT INTO Instructor_Advise_Student_Major VALUES (19, 6, 1, 1, 'Biology', NULL);

```

```

INSERT INTO CEI_Training VALUES (1, 'Introduction to Cybersecurity', 'Science and Technology', 'Available', 'Cybersecurity', 'Cybersecurity', 'Beginner', 'Information Technology', 'CISCO');
INSERT INTO CEI_Training VALUES (2, 'Cybersecurity Essentials 1', 'Science and Technology', 'Available', 'Cybersecurity', 'Cybersecurity', 'Beginner', 'Information Technology', 'CISCO');
INSERT INTO CEI_Training VALUES (3, 'Cybersecurity Essentials 2', 'Science and Technology', 'Registered', 'Cybersecurity', NULL, 'Intermediate', 'Information Technology', 'NULL');
INSERT INTO CEI_Training VALUES (4, 'Cisco Certified Network Associate (CCNA)', 'Science and Technology', 'Previous', 'Cybersecurity', NULL, 'Intermediate', 'Information Technology', 'EC-Council');
INSERT INTO CEI_Training VALUES (5, 'CCNA Enterprise Networking, Security, and Automation', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Advanced', 'Information Technology', 'CISCO');
INSERT INTO CEI_Training VALUES (6, 'Networking Essentials', 'Science and Technology', 'Registered', 'Computer Skills', NULL, 'Beginner', 'Information Technology', 'CISCO');
INSERT INTO CEI_Training VALUES (7, 'CyberOps Associate', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Intermediate', 'Information Technology', 'CISCO');
INSERT INTO CEI_Training VALUES (8, 'CSA - EC-Council', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Advanced', 'Information Technology', 'EC-Council');
INSERT INTO CEI_Training VALUES (9, 'CEH - EC-Council', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Advanced', 'Information Technology', 'EC-Council');
INSERT INTO CEI_Training VALUES (10, 'CHFI - EC-Council', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Advanced', 'Information Technology', 'EC-Council');
INSERT INTO CEI_Training VALUES (11, 'CDL - EC-Council', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Intermediate', 'Information Technology', 'EC-Council');
INSERT INTO CEI_Training VALUES (12, 'IoT Fundamentals IoT Security', 'Science and Technology', 'Available', 'Cybersecurity', NULL, 'Intermediate', 'Information Technology', 'CISCO');
INSERT INTO CEI_Training VALUES (13, 'Cybersecurity Pipeline Building', NULL, 'Previous', 'Cybersecurity', NULL, 'Intermediate', 'Information Technology', 'EC-Council');
INSERT INTO CEI_Training VALUES (14, 'Windows Server Administrator 2016', 'Science and Technology', 'Previous', 'Information Technology', 'Cybersecurity', 'Intermediate', 'Information Technology', NULL);
INSERT INTO CEI_Training VALUES (15, 'Web Editing - ICDL', 'Science and Technology', 'Available', 'Computer Skills', 'Computer Skills', 'Beginner', 'Information Technology', 'ICDL');

```

19 : 15

```

INSERT INTO Calender VALUES ('2024-08-20', 'Fall 2024 Course Registration Opens');
INSERT INTO Calender VALUES ('2024-08-31', 'Fall 2024 Course Registration Closes');
INSERT INTO Calender VALUES ('2024-09-01', 'First Day of Fall 2024 Classes');
INSERT INTO Calender VALUES ('2024-12-20', 'Final Exams Begin - Fall 2024');
INSERT INTO Calender VALUES ('2024-12-31', 'University Closed - New Year Holiday');
INSERT INTO Calender VALUES ('2025-01-02', 'Winter Break Ends - University Reopens');
INSERT INTO Calender VALUES ('2025-01-03', 'New Student Orientation - Spring 2025');
INSERT INTO Calender VALUES ('2025-01-06', 'Spring 2025 Course Registration Opens');
INSERT INTO Calender VALUES ('2025-01-10', 'Last Day to Register - Spring 2025');
INSERT INTO Calender VALUES ('2025-01-15', 'Spring 2025 Classes Begin');
INSERT INTO Calender VALUES ('2025-03-17', 'Midterm Exams Begin - Spring 2025');
INSERT INTO Calender VALUES ('2025-04-18', 'Easter Holiday - University Closed');
INSERT INTO Calender VALUES ('2025-05-01', 'Labor Day - University Closed'); 20:15
INSERT INTO Calender VALUES ('2025-05-20', 'Final Exams Begin - Spring 2025');
INSERT INTO Calender VALUES ('2025-06-05', 'Spring 2025 Semester Ends');

```

- A Significant portion of the data introduced during the insertion phase is Synthetic, not reflective Real-World Values.

Chapter 5 :

Queries

Simple Queries

1. List all Students alphabetically by name .

```
SELECT * FROM Student
ORDER BY SName ASC;
```

	ID	SName	Home_Address	Mailing_Address	Campus_Address	Story	Picture	Major_Name	College_ID
1	13	Alexander Robinson	IQ-Baghdad-67-31	IQ-Baghdad-67-31	AUIB	Alexander Robinson Story	Alexander Robinson Picture URL	NULL	4
2	14	Amelia Harris	IQ-Baghdad-39-49	IQ-Baghdad-39-49	AUIB	Amelia Harris Story	Amelia Harris Picture URL	Physics	1
3	7	Ava Miller	IQ-Baghdad-77-88	IQ-Baghdad-12-34	AUIB	Ava Miller Story	Ava Miller Picture URL	Accounting	2
4	15	Benjamin Thomas	IQ-Baghdad-78-56	IQ-Baghdad-78-56	AUIB	Benjamin Thomas Story	Benjamin Thomas Picture URL	Radiologic Sciences & Technology	7
5	19	Charlotte Thompson	IQ-Baghdad-18-76	IQ-Baghdad-18-76	AUIB	Charlotte Thompson Story	Charlotte Thompson Picture URL	English Literature	1
6	1	Emma Johnson	IQ-Baghdad-23-45	IQ-Baghdad-23-45	AUIB	Emma Johnson Story	Emma Johnson Picture URL	Biology	1
7	4	Ethan Garcia	IQ-Baghdad-55-12	IQ-Baghdad-55-12	AUIB	Ethan Garcia Story	Ethan Garcia Picture URL	NULL	5
8	16	Evelyn Clark	IQ-Baghdad-34-76	IQ-Baghdad-99-01	AUIB	Evelyn Clark Story	Evelyn Clark Picture URL	NULL	8
9	6	Harper Martinez	IQ-Baghdad-19-27	IQ-Baghdad-19-27	AUIB	Harper Martinez Story	Harper Martinez Picture URL	NULL	9
10	18	Henry Lewis	IQ-Baghdad-82-90	IQ-Baghdad-82-90	AUIB	Henry Lewis Story	Henry Lewis Picture URL	NULL	6
11	17	Isabella Anderson	IQ-Baghdad-14-32	IQ-Baghdad-14-32	AUIB	Isabella Anderson Story	Isabella Anderson Picture URL	Dental Sciences Technology	7
12	10	James Taylor	IQ-Baghdad-48-39	IQ-Baghdad-91-19	AUIB	James Taylor Story	James Taylor Picture URL	Anesthesia	7
13	20	John Carpenter	IQ-Baghdad-91-24	IQ-Baghdad-91-24	AUIB	John Carpenter Story	John Carpenter Picture URL	NULL	10
14	2	Liam Smith	IQ-Baghdad-11-34	IQ-Baghdad-11-34	AUIB	Liam Smith Story	Liam Smith Picture URL	Computer Science	1
15	12	Lucas White	IQ-Baghdad-87-26	IQ-Baghdad-42-68	AUIB	Lucas White Story	Lucas White Picture URL	Chemistry	1
16	11	Mia Jackson	IQ-Baghdad-29-48	IQ-Baghdad-29-48	AUIB	Mia Jackson Story	Mia Jackson Picture URL	Optometry and Vision Science	7
17	5	Noah Davis	IQ-Baghdad-89-10	IQ-Baghdad-89-10	AUIB	Noah Davis Story	Noah Davis Picture URL	Management Information Systems	2
18	3	Olivia Brown	IQ-Baghdad-56-17	IQ-Baghdad-56-17	AUIB	Olivia Brown Story	Olivia Brown Picture URL	Marketing	2
19	9	Sophia Moore	IQ-Baghdad-12-57	IQ-Baghdad-12-57	AUIB	Sophia Moore Story	Sophia Moore Picture URL	Entrepreneurship	2
20	8	William Wilson	IQ-Baghdad-65-24	IQ-Baghdad-65-24	AUIB	William Wilson Story	William Wilson Picture URL	Finance and Banking	2

2. Display classes offered in 2025 .

```
SELECT * FROM Class
WHERE Meeting_Dates LIKE '%2025%';
```

	Course_Code	Code	CSession	Instructuion_Mode	CStatus	Room	Capacity	Times	Meeting_Dates	CDays
1	ART 113	1382	Regular	In Person	Open	ISL_82_206	20	11:00 am to 12:15 pm	01/19/2025 - 05/31/2025	Monday Wednesday
2	BUS 112	3719	Regular	In Person	Open	ASC_65_102	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Sunday Tuesday
3	CHE 101	2684	Regular	Online	Open	NULL	15	8:00 am to 9:15 am	01/19/2025 - 05/31/2025	Sunday Tuesday
4	CSC 445	1486	Regular	In Person	Open	NULL	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Sunday Tuesday
5	MAT 111	4742	Regular	In Person	Open	CHT_03_104	35	11:00 am to 12:15 pm	01/19/2025 - 05/31/2025	Sunday Tuesday
6	MGT 111	1158	Regular	In Person	Open	COB_58_103	20	9:30 am to 10:45 am	01/19/2025 - 05/31/2025	Monday Wednesday
7	PHA 101	6742	Regular	In Person	Open	COB_58_200	20	9:30 am to 10:45 am	01/19/2025 - 05/31/2025	Sunday Tuesday
8	PSY 108	8420	Regular	In Person	Open	ISL_82_104	35	8:00 am to 9:15 am	01/19/2025 - 05/31/2025	Sunday Tuesday
9	SOC 109	5217	Regular	In Person	Open	NULL	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Monday Wednesday
10	SOC 109	9217	Regular	In Person	Open	COB_58_107	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Monday Wednesday

3. List Colleges with Study duration grater than 4 years .

```
SELECT * FROM College  
WHERE Study_Duration > 4;
```

Results		Messages					
	ID	Title	Total_Credits	Study_Duration	Degree	Academics_Section	Tuition_For
1	4	College of Dentistry	180	5	Bachelor	College of Dentistry	College of Dentistry
2	10	College of Pharmacy	180	5	Bachelor	College of Pharmacy	College of Pharmacy

4. Show instructors with emails that are not given by AUIB .

```
SELECT * FROM Instructor  
WHERE Email NOT LIKE '%AUIB%';
```

Results		Messages	
	ID	IName	Email
1	2	Jessica Turner	444555@gmail.com
2	6	Brittany Reed	741852@gmail.com

5. Display events in January 2025 .

```
SELECT * FROM Calender  
WHERE CDate LIKE '%2025-01%';
```

Results		Messages	
	CDate	CEvent	
1	2025-01-02	Winter Break Ends - University Reopens	
2	2025-01-03	New Student Orientation - Spring 2025	
3	2025-01-06	Spring 2025 Course Registration Opens	
4	2025-01-10	Last Day to Register - Spring 2025	
5	2025-01-15	Spring 2025 Classes Begin	

Intermediate Queries

1. List the Majors of College of Arts and Sciences .

```
SELECT M.Major_Name  
FROM Major M, College C  
WHERE C.Title = 'College of Arts & Sciences'  
AND M.College_ID = C.ID;
```

Results	
	Major_Name
1	Biology
2	Chemistry
3	Computer Science
4	English Literature
5	Physics
6	Psychology

2. Display Students along with their majors and Colleges .

```
SELECT S.SName, (SELECT Title FROM College WHERE ID = S.College_ID) AS College, S.Major_Name  
FROM Student S;
```

Results			
	SName	College	Major_Name
1	Emma Johnson	College of Arts & Sciences	Biology
2	Liam Smith	College of Arts & Sciences	Computer Science
3	Olivia Brown	College of Business	Marketing
4	Ethan Garcia	College of Education and Human Development	NULL
5	Noah Davis	College of Business	Management Information Systems
6	Harper Martinez	College of Law	NULL
7	Ava Miller	College of Business	Accounting
8	William Wilson	College of Business	Finance and Banking
9	Sophia Moore	College of Business	Entrepreneurship
10	James Taylor	College of Healthcare Technologies	Anesthesia
11	Mia Jackson	College of Healthcare Technologies	Optometry and Vision Science
12	Lucas White	College of Arts & Sciences	Chemistry
13	Alexander Robinson	College of Dentistry	NULL
14	Amelia Harris	College of Arts & Sciences	Physics
15	Benjamin Thomas	College of Healthcare Technologies	Radiologic Sciences & Technology
16	Evelyn Clark	College of International Studies	NULL
17	Isabella Anderson	College of Healthcare Technologies	Dental Sciences Technology
18	Henry Lewis	College of Engineering	NULL
19	Charlotte Thompson	College of Arts & Sciences	English Literature
20	John Carpenter	College of Pharmacy	NULL

3. Show Students names dropped at least one class.

```
SELECT S.SName  
FROM Student S, Student_take_Class StC  
WHERE StC.StCStatus = 'Dropped'  
AND S.ID = StC.Student_ID  
GROUP BY S.SName  
HAVING COUNT(StC.StCStatus) >= 1;
```

Results		Messages
	SName	
1	Evelyn Clark	
2	Harper Martinez	
3	Mia Jackson	
4	Sophia Moore	

4. List out college names that have Academics Section linked to them in the website, with study duration greater than 4 years and a Bachelor degree.

```
SELECT Title AS College  
FROM College  
WHERE Academics_Section IS NOT NULL  
AND Study_Duration > 4  
AND Degree = 'Bachelor';
```

Results		Messages
	College	
1	College of Dentistry	
2	College of Pharmacy	

5. Find the average of tuition fee for colleges and majors excluding tuitions for master programmes. Don't calculate repeated values and calculate it only for fees less than 300000.

```
SELECT AVG(DISTINCT Fee_Per_Unit) AS AvgTuition  
FROM Tuition  
WHERE Tuition_For LIKE '%College%'  
AND Tuition_For NOT LIKE '%MBA%'  
AND Fee_Per_Unit < 300000;
```

Results		M
	AvgTuition	
1	205250	

6. Count English tests that have the same grade for all of their testin categories.

```
SELECT Count(*) AS EqualGrades  
FROM English_Proficiency_Req  
WHERE Overall = Listening  
AND Listening = Reading  
AND Reading = Speaking  
AND Speaking = Writing;
```

Results		Messages
EqualGrades		
1	3	

-
7. Count Beginner CEI Trainnings having 'Network' or 'Security' in their names .

```
SELECT Count(*) AS TrainningNum  
FROM CEI_Training  
WHERE TLevel = 'Beginner'  
AND (TName LIKE '%Network%' OR TName LIKE '%Security%');
```

Results		Messages
TrainningNum		
1	3	

-
8. Display the average grade of Students in MAT 111 and how many times the class was offered

```
SELECT Count(Course_Code) TimesOffered, AVG(Grade) AS AvgGrade  
FROM Student_take_Class  
WHERE Course_Code = 'MAT 111';
```

Results		Messages
TimesOffered	AvgGrade	
1	7	83.3833338419596

-
9. List Courses Codes of courses having two or more prerequisites . Display the number of prerequisite each course have .

```

SELECT Course_Code , COUNT(Course_Code) AS PrerequisiteNum
FROM Course_Prerequisite
GROUP BY Course_Code
HAVING COUNT(Course_Code) >= 2;

```

	Course_Code	PrerequisiteNum
1	CSC 345	2

- lo. For each type of partnership, display the number of institutions.

```

SELECT PType , COUNT(Institute)
FROM Partnership
GROUP BY PType;

```

PType	NumOfIns
1 Government and Public Sector Partnerships	3
2 International Academic Memberships	1
3 International Academic Partnerships	2
4 National Academic Partnerships	2
5 Non Governmental and Community Partnerships	2

Complex Queries

1. List Students' names having both phones and emails.

```

SELECT SName AS Student_Name FROM Student
WHERE ID IN (SELECT Student_ID FROM Email)
AND ID IN (SELECT Student_ID FROM Phone);

```

Student_Name
Emma Johnson
Liam Smith
Olivia Brown
Ethan Garcia
Harper Martinez
Ava Miller
William Wilson
Sophia Moore
Mia Jackson
Lucas White
Amelia Harris
Charlotte Thompson
John Carpenter

2. Display Course codes and names of Computer Science Courses Supposed to be taken by Freshmen from Computer Science major.

```

SELECT C.Code AS CourseCode, C.CName AS CourseName
FROM Course C, Major_Contain_Course MCC, College_Offer_Course COC
WHERE MCC.Major_Name = 'Computer Science'
AND COC.Academic_Year = 1
AND C.Code = MCC.Course_Code
AND COC.Course_Code = C.Code;

```

CourseCode	CourseName
CSC 101	Introduction to Computer Science

3. For students who have taken courses with Michael Carter, show their names, course codes for courses they have taken with him, and the semester in which they have taken the course

```
SELECT S.SName, StC.Course_Code, StC.Time_Taken
FROM Student S, Instructor I, Student_take_Class StC, Instructor_teach_Class ItC
WHERE I.IName = 'Michael Carter'
AND I.ID = ItC.Instructor_ID
AND ItC.Class_Code = StC.Class_Code
AND StC.Student_ID = S.ID;
```

	SName	Course_Code	Time_Taken
1	Henry Lewis	MAT 111	Spring 2024
2	Liam Smith	CSC 231	Fall 2024
3	Liam Smith	STA 115	Spring 2025
4	William Wilson	MAT 111	Spring 2025
5	Liam Smith	CSC 101	Spring 2024
6	Amelia Harris	STA 115	Spring 2025
7	Sophia Moore	MAT 111	Fall 2024
8	Amelia Harris	MAT 111	Spring 2024
9	Emma John...	MAT 111	Fall 2024

4. Refine the previous query (3) so it could show how many times did Michael Carter take each student he has ever taught across his classes.

```
SELECT S.SName, COUNT(S.SName) AS Times_Taken
FROM Student S, Instructor I, Student_take_Class StC, Instructor_teach_Class ItC
WHERE I.IName = 'Michael Carter'
AND I.ID = ItC.Instructor_ID
AND ItC.Class_Code = StC.Class_Code
AND StC.Student_ID = S.ID
GROUP BY S.SName;
```

	SName	Times_Taken
1	Amelia Harris	2
2	Emma Johnson	1
3	Henry Lewis	1
4	Liam Smith	3
5	Sophia Moore	1
6	William Wilson	1

5. Retrieve names and phone numbers of students advised by Brittany Reed, show only one phone number for each student.

```
SELECT S.SName, P.Phone
FROM Student S, Phone P, Instructor I, Instructor_Advise_Student_Major IASM
WHERE I.IName = 'Brittany Reed'
AND I.ID = IASM.Instructor_ID
AND IASM.Student_ID = S.ID
AND S.ID = P.Student_ID
AND P.IsPreferred = 1;
```

	Results	Messages	Cli
	SName	Phone	
1	Emma Johnson	0790123456	
2	John Carpenter	0791122335	

6. Show classes that are currently open and have less than 10 students enrolled.

```
SELECT * FROM Class
WHERE CStatus = 'Open'
AND ( SELECT COUNT(*)
      FROM Student_take_Class StC
      WHERE StC.Course_Code = Class.Course_Code
      AND StC.Class_Code = Class.Code
      AND StCStatus = 'In Progress' ) < 10;
```

	Course_Code	Code	CSession	Instructuin_Mode	CStatus	Room	Capacity	Times	Meeting_Dates	CDays
1	ART 113	1382	Regular	In Person	Open	ISL_82_206	20	11:00 am to 12:15 pm	01/19/2025 - 05/31/2025	Monday Wednesday
2	BUS 112	3719	Regular	In Person	Open	ASC_65_102	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Sunday Tuesday
3	CHE 101	2684	Regular	Online	Open	NULL	15	8:00 am to 9:15 am	01/19/2025 - 05/31/2025	Sunday Tuesday
4	CSC 445	1486	Regular	In Person	Open	NULL	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Sunday Tuesday
5	MAT 111	4742	Regular	In Person	Open	CHT_03_104	35	11:00 am to 12:15 pm	01/19/2025 - 05/31/2025	Sunday Tuesday
6	MGT 111	1158	Regular	In Person	Open	COB_58_103	20	9:30 am to 10:45 am	01/19/2025 - 05/31/2025	Monday Wednesday
7	PHA 101	6742	Regular	In Person	Open	COB_58_200	20	9:30 am to 10:45 am	01/19/2025 - 05/31/2025	Sunday Tuesday
8	PSY 108	8420	Regular	In Person	Open	ISL_82_104	35	8:00 am to 9:15 am	01/19/2025 - 05/31/2025	Sunday Tuesday
9	SOC 109	5217	Regular	In Person	Open	NULL	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Monday Wednesday
10	SOC 109	9217	Regular	In Person	Open	COB_58_107	40	12:30 pm to 1:45 pm	01/19/2025 - 05/31/2025	Monday Wednesday

7. Display ID's, names, and majors of students that either have a Story or a picture and Home address. Students should either be from Business or Computer Science major.

```
SELECT S.ID, S.SName, M.Major_Name AS Major
FROM Student S, Major M, College C
WHERE S.Major_Name = M.Major_Name
AND S.College_ID = C.ID
AND (S.Story IS NOT NULL OR S.Picture IS NOT NULL)
AND S.Home_Address IS NOT NULL
AND (S.Major_Name = 'Computer Science' OR C.Title = 'College of Business');
```

Results			
	ID	SName	Major
1	2	Liam Smith	Computer Science
2	3	Olivia Brown	Marketing
3	5	Noah Davis	Management Information Systems
4	7	Ava Miller	Accounting
5	8	William Wilson	Finance and Banking
6	9	Sophia Moore	Entrepreneurship

9. Retrieve IDs and names of instructors who taught at least 4 classes and advised more than 2 students.

```
SELECT I.ID, I.IName
FROM Instructor I
WHERE
(SELECT COUNT(ItC.Instructor_ID)
FROM Instructor_teach_Class ItC
WHERE ItC.Instructor_ID = I.ID) >= 4
AND
(SELECT COUNT(IASM.Instructor_ID)
FROM Instructor_Advise_Student_Major IASM
WHERE IASM.Instructor_ID = I.ID) > 2;
```

Results		
	ID	IName
1	1	Michael Carter
2	2	Jessica Turner
3	3	Daniel Brooks
4	4	Ashley Stewart

10. List course codes and colleges they are offered by. Display courses ordered by their credits. If multiple courses share the same credits, order them by their year when they are supposed to be taken.

```

SELECT COC.Course_Code, C.Title AS College_Title
FROM College C, College_Offer_Course COC
WHERE COC.College_ID = C.ID
ORDER BY COC.Credit ASC, COC.Academic_Year ASC;

```

	Course_Code	College_Title
1	ART 113	College of Arts & Sciences
2	BUS 112	College of Business
3	CHE 101	College of Healthcare Technologies
4	CSC 101	College of Arts & Sciences
5	CSC 231	College of Arts & Sciences
6	CSC 345	College of Arts & Sciences
7	CSC 445	College of Arts & Sciences
8	ECO 107	College of International Studies
9	HIS 110	College of Arts & Sciences
10	MAT 111	College of Arts & Sciences
11	MGT 111	College of Business
12	PHA 101	College of Pharmacy
13	PSY 108	College of Law
14	SOC 109	College of Law
15	STA 115	College of Arts & Sciences

II. Display Student names with Course IDs of courses they took along side with the associated Class code and grade.

```

SELECT S.SName, StC.Course_Code, StC.Class_Code, StC.Grade
FROM Student S, Student_takes_Class StC
WHERE S.ID = StC.Student_ID
AND StC.Grade IS NOT NULL
ORDER BY S.SName;

```

	SName	Course_Code	Class_Code	Grade
1	Alexander Robinson	HIS 110	1035	78
2	Amelia Harris	MAT 111	2845	92.5
3	Ava Miller	BUS 112	3719	77.7
4	Charlotte Thompson	ART 113	1382	88.5
5	Charlotte Thompson	HIS 110	1035	84.2
6	Emma Johnson	MAT 111	2845	84
7	Emma Johnson	CHE 101	4921	88
8	Ethan Garcia	MGT 111	1158	89.9
9	Harper Martinez	MGT 111	1158	90
10	Harper Martinez	BUS 112	3719	88.5
11	Henry Lewis	MAT 111	2845	81
12	James Taylor	CHE 101	2684	84.5
13	Liam Smith	CSC 231	1267	87
14	Liam Smith	CSC 101	1357	91.5
15	Lucas White	CHE 101	4921	90.1
16	Lucas White	MAT 111	4742	85.3
17	Mia Jackson	CHE 101	4921	86
18	Noah Davis	MAT 111	4742	78.5
19	Noah Davis	ECO 107	7135	82
20	Olivia Brown	BUS 112	3719	85.2
21	Olivia Brown	ECO 107	7135	80.7
22	Sophia Moore	MAT 111	2845	79
23	William Wilson	CHE 101	2684	81

12. List out Students' names and average grades of classes they took in Fall 2024. Display only students who's average is greater than 85.

```
SELECT S.SName, AVG(StC.Grade) AS Avg_Grade
FROM Student S, Student_take_Class StC
WHERE S.ID = StC.Student_ID
AND StC.Time_Taken = 'Fall 2024'
AND StC.Grade IS NOT NULL
GROUP BY S.SName
HAVING AVG(StC.Grade) > 80;
```

	SName	Avg_Grade
1	Charlotte Thompson	84.1999969482422
2	Emma Johnson	84
3	Liam Smith	87
4	Lucas White	85.3000030517578
5	Olivia Brown	80.6999969482422

13. Find the name and phone number of instructors who advised Students and also taught them a class.
Display a single phone for each instructor.

```
SELECT DISTINCT I.IName
FROM Instructor I, Instructor_Advise_Student_Major IASM, Instructor_teach_Class ItC, Student_take_Class StC
WHERE I.ID = IASM.Instructor_ID
AND I.ID = ItC.Instructor_ID
AND IASM.Student_ID = StC.Student_ID
AND ItC.Class_Code = StC.Class_Code;
```

	IName
1	Daniel Brooks
2	Jessica Turner
3	Matthew Morris
4	Michael Carter

14. Retrieve Student names who have dropped at least one class. For each one of them, display the number of classes they dropped.

```
SELECT S.SName, COUNT(*) AS Dropped_Classes
FROM Student S, Student_take_Class StC
WHERE S.ID = StC.Student_ID
AND StC.StCStatus = 'Dropped'
GROUP BY S.SName
HAVING COUNT(*) >= 1;
```

	SName	Dropped_Classes
1	Evelyn Clark	1
2	Harper Martinez	1
3	Mia Jackson	1
4	Sophia Moore	1

15. Retrieve Students' Names who have taken classes at Mondays and Wednesdays alone With the Number of classes they took at those days.

```
SELECT S.SName, COUNT(*) AS ClassNum  
FROM Student S, Student_take_Class StC, Class C  
WHERE C.CDays = 'Monday Wednesday'  
AND C.Code = StC.Class_Code  
AND StC.Student_ID = S.ID  
GROUP BY S.SName;
```

	SName	ClassNum
1	Amelia Harris	1
2	Charlotte Thompson	1
3	Emma Johnson	1
4	Ethan Garcia	1
5	Harper Martinez	2
6	John Carpenter	1
7	Liam Smith	2
8	Lucas White	1
9	Mia Jackson	2
10	Noah Davis	1
11	Olivia Brown	1
12	Sophia Moore	1