

Revised Project Idea:

Our idea for

ROLES ASSIGNMENT:

- **Kayikunmi:** Front-End Development Lead
- **Sydney:** Back-End Development Lead
- **Maria:** Project Manager (Oversees the flow of the project. Also responsible for front-end + SQL)
- **Cuong:** Full Stack Developer (Front + Back)

Open-Ended Questions:

- 1) Do we have to host our website on the server, or can we use AWS?

Not really open ended

- 1) How extensive is the enrollment history of a student? (for Janna, customer)
- 2) How long are the notes? (for Janna, customer)
- 3) When can we expect some data?

Software Installed:

Translation of the ER Schema into a Relational Schema:

ENTITIES:

```
CREATE TABLE Students (  
    Email VARCHAR(100) NOT NULL,  
    PRIMARY KEY (Email),  
    First_Name VARCHAR(50) NOT NULL,  
    Last_Name VARCHAR(50) NOT NULL,  
    Preferred_Name VARCHAR(50) NOT NULL,  
    Pronouns VARCHAR(50),  
    Campus ENUM (UMass, Holyoke, Amherst, Hampshire) NOT NULL,  
    Enrollment_History VARCHAR(50) NOT NULL,  
    Academic_Career VARCHAR(50) NOT NULL,  
    Graduation_Year VARCHAR(255) NOT NULL,  
    Other_Notes TEXT(500),  
    Phone VARCHAR(50),  
);
```

```
CREATE TABLE Meetings (  
    Day DATE NOT NULL, → DATE doesn't require a length specification  
    Time TIME NOT NULL, → TIME can take a length specification, but for number of  
    decimals after seconds.  
    Meeting_Type VARCHAR(20) NOT NULL,  
    Location ENUM NOT NULL,  
    PRIMARY KEY (Day,Time,Location)  
)
```

```
CREATE TABLE Courses(  
    scheduleNum INTEGER,  
    courseNum CHAR(20),  
    Semester CHAR(6),  
    lang CHAR(15),  
    Program, CHAR(4),  
    ConversationsNum, INTEGER
```

```

        TutorialNum INTEGER,
        academicYear INTEGER,
        courseName CHAR(20)
        PRIMARY KEY (courseNum,semester,academicYear)
    )

```

```

CREATE TABLE Instructors (
    email VARCHAR(100) PRIMARY KEY,
    First_Name VARCHAR(50) NOT NULL,
    Last_Name VARCHAR(50) NOT NULL,
    Preferred_Name VARCHAR(50),
    Pronouns VARCHAR(50),
    Role VARCHAR(50),
    Academic_Career VARCHAR(50),
    Languages_Taught VARCHAR(255),
    Campus VARCHAR(50),
    Phone INT,
    Graduation_Year INT,
    Approved_to_Hire BOOLEAN,
    Paperwork_Status VARCHAR(50),
    Notes TEXT, -- Combining Other Notes and Interview Notes
    Hiring_History TEXT
);

```

RELATIONSHIPS:

```

CREATE TABLE isRegistered(
    courseNum CHAR(20),
    Semester CHAR(6),
    academicYear INTEGER,
    status VARCHAR(50)
    email VARCHAR(100) NOT NULL
    FOREIGN KEY (courseNum)
        REFERENCES Courses,
    FOREIGN KEY (academicYear)
        REFERENCES Courses,
    FOREIGN KEY (Semester)
        REFERENCES Courses,

```

```
        FOREIGN KEY (Email)
        REFERENCES (Students)
    PRIMARY KEY (courseNum,semester,academicYear, email)
)
```

```
CREATE TABLE isEnrolled(
    courseNum CHAR(20),
    Semester CHAR(6),
    academicYear INTEGER,
    status VARCHAR(50)
    email VARCHAR(100) NOT NULL
    FOREIGN KEY (courseNum)
        REFERENCES Courses,
    FOREIGN KEY (academicYear)
        REFERENCES Courses,
    FOREIGN KEY (Semester)
        REFERENCES Courses,
    FOREIGN KEY (Email)
        REFERENCES (Students)
    PRIMARY KEY (courseNum,semester,academicYear, email)
)
```

```
CREATE TABLE participatesIn(
    role CHAR(20)
    email VARCHAR(100) NOT NULL
    day date
    time time
    location ENUM
    FOREIGN KEY (email)
        REFERENCES Students,
    FOREIGN KEY (day)
        REFERENCES Meetings,
    FOREIGN KEY (date)
        REFERENCES (Meetings)
    FOREIGN KEY (location)
        REFERENCES (Meetings)
    PRIMARY KEY (email,date,location,email)
```

```

CREATE TABLE Leads(
    role CHAR(20)
    email VARCHAR(100) NOT NULL
    day date
    time time
    location ENUM
    FOREIGN KEY (email)
        REFERENCES Instructors,
    FOREIGN KEY (day)
        REFERENCES Meetings,
    FOREIGN KEY (date)
        REFERENCES (Meetings)
    FOREIGN KEY (location)
        REFERENCES (Meetings)
    PRIMARY KEY (email,date,location,email)
)

```

```

CREATE TABLE taughtBy(
    role CHAR(20)
    courseNum CHAR(20)
    semester CHAR(6)
    academicYear INTEGER
    email VARCHAR(100)
    FOREIGN KEY (courseNum)
        REFERENCES Courses
    FOREIGN KEY (semester)
        REFERENCES Courses
    FOREIGN KEY (academicYear)
        REFERENCES Courses
    FOREIGN KEY (email)
        REFERENCES Instructors
    PRIMARY KEY ( courseNum, semester, academicYear, email)
)

```

```

CREATE TABLE SpireStatus(
    email CHAR(11),
    courseNum CHAR(20) NOT NULL,
    Status ENUM (enrolled, notEnrolled),
    PRIMARY KEY (email, courseNum),
)

```

```
FOREIGN KEY (email) REFERENCES Students,  
FOREIGN KEY (courseNum) REFERENCES Courses  
)
```

```
CREATE TABLE When&Where (  
    courseNum CHAR(20) NOT NULL,  
    semester CHAR(6) NOT NULL,  
    academicYear INTEGER NOT NULL,  
    day ENUM (mon,tues,wed,thurs,fri,sat,sun) NOT NULL,  
    time DATETIME NOT NULL,  
    location VARCHAR(100) NOT NULL,  
  
    FOREIGN KEY (courseNum) REFERENCES Courses,  
    FOREIGN KEY (academicYear) REFERENCES Courses,  
    FOREIGN KEY (semester) REFERENCES Courses,  
    FOREIGN KEY (day) REFERENCES Meetings,  
    FOREIGN KEY (time) REFERENCES Meetings,  
    FOREIGN KEY (location) REFERENCES Meetings,  
    PRIMARY KEY (courseNum,semester,academicYear, day, time, location)  
)
```