INSPIRE - ER DIAGRAM

Student
- Name
- ID
- Graduation Year
- Major
- Age
- Gender
- Mailing Address
- Permanent Address
- Phone Number
- Advisor
- Umass Email
- Emergency Contact

Has — 1

1

Has — 1

Academic Record

n

Message

Has — n

n

Course
- ID
- Description
- Location
- Credits
- Final Exam Slot
- Grade
- Completed
- Category

n

Has

n

Has — n

n

Professor
- ID
- Name
- Office
- Rating

IsA

IsA

Has

Calendar Block
- Time

Lecture — n — Has — 1 — **Discussion / Lab**
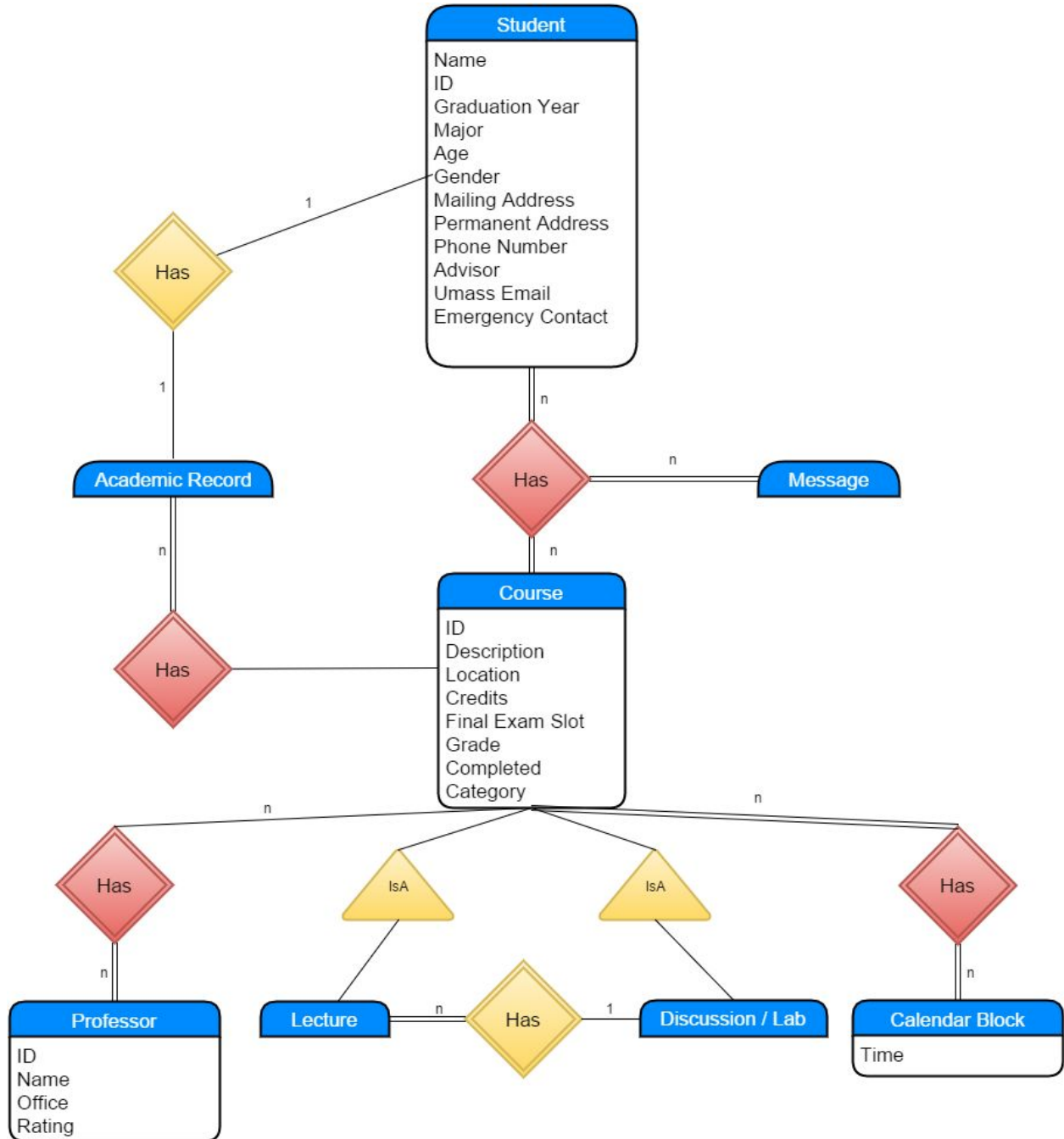
ER Description

Student
- A student has the properties: Name, ID, Graduation Year, Major, Age, Gender, Mailing Address, Permanent Address, Phone Number, Advison, Umass Email, and Emergency Contact
- A Student has 0 to many Courses
- A Student has 0 to many Messages
- A Student has 1 Academic Record

Academic Record
- An academic record consists of a list of courses
- It doesn't exist by itself; it is always attached to a student

Course
- A course has the properties: ID, Course Description, Location, Credits Worth, Final Exam Slot, Grade Achieved, Completion Status, Course Category
- A course has at least one professor but can have several professors
- A course is either a lecture or a discussion/lab/colloquium
- A discussion/lab/colloquium is related to a lecture but a lecture may offer many discussions/labs/colloquiums
- A course is offered during at least one calendar block but may consist of several blocks per week

Lecture
- A lecture is a realization of the course abstraction
- May offers multiple discussions/labs/colloquiums

Discussion/Lab
- Description: A special course that is linked to a lecture.
- Each Discussion/Lab/Colloquium can have only one lecture
- Does not exist by itself; must be embedded within a lecture

Professor
- Each course can have any number of professors
- Each professor can have any number of courses
- Each professor has an ID, name, office location, and rating

Calendar Block
- Each calendar block has a set time

Landing Page

The landing page utilizes ...

Student
- Student ID will determine exactly what data gets rendered when the student's data is imported from the database.
- Student name, major and class year may be present somewhere on the page to provide feedback that the correct user is logged in.
- The other information may or may not be present in the messages depending on the contexts of the messages

Courses
- Courses are relevant through two means on the landing page.
    - When the calendar blocks are pressed, it will display a list of classes that are available given the student information
    - When searching, the properties that a student will be allowed to query depend on the properties of the courses

Calendar Block
- The calendar widget will employ the calendar block entity as secondary database key to determine what classes may show up when a time slot is focused on the UI

Academic Record
- Embedded within the student, the academic record serves as a filter to help decide what will be rendered by the application. Also the academic record will be important for our stretch goal of recommendations / auto-scheduling

Exposed Navigation Bar

- This page does not use the entities in our database

Searching for a Class

- The class search function has access to all of the Courses listed in our database. It will be able to pull information about the class and display it for the user after they have searched. The class search will also be able to distinguish if a course is a lecture or a discussion. The class search page will also have access to the student's list of registered Courses in order to display them on the calendar.

Detailed Class Information

- The detailed class information function has access to all of the courses in order to display the information for the currently selected course. It will also be able to access the professor per selected course, the type of course, as well as the time calendar block so all of the course information can be presented.

Full Class Schedule

- The full class schedule view will have access to all of the courses, and utilize those that a particular student is enrolled in. The view itself will display the course time, title, the class type (lecture/discussion), as well as the class location.   All of which will be placed into the correct time slots in the calendar block.

Todo List and More

- This page uses the student and message entities. Each message is linked to a particular student and is displayed in a panel for the student to see.

Final Exam View

- The final exam view will have access to all of the courses in our database. It will pull the courses that the student is enrolled in and extract the final exam information. The final exam information will consist of a class title, date, time, location, and nature of the exam(online, in-person).