



For each **student** entity, it contains the student's NetID as primary key, Name and NetId.

For each **Department** entity, it contains the Department's Name as the primary key. Students can belong to multiple departments and a department can have multiple students.

For each **Course** entity, it contains the Course's CRN as primary key, Time, day, Type (whether it is a lecture or discussion), title (example: AAS100) and full title (example: Intro to Asian American Studies).

We assume courses belong to only one department and a department can have multiple courses

For each **Account** entity, it contains the NetID as primary key, identity (whether account type is administrator or student), and password.

For each **Instructor** entity, it contains NetID as primary key and the instructor name. Each Instructor can teach many courses and each course can be taught by many instructors.

We think each student can only own one (student type) account, and each instructor can only own one (administrator type) account. Account can only own by one student/instructor.

For the **Enrollment** entity, it contains 3 foreign key, CRN, Instructor NetId and Student NetId.

We assume enrollment can contain many courses, and it can be enrolled by many students and managed by many instructors. Courses can be in many enrollments, students can be in many enrollments and instructors can manage many enrollments.

Relational Schema

Student(NetID: VARCHAR(30) [PK, FK to Account.NetID], UIN: INT, Name: VARCHAR(255))

Department(Name: VARCHAR(255) [PK])

Course(CRN: INT [PK], Department: VARCHAR(255) [FK to Department.Name], NetID: VARCHAR(30) [FK to Instructor.NetID], Time: DATETIME, Day: VARCHAR(255), Type: VARCHAR(255), Title: VARCHAR(255), Full_Name: VARCHAR(255))

Account(NetID: VARCHAR(30) [PK], Identity: VARCHAR(255), Password: VARCHAR(255))

Instructor(NetID: VARCHAR(30) [PK, FK to Account.NetID], Name: VARCHAR(255))

Enrollment(Student_NetID: VARCHAR(30) [PK, FK to Student.NetID], Instructor_NetID: VARCHAR(30) [PK, FK to Instructor.NetID], CRN: INT [PK, FK to Course.CRN])