

Students(NetID: VARCHAR(10) [PK], FirstName: VARCHAR(255), LastName: VARCHAR(255), Major: VARCHAR(100), Residence: VARCHAR(100))

Major(MajorID: VARCHAR(10) [PK], NetID: [FK to Students.NetID], CurrentClasses: VARCHAR(100))

Login(NetID: VARCHAR(10) [FK to Students.NetID], FirstName: VARCHAR(10), LastName: VARCHAR(10))

Interests(InterestID: VARCHAR(255) [PK], NetID: [FK to Students.NetID], Interests: VARCHAR(255))

RSOMembers(RsoID: VARCHAR(10) [PK], NetID: VARCHAR(10) [FK to Students.NetID], FirstName: VARCHAR(255), LastName: VARCHAR(255))

Explanation of relationships:

'Enrolls' Relationship Entity: Students usually have at least one major, but they can also enroll in double majors or in very rare cases, more. Theoretically, a major can have at minimum 0 students but up to an unlimited amount, ignoring issues with capacity.

'Logs' Relationship Entity: Students at UIUC must have exactly one NetID login, and a unique NetID login must correspond to exactly one student.

'Has' Relationship Entity: A student can have 0 interests or as many interests they want. In this case, an interest has a NetID which would connect to a student. An interest can be connected to an unlimited number of students.

'Part of' Relationship Entity: The RSO table contains every student who is in at least 1 RSO. So, a student is either present or not present in that table. However, the table can point to any number of students because it can contain different students in different RSOs. Additionally, the same student with same NetID can be present twice in the table but with a different RsoID if they are in multiple RSOs.