

Aurora University ERD (Very Rough Draft)

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University:

The University entity is a representation of the multiple locations each campus resides in. The primary key is a unique code assigned to the individual campus residing in said location. While the foreign key simply relates to the correlating entity “Address”, which specifies the exact address by containing a comprehensive table of fields including State, City, Zip, etc. The relationship stands as one-to-many. One and only one University can be attended at one or many locations.

Address:

The Address entity is a representation of data that’s necessary for identifying a subject’s location. This table entails the following fields: Address\_ID, State, City, Zip, and Country. The primary key is uniquely assigned to the individual setting in the format of all corresponding essentials combined. This combination establishes the definition of an “address” as, “The particulars of the place where someone lives, or an organization is situated”. No foreign key is needed here. However, there lies direct relationships with University and Personal Information, although the relationship various between the two.

Personal Information:

The Personal Information entity is a representation of data that’s necessary for identifying a person. This entails the following fields: Personal\_Info\_ID, First\_Name, Last\_Name, DOB, Gender, and Address\_ID. The primary key is uniquely assigned to the individual in the format of all corresponding essentials combined. This combination establishes the definition of a person as, “Personal data, also known as personal information or personally identifiable information, is any information related to an identifiable person”. The foreign key relates to the Address entity in the forming of a one-to-many relationship. One and only one Address can be found between one or many persons.

Professor:

The Professor entity is a representation of data that’s necessary for identifying a professor. This entails the following fields: Coach\_ID and. The primary key is uniquely assigned to each student in the format of all corresponding essentials combined. This combination establishes the definition of a student as, “Someone who instructs students in a wide variety of academic and vocational subjects beyond the high school level”. The foreign keys relate to Personal Information and Courses in the forming of one-to-many and one-to-one relationships. One and only one professor can teach one or many courses. One and only one professor attributes to their own personal information.

Student:

The Student entity is a representation of data that’s necessary for identifying a student. This entails the following fields: Student\_ID, Personal\_Info\_ID, and Course\_ID. The primary key is uniquely assigned to the professor in the format of all corresponding essentials combined. This combination establishes the definition of a professor as, “A student is primarily a person enrolled in a school or other educational institution and who is under learning with goals of acquiring knowledge, developing professions and achieving employment at desired field.”. The foreign keys relate to Personal Information, Clubs, Sports, and Courses in the forming of various relationships. One or many students can enroll in one or many courses. One or many students are taught by one and only one professor per course. One or many students can participate one or many sports/clubs.

Coach:

The Coach entity is a representation of data that’s necessary for identifying a coach. This entails the following fields: Coach\_ID and Personal\_Info\_ID. The primary key is uniquely assigned to each coach in the format of all corresponding essentials combined. This combination establishes the definition of a coach as, “a person who teaches and trains an athlete”. The foreign key relates to Personal Information and Sports in the forming of one-to-one and one-to-many relationships. One and only one coach attributes to their own personal information. One and only one coach trains one-to-many sports.

Club:

The Club entity is a representation of data that’s necessary for identifying a club. This entails the following fields: Club\_ID and Club\_Name. The primary key is uniquely assigned to each club in the format of all corresponding essentials combined. This combination establishes the definition of a club as, “an association or organization dedicated to a particular interest or activity”. No foreign key needed. Reference student for direct relationship within that specific table.

Courses:

The Course entity is a representation of data that’s necessary for identifying a club. This entails the following fields: Course\_ID and Course\_Name. The primary key is uniquely assigned to each course in the format of all corresponding essentials combined. This combination establishes the definition of a course as, “a unit of teaching that typically lasts one academic term”. No foreign key needed. Reference student and professor for a direct relationship within those specific tables.

Sports:

The Sports entity is a representation of data that’s necessary for identifying a sport. This entails the following fields: Sports\_ID, Sport\_Type, and Coach\_ID. The primary key is uniquely assigned to each sport in the format of all corresponding essentials combined. This combination establishes the definition of a sport as, “an activity involving physical exertion and skill in which an individual or team competes against another or others for entertainment.”. The foreign key relates to the Coach entity in the forming of a one-to-many relationship. One-to-many sports per term/season are trained by one and only one coach.