Assignment 3: The University System

Entity: Schedule

Attributes:

Section_Number (PK)
Course_Number (FK)
Instructor_ID (FK)
Term_Year

Entity: Student

Attributes:

Student_ID (PK)
First_Name
Last_Name
SSN
Current_Address_Street
Current_Address_City
Current_Address_State
Current_Address_Zip
Current_Phone
Permanent_Address_Street
Permanent_Address_City
Permanent_Address_State
Permanent_Address_Zip
Permanent_Phone
DOB
Gender
Class_Level
Major_Department_Code (FK)
Minor_Department_Code (FK)
Degree_Program

Entity: Course

Attributes:

Course_Number (PK)
Course_Name
Course_Description
Course_Units
Course_Level
Department_Code (FK)

N   N   N

Enroll

1

Entity: Grades

Attributes:
Student_ID (FK)
Section_Number (FK)
Letter_Grade
Numeric_Grade

1

Belong

1

Entity: Department

Attributes:

Department_Code (PK)
Department_Name (unique)
Office_Number
Office_Phone
College
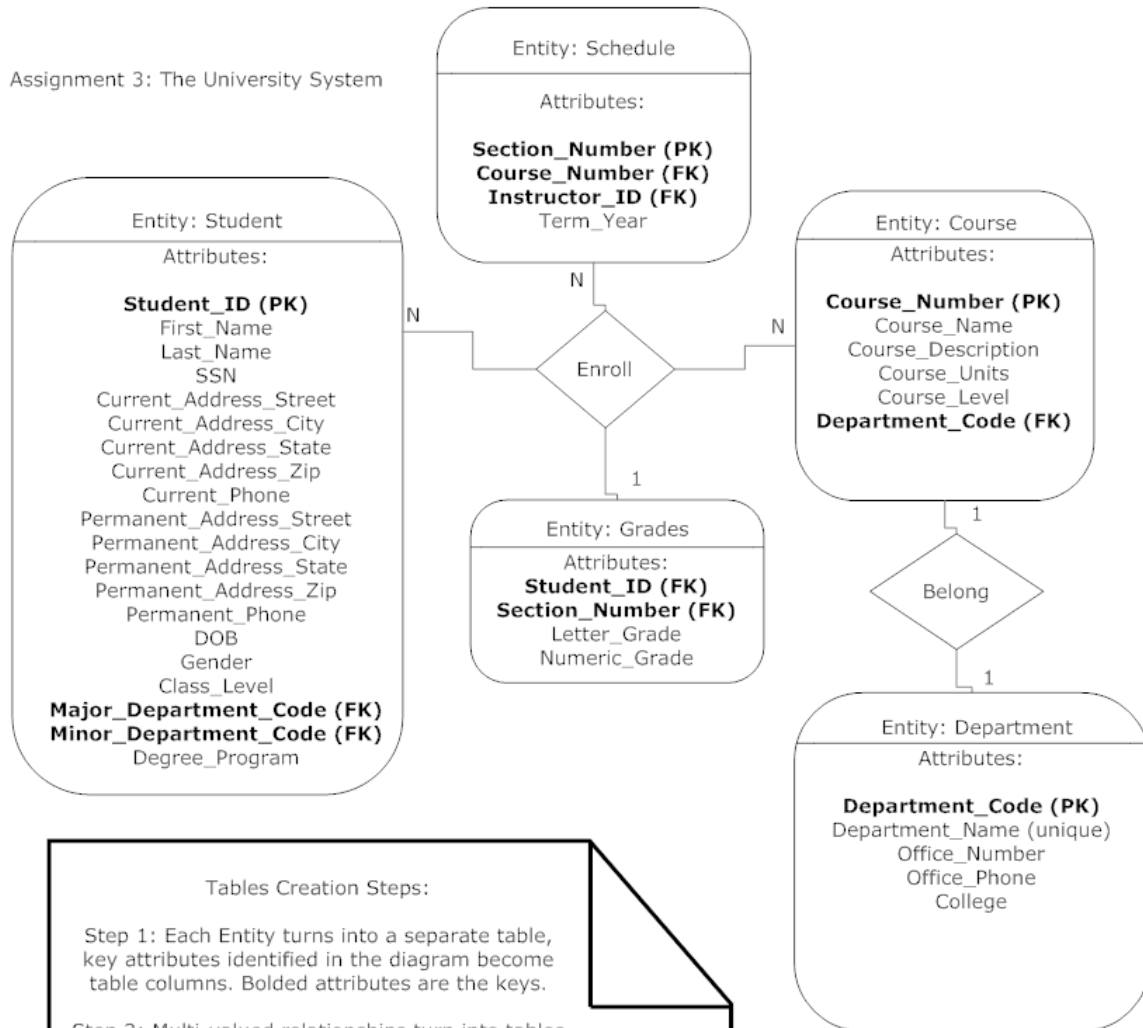
Tables Creation Steps:

Step 1: Each Entity turns into a separate table, key attributes identified in the diagram become table columns. Bolded attributes are the keys.

Step 2: Multi-valued relationships turn into tables including the composite keys of the corresponding tables. See new "enrollment" table below.

Step 3: Single valued relationships can be ignored and/or eliminated from the final table list.

New Table Created in Step 2:

Table: Enrollment

Attributes:
Enrollment_Number (PK)
Student_ID (FK)
Section_Number (FK)
Course_Number (FK)