

Database Analysis Worksheet

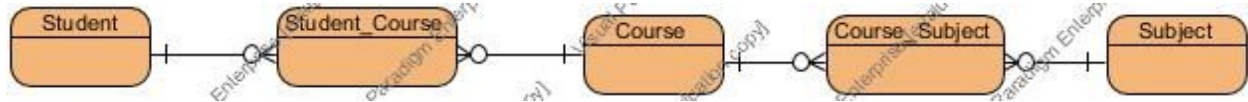
Step 1: Identify Entities, Attributes, and Primary Keys

Entity	Attributes			Primary Key
Student	SSN, LastName, FirstName, MI, Address, ZipCode, HomePhone, BirthDate, Gender			SSN
Subject		SubjectCode, TextDescription		SubjectCode
Course	Code, Title, Difficulty			Code

Step 2: Define Relationships Between the Entities

[illegible]

Step 3: Draw your Entity-Relationship Diagram (Hand-drawn is okay!!!)



Step 4: Specify Tables, Fields, and Data Types

Fill out a chart for each table to be included in the database. YOU MAY NEED MORE TABLES THAN THERE ARE HERE. The ones here are just to get you started. Mark the primary key with a double asterisk (**). Mark any foreign keys with the letters "fk" in parentheses, (fk).

Name of 1st Table: Student

Field Name	Data Type
SSN	String(8)
LastName	String(20)
FirstName	String(1)
MI	String(15)
Address	String(100)
ZipCode	String(5)
HomePhone	String(10)
DateofBirth	String ISO 8601(28)
Gender	String(15)
ID**	integer(auto-increment)

Name of 2nd Table: Course

Field Name	Data Type
Code(**)	String(20)
SubjectCode(fk)	String(10)

ID(**)	integer(auto-increment)
Difficulty	enum('Introductory', 'Intermediate', 'Advanced')
Title	String(30)

Name of 3rd Table: Subject

Field Name	Data Type
SubjectCode	String(10)
TextDescription	String(100)
ID(**)	integer(auto-increment

Name of 4th Table: JointTable Student_Course(Enrollment)

Field Name	Data Type
Course_id(**)(fk)	Integer
Student_id(**)(fk)	Integer

Name of 5th Table: JointTable Course_Subject

Field Name	Data Type
course_id(**)(fk)	Integer
subject_id(**)(fk)	Integer