

[60 min] DO: Assignment 3 / Implement a Relational Database

Due Feb 14 by 11:59pm **Points** 100 **Submitting** a file upload
File Types sql and rmd **Available** until Feb 15 at 4:59pm

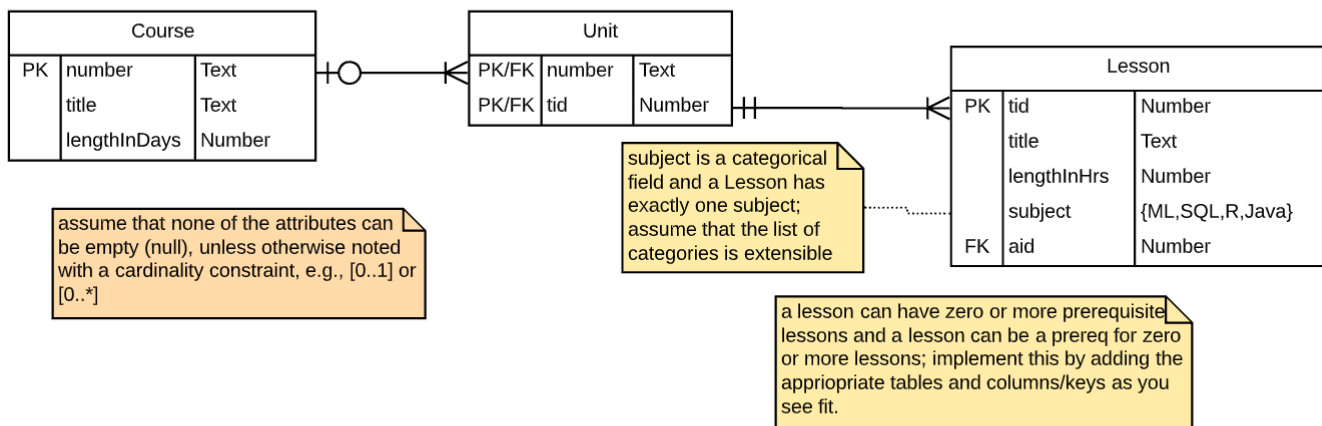
This assignment was locked Feb 15 at 4:59pm.

Instructions

Implement the following relational schema in SQLite. Create the tables with proper primary and foreign keys, data types, and constraints. Define additional tables as required to ensure that the schema can be implemented properly, e.g., categorical attributes, multi-valued attributes, lookup tables.



ER and Schema



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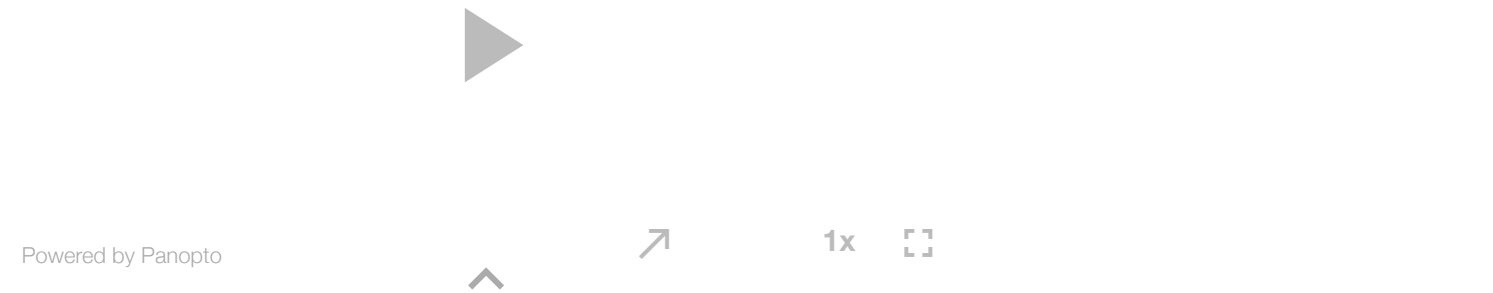


Submission

Submit a script (*LastName.A3.CS5200Sp21.sql*) with the SQL CREATE TABLE statements. You may wish to fill the table with test data but you do not need to submit those statements. We strongly recommend that you do your work in R Studio and that you submit an R Notebook

(*LastName.A3.CS5200Sp21.Rmd*) containing SQL (and a couple of R) code chunks. Submit either a SQL script file (*.sql* extension) **or** an R Notebook with SQL chunks (*.Rmd* extension).

Tutorial



N.B.: Unlike other databases, SQLite does not check foreign key constraints, by default. To enable foreign key constraint, run the following PRAGMA command:

```
PRAGMA foreign_keys = ON;
```

In R, you would write:

```
```{sql connection=dbcon}
PRAGMA foreign_keys = ON
```
```

| A3.Su20 | | | | | |
|-------------------|--|--|---|------------------------------------|---------|
| Criteria | Ratings | | | | Pts |
| Implementation | 100 pts
All tables are properly implemented and all pk/fk constraints are properly defined | 80 pts
Some tables or pk/fk constraints are not properly defined | 70 pts
Mostly implemented correctly but significant flaws | 0 pts
Poorly Implemented | 100 pts |
| Total Points: 100 | | | | | |