# Assignment 2



**Due** May 20 by 11:59pm **Points** 15 **Submitting** a file upload

## **Problem Background:**

One of the hardest parts of being a computer scientist is determining and starting projects that you want to work on. Whether this is in an academic setting with a research paper, or just a fun side project, setting up the backend for these project is often a big hurdle. What I want for this project is for you all to 1) choose an interesting personal topic and 2) work on getting the design of the backend fully squared away so we can later implement and use this database on the next assignment.

#### Part 1: Brainstorm

First, I want each student to brainstorm a smallish scale project that is interesting to them. This design must at least have a few tables with some nuance and dependencies between them. Please get creative here, it is an opportunity to start a project that you can have fun with and build on later. If you need any help coming up with a concept please reach out to me and I am happy to help.

## Part 2: Diagram

Next, you want to create a Diagram like we did for the Television example during Lab. You may create either a Chen's diagram or a Crow's foot diagram. You only need to submit one of these.

#### Part 3: Tables

1 of 2 6/22/2021, 12:23 PM

Once you have your diagram, you will want to build out your tables. For this, you do 2 things:

#### a) Plan your Tables

For this section you will want to create dependency diagrams for each table. This is where you will plan out you tables, their attributes and how the attributes line up to each other. You may decide to create multiple tables out of one entity from the design diagram. Please also determine which normal form that your tables fit best into.

## b) Implement your tables

Now that it is all planned out, you will now want to create the tables themselves. For this section please provide the create statements including all constraints

#### What to turn in:

You will turn in a write up that firstly describes your design, why you chose it, and what future project ideas you could build off of the backend.

You will then include your design diagrams along with any notes needed on those.

Lastly you will include your table sql statements used to create the tables as designed.

### NOTE:

You do not need to find or insert any data at this time, just designing the tables themselves

2 of 2 6/22/2021, 12:23 PM