

**Group project (part 2) – Database design**  
**INFO 6540 – Data Management**  
**Winter 2021**  
**20% of final grade**

**Objective**

- To develop your ability to design relational databases and draw entity relationship diagrams.

**Instructions**

- Download and install MySQL Workbench (<https://dev.mysql.com/downloads/workbench/>)
- In MySQL create a new model
- Create the tables required for your database with all the required fields and the appropriate data types, and primary and foreign keys.
- Design the Entity-Relationship Diagram (ERD).
- Save the model (.mwb file) and add it to your GitHub repository.
- Create a documentation file (in Markdown, Word or PDF) that includes a description of each table and each field of your database.

**Important notes:**

- Your database should contain **at least 10 tables, including at least 3 associative tables and no more than 3 validation tables.**
- If your objective statements require a too large number of tables, you can choose to limit your model to a subset of your objective statements.
- Working in MySQL Workbench may not ideal for the early stages of the design phase, when your team will be brainstorming and making decisions about the content and structure of the database. I recommend starting with more flexible tools like Microsoft Word, Excel or Whiteboard (or other similar software) and move to MySQL workbench once you are happy with the initial design.

**To deposit on Brightspace by February 26<sup>th</sup>, 2021 at 11:59 pm Atlantic time:**

- A zip file containing the entire content of your GitHub repository. At this point it should contain:
  - o A README.md file.
  - o A MySQL database model file (.mwb).
  - o A documentation file.
  - o An image or a PDF of your ERD.

**Grade calculation**

- The design of the database is logical (10 points)
- The ERD is complete and clear, and all required relationships are present (5 points).
- The documentation is complete and accurate (5 points)