CIT 225 Final Project Guidelines

• Conceptualize a database (topic of their choice: video games, movies, books, car dealership, whatever) that will contain at least:

• 4 Categories (which will become 4 tables)

• Every table must be related to at least one other table.

• Begin writing out business rules (what categories of information will characterise their database).

• Make sure these business rules highlight the relationships between tables.

• Make sure the business rules insure that each table is related to at least one other table.

• Begin drawing an ERD accordingly.

• Make sure that every relationship is a 1:M relationship.

• Make sure every table has a primary key.

• Include all necessary foreign keys.

• Create the database and tables in MySQL.

• Insert at least 5 records into each table (unless you get permission to have less, which may be necessary depending on your situation). It is almost always the case that each table will have a different number of records. For example, an employee table would likely have many more records than a department table.

• Perform simple queries to prove that all records were inserted in the tables.

• Perform a semi-complex query on each table, retrieving all columns from each table sorted. (You should have one query for each table. If you have 5 tables, you’d have 5 queries).

• Perform a semi-complex query on each table where you select two columns from each table and sort them.

• Perform a semi-complex query on each table where you select two columns from each table and narrow down the results via some where statement that specifies that you only want to retrieve those records where some condition is met. For example, perhaps you only want those employees from Newburgh. Do a similar query for each table and sort the output.

• Perform 10 complex queries wherein you perform the following in each query:

• Join two tables with inner join

• Select 2 colums, one of which is an aggregate (either count or average, or sum) that you alias to something more readable.

• Use the having clause to specify that you only want those records that meet some condition.

• Sort the output.