**CSE 3241 Project Checkpoint 01**

**Entities and Relationships**

Names (team members): Date:

**1 - In a NEATLY TYPED document each student, individually, needs to submit (Upload it to Carmen) the following document by the Checkpoint 1 due date, providing the following:**

1. Based on the requirements given in the project overview, list the entities to be modeled in this database. For each entity, provide a list of associated attributes (entities usually have multiple attributes).
2. Based on the requirements given in the project overview, what are the various relationships between entities? (For example, “ARTIST entities author ALBUM entities”, “ALBUM entities contain TRACK entities”, etc.)
3. Propose at least two additional entities that it would be useful for this database to model beyond the scope of the project requirements. Provide a list of possible attributes for the additional entities and possible relationships they may have with each other and the rest of the entities in the database. Give a brief, one sentence rationale for why adding these entities would be interesting/useful to the stakeholders for this database project.
4. Give at least four examples of some informal queries/reports that it might be useful for this database to generate. Include one example for each of the additional entities you proposed in question 3 above.
5. Suppose we want to add a new artist or a new actor to the database. How would we do that given the entities and relationships you’ve outlined above? Given your above description, is it possible to add a new artist or actor to your database without knowing the title of any albums or movie they have released? If not, revise your model to allow for artists or actors to be added as separate entities.
6. Determine at least three other informal update operations and describe what entities would need to have attributes altered and how they would need to be changed given your above descriptions. Include one example for each of the additional entities you proposed in question 3 above.
7. Provide an ER diagram for your database. Make sure you include ALL entities and relationships in question 1, 2, above ***INCLUDING the entities for question 3 also***, and remember that ***EVERY*** entity in your model needs to connect to another entity in the model via some kind of relationship (No entity should be isolated). Consider the direction of each relationship, do not forget about specifying the type of relationship (1 to 1, 1 to N, N to 1, or N to N).

**2 – Individual & Team submission:** **Before the team submission, each student must submit his/her own individual Checkpoint report including the ER to the Carmen dropbox; after this, all the members of the team need to meet to discuss which one of the ER models proposed the team will choose to be submitted as the team ER diagram for the project, together with all the questions answered. The team may do some adjustments/corrections to the final ER as well as the other questions in the report.**