CSE 3241 Project Checkpoint 01

In a **NEATLY TYPED** document, provide the following:

1. List names of all your team members. Provide a paragraph explaining how you have been working and plan to work as a team under remote setup, how you plan to communicate with each other, share work, etc. Any issues related to time differences, technology constraints, or any other issues/concerns?

2. 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. Make sure that your design allows for proper handling of buyer/seller interactions such as orders, payments, feedback, and karma points.

3. Based on the requirements given in the project overview, what are the various relationships between entities? (For example, "A CUSTOMER places an ORDER").

4. 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 rationale for why adding these entities would be interesting/useful to the stakeholders for this database project.

5. Give at least four examples of some informal queries/reports that it might be useful for this database to support. Include one example for each of the additional entities you proposed in question 4 above.

6. CROSS-CHECK 1: Suppose we want to add a new IP Item to the database. How would we do that given the entities and relationships you have outlined above? Is it possible to add up to five images for the IP Item? Is it possible for the Buyer to pay using more than one payment method such as Karma points and credit card payment combined? Is it possible for the Buyer to purchase multiple IP Items from multiple Sellers at the same time as part of one order? Can a Buyer leave feedback/rating for an item purchased from a particular Seller/Store? Explain how your model supports these possibilities. If it does not, make changes that allow your design to support all these requirements.

7. CROSS-CHECK 2: Refer to the Project Overview document, Main DB functionalities section. Confirm that your model supports ALL listed minimum requirements listed in the table. If it does not, make changes that allow your design to fully support all listed requirements.

8. 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 4 above. 'Informal' means stated in a plain sentence format. 'Update' includes making changes, adding, or deleting data to your database that may involve one or more entities.

9. Provide an ER diagram for your database. Make sure you include ALL the entities and relationships you determined in the questions above INCLUDING the entities for question 4 above. Remember that (E)ER model cannot have any standalone entities. Ensure that you use a proper notation and include a legend. Each entity must have a proper key. All relationships must have cardinality and participation shown. Be mindful about using weak entities. Check for presence and correct identification of all attributes. You can use draw.io for your diagram or another drawing tools. Hand drawn diagrams will not be accepted.