

CS 447

Homework 9

1. a) Create an Entity–Relationship Diagram (ERD) for a database that manages a book publisher.

- i) Draw the ERD using the UML notation.
- ii) Draw the ERD using the Chen notation.

b) Implement the database you designed in Part 1 using MySQL.

Apply all appropriate constraints, including primary keys, foreign keys, unique constraints, and any necessary integrity rules.

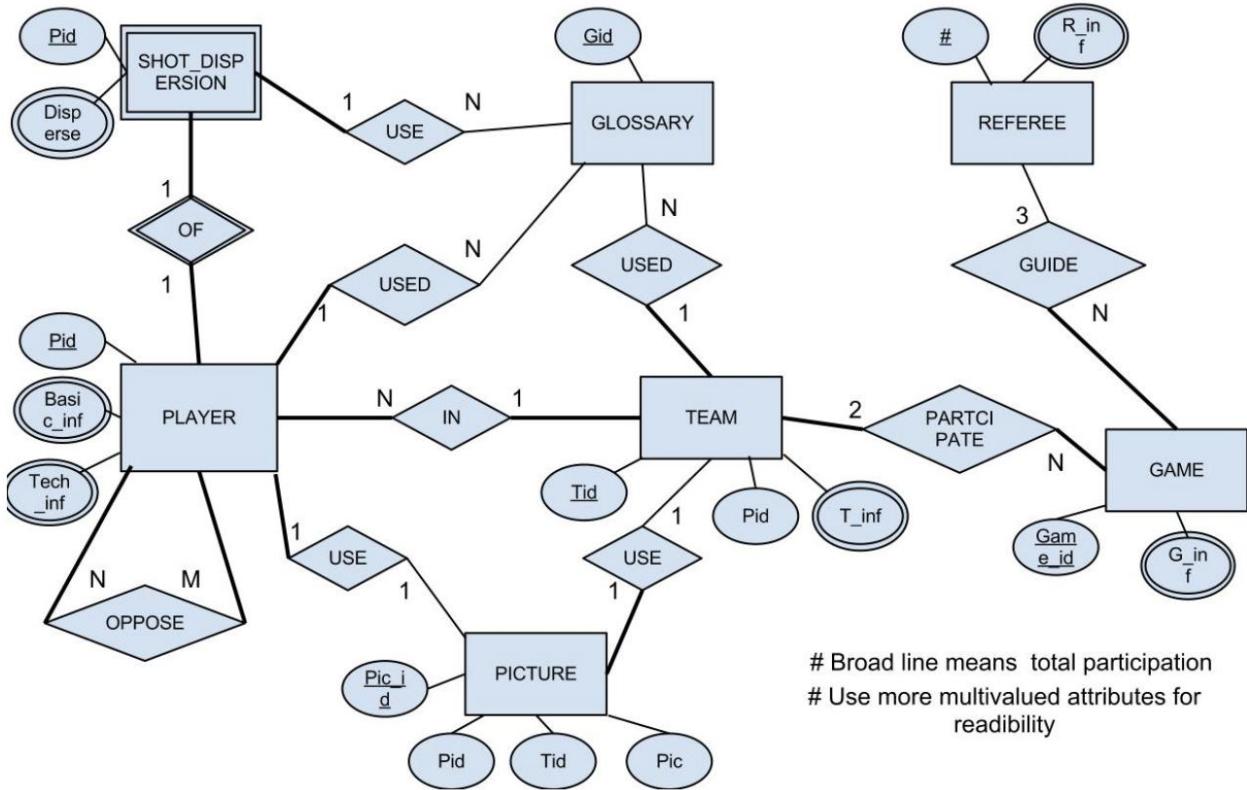
c) Populate the database with sample data for testing.

Add the following records:

- i) At least **three publishers**.
- ii) At least **5 books**.
- iii) At least **five authors**.

Finally, run a SELECT * query on each table to show the inserted data.

2. Explain and justify each entity and relationship shown in the ER diagram below:



Submission: Submit a **.pdf** file with all the diagrams and sql queries.