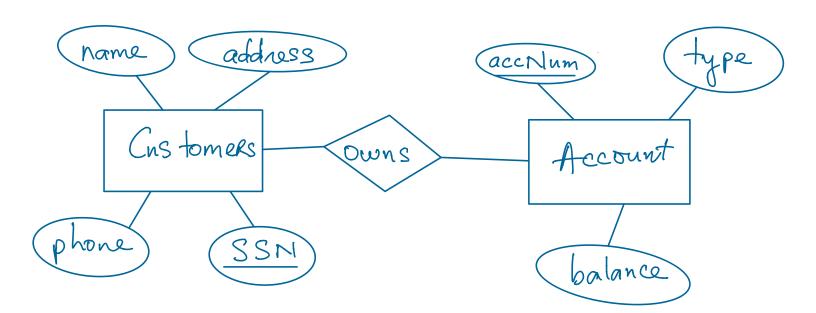
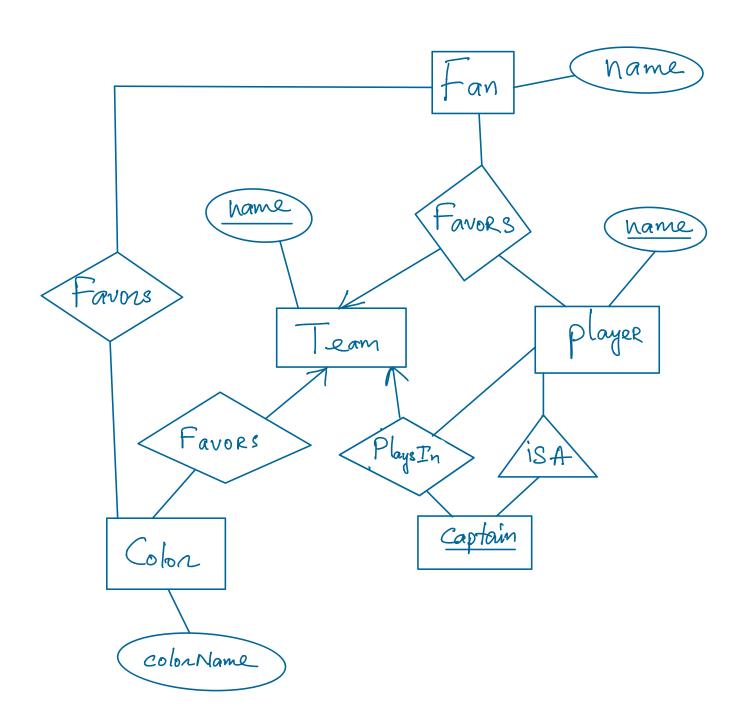
- -- UNIVERSITY OF MASSACHUSETTS LOWELL
- -- COMP3090: DATABASE I
- -- STUDENT: PHONG VO SID: 01790283
- -- HOMEWORK 7

**Exercise 4.1.1:** Design a database for a bank, including information about customers and their accounts. Information about a customer includes their name, address, phone, and Social Security number. Accounts have numbers, types (e.g., savings, checking) and balances. Also record the customer(s) who own an account. Draw the E/R diagram for this database. Be sure to include arrows where appropriate, to indicate the multiplicity of a relationship.



**Exercise 4.1.3:** Give an E/R diagram for a database recording information about teams, players, and their fans, including:

- 1. For each team, its name, its players, its team captain (one of its players), and the colors of its uniform.
- 2. For each player, his/her name.
- 3. For each fan, his/her name, favorite teams, favorite players, and favorite color. Remember that a set of colors is not a suitable attribute type for teams. How can you get around this restriction?



**Exercise 4.1.6:** Design a genealogy database with one entity set: People. The information to record about persons includes their name (an attribute), their mother, father, and children.

