CSE 370– Database Systems
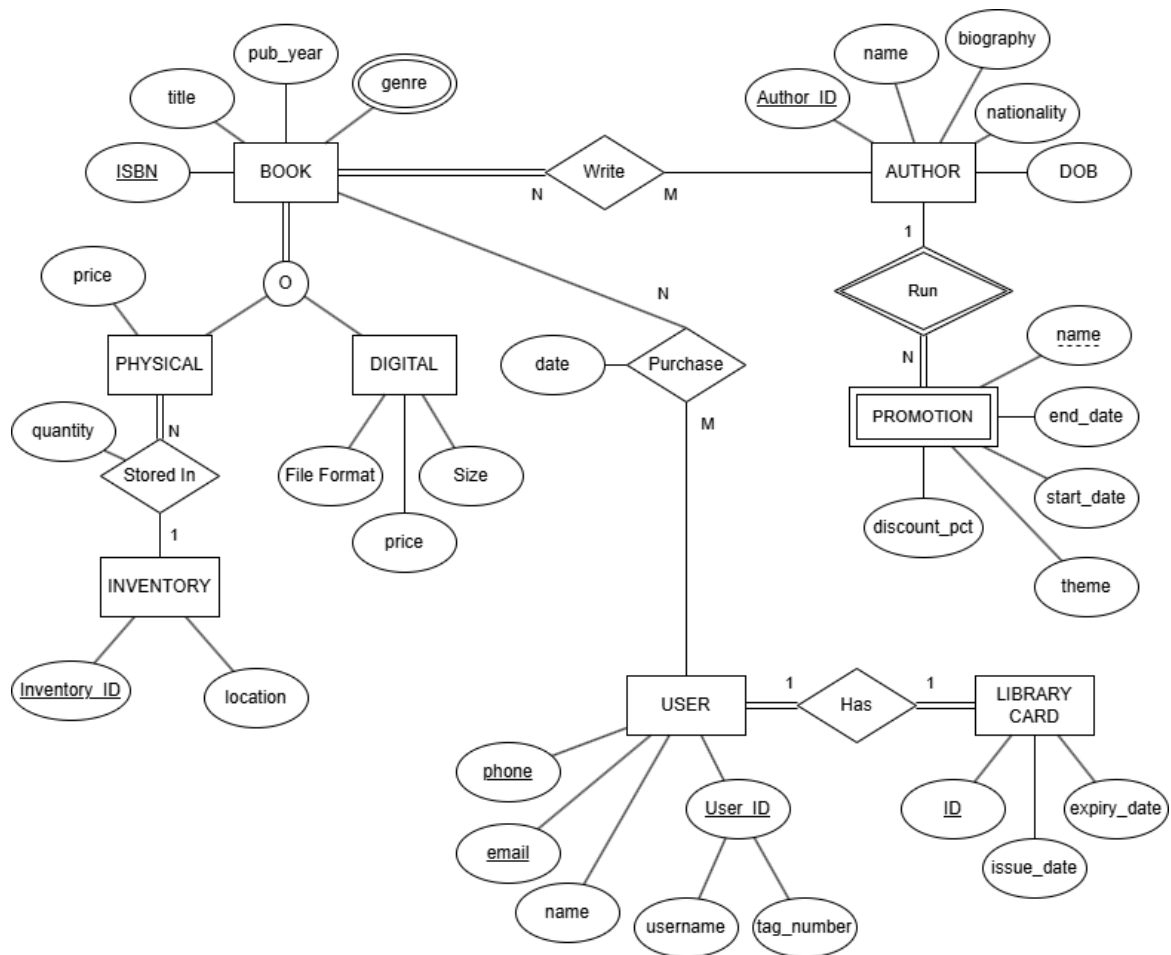
Assignment 2

Summer 2024

Question 1:   [10]

Construct a schema diagram given the EER diagram below.

Question 2:   [2 + 8 = 10]

On a freelance platform, every freelancer has the following core attributes: Unique ID, name, email, hourly rate and rating. Freelancers may or may not fall under the following categories: Designer, Developer and Writer. There are no other categories. Some freelancers may fall under multiple categories, for example, being both a Designer and a Writer, while others may not belong to any specific category at all. Designers have a design tool attribute, Developers have a programming language attribute and Writers have a writing genre attribute.

A. Represent the above scenario using an EER diagram.   [2]

B. There are four options for mapping specialization/generalization. They are:

      8A: separate tables for each subclass and superclass
      8B: tables for only subclasses
      8C: 1 table with 1 type attribute
      8D: 1 table with many type/flag attributes

Map the above EER using all four options. If any option is not applicable for the above scenario then explain why.   [4 X 2 = 8]