

Assignment 5

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Subject:
Software Development
Concepts

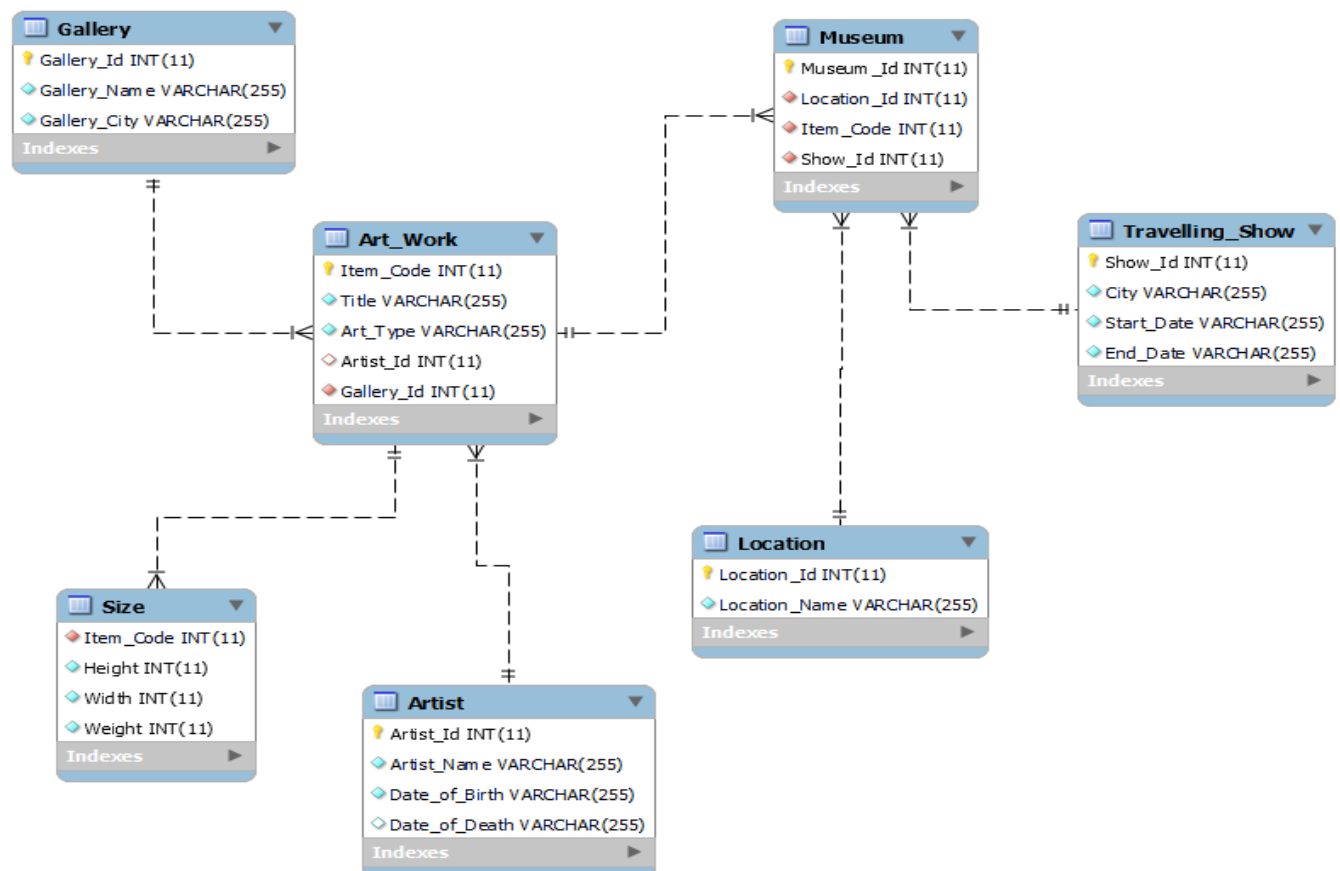
Professor:
Mike McAllister

Problem#1

Overview

Learn to design and create a database schema using an entity-relationship diagram.

Entity-relationship diagram



Description

Entities

Size, Art_Work, Artist, Gallery, Museum, Travelling_Show, Location

Relations

- Artwork has a one-to-one relationship because I have mapped artwork to one size. Multiple artworks can be created by a single artist. However, only the records of those artists who have created only arts are present in the database. As a result, a one-to-many relationship will be formed here. It is also possible that artwork will not be associated with any artist, in that case, none to one relationship will be generated.
- A gallery borrows one or more works of art from various museums forming one to many relationships. If artwork is loaned, it can only be associated with one gallery. As a result, a one-to-one relationship is formed.
- Multiple artworks in a single museum can form a one-to-many relationship. There are instances where artwork is not associated with a museum, resulting in a none to one relationship.
- Location of only those artworks can be found which are housed in a museum otherwise it does not have a location. Here we have none to one relationship. Only one location is assigned to the artwork that is the location of its museum which will form one to one relation.
- A traveling show will have multiple artworks coming from various museums having a relationship of one to many.