

University of Calgary

Progress Report:

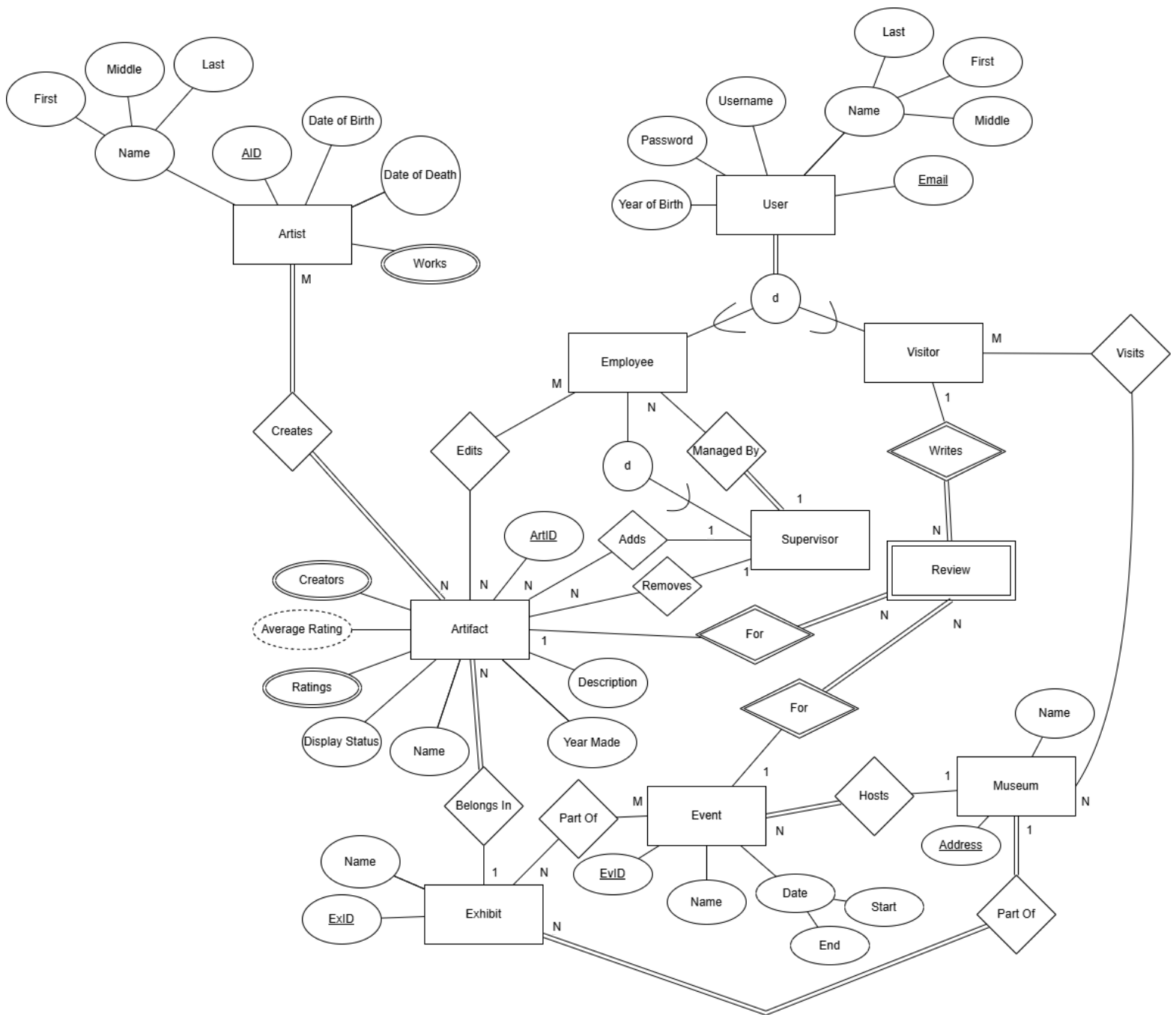
Enhanced Entity Relationship Diagram

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CPSC 471 W25: Database Management Systems

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14. Feb 2025



Assumptions

The USER entity must be either EMPLOYEE or VISITOR, but not both. Thus, EMPLOYEE and VISITOR inherit their attributes from the USER superclass. EMPLOYEE can be a SUPERVISOR. Given that SUPERVISOR is a subclass of EMPLOYEE, it once again inherits its attributes from USER. An EMPLOYEE is sometimes managed by a SUPERVISOR who must manage at least one EMPLOYEE. EMPLOYEES can edit multiple ARTIFACTS and each ARTIFACT can be edited by multiple EMPLOYEES. A SUPERVISOR (in addition to editing power inherited from EMPLOYEE) can also add and remove ARTIFACTS.

A VISITOR can write multiple REVIEWS, and each REVIEW must have been written by a VISITOR. Each VISITOR can visit multiple MUSEUMS, and MUSEUMS can be visited by multiple VISITORS.

An ARTIFACT can have multiple REVIEWS and each REVIEW pertains to one ARTIFACT. An ARTIFACT must belong to an EXHIBIT, which can hold multiple ARTIFACTS. Each EXHIBIT is housed in a MUSEUM, which holds at least one EXHIBIT. A MUSEUM can host multiple EVENTS, and each EVENT must be hosted by a MUSEUM. It is assumed that each MUSEUM has its own unique address that acts as a primary key. Each EVENT can include multiple EXHIBITS, and each EXHIBIT can be featured in multiple EVENTS. An EVENT can have many REVIEWS, and each REVIEW pertains to that specific EVENT.

Each ARTIST must have created at least one ARTIFACT to be classified as an artist, and each ARTIFACT must have been created by at least one ARTIST.