

ENSF 300 Final Report



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Task Assignment and Distribution

Group Member	Shared Tasks	Individual Tasks
Mario	<ul style="list-style-type: none">- Creation of the EER and the relational model.- Creation of report and query file.	<ul style="list-style-type: none">- Creation and management of the python application.
Nicole	<ul style="list-style-type: none">- Creation of the EER and the relational model.- Creation of report and query file.	<ul style="list-style-type: none">- Creation and population of the database.

These tasks were split up accordingly in order to save time and ensure that there was little confusion. Since these tasks are large in scale it was best to have one person work on one section of the project so that the work done to either the database or the python application stays consistent and there is no confusion. Despite the separation there must still be strong communication, for example directly notifying the other partner of a pending pull request or asking questions about the sections of the python application to ensure the database aligns with its design.

Creating the EER Diagram

While developing the EER diagram it is crucial to ensure that there are as few null values as possible, and that there is no redundant data. In order to meet those specifications, decisions were made such as the disjoint from ART_OBJECTS to PAINTING, SCULPTURE/STATUE and OTHER as well as the section of PERMENENT_COLLECTION and BORROWED. This disjoint makes clear that these entities are different, but they still inherit the same main attributes from ART_OBJECTS. SCULPTURE/ STATUE was made into a single entity due to them sharing the same attributes and thus not needing to be separate. Many of the relationships and joints were made with the constraint that they are mandatory for ART_OBJECTS to participate in. An art piece must have an artist and be either borrowed or part of a private collection. However, the relationship between EXHIBITIONS and ART_OBJECTS is non-mandatory from the art pieces due to them not needing to be in a current exhibition and possibly being lent out or in storage. The section of BORROWED and COLLECTIONS are two separate entities due to them needing different attributes specific to their type. There are no identifying relationships or weak entities as any of the entities present can exist without the need for an art piece due to them having either primary keys or foreign keys that depends on other different entities and not ART_OBJECTS. Finally, all attributes are normal as to stay consistent and reliable.