Aquarium & Fish Store Mini World

Requirements:

There are two parts to this mini world(The Aquarium and the Fish Store), so we need entities to represent both parts.

Entities:

Visitor: People visiting the aquarium

Attributes: ticket\_num, age\_group, last\_name, first\_name

Ticket: Tickets that are purchased by customers. Price dependent on age group

Attributes: ticket\_num, price

Employee: Entity representing employees

Attributes: employee\_id, last\_name, first\_name, department, position, hire\_date

Customer: Entity representing customers of the fish store

Attributes: customer\_id, last\_name, first\_name, order\_num

Order: Customer order at the fish store

Attributes: order\_num, total, num\_items

Species: Represents the species in the aquarium

Attributes: species\_id, weight\_g, length\_mm, width\_mm

Products: Products for sale in the store

Attributes: product\_id, price, product\_type, name

Inventory: Inventory of products

Attributes: product\_id, count

To determine the requirements and entities needed, I researched the different departments of an aquarium and a fish store. I looked for things that a database would include and concluded that these entities are required for the database.

Final Report

I believe the projects goal was to familiarize us with the database making process. Not only coding but thinking as well. Before even looking at MySQL workbench, I needed to think about the entities needed for my database as well as what relationships will be present between the entities. Creating the relationships within the UML diagram was the main challenge for me. It is much easier to think about relationships in your head as opposed to diagram them with primary and foreign keys. I really had to think about my entities and how they related to one another. All in all, this project helped me become much more familiarized with databases. Prior to this course, I already knew a good amount about SQL but the actual database creation process was new to me. This project challenged me and allowed me to develop those skills.