Jennifer Hoitenga

Professor Martinez

January 12th, 2025

Module 5.3 Assignment

Business rules:

* one STUDIO can produce many FILM(s)
* one FILM(s) can be described using one Genre

A close-up of a computer code

Description automatically generated

Using Visual Paradigm, I created an ERD based solely on the provided business rules without making any assumptions. The cardinality from STUDIO to FILM is "One to Many" (or "One to Zero or More"), as a STUDIO may exist without producing any FILMs initially but can produce one or many FILMs over time. The cardinality from FILM to GENRE is "One to One", as each FILM must have one GENRE for categorization, while a GENRE can describe multiple FILMs.

In the diagram:

* Primary keys are marked with a + sign and bold font.
* Foreign keys are in italics.

Relationships are labeled for clarity:

* The relationship "Produces" links STUDIO to FILM, showing a STUDIO can produce zero or more FILMs.
* The relationship "Described By" links FILM to GENRE, indicating each FILM is categorized by one GENRE.

To improve readability:

* Entities are color-coded in a monochromatic orange color scheme for consistency.
* Cardinality symbols (1, 0..\*, and 1..1) near the relationships show constraints.
* FILM is centrally located between STUDIO and GENRE to emphasize its role connecting STUDIO and GENRE.