JSS MAHAVIDHYAPEETHA

JSS SCIENCE AND TECHNOLOGY UNIVERSITY

SUBJECT: DATABASE MANAGEMENT SYSTEM

“MOVIE DBMS”

Under the guidance of

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Submitted By

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1. INTRODUCTION

The Movie Database Management System is a system that uses a custom-made database of movies and information related to each movie that can be accessed by the users in the form of a webpage where they will be able to search, query, and browse through our database of movies.

We have all been at a position sometime in our life where we cannot decide what to watch and need to browse through a huge database of movies and shows that would let you to filter through multiple attributes and query for a list of movies that you could choose from to watch with your friends tonight and that is exactly what our project aims to build.

By understanding how IMDB handles a large collection of movies and how their webpage makes use of its database we can replicate the results hence understanding the process of building a database that can be easily expanded to fit a large collection of data and making sure that adding, retrieving, modifying and removing records is a simplified process while making sure that the information entered is verifiable. Hence by building this project we are exposed to real life applications that requires us to plan the structure of the database before adding data to it.

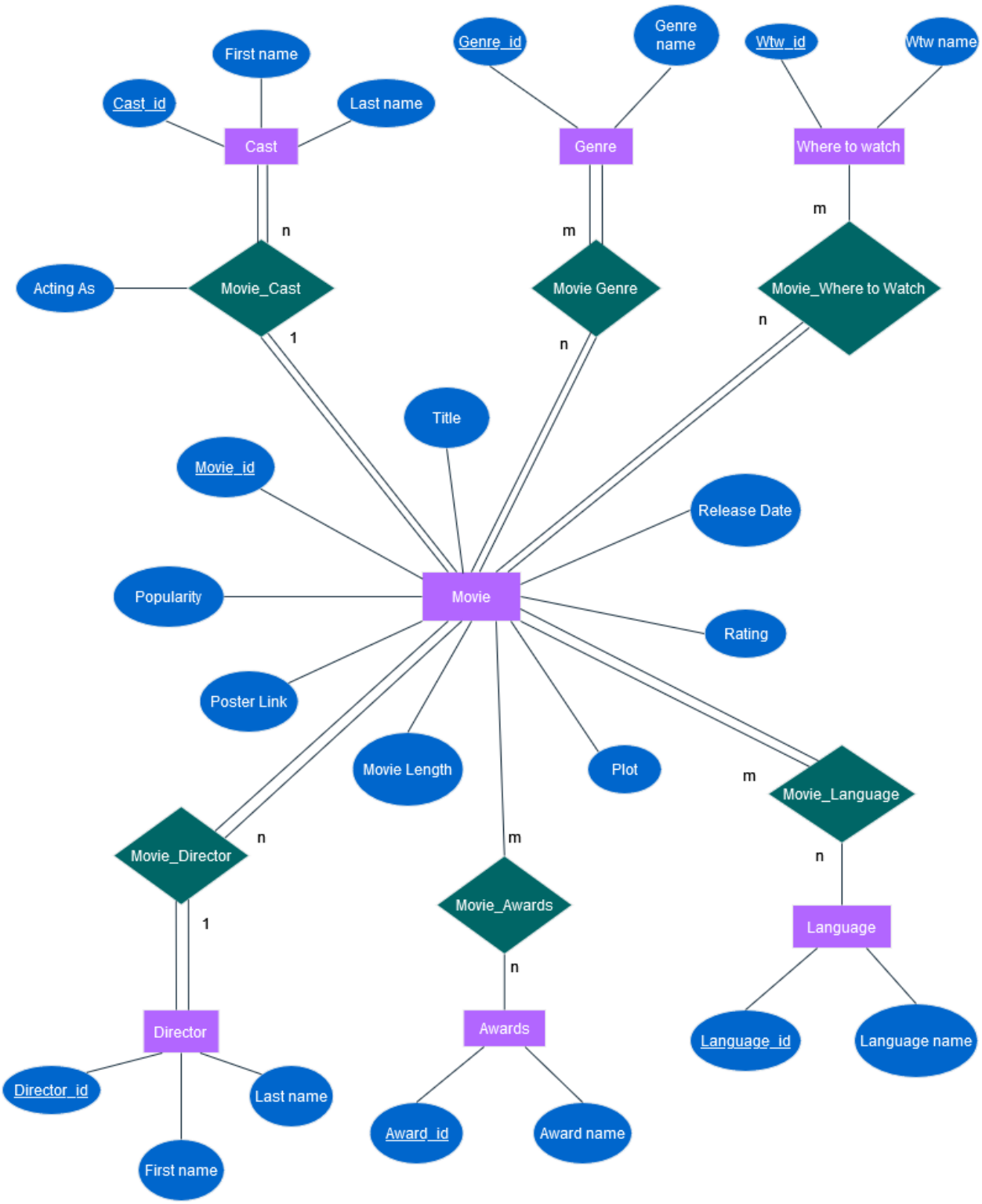
2. OBJECTIVES AND KEY FEATURES

1. Movie Management:
    - Add, edit, and delete movies.
    - Store movie details such as Title, Release Date, Rating, Plot, Movie Length, Poster Link, and Popularity.
    - Associate movies with genres, languages, awards, cast, and directors.
2. Genre Management:
    - Add, edit, and delete movie genres.
    - Associate genres with movies using a many-to-many relationship.
3. Where to Watch Management:
    - Manage information about where users can watch the movies (e.g., streaming platforms like Netflix, Amazon Prime).
    - Associate this information with movies.
4. Language Management:
    - Add, edit, and delete movie languages.
    - Associate languages with movies (supporting both one-to-one and many-to-many relationships).
5. Award Management:
    - Add, edit, and delete movie awards.
    - Associate awards with movies using a many-to-many relationship.
6. Cast Management:
    - Manage information about movie cast members (e.g., actors).
    - Associate cast members with movies (supporting one-to-many relationships).
7. Director Management:
    - Manage information about movie directors.
    - Associate directors with movies (supporting many-to-one relationships).
8. User-Friendly Webpage:
    - Create a user-friendly webpage for users to browse and search for movies.
    - Implement search and filter options based on movie attributes (e.g., genre, language, rating).
    - Display movie details, including posters and relevant information.
9. Scalability:
    - Design the system to handle a growing collection of movies and user interactions.

3. DATA RELATIONSHIPS

- MOVIE (MovieID: int, Title: string, GenreID: int, ReleaseDate: date, Rating: decimal, Plot: string, DirectorID: int, CastID: int, Wtw: string, MovieLength: int, PosterLink: string, Language: string, Awards: string, Popularity: int)
- GENRE (GenreID: int, GenreName: string)
- WHERE_TO_WATCH (WtwID: int, WtwName: string)
- LANGUAGE (LanguageID: int, LanguageName: string)
- AWARD (AwardID: int, AwardName: string)
- CAST (CastID: int, FirstName: string, LastName: string)
- DIRECTOR (DirectorID: int, FirstName: string, LastName: string)
- MOVIE_GENRE (MovieID: int, GenreID: int) m:n
- MOVIE_WTW (MovieID: int, WtwID: int) m:n
- MOVIE_LANGUAGE (MovieID: int, LanguageID: int) m:n
- MOVIE_AWARD (MovieID: int, AwardID: int) m:n
- MOVIE_CAST (MovieID: int, CastID: int, ActingAs: string) 1:n
- MOVIE_DIRECTOR (MovieID: int, DirectorID: int) n:1

4. ER DIAGRAM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Cast
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Acting As
Movie_Cast
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Genre_id
Genre name
Genre
m
Movie Genre
n
Wtw_id
Wtw name
Where to watch
m
Movie_Where to Watch
n
Title
Movie_id
Release Date
Popularity
Movie
Rating
Poster Link
Movie Length
Plot
m
Movie_Language
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Language
Language_id
Language name
Movie_Director
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n
Awards
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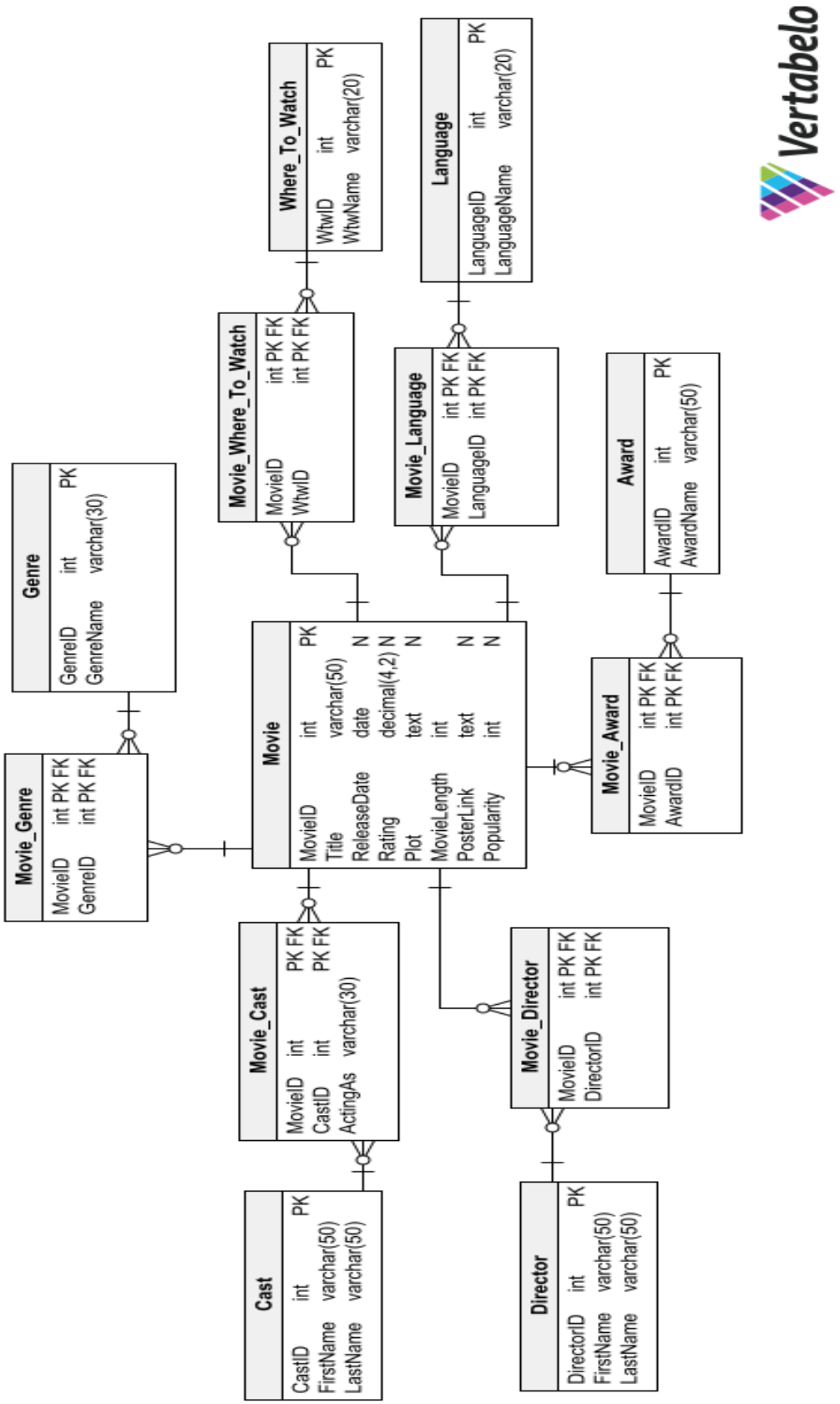
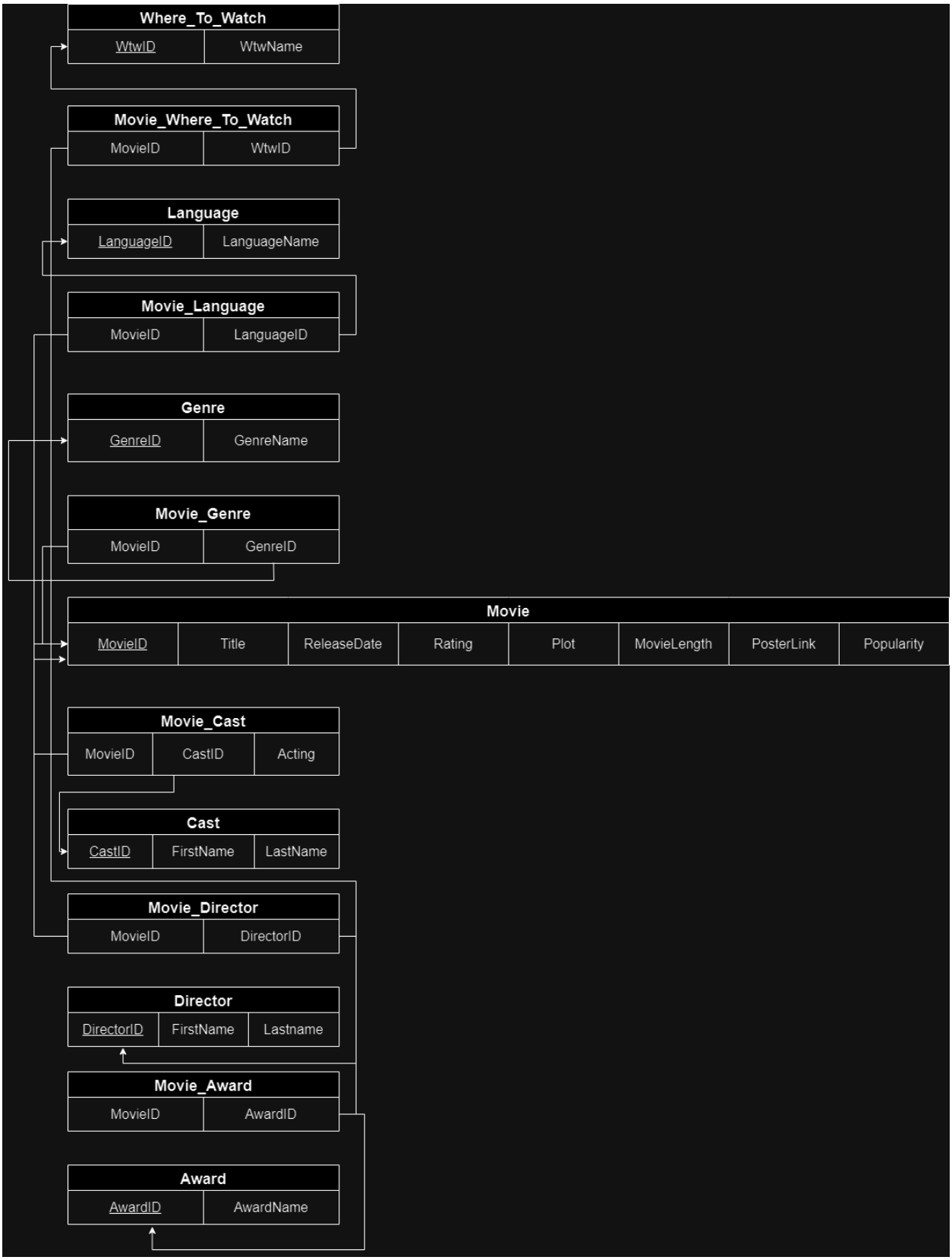
Award name

5. SCHEMA DIAGRAM




Where_To_Watch
WtwID
WtwName
Movie_Where_To_Watch
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WtwID
Language
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LanguageName
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GenreID
Movie
MovieID
Title
ReleaseDate
Rating
Plot
MovieLength
PosterLink
Popularity
Movie_Cast
MovieID
CastID
Acting
Cast
CastID
FirstName
LastName
Movie_Director
MovieID
DirectorID
Director
DirectorID
FirstName
Lastname
Movie_Award
MovieID
AwardID
Award
AwardID
AwardName

6. CONCLUSION

A movie database serves as a comprehensive repository of film-related statistics, presenting users the capability to access details about movies, such as cast and group, plot summaries, reviews, scores, release dates, and more. It acts as a centralized platform that aids in coming across, exploring, and maintaining track of numerous movies, permitting fanatics to make knowledgeable decisions about what to watch primarily based on their preferences. This tremendous collection of information presents a precious useful resource for both casual viewers and avid cinephiles, fostering a deeper appreciation and knowledge of the world of cinema.

7. REFERENCES

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