MOVIES DATABASE

DATABASE MANAGEMENT SYSTEMS
Subject code – 19PC1CS04

COURSE BASED PROJECT

VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY
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DECLARATION

The **course based project** titled **MOVIES DATABASE** has been executed under the Guidance of

Dr.C.Kiran Mai, as per the academic requirements at VNR VJIET. To the best of our knowledge we were able to design and implement, while understanding the key concepts of the subject, Data Base Management System. We are indebted to the support and motivation extended by HOD and faculty of the department, in completing our project.

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Introduction

Database Management system is a collection of interrelated and persistent data. It's a set of application Programs used to access, update and manage data.

The goal of DBMS is to provide an environment that is both convenient and efficient to use in

i) Retrieving information from DB and ii) Storing information into DB. Databases

are designed to manage large repository of information. This involves

i) Definition of structures for information storage (Data Modeling) ii) Provision of mechanisms for the manipulation of information (file and system structure, query processing).
iii) Providing safety of the information in the database (Crash Recovery and security).
iv) Concurrency control when system is shared by multiple users.

PURPOSE OF DATABASE SYSTEM:

1. To see why DBMS is necessary, consider a typical example of the file processing system supported by a conventional operating system.

   Application is employee database in an institute :

   i) Employee details, salary payment, classes handled are kept in the permanent system files.

   ii) Application programs are written to manipulate files to perform the following tasks:

   a) List the total employee in the institute.

   b) List the subjects handled by the faculty
   c) List the lab courses assisted by the operators.

   d) Generate the monthly statement of salaries paid.

2. Development of the system proceeds as follows:

   i) New application Programs to be written as need arises.

   ii) New permanent files are to be created as required.

   iii) ***But*** *over a long period, each file may be of a different format, and*

   iv)Application programs may be in different languages.

3. There are problems with the file processing system

   i) Data Redundancy and inconsistency

   a) Same files duplicated at several places.

   b) All copies are not updated properly.

ii) Difficulty in accessing the data

May have to write a new application program to satisfy an unusual request.

Eg: Find the faculty with the same postal code.

iii) *Data isolation*: Because data are scattered in various files, and files may be in different formats, writing new application programs to retrieve the appropriate data is difficult.

iv) *Atomicity Problems*.

v) *Concurrent access anomalies*:

a) Concurrency is required for faster response time.

b) Protection from concurrent updates.

vi) Security

Every user is able to handle the complete data. Restricted access cannot be applied.

Eg: Payroll details to be viewed by accounts department only.

This is difficult to enforce through an application program.

vii) Integrity problems

Difficulty in enforcing the constraints to automatically check the input or modification of data.

Advantage of DBMS

- No redundant data – Redundancy removed by data normalization
- Data Consistency and Integrity – data normalization takes care of it too
- Secure – Each user has a different set of access
- Privacy – Limited access
- Easy access to data and Flexible storage
- Easy recovery

Disadvantages of DBMS:

- DBMS implementation cost is high compared to the file system
- Complexity: Database systems are complex to understand

Performance: Database systems are generic, making them suitable for various applications. However this feature affects the performance for certain applications

Problem Definition

ABSTRACT

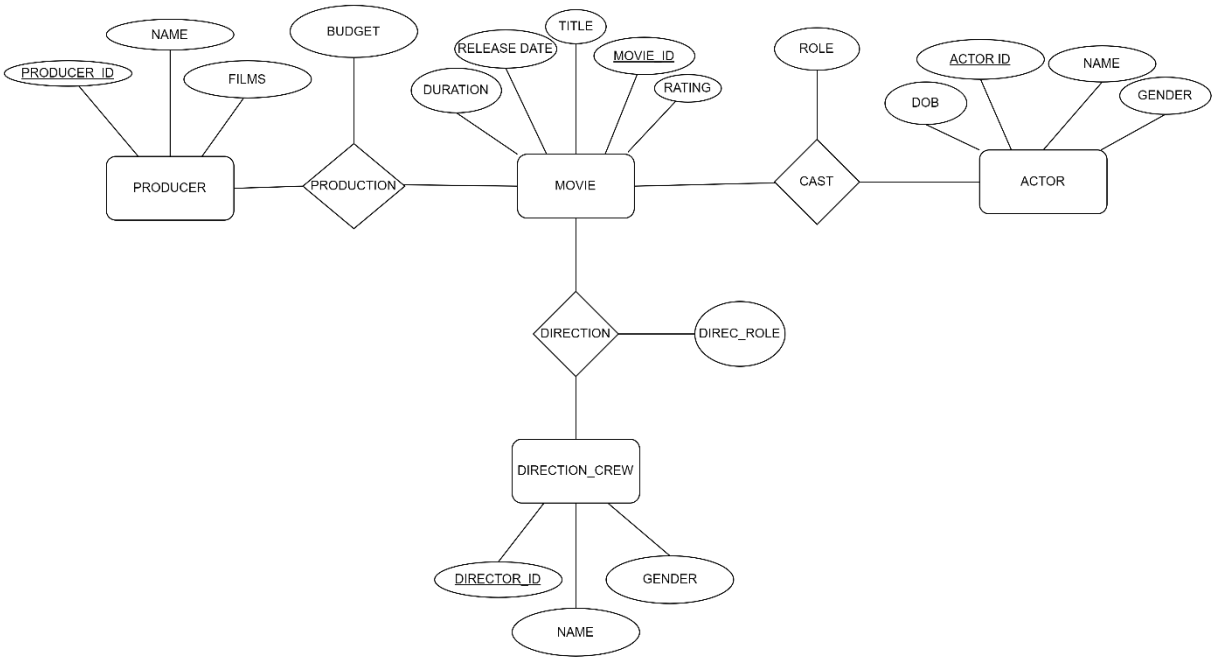
It is created for the purpose of viewing the basic information about the data i.e the actors, cast, the release year, etc. Although there are multiple sites to view the information about the movie, our project aims at the faster accessibility and retrieval of the information. The database also enables the user to view the ratings of the movie and helps them to choose a movie of their interest considering an essential factor such as ratings.

In the current scenario, a movie - goer (user) has to visit more than one website to get the following basic movie information.

- List of movies playing in theaters, DVD/Blu-ray movies
- IMDB Rating; Rotten Tomatoes Rating,etc.
- Cast & Crew, Year Released, Runtime.

Therefore, this project was started with the intention of developing a one-stop destination for the user to view all the data by providing the above information for their reference.

ER DIAGRAM



(Fig.)Movie database ER Diagram

SCHEMA

MOVIE

Column Name	Datatype	Width	Constraints
Movie_id	**VARCHAR**	**3**	**PRIMARY KEY**
Title	**VARCHAR**	**20**	**NOT NULL**
Release Date	**DATE**	**-**	**NOT NULL**
Rating	**VARCHAR**	**8**	**NOT NULL**
Duration	**VARCHAR**	**10**	**NOT NULL**

CAST

Column Name	Datatype	Width	Constraints
Movie_id	**VARCHAR**	**3**	**FOREIGN KEY**
Actor_id	**VARCHAR**	**3**	**FOREIGN KEY**
ROLE	**VARCHAR**	**10**	**NOT NULL**

ACTOR

Column Name	Datatype	Width	Constraints
Actor_id	**VARCHAR**	**3**	**PRIMARY KEY**
Name	**VARCHAR**	**30**	**NOT NULL**
Gender	**VARCHAR**	**1**	**NOT NULL**
DOB	**DATE**		**NOT NULL**

PRODUCTION

Column Name	Datatype	Width	Constraints
Movie_id	**VARCHAR**	**3**	**FOREIGN KEY**
Producer_ID	**VARCHAR**	**3**	**FOREIGN KEY**
Budget	**NUMBER**	**10**	**NOT NULL**

PRODUCER

Column Name	Datatype	Width	Constraints
Producer_id	**VARCHAR**	**3**	**PRIMARY KEY**
Name	**VARCHAR**	**30**	**NOT NULL**
Films	**VARCHAR**	**20**	**NOT NULL**

DIRECTION

Column Name	Datatype	Width	Constraints
Movie_id	**VARCHAR**	**3**	**FOREIGN KEY**
Director_id	**VARCHAR**	**3**	**FOREIGN KEY**
Direc_role	**VARCHAR**	**15**	**NOT NULL**

DIRECTION_CREW

Column Name	Datatype	Width	Constraints
Director_id	**VARCHAR**	**3**	**PRIMARY KEY**
Name	**VARCHAR**	**20**	**NOT NULL**
Gender	**VARCHAR**	**1**	**NOT NULL**

INSTANCE

MOVIE

MOVIE_ID	TITLE	RELEASE DATE	RATING	DURATION
M1	TEMPER	13-02-2015	7.5/10	147min
M2	BRAHMOTSVAM	20-05-2016	4.3/10	147min
M3	EEGA	06-07-2012	7.7/10	134min
M4	BILLA	27-11-2009	6.2/10	149min
M5	ARYA-2	20-04-2018	7.4/10	155min
M6	GEETHA GOVINDAM	15-08-2018	7.7/10	144min
M7	UPPENA	12-02-2021	6.8/10	147min
M8	BAADSHAH	05-04-2015	6.4/10	164min
M9	PUSHPA	17-12-2021	8.0/10	178min
M10	SARILERU NEEKEVVARU	11-01-2020	6.0/10	169min
M11	SHYAM SINGHA ROY	24-12-2021	8.3/10	157min
M12	AGNYATHAVASI	10-01-2018	4.6/10	158min

ACTOR

ACTOR_ID	NAME	GENDER	DOB
A1	JR.NTR	M	20-05-1983
A2	KAJAL AGARWAL	F	19-06-1985
A3	MAHESH BABU	M	09-08-1975
A4	SAMANTHA RUTHPRABHU	F	28-04-1987
A5	PRABHAS RAJU UPPALAPATI	M	23-10-1979
A6	NANI	M	24-02-1984
A7	ALLU ARJUN	M	08-04-1982
A8	RASHMIKA MANDANNA	F	05-04-1996
A9	KRITHI SHETTY	F	21-09-2003
A10	SAI PALLAVI	F	09-05-1992
A11	VAISHNAV TEJ PANJA	M	13-01-1990
A12	PAWAN KALYAN	M	02-09-1971
A13	ANU IMMANEUL	F	28-03-1996
A14	KEERTHI SURESH	F	17-10-1992
A15	ANUSHKA SHETTY	F	07-11-1981
A16	VIJAY DEVERAKONDA	M	09-05-1989
A17	PRAKASH RAJ	M	26-03-1965
A18	SUDEEP KICHA	M	02-09-1973
A19	VIJAY SETHUPATHI	M	16-01-1978
A20	SUNIL VARMA	M	28-02-1974

CAST

MOVIE_ID	ACTOR_ID	ROLE
M1	A1	HERO
M1	A2	HEROINE
M1	A17	VILLAIN
M2	A3	HERO
M2	A2	HEROINE
M2	A4	HEROINE
M3	A6	HERO
M3	A4	HEROINE
M3	A18	VILLAIN
M4	A5	HERO
M4	A15	HEROINE
M5	A7	HERO
M5	A2	HEROINE
M6	A16	HERO
M6	A8	HEROINE
M7	A9	HEROINE
M7	A11	HERO
M7	A19	VILLAIN
M8	A1	HERO
M8	A2	HEROINE
M9	A7	HERO
M9	A8	HEROINE
M9	A20	VILLAIN
M10	A3	HERO
M10	A8	HEROINE
M11	A6	HERO
M11	A10	HEROINE
M11	A9	HEROINE
M12	A12	HERO
M12	A14	HER0
M12	A15	HEROINE

PRODUCER

PRODUCER_ID	NAME	FILMS
P1	BANDLA GANESH	31
P2	PRASAD V POTLURI	11
P3	DAGGUBATI SURESH BABU	25
P4	U V KRISHNAM RAJU	15
P5	ADITYA BABU	6
P6	BUNNY VAS	9
P7	NAVEEN YERNENI	11
P8	DIL RAJU	52
P9	VENKAT BOYINAPALLI	8
P10	S RADHA KRISHNA	10

PRODUCTION

MOVIE_ID	PRODUCER_ID	BUDGET
M1	P1	35CR
M2	P2	75CR
M3	P3	40CR
M4	P4	15CR
M5	P5	21CR
M6	P6	8.5CR
M7	P7	22CR
M8	P1	55CR
M9	P2	225CR
M10	P8	75CR
M11	P9	50CR
M12	P10	70CR

DIRECTION_CREW

DIRECTOR_ID	NAME	GENDER
D1	PURI JAGANNADH	M
D2	DEVI SRI PRASAD	M
D3	SS RAJAMOULI	M
D4	SUKUMAR	M
D5	ANUP RUBENS	M
D6	TRIVIKRAM SRINIVAS	M
D7	ANIRUDH RAVICHANDRAN	M
D8	SRIKANTH ADDALA	M
D9	BUCHI BABU SANA	M
D10	GOPI SUNDAR	M
D11	MEHER RAMESH	M
D12	RAHUL SANKRITYAN	M
D13	MICKY J MEYER	M
D14	BOSCO SCEASER	M
D15	MANISHARMA	M
D16	ANIL RAVIPUDI	M
D17	VJ SHEKHAR	M
D18	JANI MASTER	M
D19	SRINU VAITLA	M
D20	ANU MALIK	M
D21	GANESH ACHARYA	M
D23	PARSURAM	M
D24	DINESH MASTER	M
D25	MM KEERAVANI	M
D26	YUVAN SHANKAR RAJA	M
D27	RAM MASTER	M
D28	RAGHU MASTER	M

DIRECTION

MOVIE_ID	DIRECTOR_ID	DIREC_ROLE
M1	D1	SCREENPLAY
M1	D5	MUSIC
M1	D18	DANCE
M2	D8	SCREENPLAY
M2	D10	MUSIC
M2	D13	MUSIC
M2	D24	DANCE
M3	D3	SCREENPLAY
M3	D25	MUSIC
M3	D18	DANCE
M4	D11	SCREENPLAY
M4	D26	MUSIC
M4	D24	DANCE
M5	D4	SCREENPLAY
M5	D2	MUSIC
M5	D27	DANCE
M6	D23	SCREENPLAY
M6	D10	MUSIC
M6	D28	DANCE
M7	D9	SCREENPLAY
M7	D2	MUSIC
M7	D28	DANCE
M8	D19	SCREENPLAY
M8	D20	MUSIC
M8	D21	DANCE
M9	D4	SCREENPLAY
M9	D2	MUSIC
M9	D18	DANCE
M10	D16	SCREENPLAY
M10	D17	DANCE
M10	D2	MUSIC
M11	D12	SCREENPLAY
M11	D13	MUSIC
M11	D17	DANCE
M12	D6	SCREENPLAY
M12	D7	MUSIC
M12	D14	DANCE

QUERIES

1. Print the movies that are released after 2010.

2. Print the movie details of the movie having Rating greater than 7.

3. Print the movies along with their duration having duration more than 2 hours 30 min.

4. Print the movies having movie - name length more than 10 (exclude blank spaces).

5. Print the movie name and the day it was released

6. Print the days lapsed from the release date of the top 4 rated movies.

7. Print the count of the movies released in each year of the given dates.

8. Print the actors whose age is greater than 30.

9. Print the details of all the male actors.

10. Print the female actors who are born between the year 1971 and

1985.

11. Print the names of the actors containing the letter 'J'.

12. Print the details of the producers having 3 words in their names.

13. Print the top 5 most produced films' producers.

14. Print the movie and the Hero name who acted in it.

15. Print the cast along with roles of the movie 'SHYAM SINGHA ROY ' and ' BAADSHAH' .

16. Print details of the actor who acted in more than one movie.

17. Print the cast details of recently released movie.

18. Print the details of villains.

19. Print the movie details having budget less than 40crores.

20. List the names of producers who produced movies between 2012 and 2018.

21. Print the movie names of the directors whose name end with 'R'.

22. Print details of directors whose role is screenplay.

23. Print total number of directors other than directors with role of screenplay.

24. Print the details of the director,crew and movie of the movie released on either January or December.

25. Print the details of the director who directed (dance or screenplay or music) in the most number films and also print the movie names.