LOVELY PROFESSIONAL UNIVERSITY

MOVIES MANAGEMENT SYSTEM

Dissertation submitted in fulfilment of the requirements of the Degree of "Database Management System – INT306"

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

BY

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ABSTRACT:

Personalized Movie Database System (PMDS) is a dynamic web application created for the purpose of viewing basic information about movies such as movie name, casting, movie type, release date, movie category, duration, ratings etc. It is designed as a one-stop destination for the user to access the movies that were released in the past 2 decades. It provides the links and allows the user to rent the movie for some time.

The movie data is obtained from available APIs provided by IMDB, Rotten Tomatoes and other official API providers. The data, which is static for a particular movie (E.g. Cast, Plot, Poster etc.), is fetched from the APIs and stored into Oracle Live SQL database. The data that may vary with time such as Ratings, Show times etc. are fetched in real time by calling the respective APIs.

CHAPTER-1

INTRODUCTION

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

List of movies playing in theatres, upcoming movies, DVD/Blu-ray movies

Trailers

IMDB Rating; Rotten Tomatoes Rating

Simple Plot, Cast & Crew, Genre, Year Released, Runtime

Show Times

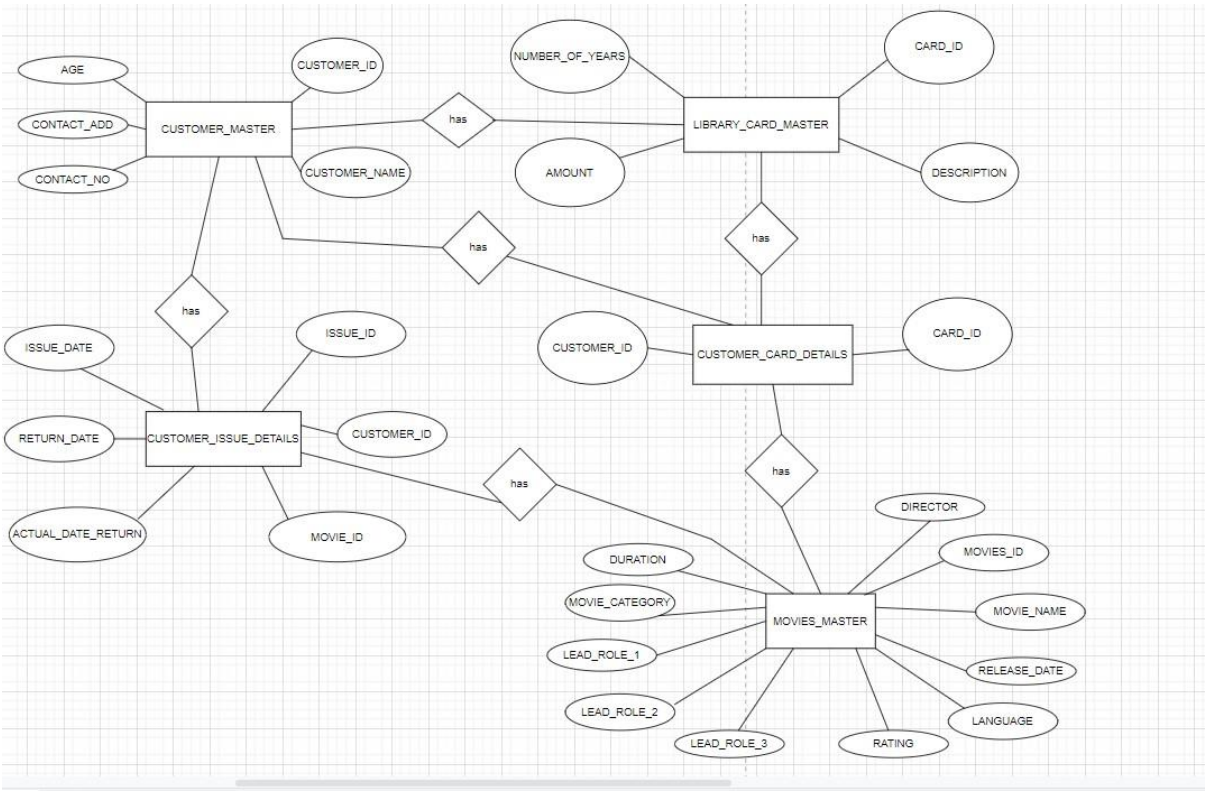
Links to stream/rent the movie online, buy DVD/Blu-ray

Similar Movie Suggestions

There are websites like www.imdb.com and www.rottentomatoes.com with rich amount of the aforementioned data but the user has to open at least 3-4 websites to view all the data. So, this project was started with the intention of developing a one-stop destination for the user to view all the data. The data from these websites was fetched by calling the APIs and putting them together.

CHAPTER-2 SCHEMA AND NORMALIZATION

2.1 ER DIAGRAM:-



2.2 Attribute and Entities

Attributes

In total we have five entities and information of each entity is mentioned below:-

1. CUSTOMER_MASTER:
   (Attributes- CUSTOMER_ID, CUSTOMER_NAME, CONATCT_NO, CONTACT_ADD, AGE)
2. LIBRARY_CARD_MASTER:
   (Attributes- CARD_ID, DESCRIPTION, AMOUNT, NUMBER_OF_YEARS)
3. MOVIES_MASTER:
   (Attributes- MOVIES_ID, MOVIE_NAME, RELEASE_DATE, LANGUAGE, RATING, DURATION, MOVIE_TYPE, MOVIE_CATEGORY, DIRECTOR, LEAD_ROLE_1, LEAD_ROLE_2, RENT_COST)
4. CUSTOMER_CARD_DETAILS:
   (Attributes- CUSTOMER_ID, CARD_ID)
5. CUSTOMER_ISSUE_DETAILS:
   (Attributes- ISSUE_ID, CUSTOMER_ID, MOVIE_ID, ISSUE_DATE, RETURN_DATE, ACTUAL_DATE_RETURN)

2.3 RELATIONSHIP:-

RELATIONSHIP BETWEEN ENTITIES

1. **CUSTOMER_MASTER and LIBRARY_CARD_MASTER:**
   Relationship = “Has”
   Type of relation = One to many

2. **CUSTOMER_MASTER and CUSTOMER_ISSUE_DETAILS:**
   Relationship = “Has”
   Type of relation= One to many

3. **CUSTOMER_MASTER and CUSTOMER_CARD_DETAILS**
   Relationship = “Has”
   Type of relationship= One to many

4. **CUSTOMER_CARD_DETAILS and MOVIES_MASTER**
   Relationship = “Has”
   Type of relationship= One to many

5. **MOVIES_MASTER and CUSTOMER_ISSUE_DETAILS**
   Relationship = “Has”
   Type of relationship= One to many

CHAPTER-3

3.1 SQL For Table Creation

1. Creating Customer Master Table

```
Create table CUSTOMER_MASTER
(
        CUSTOMER_ID Varchar(10),
        CUSTOMER_NAME Varchar(30) NOT NULL,
        CONTACT_NO Number(10),
        CONTACT_ADD Varchar(20),
        DATE_OF_REGISTRATION Date NOT NULL,
        AGE Varchar(15)NOT NULL,
        Constraint MT_cts1 PRIMARY KEY(CUSTOMER_ID)
);
```

2. Creating Library Card Master Table

```
Create table LIBRARY_CARD_MASTER
(
        CARD_ID Varchar(10),
        DESCRIPTION Varchar(30) NOT NULL,
        AMOUNT   number(20),
        NUMBER_OF_YEARS number(10) NOT NULL,
        Constraint MT_cts2 PRIMARY KEY(CARD_ID)
);
```

3. Creating Movies Master Table

```
Create table MOVIES_MASTER
(
        MOVIE_ID Varchar(10),
        MOVIE_NAME Varchar(50) NOT NULL,
        RELEASE_DATE Varchar(30) NOT NULL,
        LANGUAGE Varchar(30),
        RATING number(2),
        DURATION VARCHAR(10) NOT NULL,
        MOVIE_TYPE Varchar(3),
        MOVIE_CATEGORY VARCHAR(20) NOT NULL,
        DIRECTOR VARCHAR(20) NOT NULL,
        LEAD_ROLE_1 Varchar(3) NOT NULL,
        LEAD_ROLE_2 VARCHAR(4) NOT NULL,
        RENT_COST number(10),
        Constraint MT_cts4 PRIMARY KEY(MOVIE_ID)
);
```

4. Creating Customer Card Details Table

```
Create table CUSTOMER_CARD_DETAILS
(
        CUSTOMER_ID Varchar(10),
        CARD_ID VARCHAR(10),
        ISSUE_DATE DATE NOT NULL,
```

```
    Constraint MT_cts3 PRIMARY KEY(CUSTOMER_ID),
    Constraint MT_CTS41 FOREIGN KEY(CUSTOMER_ID) References
CUSTOMER_MASTER(CUSTOMER_ID),
   Constraint MT_CTS42 FOREIGN KEY(CARD_ID) References
LIBRARY_CARD_MASTER(CARD_ID)
);
```

5. Creating Customer Issue Details Table

```
Create table CUSTOMER_ISSUE_DETAILS
(
    ISSUE_ID Varchar(10) NOT NULL,
    CUSTOMER_ID Varchar(10) NOT NULL,
    MOVIE_ID VARCHAR(10),
    Datee date Not NULL,
    RETURN_DATE Date NOT NULL,
   ACTUAL_DATE_RETURN Date NOT NULL,
    Constraint MT_cts5 PRIMARY KEY(ISSUE_ID),
   Constraint MT_Mem FOREIGN KEY(CUSTOMER_ID) References
CUSTOMER_MASTER(CUSTOMER_ID),
   Constraint MT_Mem1 FOREIGN KEY(MOVIE_ID) References
MOVIES_MASTER(MOVIE_ID)
);
```

3.2 DATA ENTRY FOR TABLE

1. CUSTOMER_MASTER

Insert Value Into The Customer_Master

Insert into CUSTOMER_MASTER Values('123', 'faran', ‘136498’, ‘bgh’, ‘20a’);

Insert into CUSTOMER_MASTER Values('CUS001', 'AMIT', 9876543210,'ADD1', '21');

Insert into CUSTOMER_MASTER Values('CUS002', 'ABDHUL', 8765432109,'ADD2', '21');

Insert into CUSTOMER_MASTER Values('CUS003', 'GAYAN', 7654321098,'ADD3', '21');

Insert into CUSTOMER_MASTER Values('CUS004', 'RADHA', 6543210987,'ADD4', '21');

Insert into CUSTOMER_MASTER Values('CUS005', 'GURU', 111222333,'ADD5', '21');

Insert into CUSTOMER_MASTER Values('CUS006', 'MOHAN', 4321098765,'ADD6', '21');

Insert into CUSTOMER_MASTER Values('CUS007', 'NAME7', 3210987654,'ADD7', '21');

Insert into CUSTOMER_MASTER Values('CUS008', 'NAME8', 2109876543,'ADD8', '21');

Insert into CUSTOMER_MASTER Values('CUS009', 'NAME9', 111222555,'ADD9', '21');

Insert into CUSTOMER_MASTER Values('CUS010', 'NAM10', 9934567890,'ADD10', '21');

Insert into CUSTOMER_MASTER Values('CUS011', 'NAM11', 9875678910,'ADD11', '21')

CUSTOMER_ID	CUSTOMER_NAME	CONTACT_NO	CONTACT_ADD	AGE
123	faran	136498	bgh	20a
CUS001	AMIT	9876543210	ADD1	21
CUS002	ABDHUL	8765432109	ADD2	21
CUS003	GAYAN	7654321098	ADD3	21
CUS004	RADHA	6543210987	ADD4	21
CUS005	GURU	111222333	ADD5	21
CUS006	MOHAN	4321098765	ADD6	21
CUS007	NAME7	3210987654	ADD7	21
CUS008	NAME8	2109876543	ADD8	21
CUS009	NAME9	111222555	ADD9	21
CUS010	NAM10	9934567890	ADD10	21

Download CSV

11 rows selected.

2. LIBRARY_CARD_MASTER

Insert into LIBRARY_CARD_MASTER Values('CR001', 'DES1', 200, 5);

Insert into LIBRARY_CARD_MASTER Values('CR002', 'DES2', 400, 9);

Insert into LIBRARY_CARD_MASTER Values('CR003', 'DES3', 600, 8);

Insert into LIBRARY_CARD_MASTER Values('CR004', 'DES4', 800, 7);

Insert into LIBRARY_CARD_MASTER Values('CR005', 'DES5', 1200, 6);

CARD_ID	DESCRIPTION	AMOUNT	NUMBER_OF_YEARS
CR001	DES1	200	5
CR002	DES2	400	9
CR003	DES3	600	8
CR004	DES4	800	7
CR005	DES5	1200	6

Download CSV
5 rows selected.

3. MOVIES_MASTER

Insert into MOVIES_MASTER Values('MV001', 'DIEHARD', '2012-05-13','ENGLISH', 4 , '2HRS', 'U/A','ACTION','DIR1','L1','L2',100);

Insert into MOVIES_MASTER Values('MV002', 'THE MATRIX', '2012-05-13','ENGLISH', 4 , '2HRS', 'A','ACTION','DIR2','L1','L2',100);

Insert into MOVIES_MASTER Values('MV003', 'INCEPTION', '2012-05-13','ENGLISH', 4 , '2HRS', 'U/A','ACTION','DIR3','L1','L2',100);

Insert into MOVIES_MASTER Values('MV004', 'DARK KNIGHT', '2012-05-13','ENGLISH', 4 , '2HRS', 'A','ACTION','DIR4','L1','L2',100);

Insert into MOVIES_MASTER Values('MV005', 'OFFICE S', '2012-05-13','ENGLISH', 4 , '2HRS', 'U/A','COMEDY','DIR5','L1','L2',100);

Insert into MOVIES_MASTER Values('MV006', 'SHAWN OF DEAD', '2012-05-13','ENGLISH', 4 , '2HRS', 'U/A','COMEDY','DIR6','L1','L2',100);

Insert into MOVIES_MASTER Values('MV007', 'YOUNG FRANKEN', '2012-05-13','ENGLISH', 4 , '2HRS', 'U/A','COMEDY','DIR7','L1','L2',100);

Insert into MOVIES_MASTER Values('MV008', 'CAS', '2012-05-13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR8','L1','L2',100);

Insert into MOVIES_MASTER Values('MV009', 'GWW', '2012-05-13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR9','L1','L2',100);

Insert into MOVIES_MASTER Values('MV010', 'TITANIC', '2012-05-13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR10','L1','L2',100);

Insert into MOVIES_MASTER Values('MV011', 'THE NOTE BOOK', '2012-05-13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR11','L1','L2',100);

MOVIE_ID	MOVIE_NAME	RELEASE_DATE	LANGUAGE	RATING	DURATION	MOVIE_TYPE	MOVIE_CATEGORY	DIRECTOR	LEAD_ROLE_1	LEAD_ROLE_2	RENT_COST
MV001	DIEHARD	2012-05-13	ENGLISH	4	2HRS	U/A	ACTION	DIR1	L1	L2	100
MV002	THE MATRIX	2012-05-13	ENGLISH	4	2HRS	A	ACTION	DIR2	L1	L2	100
MV003	INCEPTION	2012-05-13	ENGLISH	4	2HRS	U/A	ACTION	DIR3	L1	L2	100
MV004	DARK KNIGHT	2012-05-13	ENGLISH	4	2HRS	A	ACTION	DIR4	L1	L2	100
MV005	OFFICE S	2012-05-13	ENGLISH	4	2HRS	U/A	COMEDY	DIR5	L1	L2	100
MV006	SHAWN OF DEAD	2012-05-13	ENGLISH	4	2HRS	U/A	COMEDY	DIR6	L1	L2	100
MV007	YOUNG FRANKEN	2012-05-13	ENGLISH	4	2HRS	U/A	COMEDY	DIR7	L1	L2	100
MV008	CAS	2012-05-13	ENGLISH	4	2HRS	A	ROMANCE	DIR8	L1	L2	100
MV009	GWW	2012-05-13	ENGLISH	4	2HRS	A	ROMANCE	DIR9	L1	L2	100
MV010	TITANIC	2012-05-13	ENGLISH	4	2HRS	A	ROMANCE	DIR10	L1	L2	100
MV011	THE NOTE BOOK	2012-05-13	ENGLISH	4	2HRS	A	ROMANCE	DIR11	L1	L2	100

Download CSV
11 rows selected.

4. CUSTOMER_CARD_DETAILS

Insert into CUSTOMER_CARD_DETAILS Values('CUS001', 'CR001');

Insert into CUSTOMER_CARD_DETAILS Values('CUS002', 'CR002');

Insert into CUSTOMER_CARD_DETAILS Values('CUS003', 'CR002');

Insert into CUSTOMER_CARD_DETAILS Values('CUS004', 'CR003');

Insert into CUSTOMER_CARD_DETAILS Values('CUS005', 'CR003');

CUSTOMER_ID	CARD_ID
CUS001	CR001
CUS002	CR002
CUS003	CR002
CUS004	CR003
CUS005	CR003

Download CSV
5 rows selected.

5. CUSTOMER_ISSUE_DETAILS

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS001', 'CUS001', 'MV001', '12-OCT-2022', '12-OCT-2013','20-OCT-2022');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS002', 'CUS001', 'MV001', '01-MAY-2012', '16-MAY-2012','16-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS003', 'CUS002', 'MV004', '02-MAY-2012', '06-MAY-2012','16-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS004', 'CUS002', 'MV004', '03-APR-2012', '16-APR-2012','20-APR-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS005', 'CUS002', 'MV009', '04-APR-2012', '16-APR-2012','20-APR-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS006', 'CUS003', 'MV002', '30-MAR-2012', '15-MAR-2012','20-APR-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS007', 'CUS003', 'MV003', '20-APR-2012', '05-MAY-2012','05-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS008', 'CUS003', 'MV005', '21-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS009', 'CUS003', 'MV001', '20-APR-2012', '07-MAY-2012','25-MAY-2012');

```
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS010', 'CUS003',
'MV009', '22-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS011', 'CUS003',
'MV010', '23-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS012', 'CUS003',
'MV010', '24-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS013', 'CUS003',
'MV008', '25-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS014', 'CUS004',
'MV007', '26-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS015', 'CUS004',
'MV006', '27-APR-2012', '07-APR-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS016', 'CUS004',
'MV006', '28-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS017', 'CUS004',
'MV001', '29-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS018', 'CUS010',
'MV008', '24-APR-2012', '07-MAY-2012','25-MAY-2012');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS019', 'CUS011',
'MV009', '27-APR-2012', '07-MAY-2012','25-MAY-2012');
```

ISSUE_ID	CUSTOMER_ID	MOVIE_ID	ISSUE_DATE	RETURN_DATE	ACTUAL_DATE_RETURN
IS001	CUS001	MV001	12-OCT-22	12-OCT-13	20-OCT-22
IS002	CUS001	MV001	01-MAY-12	16-MAY-12	16-MAY-12
IS003	CUS002	MV004	02-MAY-12	06-MAY-12	16-MAY-12
IS004	CUS002	MV004	03-APR-12	16-APR-12	20-APR-12
IS005	CUS002	MV009	04-APR-12	16-APR-12	20-APR-12
IS006	CUS003	MV002	30-MAR-12	15-MAR-12	20-APR-12
IS007	CUS003	MV003	20-APR-12	05-MAY-12	05-MAY-12
IS008	CUS003	MV005	21-APR-12	07-MAY-12	25-MAY-12
IS009	CUS003	MV001	20-APR-12	07-MAY-12	25-MAY-12
IS010	CUS003	MV009	22-APR-12	07-MAY-12	25-MAY-12
IS011	CUS003	MV010	23-APR-12	07-MAY-12	25-MAY-12
IS012	CUS003	MV010	24-APR-12	07-MAY-12	25-MAY-12
IS013	CUS003	MV008	25-APR-12	07-MAY-12	25-MAY-12
IS014	CUS004	MV007	26-APR-12	07-MAY-12	25-MAY-12
IS015	CUS004	MV006	27-APR-12	07-APR-12	25-MAY-12
IS016	CUS004	MV006	28-APR-12	07-MAY-12	25-MAY-12
IS017	CUS004	MV001	29-APR-12	07-MAY-12	25-MAY-12
IS018	CUS010	MV008	24-APR-12	07-MAY-12	25-MAY-12

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18 rows selected.

Chapter 4

Conclusion

This project is built keeping in mind that it is to be used to maintain the database of movies and also to keep the data of the customers that which movie they are opting so that their data can be used in the future to make movie renting and selling websites and applications.