

Section 1: Overview

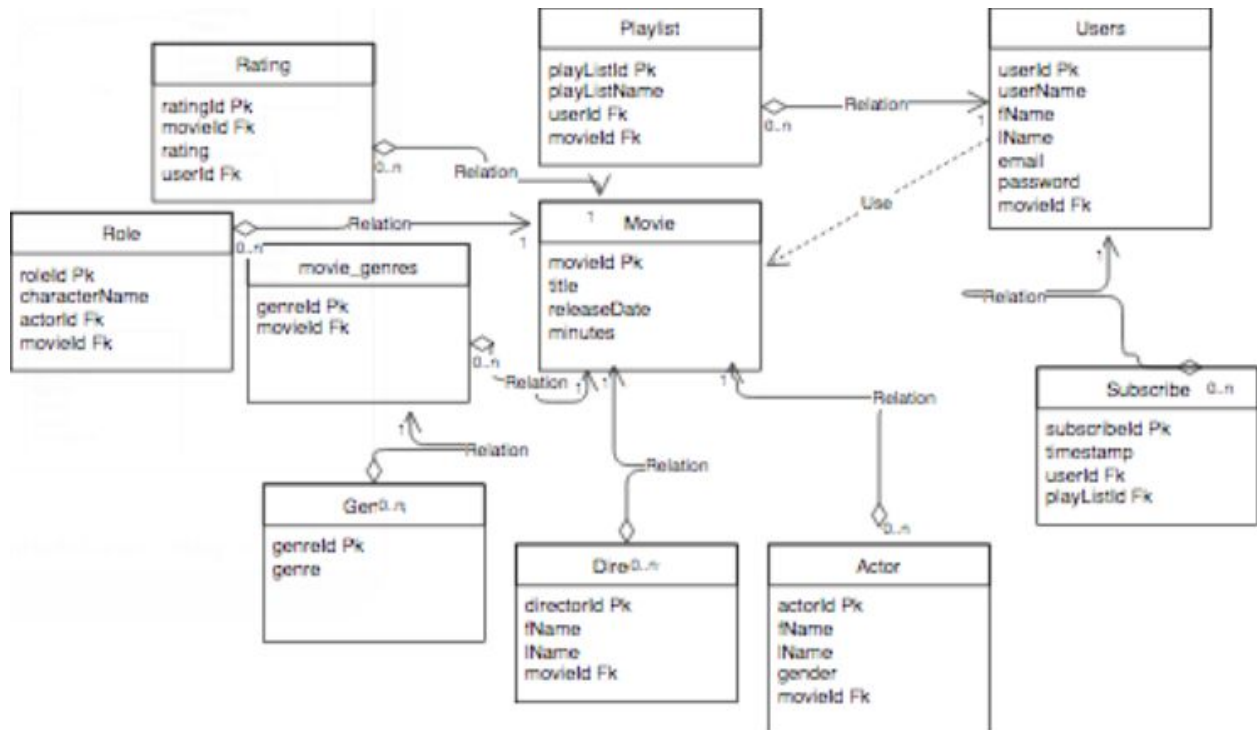
We are creating a web application that users can use to organize and store their movies. This software is intended to be able to store, filter and rate the users movies. Our users will be able to log into our Web based application with the goal of storing and viewing their movies. User will be able to Rate their favorite movies and add them to a playlist. Users will be able to view other users profiles and view their favorite movies. The rating system consists of an Plus or Minus system. Using the web based client, users will also be able to play their stored movies through an HTML 5 based video player. Users can rate, subscribe and follow other users profiles based on their taste in movies. The name of the web application is called MoviesGalore.

Functional Specifications

- Must allow users to login.
- Must allow users to store their movies.
- Must allow users to rate their own movies.
- Should allow users to create their own playlists.
- Should allow users to subscribe to other users.
- Should allow users to rate other users profiles.
- Must allow users to edit their movies
- Must allow users to delete their movies
- Must allow users to view other users
- Must allow users to play th movies
- Must allow non-users to view other users
- Must allow non-users to register

Our database stores specific movie information to allow our users to enjoy a unique movie experience. Our Database stores information about movies and their counterparts. Such as title, director, actresses, year, popularity and rating. Our database will also keep track of users profiles, including their subscription to other users, their likes and their current login session.

Section 2:UML Diagram



Section 3: Functional Dependencies

There is no need for functional dependencies for our database since the database is in Boyce Codd Normal form BCNF. There is no need for our database to contain any sort of redundant information. With that being said our database does not allow any functional dependencies, because of the fact of our primary key constraints.

Section 4: Assertions

Although assertions are not supported in oracle SQL. They are supported in Mysql, MariaDB ETC. So here are some assertions that we would have implemented if they were necessary. Our need assertions are handled by our constraints.

-- Assertion that ensures that a movie RATING cannot be greater than 5

```
Create ASSERTION CHECKRATING CHECK(
NOT EXISTS(
```

```

        SELECT * FROM RATING
        WHERE RATINGID <= 5)
);

-----
-- Makes sure USERNAME is never null
-----
Create ASSERTION CHECKUSERNAME AS CHECK(
    NOT EXISTS(
        SELECT * FROM USERS
        WHERE USERNAME IS NULL)
);

```

Section 5: Queries

```

-----
-- DDL for Table ACTOR
-----

CREATE TABLE "MOVIESGALORE"."ACTOR"
( "ACTORID" NUMBER(*,0),
  "FNAME" VARCHAR2(20 BYTE),
  "LNAME" VARCHAR2(20 BYTE),
  "GENDER" CHAR(1 BYTE),
  "MOVIEID" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;

```

```

-----
-- DDL for Table DIRECTOR
-----

```

```

CREATE TABLE "MOVIESGALORE"."DIRECTOR"
( "DIRECTORID" NUMBER(*,0),
  "FNAME" VARCHAR2(20 BYTE),
  "LNAME" VARCHAR2(20 BYTE),
  "MOVIEID" NUMBER(*,0)

```

```
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table GENRES
```

```
CREATE TABLE "MOVIESGALORE"."GENRES"
(  "GENREID" NUMBER(*,0),
   "GENRE" CHAR(20 BYTE)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table MOVIE
```

```
CREATE TABLE "MOVIESGALORE"."MOVIE"
(  "MOVIEID" NUMBER(*,0),
   "TITLE" VARCHAR2(50 BYTE),
   "RELEASEDATE" DATE,
   "MINUTES" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table MOVIE_GENRES
```

```
CREATE TABLE "MOVIESGALORE"."MOVIE_GENRES"
(  "GENREID" NUMBER(*,0),
   "MOVIEID" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
```

```
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table PLAYLIST
```

```
CREATE TABLE "MOVIESGALORE"."PLAYLIST"
(  "PLAYLISTID" NUMBER(*,0),
  "PLAYLISTNAME" VARCHAR2(20 BYTE),
  "USERID" NUMBER(*,0),
  "MOVIEID" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table RATING
```

```
CREATE TABLE "MOVIESGALORE"."RATING"
(  "MOVIEID" NUMBER(*,0),
  "USERID" NUMBER(*,0),
  "RATING" VARCHAR(20 BYTE),
  "RATINGID" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table ROLE
```

```
CREATE TABLE "MOVIESGALORE"."ROLE"
(  "ROLEID" NUMBER(*,0),
  "CHARACTERNAME" VARCHAR2(20 BYTE),
  "ACTORID" NUMBER(*,0),
  "MOVIEID" NUMBER(*,0)
```

```
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table SUBSCRIBE
```

```
CREATE TABLE "MOVIESGALORE"."SUBSCRIBE"
( "SUBSCRIBEID" NUMBER(*,0),
  "TIMESTAMP" TIMESTAMP (6),
  "USERID" NUMBER(*,0),
  "PLAYLISTID" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Table USERS
```

```
CREATE TABLE "MOVIESGALORE"."USERS"
( "USERID" NUMBER(*,0),
  "USERNAME" VARCHAR2(20 BYTE),
  "FNAME" VARCHAR2(20 BYTE),
  "LNAME" VARCHAR2(20 BYTE),
  "EMAIL" VARCHAR2(30 BYTE),
  "PASSWORD" VARCHAR2(20 BYTE),
  "MOVIEID" NUMBER(*,0)
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITRANS 1 MAXTRANS 255 NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-- DDL for Sequence RATING_SEQ
```

```
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT  
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)  
TABLESPACE "SYSTEM" ;
```

```
-----  
-- DDL for Index RATING_PK  
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."RATING_PK" ON  
"MOVIESGALORE"."RATING" ("RATINGID")  
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS  
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645  
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT  
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)  
TABLESPACE "SYSTEM" ;
```

```
-----  
-- DDL for Index MOVIE_PK  
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."MOVIE_PK" ON "MOVIESGALORE"."MOVIE"  
("MOVIEID")  
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS  
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645  
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT  
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)  
TABLESPACE "SYSTEM" ;
```

```
-----  
-- DDL for Index GENRE_PK  
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."GENRE_PK" ON  
"MOVIESGALORE"."GENRES" ("GENREID")  
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS  
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645  
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT  
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)  
TABLESPACE "SYSTEM" ;
```

```
-----  
-- DDL for Index USERS_PK  
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."USERS_PK" ON  
"MOVIESGALORE"."USERS" ("USERID")  
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
```



```
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-----
-- DDL for Index SUBSCRIBE_PK
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."SUBSCRIBE_PK" ON
"MOVIESGALORE"."SUBSCRIBE" ("SUBSCRIBEID")
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-----
-- DDL for Index DIRECTOR_PK
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."DIRECTOR_PK" ON
"MOVIESGALORE"."DIRECTOR" ("DIRECTORID")
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-----
-- DDL for Index ACTOR_PK
-----
```

```
CREATE UNIQUE INDEX "MOVIESGALORE"."ACTOR_PK" ON
"MOVIESGALORE"."ACTOR" ("ACTORID")
PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ;
```

```
-----
-- DDL for Trigger RATING_TRG
-----
```

```
CREATE OR REPLACE TRIGGER "MOVIESGALORE"."RATING_TRG"
BEFORE INSERT ON RATING
```

```
FOR EACH ROW
BEGIN
  <<COLUMN_SEQUENCES>>
  BEGIN
    IF INSERTING AND :NEW.RATINGID IS NULL THEN
      SELECT RATING_SEQ.NEXTVAL INTO :NEW.RATINGID FROM SYS.DUAL;
    END IF;
  END COLUMN_SEQUENCES;
END;
```

```
ALTER TRIGGER "MOVIESGALORE"."RATING_TRG" ENABLE;
```

```
-----
-- Constraints for Table SUBSCRIBE
-----
```

```
ALTER TABLE "MOVIESGALORE"."SUBSCRIBE" MODIFY ("SUBSCRIBEID" NOT NULL
ENABLE);
ALTER TABLE "MOVIESGALORE"."SUBSCRIBE" MODIFY ("USERID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."SUBSCRIBE" MODIFY ("PLAYLISTID" NOT NULL
ENABLE);
ALTER TABLE "MOVIESGALORE"."SUBSCRIBE" ADD CONSTRAINT "SUBSCRIBE_PK"
PRIMARY KEY ("SUBSCRIBEID")
  USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
  STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
  PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
  TABLESPACE "SYSTEM" ENABLE;
ALTER TABLE "MOVIESGALORE"."SUBSCRIBE" MODIFY ("TIMESTAMP" NOT NULL
ENABLE);
```

```
-----
-- Constraints for Table GENRES
-----
```

```
ALTER TABLE "MOVIESGALORE"."GENRES" MODIFY ("GENREID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."GENRES" ADD CONSTRAINT "GENRE_PK" PRIMARY
KEY ("GENREID")
  USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
  STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
  PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
  TABLESPACE "SYSTEM" ENABLE;
```

-- Constraints for Table MOVIE

```
ALTER TABLE "MOVIESGALORE"."MOVIE" MODIFY ("MOVIEID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."MOVIE" ADD CONSTRAINT "MOVIE_PK" PRIMARY
KEY ("MOVIEID")
  USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
  STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
  PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
  FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
  TABLESPACE "SYSTEM" ENABLE;
```

-- Constraints for Table ROLE

```
ALTER TABLE "MOVIESGALORE"."ROLE" MODIFY ("ROLEID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."ROLE" MODIFY ("ACTORID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."ROLE" MODIFY ("MOVIEID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."ROLE" ADD CONSTRAINT "ROLE_PK" PRIMARY KEY
("ROLEID")
  USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
  STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
  PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
  FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
  TABLESPACE "SYSTEM" ENABLE;
```

-- Constraints for Table USERS

```
ALTER TABLE "MOVIESGALORE"."USERS" MODIFY ("USERID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."USERS" ADD CONSTRAINT "USERS_PK" PRIMARY
KEY ("USERID")
  USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
  STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
  PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
  FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
  TABLESPACE "SYSTEM" ENABLE;
```

-- Constraints for Table DIRECTOR

```
ALTER TABLE "MOVIESGALORE"."DIRECTOR" MODIFY ("DIRECTORID" NOT NULL
ENABLE);
```

```
ALTER TABLE "MOVIESGALORE"."DIRECTOR" MODIFY ("MOVIEID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."DIRECTOR" ADD CONSTRAINT "DIRECTOR_PK"
PRIMARY KEY ("DIRECTORID")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ENABLE;
```

-- Constraints for Table RATING

```
ALTER TABLE "MOVIESGALORE"."RATING" MODIFY ("MOVIEID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."RATING" MODIFY ("USERID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."RATING" MODIFY ("RATING" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."RATING" MODIFY ("RATINGID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."RATING" ADD CONSTRAINT "RATING_CHK1" CHECK
(rating in ('1', '2', '3', '4', '5')) ENABLE;
ALTER TABLE "MOVIESGALORE"."RATING" ADD CONSTRAINT "RATING_PK" PRIMARY
KEY ("RATINGID")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ENABLE;
```

-- Constraints for Table MOVIE_GENRES

```
ALTER TABLE "MOVIESGALORE"."MOVIE_GENRES" MODIFY ("GENREID" NOT NULL
ENABLE);
ALTER TABLE "MOVIESGALORE"."MOVIE_GENRES" MODIFY ("MOVIEID" NOT NULL
ENABLE);
```

-- Constraints for Table ACTOR

```
ALTER TABLE "MOVIESGALORE"."ACTOR" MODIFY ("ACTORID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."ACTOR" ADD CONSTRAINT "ACTOR_CHK1" CHECK
(gender in ('m', 'f')) ENABLE;
ALTER TABLE "MOVIESGALORE"."ACTOR" ADD CONSTRAINT "ACTOR_PK" PRIMARY
KEY ("ACTORID")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
```

```
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ENABLE;
ALTER TABLE "MOVIESGALORE"."ACTOR" MODIFY ("MOVIEID" NOT NULL ENABLE);
```

```
-----
-- Constraints for Table PLAYLIST
-----
```

```
ALTER TABLE "MOVIESGALORE"."PLAYLIST" MODIFY ("PLAYLISTID" NOT NULL
ENABLE);
ALTER TABLE "MOVIESGALORE"."PLAYLIST" MODIFY ("USERID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."PLAYLIST" MODIFY ("MOVIEID" NOT NULL ENABLE);
ALTER TABLE "MOVIESGALORE"."PLAYLIST" ADD CONSTRAINT "PLAYLIST_PK"
PRIMARY KEY ("PLAYLISTID")
USING INDEX PCTFREE 10 INITRANS 2 MAXTRANS 255 COMPUTE STATISTICS
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1 BUFFER_POOL DEFAULT
FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "SYSTEM" ENABLE;
```

```
-----
-- Ref Constraints for Table ACTOR
-----
```

```
ALTER TABLE "MOVIESGALORE"."ACTOR" ADD CONSTRAINT "ACTOR_FK1" FOREIGN
KEY ("MOVIEID")
REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ENABLE;
```

```
-----
-- Ref Constraints for Table DIRECTOR
-----
```

```
ALTER TABLE "MOVIESGALORE"."DIRECTOR" ADD CONSTRAINT "DIRECTOR_FK1"
FOREIGN KEY ("MOVIEID")
REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ON DELETE CASCADE
ENABLE;
```

```
-----
-- Ref Constraints for Table MOVIE_GENRES
-----
```

```
ALTER TABLE "MOVIESGALORE"."MOVIE_GENRES" ADD CONSTRAINT
"MOVIE_GENRES_FK1" FOREIGN KEY ("MOVIEID")
REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ON DELETE CASCADE
ENABLE;
```

```
ALTER TABLE "MOVIESGALORE"."MOVIE_GENRES" ADD CONSTRAINT
"MOVIE_GENRES_FK2" FOREIGN KEY ("GENREID")
REFERENCES "MOVIESGALORE"."GENRES" ("GENREID") ON DELETE CASCADE
ENABLE;
```

-- Ref Constraints for Table PLAYLIST

```
ALTER TABLE "MOVIESGALORE"."PLAYLIST" ADD CONSTRAINT "PLAYLIST_FK1"
FOREIGN KEY ("USERID")
REFERENCES "MOVIESGALORE"."USERS" ("USERID") ON DELETE CASCADE
ENABLE;
ALTER TABLE "MOVIESGALORE"."PLAYLIST" ADD CONSTRAINT "PLAYLIST_FK2"
FOREIGN KEY ("MOVIEID")
REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ON DELETE CASCADE
ENABLE;
```

-- Ref Constraints for Table RATING

```
ALTER TABLE "MOVIESGALORE"."RATING" ADD CONSTRAINT "RATING_FK1" FOREIGN
KEY ("MOVIEID")
REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ON DELETE CASCADE
ENABLE;
```

-- Ref Constraints for Table ROLE

```
ALTER TABLE "MOVIESGALORE"."ROLE" ADD CONSTRAINT "ROLE_FK1" FOREIGN KEY
("MOVIEID")
REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ON DELETE CASCADE
ENABLE;
ALTER TABLE "MOVIESGALORE"."ROLE" ADD CONSTRAINT "ROLE_FK2" FOREIGN KEY
("ACTORID")
REFERENCES "MOVIESGALORE"."ACTOR" ("ACTORID") ENABLE;
```

-- Ref Constraints for Table SUBSCRIBE

```
ALTER TABLE "MOVIESGALORE"."SUBSCRIBE" ADD CONSTRAINT "SUBSCRIBE_FK1"
FOREIGN KEY ("USERID")
REFERENCES "MOVIESGALORE"."USERS" ("USERID") ENABLE;
```

-- Ref Constraints for Table USERS

```
ALTER TABLE "MOVIESGALORE"."USERS" ADD CONSTRAINT "USERS_FK1" FOREIGN
KEY ("MOVIEID")
  REFERENCES "MOVIESGALORE"."MOVIE" ("MOVIEID") ENABLE;
```

-- Begin View Queries

-- Will display which users is subscribed to who
-- This will work if each user has a different subscribeID.

```
CREATE VIEW USER_SUBSCRIPTIONS AS
SELECT USERS.USERID,SUBSCRIBE.SUBSCRIBEID
FROM SUBSCRIBE,USERS
  WHERE USERS.USERID=SUBSCRIBE.SUBSCRIBEID
  GROUP BY USERS.USERID;
```

-- Will display which Actors are in which movie

```
CREATE VIEW ACTOR_MOVIES AS
SELECT MOVIE.MOVIEID, MOVIE.TITLE, ACTOR.FNAME, ACTOR.LNAME
FROM MOVIE,ACTOR
  WHERE MOVIE.MOVIEID=ACTOR.MOVIEID
  GROUP BY MOVIE.TITLE;
```

-- End View Queries

-- Begin
-- at least fifteen queries, at least two of which will include GROUP BY and HAVING clauses
-- at least two of which will include join clauses
-- at least one INSERT, at least two UPDATE, and at least one DELETE.

-- BEGIN ASSERTIONS

```
Create ASSERTION CHECKRATING CHECK(
  NOT EXISTS(
    SELECT * FROM RATING
    WHERE RATING <= 5)
);
```

```
-----
-- Makes sure USERNAME is never null
-----
```

```
Create ASSERTION CHECKUSERNAME AS CHECK(
  NOT EXISTS(
    SELECT * FROM USERS
    WHERE USERNAME IS NULL)
);
```

```
-----
-- END ASSERTIONS
-----
```

```
-----
-- Begin Group Having Clauses
-----
```

```
-----
-- Will display all movie titles uploaded by users
-----
```

```
SELECT MOVIE.MOVIEID, COUNT(*) AS TOTAL_MOVIES FROM MOVIES, USER
WHERE MOVIE.MOVIEID = USER.MOVIEID
GROUP BY
  MOVIE.MOVIEID, MOVIE.TITLE
HAVING COUNT(*) >=1;
```

```
-----
-- Will display all created playlists by users
-----
```

```
SELECT PLAYLIST.ID, COUNT(*) AS TOTAL_PLAYLIST FROM PLAYLIST, USER
WHERE PLAYLIST.PLAYLISTID = USER.USERID
GROUP BY
  PLAYLIST.PLAYLISTID, PLAYLIST.PLAYLISTNAME
HAVING COUNT(*) >=1;
```

```
-- End HAVING CLAUSES
```

```
-- Begin JOIN CLAUSES
```

```
-- Will display Movie Titles greater than 4.
```

```
SELECT MOVIE.TITLE, RATING.USERID, RATING.RATING
FROM(
    MOVIE LEFT OUTER JOIN RATING
    ON MOVIE.MOVIEID = RATING.MOVIEID
    AND RATING.RATINGID > 4);
```

```
-- Will display all movies directed by George Lucas
```

```
SELECT DIRECTOR.ID MOVIE.TITLE, MOVIE.RELEASE,
FROM(
    DIRECTOR LEFT OUTER JOIN MOVIE
    ON DIRECTOR.MOVIEID = MOVIE.MOVIEID
    AND DIRECTOR.FNAME = 'George'
    AND DIRECTOR.LNAME = 'Lucas' );
```

```
-- End JOIN CLAUSES
```

```
-- Start Queries
```

```
-- Start Select Queries
```

```
SELECT * FROM MOVIE;
```

```
-- get all subscription dates from users
-- between January 1, 2016 and December 31 1026
```

```
SELECT TIMESTAMP FROM SUBSCRIBE WHERE SUBSCRIBE BETWEEN TO_DATE  
( '2016/01/01', 'yyyy/mm/dd') AND TO_DATE ( '2016/12/31', 'yyyy/mm/dd');
```

```
-----  
-- get first user who registered  
-----
```

```
SELECT * FROM (SELECT * FROM USER ORDER BY USER.USERID) WHERE ROWNUM =  
1;  
MOVIEID  
-----
```

```
-- Get Name of a director based off of ID  
-----
```

```
SELECT TRIM(TRIM(FNAME || ' ' || LNAME)) FROM DIRECTOR WHERE DIRECTORID='2';  
-----
```

```
-- Display all movies realeased between 2000 and 2017  
-----
```

```
SELECT MOVIEID , TITLE , MINUTES  
FROM MOVIE WHERE RELEASEDATE BETWEEN 2000 AND 2017;  
-----
```

```
-----  
-- get count of all Actors  
-----
```

```
SELECT COUNT(ACTORID) FROM ACTOR;  
-----
```

```
-- Select Movies that do not have 'The Movie' present in the title.  
-- EX: Dragon Ball Z: The Movie  
-----
```

```
SELECT TITLE FROM MOVIE WHERE TITLE NOT LIKE 'The Movie';  
-----
```

```
-- End Select Queries  
-----
```

```
-----  
-- Begin INSERT,UPDATE,DELETE  
-----
```

```
INSERT INTO MOVIEGALOR.MOVIE (MOVIEID, MOVIE TITLE, RELEASEDATE, MINUTES)  
VALUES  
(1, 'Minions', 2012, 107),  
(2, 'Minions 2', 2014, 112),
```

(3, 'Minions 3', 2017, 83),
 (4, 'Transformers', 2011, 200),
 (5, 'Harry Potter and The Sorcerors Stone', 2008, 110),
 (6, 'Star Wars III', 2006, 90),
 (7, 'Hackerman', 2001, 69),
 (8, 'Pirates of Sillicon Valley', 1983, 140),
 (9, 'The Social Network', 2010, 130),
 (10, 'Dragon Ball Z : The Movie', 2008, 107),
 (11, 'Captain Underpants', 2017, 88);
 (12, 'Inception', 2010, 80);

INSERT INTO MOVIESGALORE.PLAYLIST (PLAYLISTID, PLAYLISTNAME, USERID, MOVIEID)

VALUES

(1, 'OLDPLAYLISTNAME', 1, 12),
 (2, 'OLDPLAYLISTNAME', 2, 17),
 (3, 'OLDPLAYLISTNAME', 3, 1),
 (4, 'OLDPLAYLISTNAME', 4, 7),
 (5, 'OLDPLAYLISTNAME', 5, 24),
 (6, 'OLDPLAYLISTNAME', 6, 13);

INSERT INTO MOVIESGALORE.USERS (USERID, USERNAME, FNAME, LNAME, EMAIL, PASSWORD, MOVIEID)

VALUES

(1, 'CutieWithTheMovies', 'Marcia', 'Smith', 'moviecutie@gmail.com', 'password123', 1),
 (2, 'AwesomeMovieDude', 'Dude', 'Perfect', 'Perfect2017ThatDude@aol.com', 'password123', 2),
 (401, 'Jason21', 'Jason', 'Smith', 'Jason.Smith@yahoo.com', '123321ASa', 1),
 (402, 'Ryan1993', 'Ryan', 'Johnson', 'Ryan.Johnston@gmail.com', '424123ASs21', 2),
 (403, 'Kitkat909', 'Chris', 'Alborg', 'Chris1991@hotmail.com', '4123ASa', 3),
 (404, 'Cheeseballs100', 'Sarah', 'Jones', 'JonesSS@gmail.com', '124124AA24', 4),
 (405, 'RollerToasterX', 'Megan', 'Cantalope', 'Cantalope434@gmail.com', '123asdAA', 5),
 (406, 'Tacoshimi29', 'Edd', 'Alvarez', 'Alvarez.Edd@yahoo.com', '12AGSa21', 6),
 (407, 'JunkieAce', 'Elias', 'Rader', 'RadEli@hotmail.com', 'AASD121@', 7),
 (408, 'Mousepadman96', 'Jenny', 'Kingston', 'Jennytoomany@gmail.com', 'asdfAS21', 8),
 (409, 'PuppyMan', 'Michael', 'Owen', 'OwneTheone@hotmail.com', '121ASAG', 9),
 (410, 'CaptainBroclli', 'Liam', 'McNelson', 'McnelsonLL@yahoo.com', '65GDF12aa', 10);

INSERT INTO MOVIESGALORE.ACTOR (ACTORID, FNAME, LNAME, GENDER, MOVIEID)

VALUES

(9, 'Jesse', 'Esienberg', 'M', 9),
 (001, 'Sandra', 'Bullock', 'F', 1),
 (002, 'John', 'Hamm', 'M', 2),

```
(003,'Michael','Keaton','M', 3),
(004,'Andrew','Garfield','M', 4),
(005,'Rooney','Mara','Female', 5),
(006,'Daniel','Radcliffe','M', 6),
(007,'Shaia','LaBeouf','M', 7),
(008,'Josh','Duhamel','M', 8),
(010,'Megan','Fox','F', 10),
```

```
INSERT INTO MOVIESGALORE.GENRES (GENREID, GENRE)
VALUES
```

```
(1, 'Comedy'),
(2, 'Horror'),
(202,'Action'),
(203,'Thriller'),
(204,'Adventure'),
(205,'Romance'),
(206,'Drama'),
(207,'Animation'),
(208,'Fantasy'),
(209,'Fiction'),
(210,'Documentary');
```

```
INSERT INTO MOVIESGALORE.MOVIE_GENRES (GENREID, MOVIEID)
VALUES
```

```
(1, 1),
(201,1),
(202,2),
(203,3),
(204,4),
(205,5),
(206,6),
(207,7),
(208,8),
(209,9),
(2010,10);
```

```
INSERT INTO MOVIESGALORE.ROLE(ROLEID, CHARACTERNAME, ACTORID, MOVIEID)
VALUES
```

```
(9, 'Mark Zuckerbeg', 9, 9),
(101, 'Scarlet Overkill', 001, 1),
(102, 'Herb Overkill', 002, 2),
(103, 'Madge Nelson', 003, 3),
```

(104, 'The Queen' , 004 , 4),
(105, 'Hagrid' , 005 , 5),
(106, 'Uncle Dursley', 006, 6),
(107, 'Captain Lennox', 007, 7),
(108, 'Agent Simmons', 008, 8,),
(109, 'Nikon', 009, 9),
(110, 'Razor', 010, 10);

INSERT INTO MOVIESGALORE.DIRECTOR (DIRECTORID, FNAME, LNAME, MOVIEID)
VALUES

(1, 'George','Lucas', 6),
(301,'Iain','Sofley', 1),
(302,'Kyle','Balda', 2),
(303,'Sam','Raimi', 3),
(304,'Roman','Polanski', 4),
(305,'Ridley','Scott', 5),
(306,'Robert','Zemeckis', 6),
(307,'James','Cameron', 7),
(308,'Mike','Nichols', 8),
(309,'Francis','Copola', 9),
(310,'Mel','Brooks', 10);

INSERT INTO MOVIESGALORE.RATING (MOVIEID, USERID, RATING, RATINGID)
VALUES

(1, 1, 'Excellent', 5),
(1, 401,'Very Good', 4),
(2, 402,'Excellent',5),
(3, 403,'Good',3),
(4, 404,'Poor',1),
(5, 405,'Very Good',4),
(6, 406,'Very Good',4),
(7, 407,'Excellent',5),
(8, 408,'Good',3),
(9, 409,'Poor',1),
(10,410,'Okay', 2);

INSERT INTO MOVIESGALORE.SUBSCRIBE (SUBSCRIBEID, TIMESTAMP, USERID,
RATINGID)

VALUES

(801,'2009-05-18 15:16:51', 401,5),
(802,'2009-05-18 14:14:41', 402,3),
(803,'2009-05-18 23:18:11', 403,3),
(804,'2009-05-18 15:54:45', 404,4),

```
(805,'2009-05-18 16:47:16', 405,4),
(806,'2009-05-18 14:23:12', 406,5),
(807,'2009-05-18 18:11:16', 407,5),
(808,'2009-05-18 12:25:22', 408,1),
(809,'2009-05-18 20:16:25', 409,4),
(810,'2009-05-18 09:11:27', 410,2);
```

```
UPDATE MOVIESGALORE.PLAYLISTNAME
SET = 'NEWPLAYLISTNAME' WHERE PLAYLISTNAME = 'OLDPLAYLISTNAME';
```

```
UPDATE MOVIESGALORE.USERS
SET = 'NEWUSERNAME' WHERE ID = 25;
```

```
DELETE FROM MOVIESGALORE.MOVIE
WHERE TITLE="Inception" ;
```

```
-----
-- End INSERT,UPDATE,DELETE
-----
```

```
-----
-- End Queries
-----
```