**import** java.util.Scanner;

**import** java.sql.Connection;

**import** java.sql.Statement;

**import** java.sql.DriverManager;

**import** java.sql.ResultSet;

**import** java.sql.SQLException;

**import** java.util.Properties;

**public** **class** cinema {

**public** **static** Scanner *keyboard* = **new** Scanner(System.***in***);

**private** **static** String *username* = "root";

**private** **static** String *password* = "Soccer10!";

**private** **static** String *servername* = "localhost";

**private** **static** **int** *portnumber* = 3306;

**private** **static** String *dbname* = "cinema";

**private** **static** Connection *conn* = **null**;

**public** **static** Connection getConnection() **throws** SQLException {

*conn* = **null**;

Properties connectionProps = **new** Properties();

connectionProps.put("user", *username*);

connectionProps.put("password", *password*);

*conn* = DriverManager.*getConnection*("jdbc:mysql://" + *servername* + ":" + *portnumber* + "/" + *dbname*, connectionProps);

**return** *conn*;

}

**public** **static** **int** menu() {

**try** {

**int** option = 0;

**while**(option < 1 || option > 7) {

System.***out***.println("\n\nCINEMA INFORMATION SYSTEM");

System.***out***.println("OPTION\t\t\tTASK");

System.***out***.println("1\tLIST THE MOVIE TITLES FOR A PARTICULAR STAR");

System.***out***.println("2\tLIST THE MOVIE TITLES AND STAR NAMES OF ALL MOVIES OF A PARTICULAR GENRE");

System.***out***.println("3\tLIST THE MOVIES TITLES FOR THOSE MOVIES RELEASED IN A PARTICULAR YEAR");

System.***out***.println("4\tLIST THE MOVIE GENRES");

System.***out***.println("5\tLIST THE NAMES OF THE STARS FOR MOVIES OF A PARTIUCLAR GENRE");

System.***out***.println("6\tLIST THE MOVIES THAT CONTAIN PARTICULAR WORDS OR PHRASES");

System.***out***.println("7\tQUIT");

System.***out***.print("ENTER CHOICE: ");

option = *keyboard*.nextInt();

System.***out***.println("");

}

**return** option;

}

**catch**(Exception e) {

e.printStackTrace();

**return** -1;

}

}

**public** **static** **void** main(String[] args) {

**try** {

*conn* = *getConnection*();

System.***out***.println("debugging, connected to the database");

} **catch**(SQLException e) {

System.***out***.println("ERROR Could not connect to the database");

e.printStackTrace();

**return**;

}

**int** menuoption = 0;

**int** whichYear = 0;

String whichStar = "";

String whichGenre = "";

String whichWords = "";

**while**(menuoption != 7) {

menuoption = *menu*();

**switch**(menuoption) {

**case** 1:

System.***out***.print("Which Star -- Enter The Stars Name: ");

*keyboard*.nextLine();

whichStar = *keyboard*.nextLine();

*displayMoviesTitles*(whichStar);

**break**;

**case** 2:

System.***out***.print("Which Genre: ");

*keyboard*.nextLine();

whichGenre = *keyboard*.nextLine();

*displayMovieStar*(whichGenre);

**break**;

**case** 3:

System.***out***.print("Which Year: ");

*keyboard*.nextLine();

whichYear = *keyboard*.nextInt();

*displayMovieYear*(whichYear);

**break**;

**case** 4:

*displayMovieGenres*();

**break**;

**case** 5:

System.***out***.print("Which Genre: ");

*keyboard*.nextLine();

whichGenre = *keyboard*.nextLine();

*displayStarName*(whichGenre);

**break**;

**case** 6:

System.***out***.print("Which Words or Phrases: ");

*keyboard*.nextLine();

whichWords = *keyboard*.nextLine();

*displayWordPhrase*(whichWords);

**break**;

**case** 7:

**return**;

**default**: System.***out***.println("Exception error!");

}

}

}

//\*\*\*\*\*\*1\*\*\*\*\*\*

**private** **static** **void** displayMoviesTitles(String whichStar) {

**try** {//Not sure if this was supposed to be star\_name or starID

String query = "SELECT movies.movieTitle FROM movies " +

"INNER JOIN stars ON movies.starID = stars.starID " +//need inner join

"WHERE stars.star\_Name Like '%" + whichStar + "%';";

Statement stat = *conn*.createStatement();

ResultSet rs = stat.executeQuery(query);

System.***out***.println("\nTHESE ARE THE MOVIES FOR STAR Name " + whichStar + ":");

**while**(rs.next()) {

String movies = rs.getString("movieTitle");

System.***out***.println(movies);//one output

}

}**catch**(SQLException e) {

e.printStackTrace();

}

}

//\*\*\*\*\*\*2\*\*\*\*\*\*

**private** **static** **void** displayMovieStar(String whichGenre) {

**try** {

String query = "SELECT movies.movieTitle, stars.star\_Name FROM movies " +

"INNER JOIN stars ON movies.starID = stars.starID " +//need inner join

"WHERE movies.genre Like '" + whichGenre + "';";//Like for String

Statement stat = *conn*.createStatement();

ResultSet rs = stat.executeQuery(query);

System.***out***.println("\nTHESE ARE THE MOVIES AND STAR NAME FOR GENRE: " + whichGenre + ":");

**while**(rs.next()) {

String movies = rs.getString("movieTitle");

String stars = rs.getString("star\_Name");

System.***out***.println(movies + " STARRING " + stars);//two outputs

}

}**catch**(SQLException e) {

e.printStackTrace();

}

}

//\*\*\*\*\*\*3\*\*\*\*\*\*

**private** **static** **void** displayMovieYear(**int** whichYear) {

**try** {

String query = "SELECT movies.movieTitle FROM movies " +

"WHERE movies.dateReleased = " + whichYear + ";";

Statement stat = *conn*.createStatement();//no inner join

ResultSet rs = stat.executeQuery(query);

System.***out***.println("\nTHESE ARE THE MOVIES RELEASED IN " + whichYear + ":");

**while**(rs.next()) {

String movies = rs.getString("movieTitle");

System.***out***.println(movies);//one output

}

}**catch**(SQLException e) {

e.printStackTrace();

}

}

//\*\*\*\*\*\*4\*\*\*\*\*\*

**private** **static** **void** displayMovieGenres() {

**try** {

String query = "SELECT distinct movies.genre FROM movies;";//need distinct otherwise will print out all

Statement stat = *conn*.createStatement();//no inner join

ResultSet rs = stat.executeQuery(query);

System.***out***.println("\nTHESE ARE THE MOVIES GENRES:");

**while**(rs.next()) {

String genre = rs.getString("genre");

System.***out***.println(genre);//one output

}

}**catch**(SQLException e) {

e.printStackTrace();

}

}

//\*\*\*\*\*\*5\*\*\*\*\*\*

**private** **static** **void** displayStarName(String whichGenre) {

**try** {

String query = "SELECT stars.star\_Name FROM stars " +

"INNER JOIN movies ON stars.starID = movies.starID " +//need inner join

"WHERE movies.genre Like '" + whichGenre + "';";//Like for String

Statement stat = *conn*.createStatement();

ResultSet rs = stat.executeQuery(query);

System.***out***.println("\nTHESE ARE THE STAR NAMES FOR MOVIE GENRE " + whichGenre + ":");

**while**(rs.next()) {

String stars = rs.getString("star\_Name");

System.***out***.println(stars);//one output

}

}**catch**(SQLException e) {

e.printStackTrace();

}

}

//\*\*\*\*\*\*6\*\*\*\*\*\*

**private** **static** **void** displayWordPhrase(String whichWord) {

**try** {

String query = "SELECT movies.movieTitle from movies " +

"WHERE movies.movieTitle Like '%" + whichWord + "%';";//no inner join

Statement stat = *conn*.createStatement();//Like for String, and need % for searching for a part

ResultSet rs = stat.executeQuery(query);

System.***out***.println("\nTHESE ARE THE MOVIE TITLES CONTAINING PARTICULAR WORDS " + whichWord + ":");

**while**(rs.next()) {

String title = rs.getString("movieTitle");

System.***out***.println(title);//one output

}

}**catch**(SQLException e) {

e.printStackTrace();

}

}

}