Introduction

Develop a web site which customers can access movie information anytime of the day. The website has client-side webpage to display relevant details and a server-side webpage to process online request from the client. The website will develop using php and html. All the data will be stored in a MySQL database. According to the client search criteria server-side program will process the request according to the predefined queries and display all the details in the page as a table format.

Movies can be searched using Movie title, rating of the movie, year released or Genre. Client can mix and match those criteria's to find the movie or movies of their choice. Client need not to enter the whole name of the movie only a part of it would be enough, and application will display all the possible movies with matching name. So, it is user-friendly for clients to search their favourite movies. Furthermore, application will have a drop-down menu to select options as they needed to make the search much easier for customers.

There is a page to display 10 most popular movies, this information gathers from the search records. There is a separate table to store tile and the count of times a movie search. Page will display only 10 most searched movies.

Design of the application
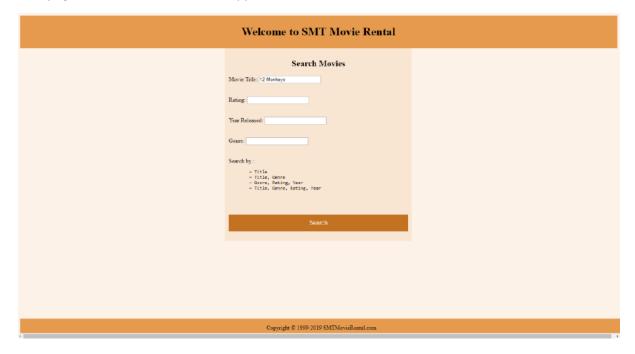
Draft design of the web pages

Database Design

Data stored in an Excel file, to get the data to the sql database first it need to be converted to a comma delimited csv file. Then Create a database called "MovieRentals", and a table to store movies.
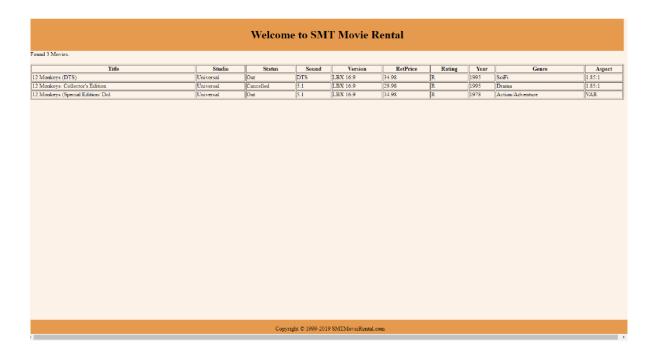
```
DROP DATABASE IF EXISTS MovieRentals;

CREATE DATABASE MovieRentals;

USE MovieRentals;


CREATE TABLE Movies (
    MID INTEGER NOT NULL AUTO_INCREMENT,
    Title VARCHAR(32) NOT NULL,
    Studio VARCHAR(32) NOT NULL,
    Status VARCHAR(32) NOT NULL,
    Sound VARCHAR(32),
    Version VARCHAR(32),
    RetPrice DECIMAL(6,2) NOT NULL,
    Rating VARCHAR(32),
    Year INTEGER,
    Genre VARCHAR(32),
    Aspect VARCHAR(32),
    PRIMARY KEY(MID)
);
```
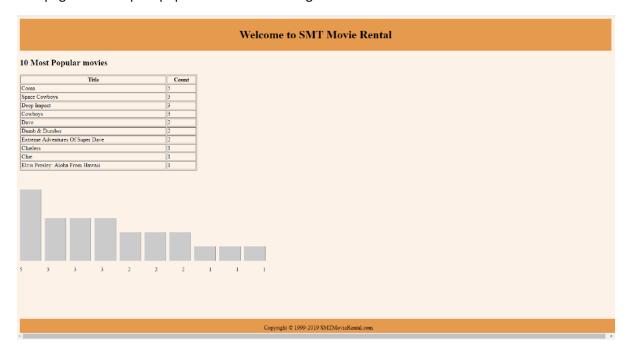
Web Application Development

First page of the Movie Rental web application.

Search movies using the title "12 Monkeys" and this will bring 3 movies on the next page for the customer to find the one he/she desired.

Welcome to SMT Movie Rental

Found 3 Movies.

Title	Studio	Status	Sound	Version	RetPrice	Rating	Year	Genre	Aspect
12 Monkeys (DTS)	Universal	Out	DTS	LBX 16:9	34.98	R	1995	SciFi	1.85:1
12 Monkeys: Collector's Edition	Universal	Cancelled	5.1	LBX 16:9	29.98	R	1995	Drama	1.85:1
12 Monkeys (Special Edition/ Dol	Universal	Out	5.1	LBX 16:9	34.98	R	1978	Action/Adventure	VAR

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This page shows top 10 popular movies according to customers number of searches.

Welcome to SMT Movie Rental

10 Most Popular movies

Title	Count
Coma	5
Space Cowboys	3
Deep Impact	3
Cowboys	3
Dave	2
Dumb & Dumber	2
Extreme Adventures Of Super Dave	2
Clueless	1
Clue	1
Elvis Presley: Aloha From Hawaii	1

5   3   3   3   2   2   2   1   1   1

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Test code against the PEAR code standard using PHP CodeSniffer

CodeSniffer is used to check for the violation of coding conventions which are guidelines for software structural quality. Software programmers are highly recommended to follow these guidelines to help improve the readability of their source code and make software maintenance easier.

The Movie Rental website index page is also checked for the coding standards violations using the codeSniffer pre-installed version and found 137 errors and 1 warning.

```
FILE: ...ampp with PHP Code Sniffer pre-installed\_xampp\htdocs\index.php
--------------------------------------------------------------------------
FOUND 137 ERRORS AND 1 WARNING AFFECTING 71 LINES
--------------------------------------------------------------------------
    1 | ERROR   | [x] End of line character is invalid; expected "\n"
      |         |     but found "\r\n"
   25 | ERROR   | [ ] Missing file doc comment
   25 | ERROR   | [x] File is being unconditionally included; use
      |         |     "require" instead
   29 | ERROR   | [x] Line indented incorrectly; expected 0 spaces,
      |         |     found 4
   29 | ERROR   | [x] Spaces must be used for alignment; tabs are not
      |         |     allowed
   30 | ERROR   | [x] Spaces must be used to indent lines; tabs are
      |         |     not allowed
   30 | ERROR   | [x] Line indented incorrectly; expected at least 4
      |         |     spaces, found 2
   31 | ERROR   | [x] Spaces must be used to indent lines; tabs are
      |         |     not allowed
```

Fix Code violations using PHP Code Beautifier

Above violations of coding standards can be fixed easily using PHP Code Beautifier utility. Fixing these issues is highly recommended as its increase the readability and easy to maintain coding in future.

Index.php page:

```
PHPCBF RESULT SUMMARY
-------------------------------------------------------------------------
FILE                                                 FIXED   REMAINING
-------------------------------------------------------------------------
...ode Sniffer pre-installed\_xampp\htdocs\index.php  128     14
-------------------------------------------------------------------------
A TOTAL OF 128 ERRORS WERE FIXED IN 1 FILE
-------------------------------------------------------------------------

Time: 203ms; Memory: 5Mb
```