Online Movie theatre’s Ticket booking system

Objective:

- This is an online web site on which user as well as theatre owner register themselves and use this site to update movies in theatre and search for particular location of theatre as well as book tickets for particular movie. Also theatre authority can check by ticket number for valid user.
Database Design:

**ER-Schema:**

- **CreditInfo**
  - UserID
  - ExpDate
  - Name
  - Ticket

- **UserInfo**
  - FirstName
  - LastName
  - Movie
  - Address
  - TheatreID
  - County
  - TheatreID

- **Theatre**
  - NameofTheatre
  - TheatreID
  - NumofScreen
  - TheatreID
  - Capacity

- **Movie**
  - NameofMovie
  - MovieID
  - Director
  - Actor
  - Actress
  - Rated
  - ReleaseYear

- **Screen**
  - MovieID
  - ScreenID
  - TheatreID
  - ScreenID
  - Capacity

- **ShowTime**
  - MovieID
  - TheatreID
  - Time1
  - ScreenID
Tables:

**CreditInfo:**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NumOfCreditCard</td>
<td>Number</td>
</tr>
<tr>
<td>Type</td>
<td>Text</td>
</tr>
<tr>
<td>Name</td>
<td>Text</td>
</tr>
<tr>
<td>UserID</td>
<td>Text</td>
</tr>
<tr>
<td>ExpDate</td>
<td>Date</td>
</tr>
<tr>
<td>Ticket</td>
<td>Number</td>
</tr>
<tr>
<td>Movie</td>
<td>Text</td>
</tr>
</tbody>
</table>

**UserInfo:**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>FirstName</td>
<td>Text</td>
</tr>
<tr>
<td>LastName</td>
<td>Text</td>
</tr>
<tr>
<td>UserID</td>
<td>Text</td>
</tr>
<tr>
<td>Password</td>
<td>Text</td>
</tr>
<tr>
<td>Favorite</td>
<td>Text</td>
</tr>
<tr>
<td>Reply</td>
<td>Text</td>
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</tbody>
</table>

**Location**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ZipCode</td>
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</tr>
<tr>
<td>State</td>
<td>Text</td>
</tr>
<tr>
<td>City</td>
<td>Text</td>
</tr>
<tr>
<td>StreetAddress</td>
<td>Text</td>
</tr>
<tr>
<td>County</td>
<td>Text</td>
</tr>
<tr>
<td>TheatreID</td>
<td>Number</td>
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</tbody>
</table>

**Movie:**

<table>
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<tr>
<th>Attributes</th>
<th>Data Type</th>
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</thead>
<tbody>
<tr>
<td>NameOfMovie</td>
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</tr>
<tr>
<td>MovieID</td>
<td>Number</td>
</tr>
<tr>
<td>Actor</td>
<td>Text</td>
</tr>
<tr>
<td>Actress</td>
<td>Text</td>
</tr>
<tr>
<td>Director</td>
<td>Text</td>
</tr>
<tr>
<td>ReleaseYear</td>
<td>Number</td>
</tr>
<tr>
<td>Rated</td>
<td>Text</td>
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</tbody>
</table>

**Screen:**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MovieID</td>
<td>Number</td>
</tr>
<tr>
<td>ScreenID</td>
<td>Number</td>
</tr>
<tr>
<td>TheatreID</td>
<td>Number</td>
</tr>
<tr>
<td>Capacity</td>
<td>Number</td>
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**Theatre:**

<table>
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<tr>
<th>Attributes</th>
<th>Data Type</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>NumOfScreen</td>
<td>Number</td>
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<tr>
<td>NameOfTheatre</td>
<td>Text</td>
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</tbody>
</table>

**ShowTime:**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MovieID</td>
<td>Number</td>
</tr>
</tbody>
</table>
Application Structure:

A typical application that interacts with a user, from spreadsheets on personal computers to accounts payable systems on mainframes, consists of three elements:

1. **Presentation:**
   - Presentation of information and functionality, navigation, and protection of user interface consistency and integrity.

2. **Application Logic:**
   - Shared business policies, generation of business information from data, and protection of business integrity.

3. **Data Services:**
   - Definition of data, storage and retrieval of persistent data, and protection of data integrity.

   Presentation, also known as the user interface, focuses on interacting with the user. Particularly in this Application WebPages and Forms and controls in WebPages that the user interacts with.

   Application Logic, or Business rules, perform calculations and determine the flow of the application. Business rules encompass those practices and policies that define a corporation’s behavior. Business rules are Constraints, usually self-imposed, that companies use to help them operate in their particular business environment. Business rules often define a baseline for application requirements and provide guidance to the Developer. Here in this application what kind of data you have to enter and what type of output you get it.

   Data services manage information by storing data and providing datarelated functionality. For Example A SQL Server running on WindowsNT server would be a data Service. In this application all the data has been Stored and managed in MS Access and created data source ‘OnlineMovie’ in MS ODBC. By ADODB it passes Information to database and application and web server.
Following Tools and Languages has been used to make this application

Technologies:
Operating system: WindowNT Server
Languages: Visual Basic
Scripts: VB Script, JavaScript
Tools: Visual InterDev, Microsoft Transaction Server(MTS)
Web Server: Internet Information Server (IIS 4.0)
DataBase: MS Access, MS SQL Server
Following Web Pages have been created in Visual InteDev:

1. Default.html
2. Login_handler1.asp
3. NewAccount.asp
4. Forgotpw.asp
5. Action.asp
6. UserInfo.asp
7. Ticketbooking.asp
8. MovieSearch.as
9. Checkticket.asp
10. Checkforticketavailability.asp
11. Displayaddinfo.asp
12. Display_profile.asp
13. AddInfo.asp
Above page is the first page when User type in address of web site http://dhruv/onlinemovietheatre.
On this page there are two text boxes inputs UserID and Password. If user is already registered to system he/she can login to system by Entering userid and password.
If User is new and he has to register by clicking New Users.
If User is already registered but he doesn’t know is password he can know by clicking on ‘If you have forgotten your password, click here’.
There are two buttons ‘Submit’ to submit UserID and PassWord and ‘Reset’ by Resetting fields.

By Clicking on ‘New Users, Click here’ we can have access to following web page ‘NewAccount.asp’
New Account Information Form

- **FirstName**: Dhruv
- **LastName**: Patel
- **UserID**: Dhruv
- **Password**: Dhruv
- **Favorite**: Bridgeport
- **Answer**: U6

**Click here to go to Login Page**

- There are six text fields on this web page.
  1. FirstName
  2. LastName
  3. UserID
  4. Password
  5. Favorite
6. Answer

All the Fields user has to enter for register himself.
- All the entered data can be submitted by submit button and can be reset by Reset button.
- When user click on submit button all the data entered by user has been stored to Table ‘UserInfo’
- After Submitting data user can click on ‘Click here to go to Login Page’ so he can have login page.
- If user Click on submit button he can have access to following page

Action.asp

- By Clicking on ‘Click here to go to movie Search page’ he can have access to ‘MovieSearch.asp’ page
- On Main login page if you user has been registered but user doesn’t know his password. He can know his password by clicking on ‘If you forgotten your password click here’ he can have access to following web page.
There is one text field on this web page ‘Enter Your UserID’ Where user Enter his user ID and click on submit button he can have access to following information
When User Enter correct answer in response to Favorite that query can search password from UserInfo table of database and display to user
After getting this password, the user can go to the main login page and authenticate himself to the system and get access to the following page.
Login Successful

Click here to go to main page...

Click here to Check Ticket Information..

There are two options on to go to on different web pages

1. ‘Click here to go to main page…’ if user click on this line he can have access to movie search page.
2. ‘Click here to check ticket information’ by clicking on this line user can check ticket confirmation by entering ticket number.

If user click on number 1. He can have access to ‘MovieSearch.asp’ Page
On this web page there are certain Listboxes
1. State
2. County
3. City
4. Theatre
5. Movie
6. Showtime

One Text box for number of tickets user want to book

Two options
1. ‘Click here to add Theatre Information’ to go to add theatre and movie information for theatre owner
2. ‘Click here to logout’ for logout
   - One button ‘Go for Ticket booking’
   - When user select Particular movie in particular area like this way

   When user Enter  500 ticket which is more than capacity of particular screen in selected theatre
   So it will display following web page saying that Ticket is not available enter Reasonable number of tickets
• By Selecting ‘Click here to add reasonable tickets’ option we can have previous web page ‘Moviesearch.asp’

• If user enter valid ticket in that text box for Example:1 and click that button ‘Go for Ticket booking’

He can have access to following web page.
Checkforticketavailability.asp

- If user chose this option ‘Go to Book ticket’ he can have access to following web page.

Ticket is available
Click here to go to book tickets

Go to book ticket
There are following user interfaces available on this web page
1. For Radio buttons  Master, Visa, American Express, Discover Card
2. Name
3. UserID
4. CreditCard Number
5. Exp. Date
6. SubmitInfo Button

When user Enter above information and click on submitinfo button all the information have been saved into CreditInfo table of database

When user click on submit he can have access to following web page
If user chose ‘Click here to go to search another movie’ he can have access to ‘MovieSearch.asp’ page.

On ‘MovieSearch.asp’ Page if user click on ‘Click here to add theatre Information’ he can have access to this web page ‘AddInfo.asp’
<table>
<thead>
<tr>
<th>CT</th>
<th>State</th>
<th>Movie</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Actress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NameofTheatre</td>
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<tr>
<td></td>
<td></td>
<td>Number Of Screen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TheatreID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Release Year</td>
</tr>
</tbody>
</table>
Following Information Theatre owner has to enter to update movie information in database

1. State
2. Movie
3. Actor
4. Actress
5. Director
6. NameOfTheatre
7. NumberOfScreen
8. TheatreId
9. Capacity
10. ReleaseYear
11. Rated
12. ScreenID
13. Address
14. County
15. City
16. ZipCode