

Introduction to Computer Communications – Project —a website in MVC

The project – Cinema

Instructions:

1. The project can be developed in singles or in pairs in MVC. **In addition to MVC**, you can choose to implement other web development technologies on YOUR RESPONSIBILITY.
2. The project is to be presented during the dates published in Moodle (later in the course). All the partners must be present during the meeting. **Both partners will be graded separately for their part in their project.**
3. The project must be submitted till 03/01/2021 into Moodle. Only one partner should submit the project but the names of both partners must be included.
4. The delay can be granted **only** due to the sickness and military reservation service (miluim). The delay can be asked **only** via a student request with the attachment of relevant documents.
5. Copying ANY part is strongly prohibited and will be graded by 0, all the students will stand to disciplinary committee in this case.

You are to develop a website for managing the Movies booking at the Cinema (local host) using all the technologies taught during the lab sessions.

The user types and their permissions, respectfully: admin (managing the site) and users (booking a movie and confirming the payment). Other users can be added with their permissions. All of the types of users should get a separate page view according to their permissions.

Cinema is a slight version of the real Cinema Halls, which should manage movies, halls, payments, etc.

The following is a necessary list of requirements to be implemented in the project. You are responsible of taking care of other possible constraints (e.g., different users are simultaneously trying to book the same seat in the same hall while browsing the site from the same local host, etc.). All the constraints, which does not meet requirements, must give a relative error message.

Admin is responsible for:

- adding/removing movies
- managing the prices
- managing the movie halls (where each movie is demonstrated)
- managing the number of seats in each hall
- etc.

Users can:

- choose a movie according to its date and time
- book an unoccupied seat
- change a seat (if it's unoccupied) till the booking (that is, after the seat is chosen and payment is processed, the seat cannot be checked).
- Make a payment
- Etc.

Movie gallery:

- has a list of movies with their posters, demonstration date and time, price and hall they are shown
- has an age limitation
- a movie list can be ordered according to
 - price increase
 - price decrease
 - most popular
 - category
- Users can choose movies of a specific date/category/time/price range
- Movie list can be filtered to show only movies with the decreased price (on sale)
- Different movies can be shown at the same time but in different halls
- Each movie has a specific time and date. Show the last date the movie is demonstrated in the cinema.
- Movies can be shown for several times on the same day.
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Buying a ticket:

- Users can choose a seat for a specific movie at a specific date and time
- Show occupied/unoccupied seats
- A seat can be changed only before pressing “confirm” button in payment section.
- It's impossible to choose an occupied seat
- It's impossible to buy a ticket for a movie, which already started or ended
- Registered/unregistered users can buy a ticket
- If a movie has a price decrease, show the ~~striketrough previous price~~, and a new price.

Payment:

- Managing a shopping cart
- Processing a payment (using SSL certificate – there are free ones online – is a **bonus**)
- **No** credit card must be stored in the database
- **Bonus:** the ability to pay with a PayPal (redirection to a PayPal site using its API)
- The user can choose to enter a movie to a shopping cart and process the payment from it or pay directly
- Show notification message after the payment is accepted or failed. After that, a user is redirected to Home page.

All data must be managed in the Database according to the user permission. For any violation, the points will be taken.

Note: You are responsible of other logical constraints as stated before!

Bonus (up to 15 points):

- (Online) Chat between the admin and the users
- Sending email confirmations

- Rating / giving feedback to movies (a user can only rate a movie after it ended and if he bought a ticket)
- Giving feedback to online experience of buying tickets (in an appropriate for that place)

Good Luck!!