The Movies

The proposed web application allows the user to book tickets to a movie theater. The user can:

- 1. Select the movie from the predefined list.
- 2. Choose the desired date in the calendar.
- 3. Choose the place in the cinema hall.
- Type own name and confirm own choice with OK button.
 (The system should notify whether the reservation is completed successfully.)
- 5. Additionally, the user can register in the system, so that the app will not have to ask the user name during the next booking.
- 6. (Optional) The system can show the history of movies booked by the currently logged user.

Notes:

- 1. There are 10 different movies in the system.
- 2. There are 5 movies shown daily in the theater.
- 3. Reservation can be done for the next 14 days.
- 4. The number of seats in the hall is limited, and they are different.

Suggestions for the user interface:

- 1. If the user selects the desired date first, he/she can only select movies available for this date.
- 2. If the user selects the desired movie first, he/she can only select dates when this movie is shown.
- 3. If there are no available seats for a certain day/film, the app should inform the user about it.
- 4. The user should be able to select the seat using the movie hall map. (Available seats should be highlighted.)
- 5. Registration requires entering a unique combination of login/password.
- 6. If a certain user is logged in, there is no need to ask for a user name.

Database Structure

Table ShowDate

Column	Type	Comment
date	DateField	ShowDate

Table CinemaHall (In fact, it's a theater room)

Column	Туре	Comment
name	CharField(255)	Cinema hall name
capacity	IntegerField	Capacity of cinema hall

Table Movie

Column	Туре	Comment
name	CharField(200)	Movie name
show_dates	ManyToMany	Movie screening dates
cinema_hall	ForeignKey	Movie screen hall

Table ReservationHistory

Column	Туре	Comment
user	ForeignKey	Use Django's models.User
reservation	ForeignKey	Loggin user's reservation

Table Reservations.

Column	Туре	Comment
User	ForeignKey	For Logged in user
Username	CharField	For users not logged in
Movie	ForeignKey	Booked movie
Seat	IntegerField	ID of the seat
date	DateField	Screening date of the reserved movie