Project C: An online meeting booking system

(Supervisor: Nanlin Jin(Nanlin.Jin@xjtlu.edu.cn)

TA & Groups:

Dingding Chen(Dingding.Chen18@xjtlu.edu.cn): Group(1, 16, 33, 50, 25)

Xinyi Zeng(Xinyi.Zeng24@student.xjtlu.edu.cn): Group(22, 5, 10, 49)

Tong Zou(Tong.Zou24@student.xjtlu.edu.cn): Group(32, 17, 9, 23))

Overall Description:

A web-based application for users to manage the meeting room resources, featuring user authentication, role-based access control, and administrative oversight.

Customer Specifications:

The system to be implemented should provide the following functionalities:

User Registration and Verification:

- Allow users (students who have a university ID card number) to register with an avatar, email, and password.
- Implement email verification for account activation.

Role-Based Access Control:

- Define two user roles: Admin and User.
- Admin can be pre-defined.

Meeting room management:

- Allow admins to enter the catalog of the meeting rooms, including an image of the meeting room, the room number, the capacity (number of seats), any IT facilities such as interactive screen/projector and speaker(s), and the location (for example in SD building, EE building).
- Admins to maintain the updated information about bookings, including time slots, dates, the reasons for booking, the account who has booked meeting rooms, and the room availability.

Resource Review and Management:

- Admins can review the updated information about bookings and the admins can reject any booking.
- Admins can lock/unlock user accounts if they book the meeting rooms excessively.

Resource Listing:

- The system lists all available meeting rooms with options for viewing details.
- Users can view the details of the available meeting rooms and the bookings they have made.

Search and Filter:

- Implement search functionality for users to find meeting rooms.
- Provide filtering options based on capacity, location and/or IT facilities.

System Users:

The system should provide functionality for different end users listed below:

System Administrators should be able to:

- Review, add, delete meeting rooms.
- Lock and unlock user accounts based on overbooking.
- View and manage all meeting room bookings, and user accounts.

Users who should be able to:

- Register as a new user with email verification.
- Login to the system.
- Update their personal information, upload avatars, and change passwords.
- Manage their room booking, including deleting or updating an existing booking, before the start of the meeting time.
- Search meeting rooms on the capacity, IT facilities, and/or the location.
- Make a new room booking.
- View the booking they have made.

Additional Considerations:
- **Security:** Ensure secure data handling and protection against vulnerabilities.
- **Usability:** Design an intuitive and accessible user interface. Consider usability properties such as providing help for users, accepting user feedback, and optimizing app performance.