

SE Exp 5

Aim: To Develop, collaborations & state diagram

Theory:

Sequence Diagram: Diagram shows interaction between objects  
here's the breakdown:

- ① Attendee (user)    ② Host (user)
  - ③ Authentication service: This service verifies identity of user attempting to login.
  - ④ Meeting manager: This component manages creation, configuration and termination of meetings.
  - ⑤ Meeting Room: Virtual space where meeting will take place. It holds multiple attendee & various functionalities.
  - ⑥ Media Server: This server handles transmission of audio & video data.
  - ⑦ Content sharing: Functionality to collaborate & share.
- Both attendee & host first initiate login by credentials to authentication. Host sends meeting details to manager where manager creates a meeting room & sends meeting ID to host and requested participants. The attendees can join meet using meeting ID/link with help of meeting manager. Attendee can carry out communication in meeting room.

Collaboration Diagram:

The Diagram illustrates how objects collaborate to let the Host create a meeting & attendees to join that meeting. It shows the interactions between user, authentication service, meeting manager, meeting Room,



media server & content sharing. The diagram shows a systematic view operation demonstrating coordination between each object to carry out the online meeting. It helps in identifying potential bottlenecks or areas for optimization in online meeting.

### State Diagram:

- ① User : login
- ② Logged in Attendee : join meeting
- ③ Logged in Host : join meeting
- ④ meeting : interact in meeting, leave meeting

User transitions from start state to Logged in state upon successful login. If user is a Host, it creates the meeting and if attendee user then joins the meeting. Initially attendee & host are 'not in meeting state' once they join meeting they all are 'in meeting state'. If host ends meeting all <sup>participants</sup> come to 'not in meeting state'. But if attendees leave the meeting, the attendee leaving will only be in 'not in meeting state'.

### Conclusion :

Hence we studied about the sequence, collaboration & state Diagram, also implement the same for the online meeting software. From this we came to know each of Diagram serves a distinct purpose in understanding and designing complex systems which offer valuable insight into system dynamics, interaction.

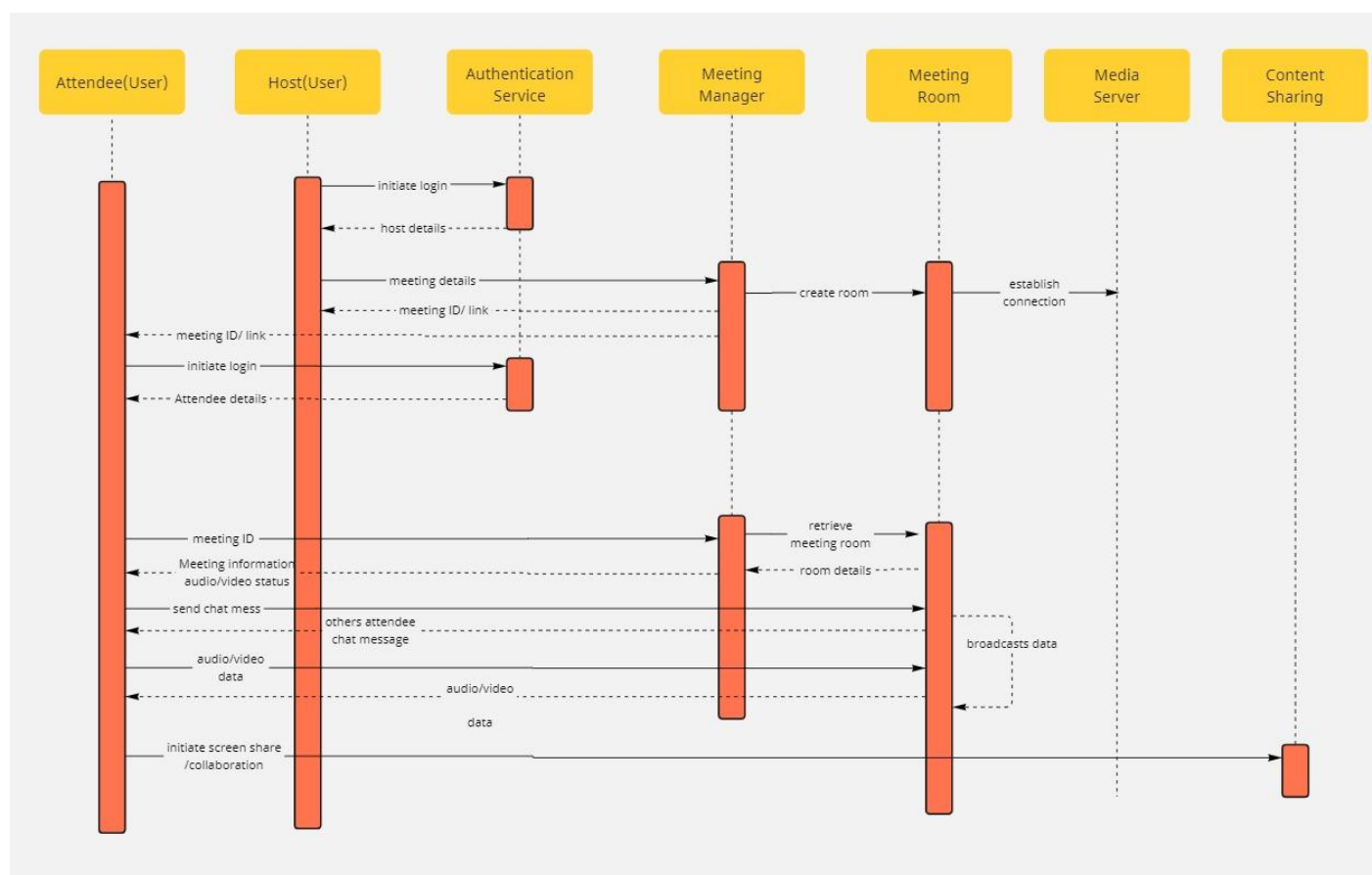




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Implementation :

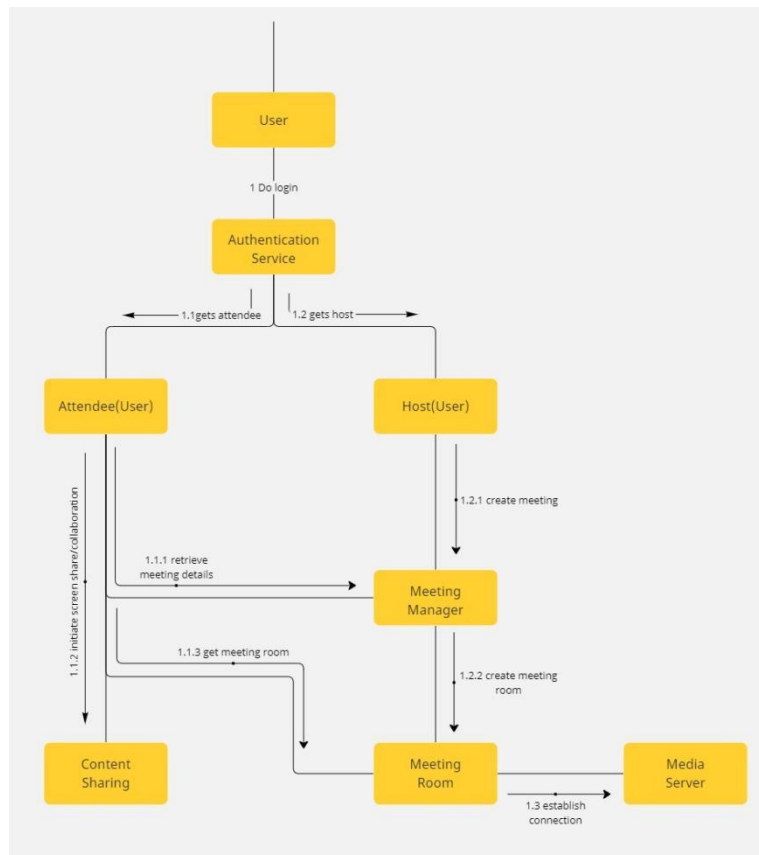
### 1. Sequence diagram :





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2. Collaboration diagram :



3. State Diagram :

