



KIET Group of Institutions, Delhi-NCR, Gzb
Department of Computer Applications (NBA Accredited)
(An ISO – 9001: 2015 Certified & 'A+' Grade accredited Institution by NAAC)



Session: 2023- 2024

SE-LAB KCA 325

Experiment-No.10

Objective: Identify the classes. Classify them as weak and strong classes and draw the class diagram for the specified Case Study.

Classes:

1. User Class (Strong Class):

Attributes: UserID, Username, Password, Email, etc.

Methods: SignUp(), Login(), Logout(), UpdateProfile()

2. ChatRoom Class (Strong Class):

Attributes: RoomID, RoomName, Participants, Messages, etc.

Methods: AddParticipant(), RemoveParticipant(), SendMessage(), GetMessages()

3. VideoRoom Class (Strong Class):

Attributes: RoomID, RoomName, Participants, VideoStream, etc.

Methods: AddParticipant(), RemoveParticipant(), StartVideoStream(), StopVideoStream()

4. Message Class (Weak Class):

Attributes: MessageID, SenderID, ReceiverID, Content, Timestamp, etc.

5. Notification Class (Weak Class):

Attributes: NotificationID, UserID, Content, Timestamp, etc.

Relationships:

1. User-ChatRoom Relationship:

One user can participate in multiple chat rooms.

One chat room can have multiple participants.



Session: 2023- 2024
SE-LAB KCA 325

2. User-VideoRoom Relationship:

One user can participate in multiple video rooms.

One video room can have multiple participants.

3. ChatRoom-Message Relationship:

One chat room can have multiple messages.

One message belongs to one chat room.

4. VideoRoom-Message Relationship:

One video room can have multiple messages.

One message belongs to one video room.

5. User-Message Relationship:

One user can send/receive multiple messages.

One message has one sender and one or more receivers.

6. User-Notification Relationship:

One user can receive multiple notifications.

One notification belongs to one user.



KIET Group of Institutions, Delhi-NCR, Gzb
Department of Computer Applications (NBA Accredited)
(An ISO – 9001: 2015 Certified & ‘A+’ Grade accredited Institution by NAAC)



Session: 2023- 2024

SE-LAB KCA 325

