

PES University, Bengaluru

(Established under Karnataka Act 16 of 2013)

Department of Computer Science & Engineering Session: Jan - May 2023

UE20CS352 - 00ADJ

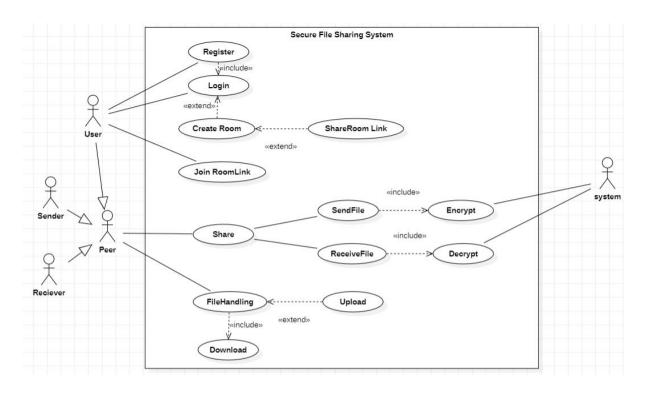
Mini Project

Secure File Sharing System

Team Members:

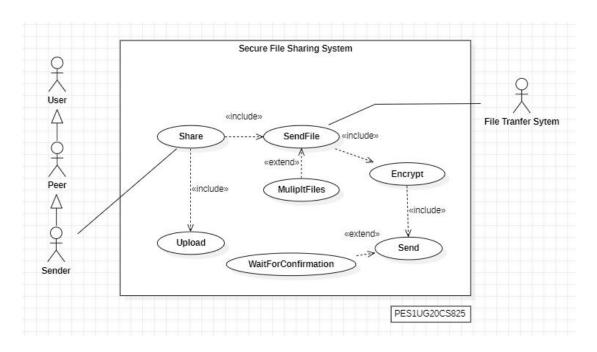
SRN	NAME	SEC	Roll No
PES1UG20CS825	Prem Sagar J S	"H"	61
PES1UG20CS472	Tushar J	"H"	10
PES1UG20CS479	Vaibhav Vijay	"H"	25

Secure File Sharing System Use Diagram:



Use Cases:

Send File Use Case Diagram:

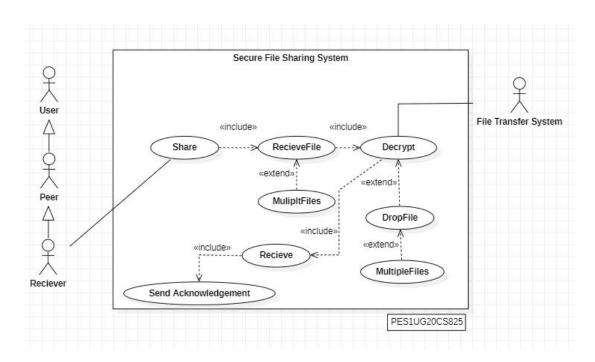


Description:

- ➤ Name : Send File Use Case
- ➤ Description: This use case represents the actions that a user takes to send a file to another user through the file sharing system.
- > Actors: User, File Sharing System.
- ➤ Pre-conditions: The user is logged in to the file sharing system, has the file to be sent, and knows the recipient's information.
- ➤ Post-conditions: The file is sent to the recipient through the file sharing system.
- > Flow of Events:
 - The user selects the "send file" option from the file sharing system's user interface.

- The file sharing system prompts the user to select the file to be sent and enter the recipient's information (e.g. email address, username, etc.).
- The user selects the file to be sent and enters the recipient's information.
- The file sharing system verifies the recipient's information and prompts the user to confirm the file and recipient.
- The user confirms the file and recipient.
- The file sharing system sends the file to the recipient through the file sharing system.
- The file sharing system notifies the user when the file has been successfully sent.

Receive File Use Case Diagram:

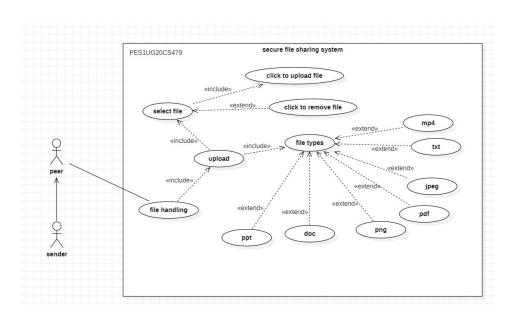


Description:

- ➤ Name : Receive File Use Case
- ➤ Description: This use case represents the actions that a recipient takes to receive a file sent through the file sharing system.

- > Actors: Reciever, File Sharing System.
- ➤ Pre-conditions: The recipient has been notified that a file has been sent to them through the file sharing system.
- ➤ Post-conditions: The recipient has received the file through the file sharing system.
- > Flow of Events:
 - The recipient logs in to the file sharing system.
 - The file sharing system notifies the recipient that a file has been sent to them.
 - The recipient selects the file and downloads it through the file sharing system.
 - The file sharing system verifies the recipient's identity and authorizes the download.
 - The file is downloaded to the recipient's device.
 - The file sharing system notifies the sender that the file has been successfully received.

Upload File Use Case Diagram:



Description:

> Name: upload file use case

> Summary: select the file and upload it in file database

> Actor: peer(sender)

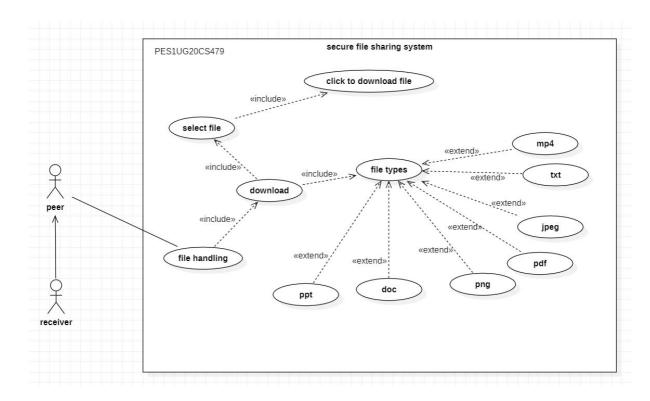
> Pre-condition: client has entered the platform

➤ Description: click on "UPLOAD" to upload the file select file from the peer local system click on "OK" to start upload, uploading could be stopped

> Exception: file is invalid or corrupted

> Post-condition: send file for encryption

Download File Use Case Diagram:

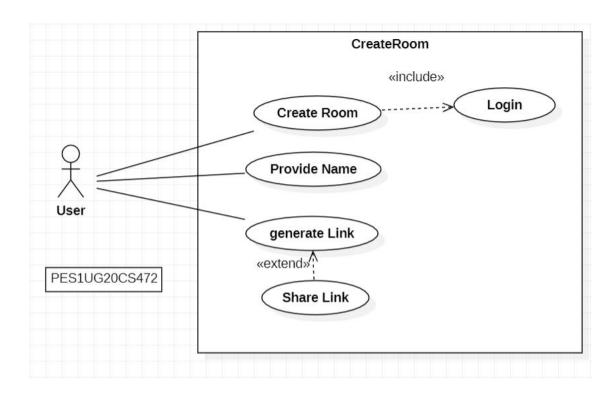


Description:

➤ Name: download file use case

- > Summary: download shared file in the room
- > Actor: peer(receiver).
- > Pre-condition: file had been received and verified by decryption
- Description: click on "DOWNLOAD" to download the file. select the destination to download in the peer's local system click on "OK" to start downloading, downloading could be stopped.
- > Exception: file is invalid or corrupted
- ➤ Post-condition: peer can continue being in the room to share and receive files.

Create Room Use Case Diagram:



Description :

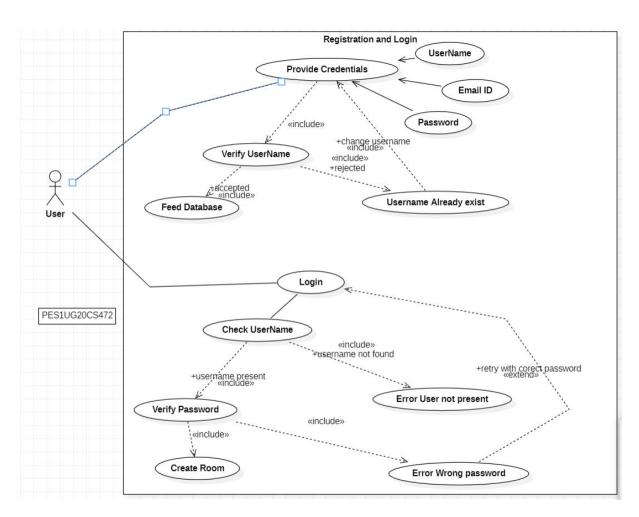
> Name: CreateRoom

> Summary: Create a room where peers can share files

> Actor: User

- > Preconditions: The Client has entered the platform
- > Description:
 - - Click on "create room"
 - - Click on "generate room link"
 - - Click on "share link" and share it with other peers and the peers can join the room if the room limit has not been exceeded
- Exceptions: The room limit exceeds
- ➤ Post-condition: Peers can join and share files

Registration and Login Use Case Diagram:



Description:

> Name: Registration and Login

> Summary: Register or login to room

> Actor: User

> Description:

- if the user already has an account, they enter their username or email address and password and click the "login" button.
- If the user is a new user, they click the "register" button and are directed to a registration form.
- If the credentials are valid and the account is activated, the system logs the user in and directs them to the main page of the application or website.
- If the credentials are not valid or the account has not been activated, the system displays an error message explaining why the login failed
- > Exceptions: invalid username or password
- > Post-condition: Go ahead and Create or join room