Sequence Analysis for server and client
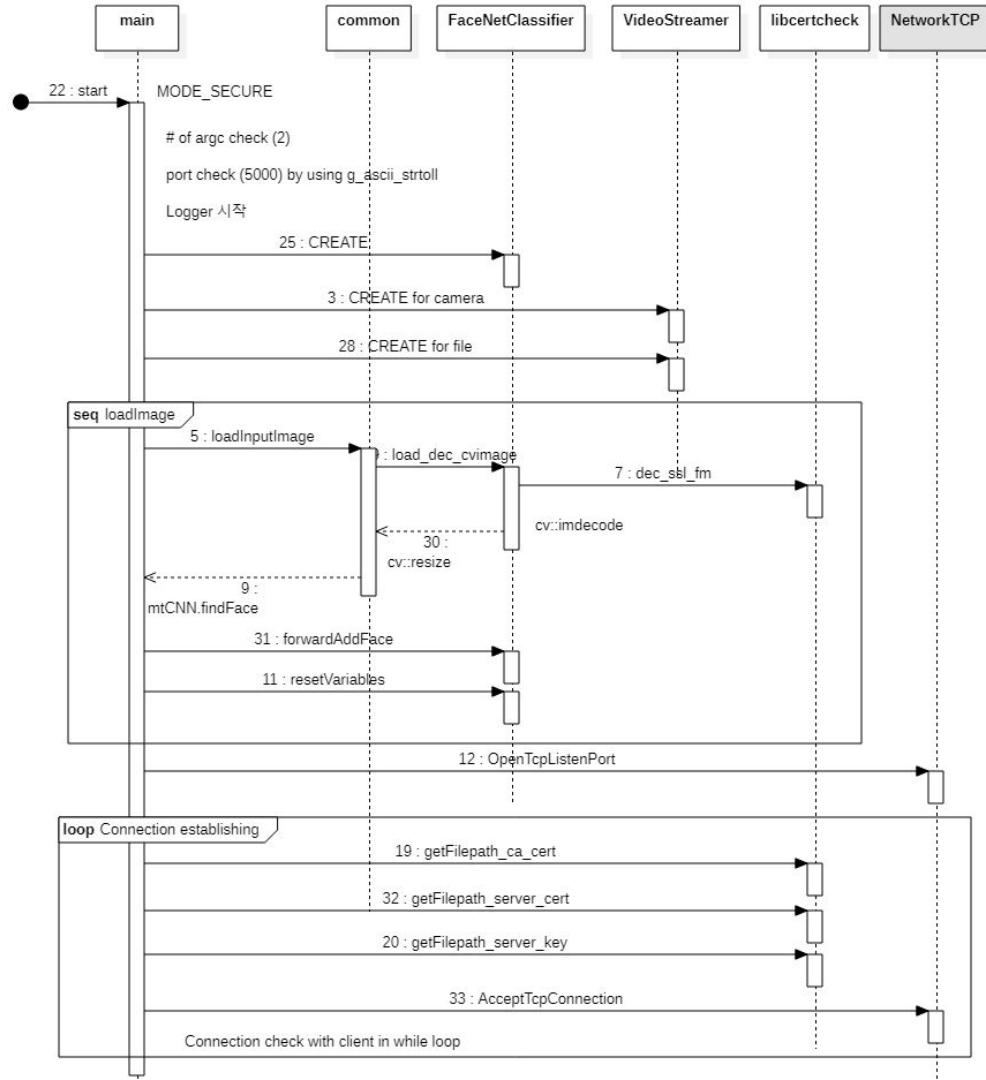
Phase 2: Evaluation of Team 6

Server Initialization

Allow only one port (5000)
Load face images with decryption
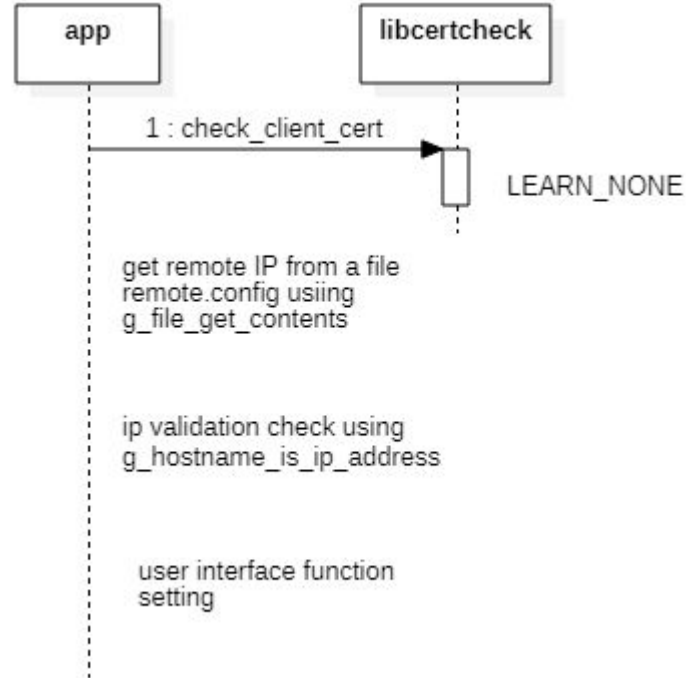Listening TCP Port

Client Initialization

get server IP address from config file as plain text
IP validation

LogIn

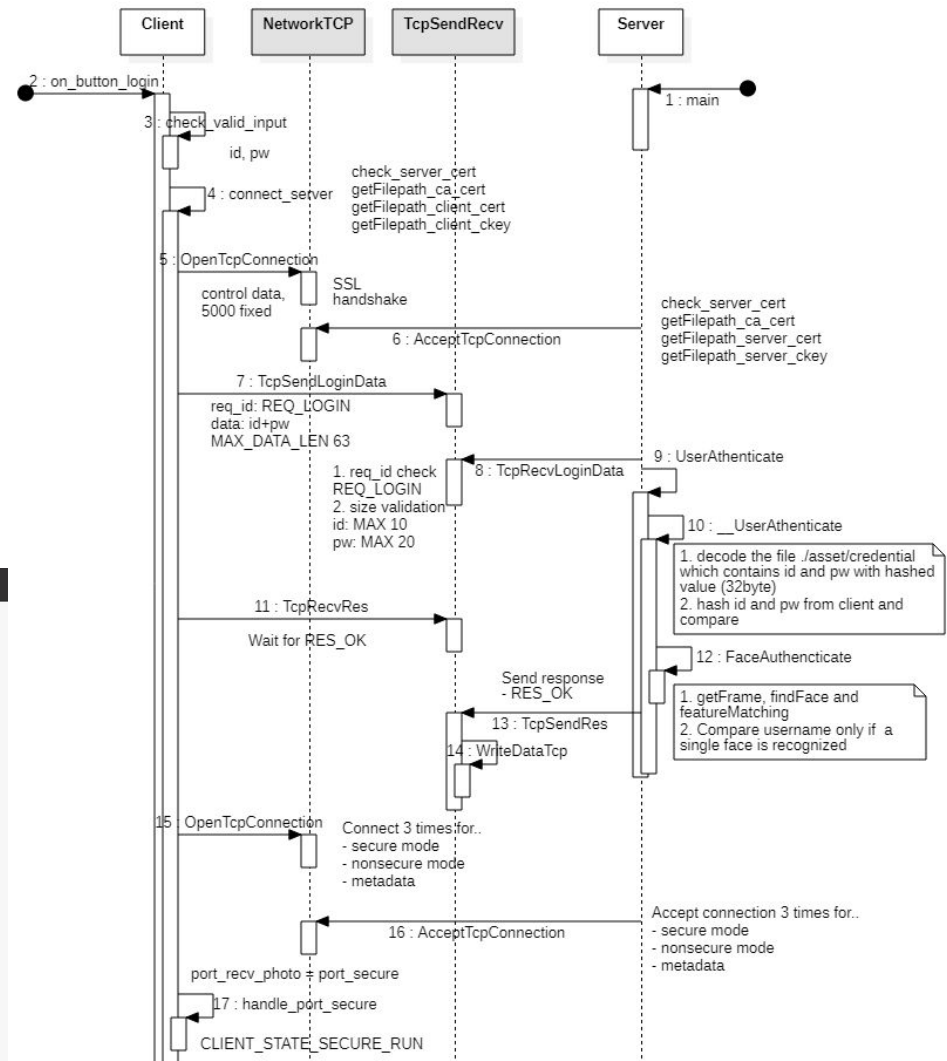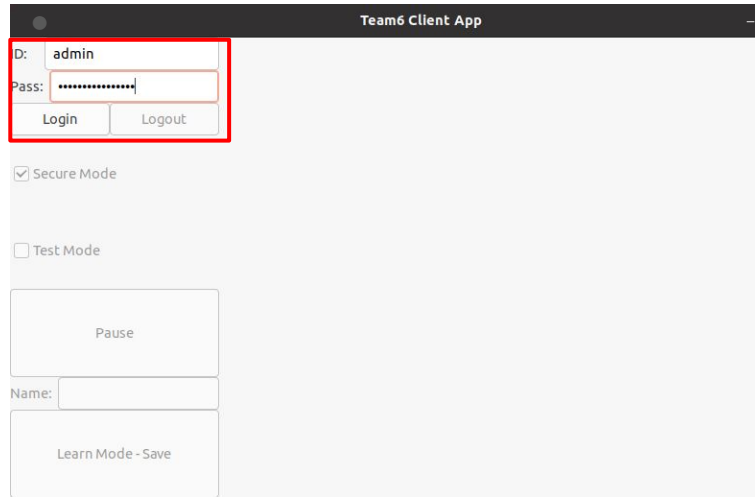## Client
- Input validation for ID/Pass
- Establishing connection using certification

Server
- Authentication of ID/Pass with credential file
- Authentication of Face with ID
- Image is not sent to client

Data Communication

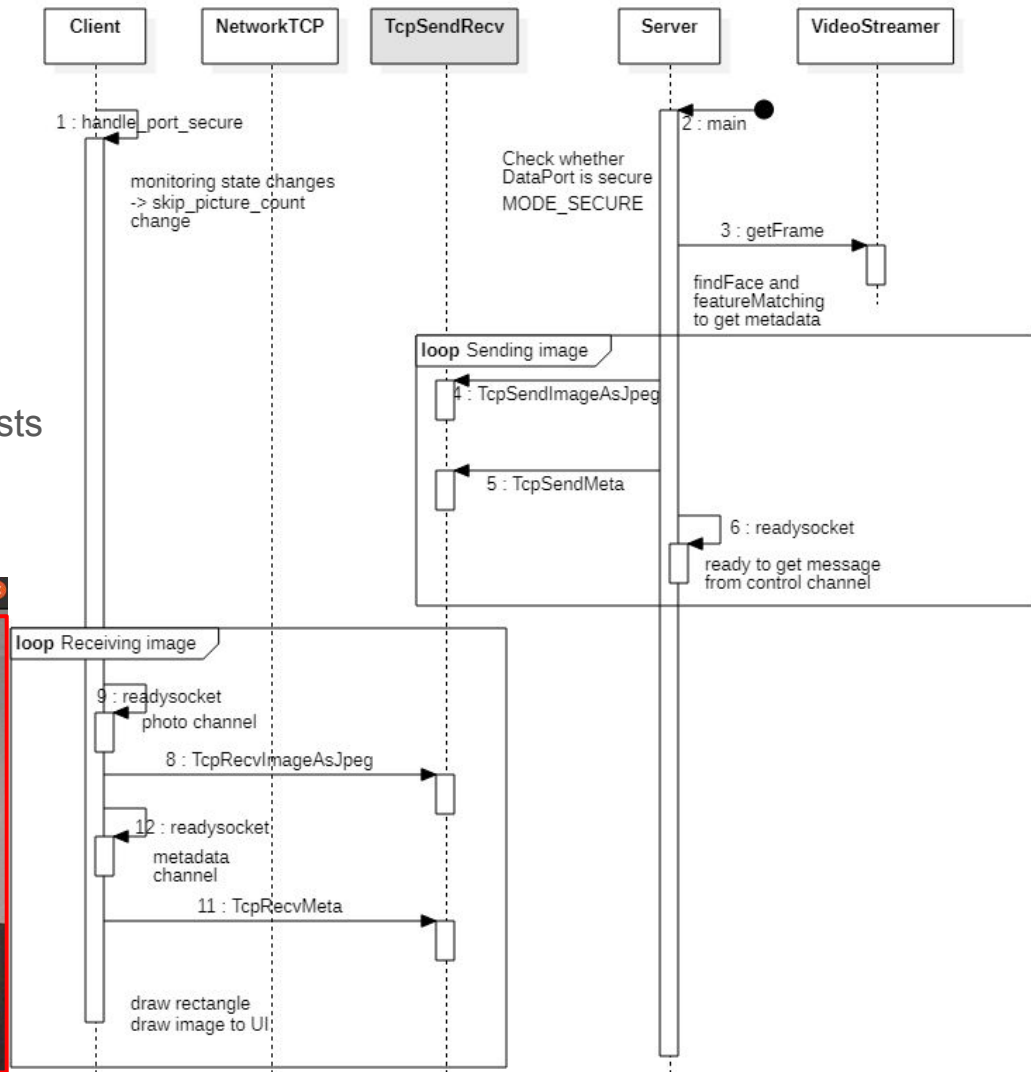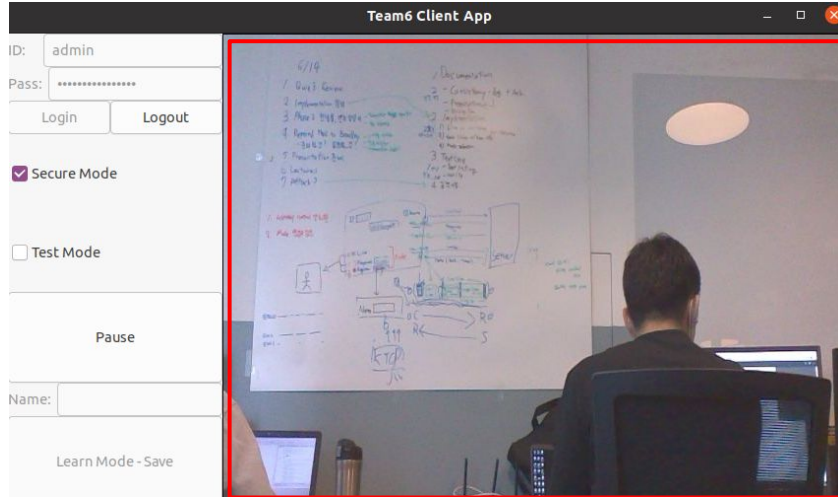Data send/receive twice via each channel
- Photo (image)
- Metadata (face information)

Then, get a message from control channel if exists
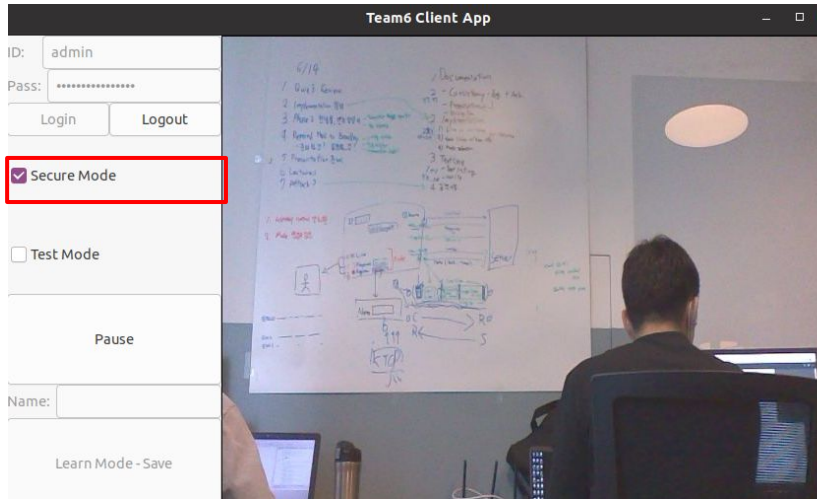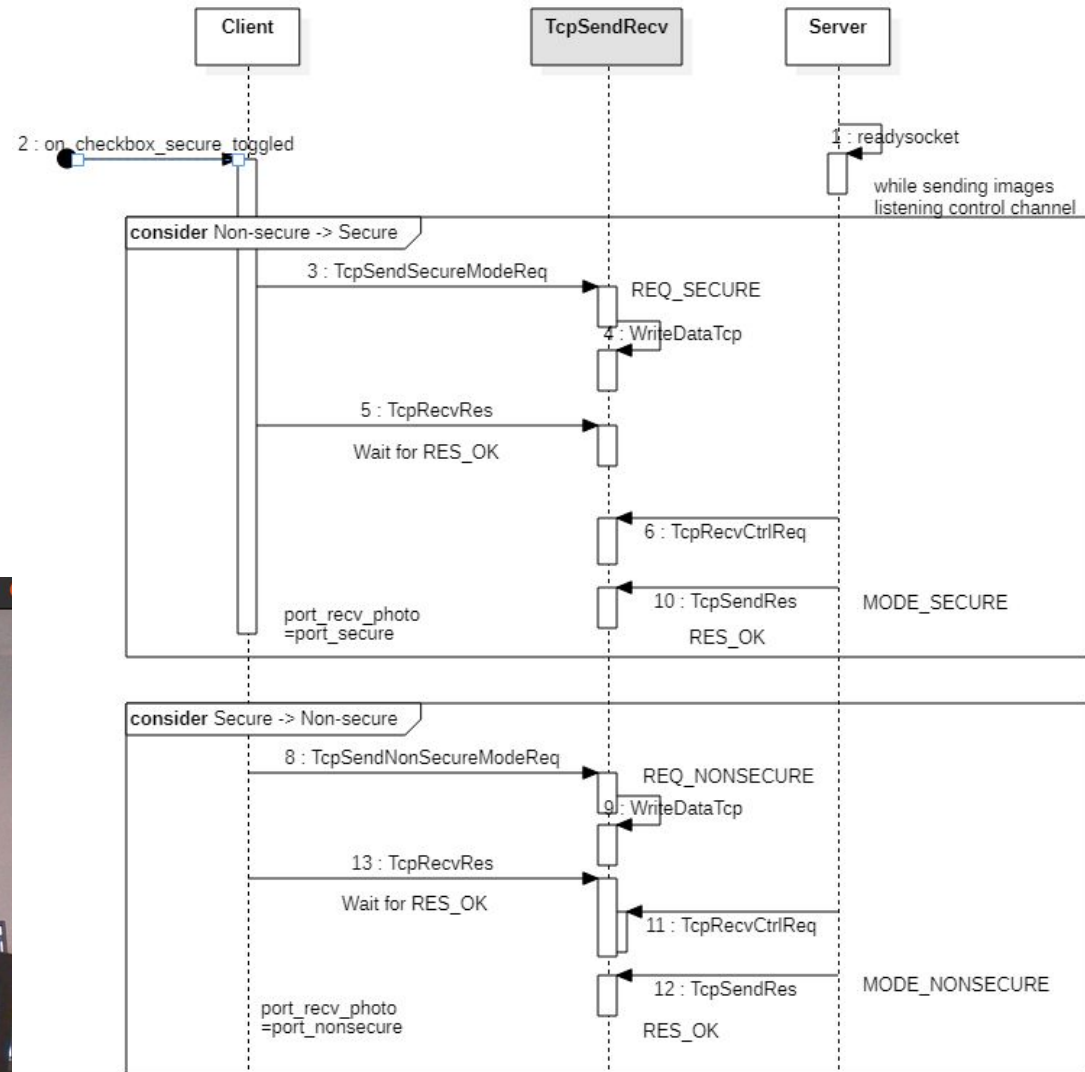
Secure mode Change

Secure ↔ Insecure

Client
- Send Request via control channel
- Wait for OK response then change port

Server
- Just change mode status
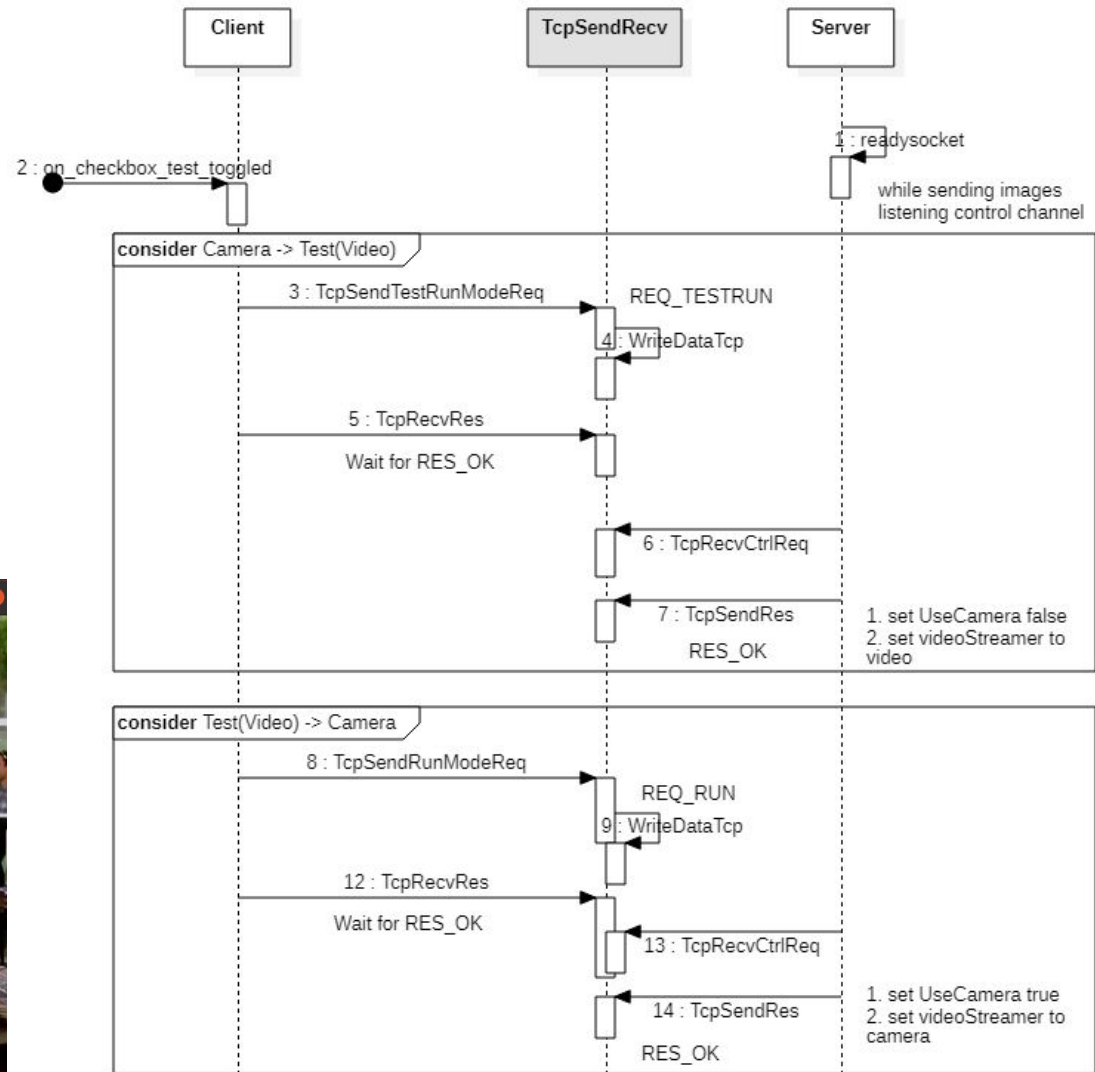
Play mode Change

Camera ↔ Test(Video)

Client
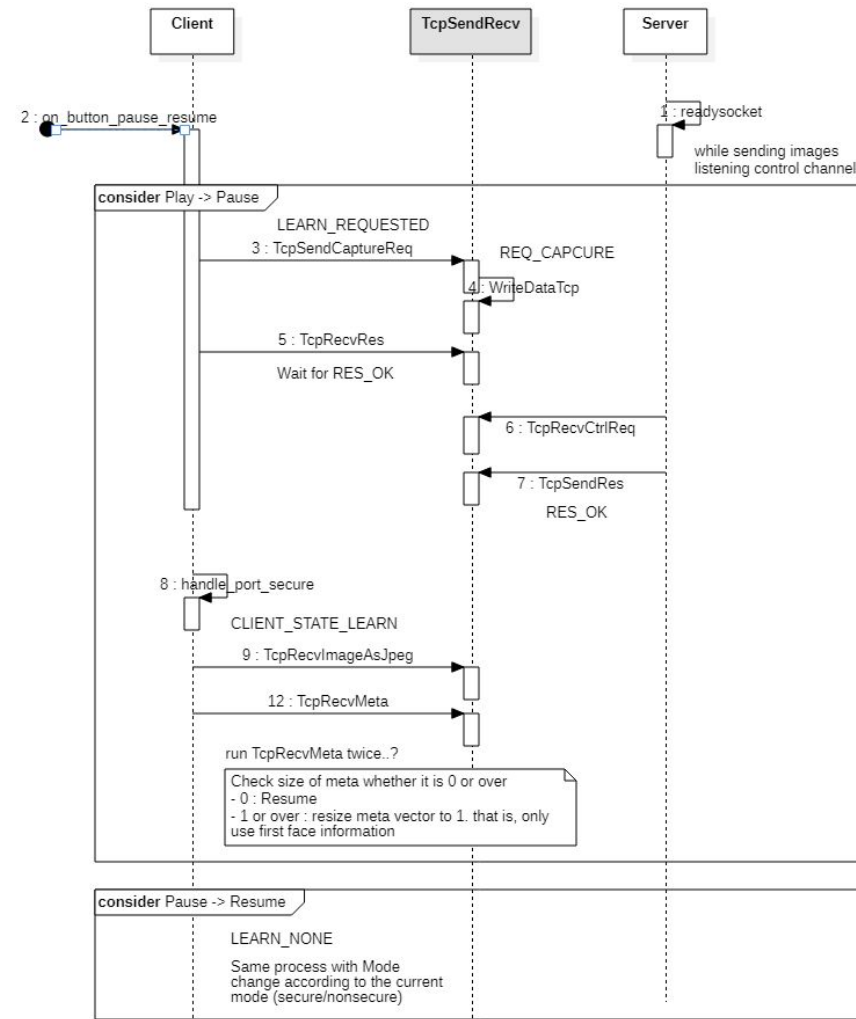- Send Request via control channel

Server
- Change video source

Pause - Switch to Learn mode

Check metadata

- No face - Notification to try again.
- 1 or more faces - The first detected face can be the candidate to save
- Possible no matter what the face is already registered

Client App screenshot

ID: admin
Pass: ••••••••••••••••
Login   Logout

☑ Secure Mode

☑ Test Mode

Resume

Name: [   ]

Learn Mode - Save

Sequence diagram:

Client | TcpSendRecv | Server

2 : on_button_pause_resume

1 : readysocket

while sending images
listening control channel

consider Play -> Pause

LEARN_REQUESTED
3 : TcpSendCaptureReq   REQ_CAPCURE
4 : WriteDataTcp

5 : TcpRecvRes
Wait for RES_OK

6 : TcpRecvCtrlReq

7 : TcpSendRes
RES_OK

8 : handle_port_secure

CLIENT_STATE_LEARN

9 : TcpRecvImageAsJpeg

12 : TcpRecvMeta

run TcpRecvMeta twice..?

Check size of meta whether it is 0 or over
- 0 : Resume
- 1 or over : resize meta vector to 1. that is, only
use first face information

consider Pause -> Resume

LEARN_NONE

Same process with Mode
change according to the current
mode (secure/nonsecure)

Save on Learn mode

Press save button with name
Client
- Input validation for the name, send it
- Admin is not allowed

Server
- Save image with encryption