Draw the use case diagram for the subscribers in Telephone Network System. Pay attention to the granularity of use cases. Draw at least three use cases

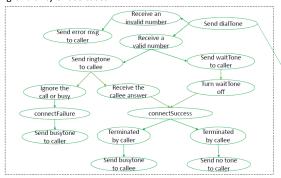
Hear the Dialing tone

Pick up the receiver

Hear the telephone ring

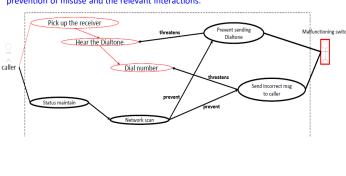
Ignore the telephone ring

E4: Draw the use case diagram for the Telephone switch in the Telephone Network System. Combine it with the use cases involving subscribers. Pay attention to the granularity of use cases.



Complete the misuse case diagram for Telephone Network System. Assume the presence of a malfunctioning telephone switch in the network. Incorporate at least two misuse cases. Assume periodic network scan to detect such malfunctioning switch.

In class, draw only the misuse cases, the subscriber use cases, the prevention of misuse and the relevant interactions.



Draw the sequence diagram for the telephone network in following scenarios (Refer to the diagram): S1 makes a call to S2

While S1->S2 call in process, S3 makes a call to S2

S1->S2 call is established

S2 hangs up

Switch1

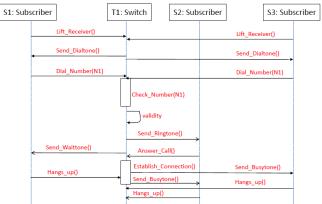
(the caller and

the callee share

the same switch)

Since S2 is busy, outgoing call by S3 is refused

Since S2 is busy, outgoing call by S3 hangs up S1: Subscriber



Draw the sequence diagram for the telephone network in following scenarios (Refer to the diagram in telenetwork.pdf):

- S1 makes a call to S2
- S3 makes a call to S2
- If S1 receives waittone message in 1 second, then S1- >S2 call is established
- Otherwise, S1 is refused to connect to S2
- S1 hangs up
- To simplify, you can ignore the messages between a local and a remote switch, if they are the same for a given call.

Two subscribers, say S1 and S2 wanted to talk with each other with no other subscriber attempting any telephone call in between. Both S1 and S2 make call to each other, both calls fail to establish and both S1 and S2 hang up.

T1:Switch

S2:Subscriber

Lift_Reciever()

