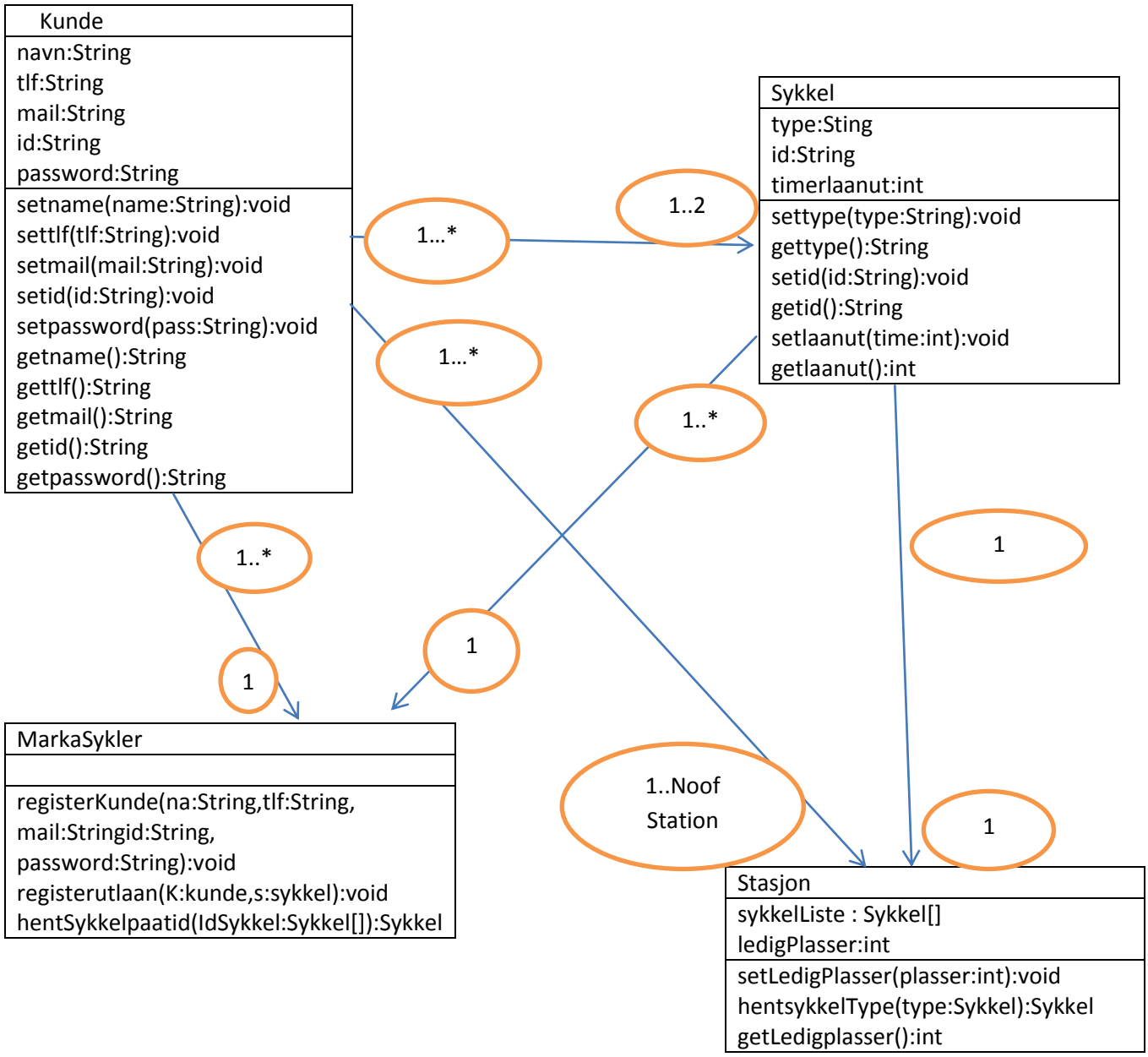


Oppgave 2.

a)

Pre condition

The user is asked for username and password.

Post condition

The user is accepted or registered and is transferred to choose cycle and users choice is registerd.

Hovedflyt 1 steg 5:

1. The user enters username and password.

2. The system searches if the users isregisted.
3. The user is accepted and is lead to choice his cycle.
4. The user is asked to pay for the cycle of his choice.
5. The cycle is registerd to be borrowed.

   Alternativflyt:

   2.1 the system display “must register first” and loads the registration page

   2.2 the system register the users info.

   2.3 system returns to stege 1.

Alternative flyt 1 stage 2: user is declined because either the user name or password is wrong

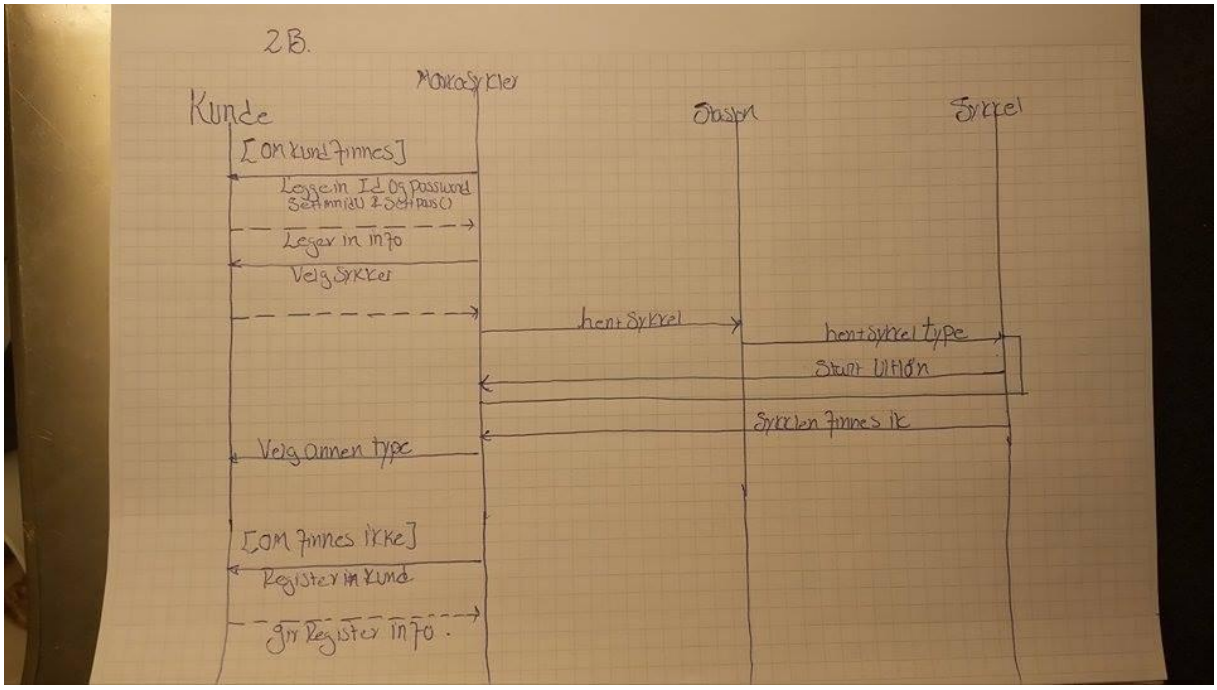
A 1.1: the system reloads the page and display either the username or password is incorrect and display the enter verification again.

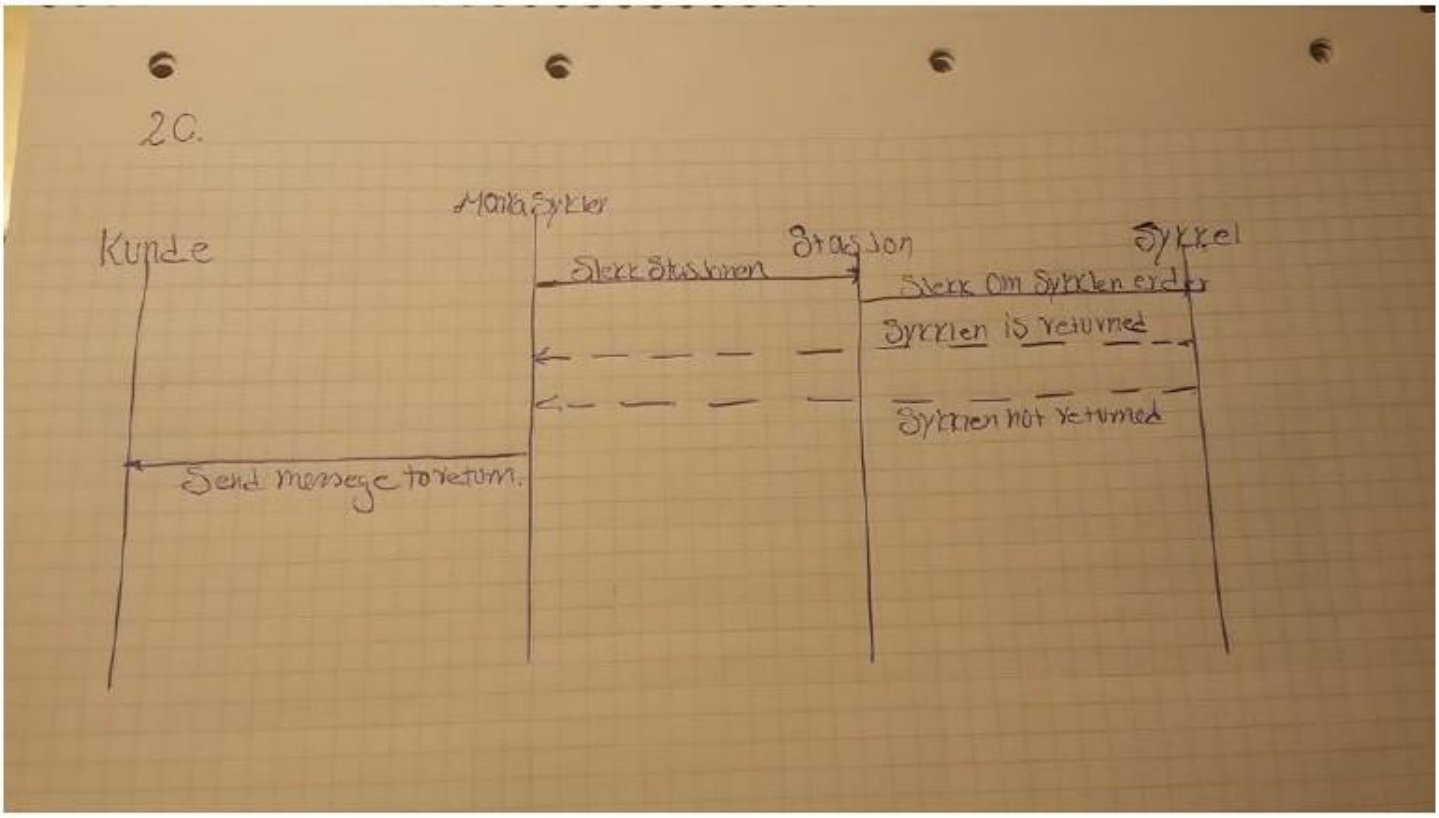
A 1.2: System puts utlån to waiting.

Alternative flyt 2 stage 2: user is declined because the user is unregistered.

A 2.1: the system display “not registered yet” and loads the registration page.

A 2.2: System puts utlån to waiting.





Oppgave 3.

a)

1. Requirement analysis and definition: this is where the system requirement is defined. For example what is expected from the system and the tasks it should perform?
2. System and software design: Her is where system design and arctucture is drawn based on the requirement definition.
3. Implementation: during this stage the codes that perform the task are written based of the system design.
4. Unit testing: here each method is tested individually to check whether they do what they are expected to do.
5. Integration: here all the individual methods are integrated as a single system.
6. System testing: the methods that are integrated are tasted to check they perform correctly as a single system.
7. Deployment: after the system are tested and satisfy the requirement it is deployed to their intended place.

8. Operation and maintenance: here the system is maintained and corrected for errors that were not previously found during development.

B)

Activity name	Effort	Duration(days)	dependence
A.req analysis	15	7	none
B.system and software design	15	7	A
C.implementation	25	14	B
D.unit testing	15	7	C
E.integration	13	7	D
F.system testing	20	14	E
G.deployment	10	7	F
H.operation and maintenance	10	7	G

c)

Activitet	1	2	3	4	5	6	7	8	9	10
A	none									
B		A								
C			B							
D				C						
E						D				
F							E			
G								F		
H										G

d)

Repair = Tiltak.

1 Risk: the system is not processing many transactions as expected.

Probability: Moderate

Effect: serious

Repair : fix error causing the problem or rewrite the code responsible for that specific task.

Responsible: System developers.

2. Risk: fault in reusable software components.

Probability: Moderate.

Effect: serious.

Repair: try to fix the fault or don’t use the component at all.
Responsible: technology.

3. Risk: the time required to develop the software is underestimated.
Probability: high.
Effect: serious.
Repair: employ addition employees.
Responsible: the contractor (the person who agreed to develop the system to the customer).

4. Risk: change in requirement that require major rework.
Probability: Moderate.
Effect: serious
Repair: new system design change in some part of the code and refracting the entire codes.
Responsible: customer.

5. Risk: software tools cannot be integrated.
Probability: high.
Effect: Tolerable.
Repair: search and reapare the codes that are responsible or rewrite part of the code.
Responsible: system developers.

6. Risk: difficulty in finding skilled workers.
Probability: high.
Effect: catastrophic.
Repair: increasing the quality and fund of the education branch that is responsible for training such students.
Responsible: ministry of education.