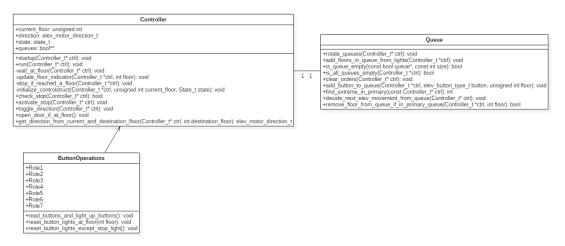
# Diagrams for C-lift project

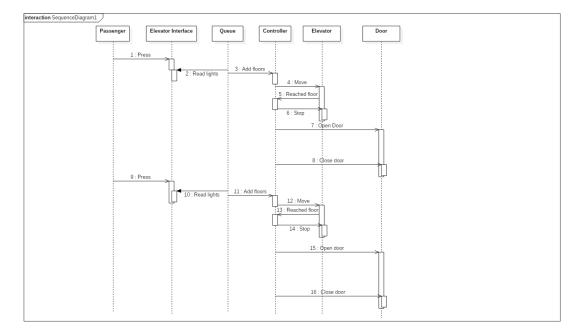
Herman Berget, Markus Ho-Yen $15.~{\rm mars}~2018$ 

#### 1 Class Diagram



#### 2 Sequence Diagram

- 1. Heisen står tom og stille i 2. etasje med døra åpen
- $2.\,$  En person signaliserer fra 1.etasje at hun ønsker transport oppover
- 3. Når heisen kommer, bestiller hun transport til 3. etasje
- 4. Scenariet avsluttes når heisen befinner seg i 3. etasje og heisdøra åpnes

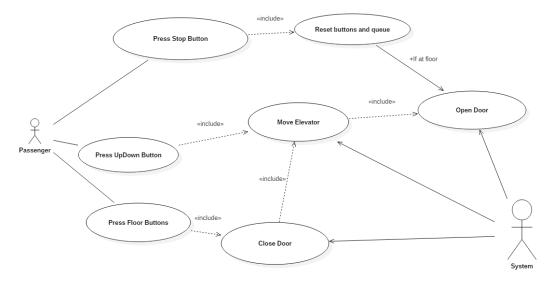


#### 3 Use Case Diagram

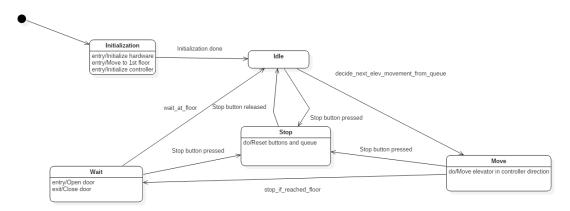
Main success scenario with extensions

- 1. Customer presses up/down-button.
- 2. System orders elevator to go to customer floor and opens door.
  - (a) Elevator is going the opposite direction
    - i. Elevator doesn't stop unless someone wants to go down, or someone in the elevator has selected the floor.
    - ii. When Elevator is going the same direction as desired floor movement -> 2.
- 3. Customer goes in the elevator
- 4. Customer presses a floor button to select a floor.
  - (a) Stop-button is pressed
    - i. Reset all buttons
    - ii. If on floor -> open door
    - iii. -> 4.c.ii
  - (b) Presses multiple buttons
    - i. Add selected floors in queue.
  - (c) Presses the same floor button as current floor.
    - i. "Close doortimer resets
  - (d) Doesn't press button.
    - i. Close door after three seconds.
    - ii. Wait until button press. If
      - A.  $Up/down \rightarrow 1$ .
      - B. Floor button -> 3.
- 5. System closes door after three seconds
- 6. Moves in desired direction.
  - (a) Presses one or more buttons
    - i. Stop-button is pressed -> 4.a.i
    - ii. Multiple buttons -> Add selected floors in queue.
- 7. Elevator stops in next selected floor on the way
  - (a) Presses one or more buttons
    - i. Stop-button is pressed -> 4.a.i
    - ii. Multiple buttons -> Add selected floors in queue.
- 8. System opens door.
  - (a) Presses one or more buttons
    - i. Stop-button is pressed -> 4.a.i

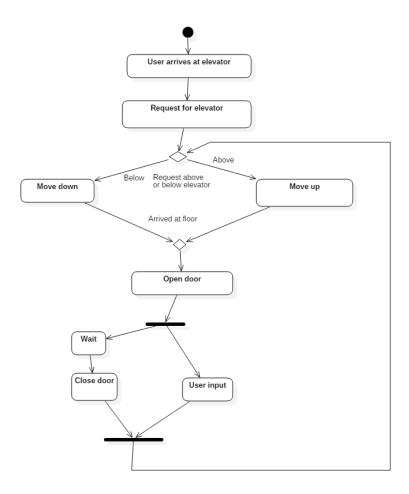
- ii. Same floor as current -> 4.c.i
- iii. Multiple buttons-> 4.b.i
- (b) If
  - i. queue empty -> 4.d.i
  - ii. Else -> 5.



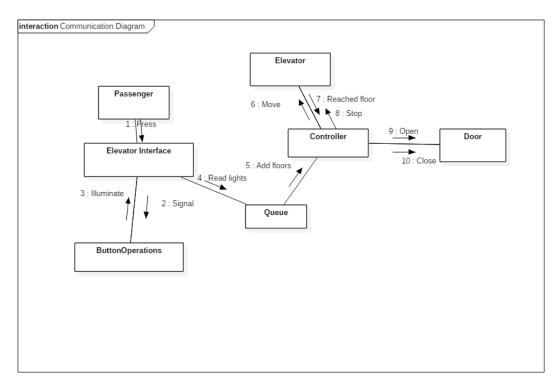
#### 4 State Diagram



## 5 Activity Diagram



### 6 Communication Diagram



### 7 Timing Diagram

