

# Nurse

## Responsibility

1. launch triage application(loads saved data if exists)
2. save recorded data (first time)
3. record individual data (name, DOB and health card No.) along with the arrival time
4. record(first time) vital signs
5. update vital signs
6. record(first time) symptoms
7. update symptoms
8. record time seen by doctor
9. look up patients' records by health number, and access the patient's data.
10. access the urgency list for waiting patients
11. access the waiting patients list ordered by arrival time

## Collaborations

patient  
vital\_signs  
symptoms  
waiting\_list  
urgency  
medical\_history

# Patient

waiting\_patient

## Responsibility

have the access to the patient's Data  
record (first time) name, date of birth, health card number, arrival time  
update(for existing patients, not retaining older records) arrival time  
correct (for existing patients, with wrong information) name, date of birth, health card number, arrival time  
add(update) a recorded\* vital signs to the specific patient  
add(update) a recorded\* symptoms to the specific patient  
add(update) a recorded\* medical history to the specific patient  
add(update) urgency points

(\*every time a record is created, the Patient instance has to add the record data to itself)

## Collaborations

nurse  
vital\_signs  
symptoms  
medical\_history  
urgency

abstract

## data

vital\_signs, symptoms,  
medical\_history, urgency,

### Responsibility

specify the patient's name, health card number(which patient it is for)

record(first time) the data of the specific patient

save data (first time)

add/update (existing patient) the data of the specific patient

### Collaborations

data

## vital\_signs

### Responsibility

1. specify the patient's name,health card number(which patient it is for)
2. record(first time) a patient's vital signs including temperature, blood pressure and heart rate (as a set) with time specified.
3. save(first time) vital signs
4. add(retaining older values) a patient's vital signs including temperature, blood pressure and heart rate (as a set) with time specified.

### Collaborations

Patient

data

## symptoms

### Responsibility

1. specify the patient's name,health card number(which patient it is for)
2. record a text description on symptoms with time specified.
3. save(first time) symptoms
4. add(retaining older values) a text description on symptoms with time specified.

### Collaborations

patient

data

## medical\_history

### Responsibility

1. specify the patient's name,health card number (which patient it is for)
2. record(first time) the time and date that the specific patient is seen by a doctor
3. save(first time) medical history
4. add (retaining the order history) the time and date that the specific patient is seen by a doctor

### Collaborations

Patient

data

## urgency

### Responsibility

1. specify the patient's name, health card number (which patient it is for)
2. access the patient's data and calculate the urgency points
3. update whenever the age, symptoms or vital signs are updated
4. calculate the worsening/improving status and update it whenever the urgency points are updated

### Collaborations

Patient

patient

## waiting\_patient

### Responsibility

1. mark(first time) a patient as "waiting"
2. if a patient has been seen by a doctor, mark him/her as "seen". and add a description of time into this patient's medical history.
3. if a patient with existing data come back to the hospital, update his/her status as "waiting"

### Collaborations

# waiting\_list

## Responsibility

1. Access all waiting\_patients' data and create a list of waiting patients
2. Update the waiting patients list automatically whenever a new patient arrives or a patient has been seen by a doctor
3. Order waiting patients list by arrival time and automatically update it whenever the list is modified
5. Categorize and order waiting patients list by decreasing urgency and create an urgency list
6. Whenever the waiting patients list is modified, update the urgency list.

## Collaboarations

Waiting\_Patient