



Hospital information system (HIS)

Team members

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Hospital information system

We are going to do hospital information system project to help doctors and hospital managers to follow the patient bit by bit especially for hospitals which have more than one branch so we are going to do a project which contain four tracks the first one is for patients and follow their condition step by step in the intensive care unit (ICU) and we can from this track to add patient and remove one after recovery the second track is designed for doctors we can from it add or remove a doctor for the icu the third one is designed for prescription we can add more than one prescription for the patient we can add a prescription for the patient after every visit to the doctor or remove or edit the last prescription the fourth one is to follow the drugs consumed by the patient we think it is a suitable program for the hospital to follow the updated information about every icu ,patient ,drugs and drugs consumed every week .

Libraries:

- QtCore + Qtgui
- <queue>

Block diagram describing the whole system:



User manual for the system:

The 'Patients Data' dialog box is shown with the following fields and controls:

- ICU Number:** A list box containing 'ICU 1' (selected), 'ICU 2', and 'ICU 3'.
- Patient ID:** An empty text field.
- Name:** An empty text field.
- Gender:** A dropdown menu set to 'Male'.
- Phone:** An empty text field.
- Address:** An empty text field.
- Birth Date:** An empty text field.
- Med History:** An empty text field.
- Allergy:** An empty text field.
- Systolic:** A numeric spinner set to 0.
- Diastolic:** A numeric spinner set to 0.
- Heart Rate:** A numeric spinner set to 0.
- Temperature:** A numeric spinner set to 0.00.
- Buttons:** 'Remove Last', 'Insert', 'Close', and 'Clear'.

The 'Patients Data' dialog box is shown with the following fields and controls:

- ICU Number:** A list box containing 'ALI', 'Husein', and 'Alaa'.
- Patient ID:** 123456
- Name:** Alaa
- Gender:** Male
- Phone:** 01011011010
- Address:** alkdami, st
- Birth Date:** 25/5/1990
- Med History:** N/A
- Allergy:** N/A
- Systolic:** 160
- Diastolic:** 100
- Heart Rate:** 95
- Temperature:** 37.50
- Buttons:** 'Remove Last', 'Insert', 'Close', and 'Clear'.

The 'Patients Data' dialog box is shown with the following fields and controls:

- ICU Number:** A list box containing 'Alaa', 'Monem', 'Jack', 'Saied', 'ALiaa', 'hassan', 'mohamed', 'kamal', 'Hosam', and 'saied'.
- Patient ID:** 123456
- Name:** yahia
- Gender:** Male
- Phone:** 01011011010
- Address:** alkdami, st
- Birth Date:** 25/5/1990
- Med History:** N/A
- Allergy:** N/A
- Systolic:** 160
- Diastolic:** 100
- Heart Rate:** 95
- Temperature:** 37.50
- Buttons:** 'Remove Last', 'Insert', 'Close', and 'Clear'.

Application Output:

```
firstTest
22:02:55: St
Debug\debug\firstTest.exe ...
the queue is full
the queue is full
the queue is full
the queue is full
```

Screenshots for your running programs:

```
*C:\Users\saeed khaled\Desktop\data structure project\sbe201-2020-final-project-hospital-sbe-20...
please choose one choice
1-icu and its pateint track
2-doctors track
3-prescription of pateints
4-patien's drug data
5-exit from the programe
```

```
*C:\Users\saeed khaled\Desktop\data structure project\sbe201-2020-final-project-hospital-sbe-20...
please choose one choice
1-icu and its pateint track
2-doctors track
3-prescription of pateints
4-patien's drug data
5-exit from the programe
1
choose the ICU you want
1-ICU number 1
2-ICU number 2
3-ICU number 3
4-back to main menu
1
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
stream> please choose one of these elements
2
the ICU number1 is empty
done
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
prescri> please choose one of these elements
3
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
diption> please choose one of these elements
1
what is the number of patients you want to enqueue?
2
name; patient ID:555
sex; name:saeed
age; sex:male
security; phone:0100514755
scienti degree; adress:kerdasssa
i; birthdate:19999
medical history:no
_stack; allgry:no
systolic_blood_pressure:120
```

```

systolic_blood_pressure:120
distolic_blood_pressure:80
heart_rate:60
tempreture:37.5
please enter the data of patient 2
*****
patient ID:555
the id already exist please enter another ID
patient ID:666
name:khaled
sex:male
phone:01005172447
adress:giza
birthdate:1964
medical history:no
allgry:no
systolic_blood_pressure:125
distolic_blood_pressure:90
heart_rate:70
tempreture:37.5
done
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements

```

```

heart_rate:70
tempreture:37.5
done
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements
3
patient_ID:666
name:khaled
sex:male
birth date:1964
phone:01005172447
adress:giza
sex:male
tempreture:37.5
pressure:125/0
heart reate:70
medical history:no
allegry:no
*****
patient_ID:666
name:khaled
sex:male
birth date:1964
phone:01005172447
adress:giza
sex:male
tempreture:37.5
pressure:125/0
heart reate:70
medical history:no
allegry:no
*****
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements

```

```
C:\Users\saeed.khaled\Desktop\data structure project\sde201-2020-final-project-hospital-sde-20...
name:khaled
sex:male
birth date:1964
phone:01005172447
adress:giza
sex:male
tempreture:37.5
pressure:125/0
heart reate:70
medical history:no
allegry:no
*****
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements
2
what is the number of patients you want to dequeue?
3
ther are 2 elements only
please enter number less than or equal: 2
1
done
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements
3
patient_ID:666
name:khaled
sex:male
birth date:1964
phone:01005172447
adress:giza
sex:male
tempreture:37.5
pressure:125/0
heart reate:70
medical history:no
allegry:no
*****
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements
```

```
address:giza
sex:male
tempreture:37.5
pressure:125/0
heart reate:70
medical history:no
allegry:no
*****
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements
4
ICU name:NICU
ICU code:111
ICU beds number:100
ICU manager:saeed khaleed
1- enqueue an patient in the ICU number1
2- dequeue an patient from the ICU number1
3- display all patients data in the ICU number 1
4- display the data of ICU number1
5- back to icu menu
please choose one of these elements
5
choose the ICU you want
1-ICU number 1
2-ICU number 2
3-ICU number 3
4-back to main menu
4
please choose one choice
1-icu and its pateint track
2-doctors track
3-prescription of pateints
4-patien's drug data
5-exit from the programe
```



```
"C:\Users\saeed khaled\Desktop\data structure project\sbe201-2020-final-project-hospital-sbe-20..."
2-display a pateint prescription
3-get back and choose another track
3
1-write a prescription
2-display a pateint prescription
3-go back to main menu
3
please choose one choice
1-icu and its pateint track
2-doctors track
3-prescription of pateints
4-patien's drug data
5-exit from the programe
2
1-add new doctors
2-display specific doctor information with id
3-go back to main menu
1
whate is the number of doctors you want to add?
1
please enter the data of the doctor number1
*****
doctor code:444

doctor name:eiad

doctor sex:male

doctor birth date:1998

doctor social security number:5

doctor scientific area:cardiovascular

doctor degree:goood
1-add new doctors
2-display specific doctor information with id
3-go back to main menu
2
please enter the the id of the doctor you want to display
ID:44
the id44 doesn't exsit please enter anothe one
ID:444
the information of doctor with id:444is
doctor name:eiad
doctor sex:male
doctor birth date:1998
doctor social security number:5
doctor scientific area:cardiovascular
doctor degree:goood
1-add new doctors
2-display specific doctor information with id
3-go back to main menu
```

```
"C:\Users\saeed khaled\Desktop\data structure project\sbe201-2020-final-project-hospital-sbe-20...
doctor name:khaled
doctor sex:1
doctor birth date:1
doctor social security number:1
doctor scientific area:1
doctor degree:1
1-add new doctors
2-display specific doctor information with id
3-go back to main menu
3
please choose one choice
1-icu and its pateint track
2-doctors track
3-prescription of pateints
4-patien's drug data
5-exit from the programe
3
1-write a prescription
2-display a pateint prescription
3-go back to main menu
1
pateint name :saeed
prescription code :5555
doctor name:khaled
please write your prescription
profen
1-write another aprescription
2-display a pateint prescription
3-get back and choose another track
2
1-write a prescription
2-display a pateint prescription
3-go back to main menu
2
pateint name :saeed
there is 0witten
*****
prescription code:5555
prescription writen to:saeed
prescription writen from:khaled
prescription_text:profen
*****
1-write aprescription
2-display another pateint prescription
3-get back and choose another track
```

```
"C:\Users\saeed khaled\Desktop\data structure project\sbe201-2020-final-project-hospital-sbe-20...
1.enter drugs data to this patient
2.represent the drugs data of this patient
3.back to previous menu
1
enter the day(form 1 to 10)
1
enter drug name
profen
enter time in hours <24 format>
2
enter time in mins
00
done
enter icu number
0
enter patient name
saeed
choose one of the following:
1.enter drugs data to this patient
2.represent the drugs data of this patient
3.back to previous menu
2
day 1:
drug name:profen
time :2:0
```

```
else
    d_s.top=d_s.top-1;
```