

**College of Electrical and Mechanical**

**Engineering**

**Software Engineering Department**

**Fundamental to programming I (SWEG2103)**

**Project**

**Group - 3**

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Submission date: - 17/09/2023

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**Pseudocode**

1. Start the program.
2. Display a menu with options (“Employee”, “Patient”, “Emergency”) for the user to choose from.
3. Ask the user to enter their choice (ask1).
4. If ask1 = 1,

* Ask the user to enter a passcode, if passcode is correct
* Ask the user to choose patNum (“Add a patient”,“Access patient info”,“Medical inventory”).
* If patNum = 1,
* Take patient info.
* Then take the info to the patients.cpp file that has a class.
* Save it to the text file (“patients.txt”).
* Go to step 3.
* If patNum = 2,
* Print patient info on the console from (“Patients.txt”).
* Go to step 3.
* If patNum = 3,
* Ask the user to choose patNum (“Add lab equipment”, “Access lab equipment info”).
* If patNum = 1,
* Take equipment info.
* Then take the info to the equipments.cpp file that has a class.
* Save the info to the text file (“Equipments.txt”).
* Go to step 3.
* If patNum = 2,
* Print equipment info to the console from (“Equipments.txt”).
* Go to step 3.
* Else if the passcode is not correct.
* Print wrong passcode!!
* Go to step 4.1.

1. If ask1 = 2,

* Display a menu with options for the user to choose from (“Access some doctors info”, “Calculate medicine price”, “calculate medical lab test price”, “continue”).
* If ask2 = 1,
* Print some doctors info on the console from (“Employee.txt”).
* Go to step 3.
* If ask2 = 2,
* Print the medicines that are available, and calculate their prices as the user enters their number.
* Print the price on the console
* Go to step 3.
* If ask2 = 3,
* Print the lab tests that are available, and calculate their prices as the user enters their number.
* Print the price on the console
* Go to step 3.
* If ask2 = 4,
* Ask which body part hurts.
* Ask the level of pain.
* If pain < 5, assign a nurse and pain > 5 assign a doctor.
* Take patients info and ticket price.
* Then take the info to the patients.cpp file that has a class.
* Print the patients info with assigned nurse/doctor.
* Go to step 3.

1. If ask1 = 3,

* Ask the user to choose patNum (“Add an emergency patient”, “Access emergency patient info”)
* If patNum = 1,
* Print the number of patients available by counting the number of lines in the text file and divide it by 6.
* If the number of patients is greater than or equal to 10.
* Print Emergency beds are full.
* Go to step 3.
* If the number of patients is less than 10
* Take patients info.
* Then take the info to the patients.cpp file that has a class.
* Print the patients info with assigned nurse/doctor.
* Save the info to the text file (“EMERGENCY.txt”).
* Go to step 3.
* If patNum = 2,
* Print patient info to the console from (“EMERGENCY.txt”).
* Go to step 3.

1. If ask1 = 0,

* End the program.

**Flowchart**

Read ask1(employee, patient, emergency)

If ask1=1

Print wrong passcode

If passcode is correct

Read passcode

Else

Read patNum(add or access patients or medical inventory)

If patNum = 2

If patNum = 1

If patNum = 3

Read patient(name, age, gender, assigned doctor, condition)

Print patient information

Read patNum(add or access medical inventory).

Save to patients.txt text file

If patNum = 2

If patNum = 1

Print equipment information

Read equipment(name, description, price).

Save to Equipments.txt text file

Read ask2(level of pain)

If ask2 < 5

Read pain(body parts).

Print price

Print price

Add prices as user enters

Print lab tests

Add prices as user enters

Print medicines

Print Dr./nurse info.

If ask1 = 3

If ask1 = 1

If ask2 = 2

Read ask2(access Dr. info, calculate medicine and lab test, continue)

If ask1 = 3

If ask1 = 2

Read patNum(add or access emergency patients

If ask1 = 4

If patNum = 1

Print num of taken beds

Else

If numOfpat > = 10

Assign a doctor

Print patient info with assigned doctor/nurse

Read name, age, ticket no.

Assign a nurse

Else

Print emergency patients info.

If patNum = 2

Save to EMERGENCY.txt

Print patients info.

Read patients info.

Print num of taken beds

Print emergency beds are full