



World of Robots

Master 1 Génie Physiologique et Informatique

Lab 4.1: Required classes



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Class name: Robot

- short description: represents the robot who will help the patient for its medication

- class attributes:

attribute name: nametvpe: string

- short description: name of robot

attribute name: patienttype: Patient

- short description: name of the patient who is assigned to the robot

- Class method:

method name: setName

category: setter

signature: public void setName(String newName)short description: change the name of the robot

- method name: getName

- category: getter

signature: public String getName()

short description: give the name of the the robot

- method name: **getPatient**

category: getter

signature: public String getPatient()

short description: give the name of the patient

method name: isContraindicated

category: getter

signature: public Boolean isContraindicated()

- short description: verify whether a drug is not contraindicated for its patient

- method name: verifDrug

- category: setter

signature: public void verifDrug()

 short description: method that allows the robot to manage the stock of drug and if the patient needs to go to the pharmacy

- method name: setPrescription

Category : setter

Signature : public String setPrescription()

- Short description : change the prescription for the patient

Class name : Patient

- short description: represents a patient

class attributes:

attribute name: **name**

- type: string

- short description: name of patient

attribute name: prescription

- type: prescription (class)

- short description: prescription given to the patient





attribute name: contraindication

- type: enum type

- short description: contraindication of the patient (asthmatic patients and pregnant women)

- attribute name: **stock**

- type: integer

- short description: quantity of drugs available to patients

- attribute name: pharmacy

type: boolean

- short description: Refill or no medication

Class methods:

• Method name : getName

Category : getter

Signature : public String getName()

o Short description : Returns the name of the patient

• Method name : setName

Category : setter

Signature : public void setName(String newName)

Short description : Changes the name of the patient

• Method name : getStock

o Category : getter

Signature : public String getStock()

Short description : Returns the available stock of the patient

• Method name : setStock

Category : setter

Signature : public void setStock(int newSotck)

o Short description: Changes the stock of the patient

• Method name : setContraindication

o Category : setter

 Signature : public void setContraindication (contraindication Contraindication)

• Short description : change the contraindication for the patient

• Method name : getContraindication

o Category : getter

Signature : public contraindication setContraindication()

• Short description : give contraindication for the patient

• Method name : getPrescription

o Category : getter

Signature : public String getPrescription()

o Short description : Returns the prescription

Class name: Drug

Short description: Details about a drug

Class attributes:

• Attribute name : name

Type : String

Short description: The name of a drug





- Attribute name: contraindication
 - type: enum type
 - short description: contraindication of the drug

Class methods:

- Method name : getName
 - Category : getter
 - Signature : public String getName
 - Short description : give the name of the drug
- Method name: setName
 - Category : setter
 - Signature : public void setName (String newName)
 - Short description : change the name of the drug
- Method name: getContraindication
 - o Category : getter
 - Signature : public contraindication getContraindication ()
 - Short description : give contraindication of the drug
- Method name: setContraindication
 - o Category : setter
 - Signature : public void setContraindication (contraindication Contraindication)
 - Short description : change the contraindication of the drug

Class name: Prescription

Short description: Details the prescription of the patient

Class attributes:

- Attribute name : dailyDose
 - o Type: Int
 - Short description: the daily dose of the drugs
- Attribute name : drugName
 - o Type: Drug
 - Short description: the medication that the patient has to take

Class method:

- Method name: getDailyDose
 - o Category : getter
 - Signature : public int getDailyDose ()
 - Short description : get the daily dose of drugs



Class diagram:

Robot