



## DATA STRUCTURE PROJECT

# DS pharmacy system

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**Prepared by: Group 16**

## ● **Project Idea and Aims:**

STRUCTURING A «PHARMACY DATA STORING SYSTEM »  
THAT CONTAINS TWO EMPLOYEES: THE FIRST IS THE  
PHARMACIST, AND THE SECOND IS THE ASSISTANT WHO  
HELPS CUSTOMERS TO CHOOSE PRODUCTS FORM  
SEVERAL SECTIONS: BEAUTY, CARE, MEDICAL SUPPLIES,  
MEDICATIONS  
EACH SECTION HAS SPECIFIC PRODUCTS

## ● **Project Functionalities/Tasks:**

- EMPLOYEES CLASS– TAKES THE EMPLOYEE'S NAME, ID, GENDER, AND JOB: DEFINED IN THE MAIN BY SENDING THEM TO THE EMPLOYEE CLASS AS OBJECTS
- PRODUCT CLASS-- STORES THE PRODUCTS INFORMATION THAT REGISTER ACCORDING TO THE PRODUCT THAT IS SENT TO THE PRODUCTS CLASS BY THE MAIN CLASS
  - HAS THE METHODS THAT ARE APPLIED ON THE ARRAY THAT IS SENT (BINARY SEARCH, INSERTION SORT)
- MAIN CLASS (DS PHARMACY): CONTAINS SEVERAL ARRAYS THAT CONTAIN THE SECTIONS OF THE PHARMACY, AND THE PRODUCTS IN EACH SECTION
  - ALSO THE EMPLOYEES OBJECTS ARE DEFINED AND SENT TO THE EMOLYEEES CLASS
  - CALLING THE METHODS WITH THE ARRAY THAT HAS TO BE IMPLEMENTED ON BY THEM
  - PRINTING OUR PHARMACY COMPONENTS

# Output:

```
Output - Run (ProjectDS) x
[Welcome to DS pharmacy]

Here is a list of our provided products and their sections:

~~~~~
Sections: Beauty, Care, Medical Supplies, Medications.
~~~~~
Beauty Section has: Makeup, Nails products, Hair dye, Eyes lenses.
~~~~~
Care Section has: Products for body, Products for skin care, Products for hair, Makeup removers.
~~~~~
Medical Supplies Section has: First aid materials, Wheel chairs, Measuring devices, Hot&Cold Bags.
~~~~~
Medications Section has: Prescribed medications, Non-Prescribed medications, Sore throat Candies, Vitamins.
~~~~~

Our Pharmacist "Omar Ahmad" AND our Assistant "Anas Turki" will be happy to serve you!~

[Implementing sort & search]

~~~~~
|insertion sort|
~~~~~
~The sections array after sorting:
Beauty
Care
Medical Supplies
Medications

~The Beauty Section array after sorting:
Eyes lenses
Hair dye
Makeup
Nails products

~The careSection array after sort:
Makeup removers
Products for body
Products for hair
Products for skin care

~The medicalSuppliesSection array after sorting:
First aid materials
Hot&Cold Bags
Measuring devices
Wheel chairs

~The medicationsSection array after sort:
Non-Prescribed medications
Prescribed medications
Sore throat Candies
Vitamins
```

```
~~~~~
| binary search |
~~~~~
if exist shows the index, -1 if not

~Search for "Snacks" section:
-1
~Search for "Nails products" in Beauty section:
3
~Search for "Products for fitness" in careSection:
-1
~Search for "First aid materials" in Medical supplies section:
0
~Search for Non-Prescribed medications in Medications section:
0

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If you bought from beautySection
The expiry will be from 6-12 months after openning the package

If you bought from careSection
The expiry will be from 4-6 months after openning the package

If you bought from medicalSuppliesSection
The expiry will be from 12-24 months after openning the package

If you bought from medicationsSection
The expiry will be from 12-24 months after openning the package
```

1:33

## HTMLs of javadoc:

FILE:///USERS/JOODALTHAGAFI./DOWNLOADS/PROJECTDS.HTML

FILE:///USERS/JOODALTHAGAFI./DOWNLOADS/EMPLOYEES%20(1).HTML

FILE:///USERS/JOODALTHAGAFI./DOWNLOADS/PRODUCT%20(1).HTML

## Group work & Members info

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main class



Employees class



Products class



Readme.txt



JavaDoc



Report



Presentation

