# Pharmacy Management System

Project report

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The pharmacy management program consists of four classes.

1. Item Class
2. Medicine Class
3. PharmacyManagementSystem
4. Driver

**Item Class**

This class has three private data fields.

One constructor

Four getter methods and one setter method.

**Medicine Class**

This class is an extension of Item class and has one constructor.

**PharmacyManagementSystem Class**

This class has a private array list of type Medicine called medicines.

It has one constructor.

It has three public methods.

1. The method AddMedicine()

First verifies that the maximum capacity of the array list is not exceeded. Then the add method is used to insert the variable “medicine” of type “Medicine” in the medicines array.

1. Purchase()

This method takes the name of a medicine and the quantity Then runs through a for each loop to check if the medicine is in inventory or if there is enough to sell. The method also updates the amount of available quantity of pills after a sale has been made.

1. DisplayMedicines()

This method uses a for each loop to loop through the array and print out the inventory of medicine the available units and the price.

**Driver Class**

This class contains the main method.

It has been pre populated with addMedicine method.

It has an admin authentication portion. Then after authentication, a menu pops up with four options. A switch case system is used to interpret the user's input.

Case 1. Creates a medicine object and parses it through the add medicine method of the PharmacyManagementSystem class, and then the object is added to the medicines Arraylist.

Case 2. invokes the purchase method and parses the input as argument.

Case 3. Displays the medicines Arraylist.

Case 4. Is used to exit the menu.