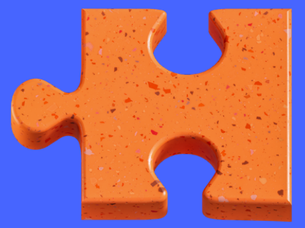
A JAVA PROJECT

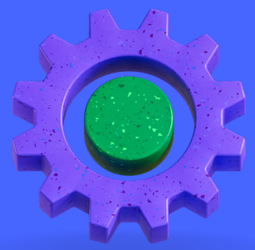
Pharmacy Medicines Management System

A Project by :
Vinay S Kanse - 16010321101
Chandan Deshmukh - 16010321094
Rachit Barapatre - 16010321093

AGENDA



Review of
OOPS Concepts



Problem
Definition

Demo of
implimentation

Learning
Outcomes

What is Object-Oriented Programming ?

Object-oriented programming (OOP) is a computer programming model that organizes software design around data, or objects, rather than functions and logic. An object can be defined as a data field that has unique attributes and behavior.

JAVA and PYTHON are examples of Object oriented programming languages.

Back to Agenda Page

Object Oriented Concepts

INHERITANCE

A process in which, new classes are created from the existing classes

POLYMORPHISM

A concept where you can access objects of different types through the same interface.

ABSTRACTION

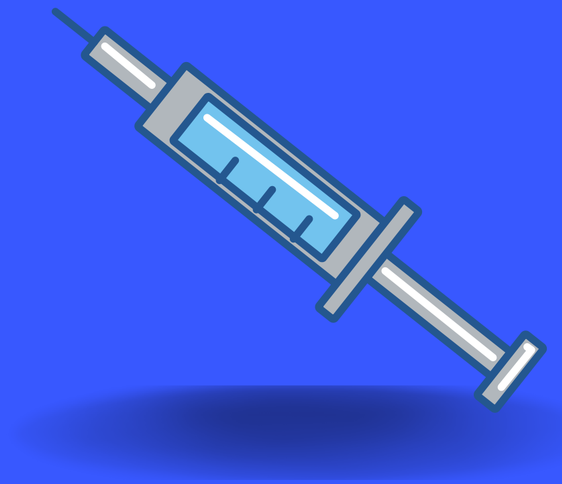
A process of hiding all the irrelevant data about an object in order to reduce complexity and increase efficiency.

ENCAPSULATION

The concept of bundling the data, along with the methods that operate on that data, into a single unit.

Back to Agenda Page

PROBLEM STATEMENT



The global pharmaceutical manufacturing market size was estimated at USD 485.52 billion in 2021. With a industry as huge as this, there is a need to keep track of all the medicines and equipment and keep everything organized. The Medistore helps in this task.

OBJECTIVES

Keep track of all the Medicines in stock.
Register the details of new and improved medicines.
Ensure all the medicines in stock are within expiry date.

GOALS

Keep all necessary medicines in stock
Minimize human workload to generate bills from database.
Minimize human error in giving expired medicines

Back to Agenda Page

PRIMARY FEATURES OF OOP USED

INHERITANCE : The class "Admin" Extends the class "Pharmacy" and hence inherits all the methods and variables of the Parent class.

ABSTACTION : Objects are created for Bill , Medicine , Bill Records and Medicine Database. Objects are created for all of the above mentioned classes in the Admin class.

Back to Agenda Page

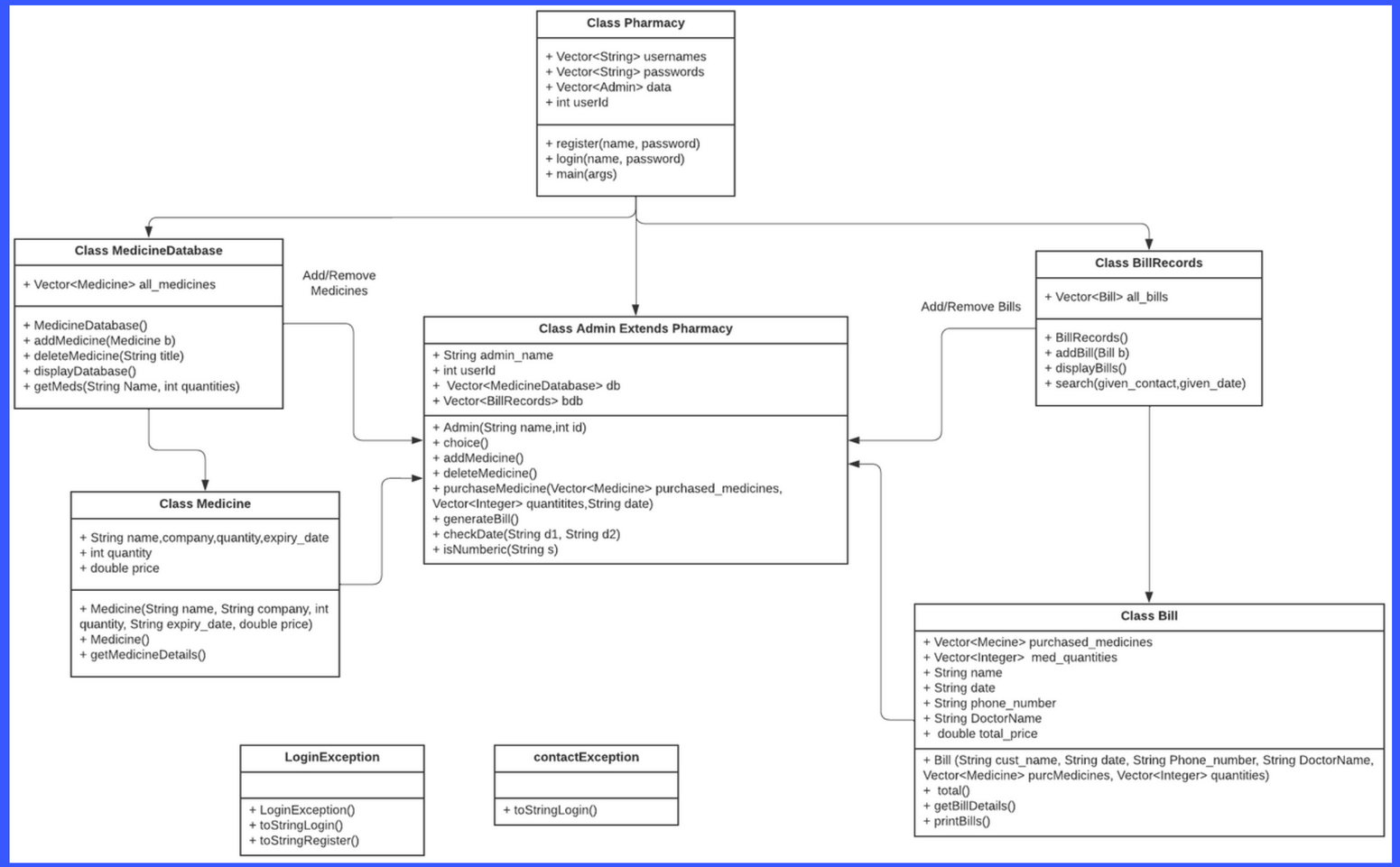
PRIMARY FEATURES OF OOP USED

ENCAPSULATION : We have used Encapsulation to encapsulate the variables of all the classes so that other classes cannot access them.

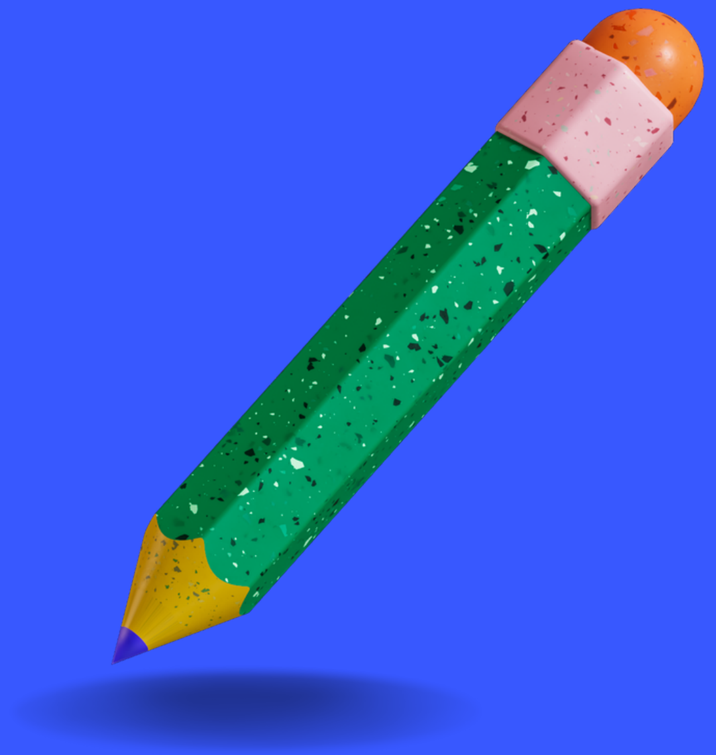
EXCEPTION HANDLING : We have defined custom user defined exceptions so that an invalid login throws an exception and stops the execution of the program.

Back to Agenda Page

CLASS DIAGRAM



Code Repo



LEARNING OUTCOMES

Learnt to apply concepts of object-oriented programming and write a more modular and reuseable.

Successfully implimented user-defined exceptions by extending the Exception class.

Back to Agenda Page


Thank
You