



VITYARTHI Project Python Essentials REPORT

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Overview of the Project

PharamaCRUD.py is a command-line-based Python implementation for a pharmacy's inventory management system, whereby users maintain or update medicine inventory by carrying out vital operations like adding, viewing, searching, updating, and deleting medicine records for accuracy in the stock.

Features

Add Medicine: The user provides medicine details—name, price, quantity, and expiry date—through user inputs.

View Inventory: This displays the list of all stored medicines, showing their key details in a readable format.

Medicine Search: Allows searching for specific medicines by name with flexible partial matching.

Update Medicine: Supports the updating of prices and quantities of existing medicines based on user prompts.

Delete Medicine: Allows the removal of a medicine from inventory; confirmation is provided to protect against accidental deletion.

Functional Workflow

The system offers a menu-driven interface for ease of the user.

Users select their options by inputting the corresponding numbers to trigger desired operations.

The Input Validations ensure numeric fields like price and quantity are handled appropriately.

In case of update and delete operations, the system checks if the medicine entry exists before applying the changes.

Feedback messages acknowledge successful operations or input errors.

Technology Infrastructure

Completely written in Python, having all interactions based on standard input/output.

Handles data storage and retrieval by an embedded local, file-based mechanism that is abstracted away from the user.

Integrates error handling and exception management to ensure robustness during operations.

Usage Instructions

Execute the script in order to start the interactive console application.

Select operations such as add, view, search, update, or delete medicines from the on-screen menu.

Provide necessary details whenever prompted.

Once finished, close the application using the provided menu option.

Educational Value

The project addresses the implementation of a full CRUD system based on user interaction, data handling, and operational flow without any dependency on an external database technology. It represents a simple approach that makes it easier for learners to conceptualize important programming concepts, such as the validation of data, exception handling, and flow driven by the user.