RIPHAH INTERNATIONAL UNIVERSITY LAHORE CAMPUS

Riphah School of Computing & Innovation (RSCI)

Data Structures and Algorithms

BS Computer Science (3B) – Fall 2022

Semester Project Proposal

Student Information	
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Section:	3-B
Project Name:	Pharmacy Management System

Project Information

Problem Statement:

Managing pharmacies in the 21st century kept getting more and more complex as the amount and need of medicines kept increasing over time so, the need of an efficient *Pharmacy Management System* was felt greatly as such a system would help categorize all the medicines and make their management a lot more easier!

Proposed Solution:

This program will efficiently manage a pharmacy depending on its stock. It will list all the available medicines in the stock and have an *Admin control*, who can add or remove employees and access all the available functions as well. Secondly, a *Pharmacist control* would be present as well and it will be responsible for dealing with the sale/purchase and the addition on deletion of the available medicines. By using the available features, the workers would be able to manage everything with ease and efficiency.

Used Data Structure:

Doubly Linked Lists are used as they would play a good role in storing and managing the stock. We can perform all operations of a linked list on the available stock with ease (add/remove/update etc.). The use of stacks may also be seen.

Modules:

- 1. Admin Control
- 2. Pharmacist
- 3. Stock
- 4. Categorizing Medicines
- 5. Add/Remove/Update Stock
- 6. Sale/Purchase

Summary:

The availability of an efficient management system would reduce the workload of the Pharmacists greatly. Having a system that caters to the worker's needs and requirements, is the ultimate solution for a working Pharmacy by providing them the required functions necessary for the proper working of their Medical store. Ultimately, this system would provide solutions to all the problems faced by the Pharmacist.