

# Guided Approach to Automate the Hospital Pharmacy Management System

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**Abstract.** In general, electronic technology has been used to automate conventional systems. As a result, many copies of management systems with varying scopes were offered. The development of pharmacy systems to support working processes in both hospital and community pharmacies has taken place over the last 40 years in the UK, the US, and other countries. For the purposes of this chapter, pharmacy systems are defined as computer systems designed specifically for pharmacy departmental use. These systems encompass both commercial and individual services, such as healthcare. Traditional data management systems for pharmacies, for example, suffer from capacity, time consumption, drug accessibility, maintaining the medicines storage, medicine labelling, patient medication records, decision support for drug interactions and other warnings, stock control, ward inventory management, order processing and the necessity for skilled employees in accordance with employer expectations. The proposed Pharmacy Management System for the BIO-LAB Pharmacy begins with project planning, as well as establishing the system's users. Users and designers iterate through the phases of analysis, design, and implementation until a final system specification is reached. By importing new patient records, the proposed system was put to the test in terms of registration, release, and update functionalities. The proposed system supervises and regulates a hospital pharmacy studio-based sensing cycle. The presented system contains a SQL Server database and a Visual Studio-based GUI design. Many case studies, such as enrolling a patient (inpatient/outpatient), providing drugs to this patient, and obtaining pharmaceuticals from a warehouse, have been used to test the system. The test findings revealed that the examined system outperformed the control system in terms of fewer failures and more effective actions.

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