

SOFTWARE REQUIREMENT SPECIFICATION

PROJECT TITLE: Pharmacy Management

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Version Number	Date	Author/Owner	Description of Change
1	13/Aug/2023	Selvabharathi S	Problem statement, project features, software and hardware details, project plan
2	15/Aug/2023	Selvabharathi S	Conceptual Design: ER & Object Model

I. REQUIREMENT SPECIFICATION:

a. Problem Statement and Requirements Definition

1. Introduction

1.1 Purpose

The purpose of this document is to define the requirements for the development of a Pharmacy Management System. This system aims to streamline the operations and management of a pharmacy, enhancing efficiency and customer service.

1.2 Scope

The Pharmacy Management System will encompass both a user-friendly web-based frontend and a backend system. It will facilitate tasks such as managing medicines, handling prescriptions, inventory management, customer records, and billing.

1.3 Definitions, Acronyms, and Abbreviations

SRS: Software Requirements Specification

API: Application Programming Interface

2. Problem Statement

Pharmacies often deal with a high volume of medicine stock, prescription records, and customer interactions. Manual management can lead to errors, inefficient inventory control, and slower service. The need is for a comprehensive system that automates and improves pharmacy management processes.

3. Proposed Solution

The Pharmacy Management System will provide a centralized platform for pharmacy staff to effectively manage medicines, prescriptions, inventory, and customer interactions. It will offer automation, real-time tracking, and reporting functionalities.

b. Project features identified

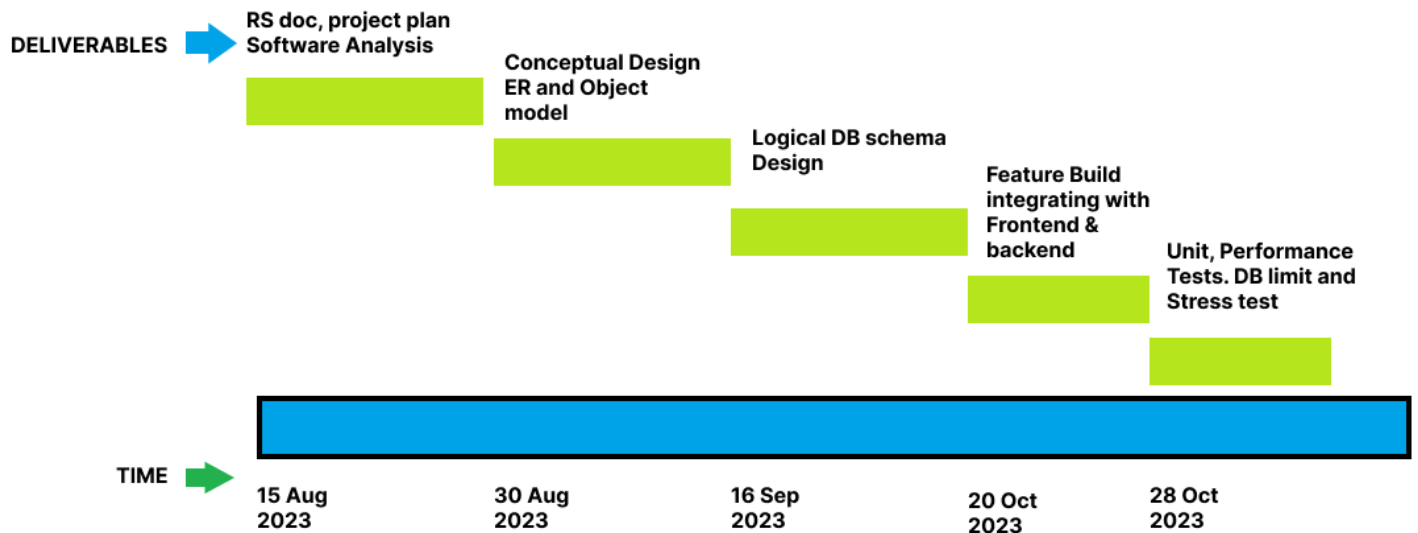
Feature ID	Feature Name	Description
F1	User Authentication & Authorization	<ul style="list-style-type: none">➤ Secure login and registration for pharmacy staff with role-based access control
F2	Medicine Management	<ul style="list-style-type: none">➤ Add, update and delete medicine details, including name, dosage, price, and availability.➤ Categorize medicines for easier navigation.
F3	Prescription Handling	<ul style="list-style-type: none">➤ Record and manage prescriptions from doctors, including patient information & prescribed medicines.➤ Track prescription history.
F4	Inventory Management	<ul style="list-style-type: none">➤ Real time tracking of medicine stock levels.➤ Automated alerts for low stock.➤ Manage incoming and outgoing stock.
F5	Customer Records	<ul style="list-style-type: none">➤ Maintain customer profiles with contact details, purchase history and prescriptions.

F6	Billing and Invoicing	<ul style="list-style-type: none"> ➤ Generate itemized bills for customers. ➤ Apply discounts and calculate taxes automatically.
F7	Reporting & Analytics	<ul style="list-style-type: none"> ➤ Generate reports on inventory levels, sales, profits, and customer trends. ➤ Visualize data for informed decision-making.
F8	Search and Filter	<ul style="list-style-type: none"> ➤ Search and filter medicines, prescriptions, and customer records for easy retrieval.
F9	User Friendly Interface	<ul style="list-style-type: none"> ➤ Intuitive and responsive web-based frontend using Angular. ➤ Backend powered by springboot for seamless data flow.
F10	Public API Integration(Future Enhancement)	<ul style="list-style-type: none"> ➤ Integration with external systems for e-prescriptions and insurance claims.

c. Software and hardware details

Platform	Web Application
Frontend/ console	Angular
Backend/ server	SpringBoot
Database	MySql
Programming Language: Frontend	JavaScript, TypeScript
Backend/ server programming language	Java

d. Project plan



II. CONCEPTUAL DESIGN:

a. Entity Relationship Model

b. Object Model