

Easy Hospital Mode

Medical center Managment System Application



Because life matters 



Software Requirements Specification

for

<Easy Hospital Mode>

Version 1.0 approved

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<01/11/2021>

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Revision History

Name	Date	Reason For Changes	Version
Easy Hospital Mode	20/11/2021	First Specification	1.0
Easy Hospital Mode	20/12/2021	Second Specification	2.0

1. Introduction

1.1 Purpose

The software is for the automation medical centre management system.

Save money for patient and medical centres.

The system will be used to get the information from the patient and then storing that data for future usages.

1.2 Document Convention

we use IEEE format to write this document.

We recommended to read:

(Product Scope, Product Functions, Operating Environment and Business Rules)

As a summary to understand what application talking about.

1.3 Intended Audience and Reading Suggestions

This project is a prototype for the medical centre management system, and it is restricted within the college premises. This has been implemented under the guidance of college professors. This project is useful for the hospital administration department.

1.4 Product Scope

*The proposed software is the **Medical center Managment System** . The system will be used to get the information from the patient and then storing that data for future usages.*

The current system in use is a paper-passed system. It is too slow and cannot provide update lists of patients within a reasonable timeframe.

The intentions of the system are to reduce over-time pay and increase the number of patients that can be treated accurately.

Requirements statement in this document are both functional and nun functional.

1.5 References

We use this application as a reference for us and we have taken some function from it

https://en.wikipedia.org/wiki/Hospital_information_system

- <https://economictimes.indiatimes.com/definition/minimum-viable-product>

2. Overall Description

2.1 Product Perspective

This easy Hospital mode is a self-contained system that manages activities of the medical centre as patient information. Various stakeholders are involved in the hospital patient information system.

2.2 Product Functions

The system functions can be described as follows:

Registration: When a patient is admitted, the receptionist records the patient's data, and the patient. The patient's information such as date of birth, address and telephone number is also entered into computer system.

*the patient chooses which disease he suffers from.
The receptionist helps the patient fill out the form.*

Patients check out. If a patient checks out, the administrative staff shall delete his ID from the system and the just evacuated bed is included in available-beds list.

2.3 User Classes and Characteristics

Who is using this program:

The system will be used in the medical centre . front-desk staff will be the main users. Given the condition that not all the users are computer-literate. Some users may have to be trained on using the system.

Front-desk staff:

They all have general reception and secretarial duties. Every staff has some basic computer training. They are responsible for patient's check-in or notification of appropriate people.

2.4 Operating Environment

Operating environment for Hospital Management System:

distributed database

client/server system

Operating system: Windows.

database: SQL server + database

platform: framework.net and C#.

2.5 Design and Implementation Constraints

Database

The system shall use SQL server, which is open source and free.

Operating system

The development shall be windows 7, 8, 8.1, 10 and 11.

2.6 User Documentation

The patient can register his data through the forms with ease.

Patient folders are created with a single click using this software. By naming folders, accessing data becomes easy and convenient.

Document can be captured from multiple fields allowing employees to easily upload data.

The correct information is always loaded for each patient which means that the software eliminates errors and ensures the speed of work.

2.7 Assumptions and Dependencies

It is assumed that there will be one hundred computers compatible with the software system before the system is installed and tested.

The hospital is supposed to have enough trained personnel to take care of the system.

Any modification (insert, delete, update) for the Database shall be synchronized and done only by the administrator in the ward.

The system must be user-friendly.

3. External Interface Requirements

3.1 User Interfaces

The software provides good graphical interface for the user any administrator can operate on the system, performing the required task such as create, update, viewing the details of the patient data.

Allows user to view quick reports like the number of patients in each clinic.

3.2 Hardware Interfaces

Hard disk :40 GB

RAM: 256 MB

Processor: Pentium(R)Dual-core CPU

3.3 Software Interfaces

Operating system: Windows.

database: SQL server + database

platform: framework.net and C#.

4. System Features

System Feature: login

4.1.1 Description and Priority

This is the first from where you are logged into system.

4.1.2 Stimulus/Response Sequences

the user entre to system by enter (admin) as a username and as a password



4.1.3 Functional Requirements

Requirements	Description
Requirement1	Entering username (admin)
Requirement 2	Entering password (admin)
Requirement 3	Press (Enter)

User will not be able to enter to the system if he did not write the username and password correctly.

System Feature: Choose the clinic

4.1.1 Description and Priority

It is one of the main features of the program where the user chooses the clinic that the patient will go.

4.1.2 Stimulus/Response Sequences

The user chooses the clinic that the patient will go to and then presses next.



4.1.3 Functional Requirements

Requirements	Description
Requirement1	The user chooses the clinic that the patient will go to.

System Feature: Entering patient data

4.3.1 Description and Priority

It is one of the main features of the program where the user entering patient data like name, phone number, blood type and so on.

4.3.2 Stimulus/Response Sequences

The user entering patient data like name, ID, phone number, blood type and age.

ID	Patient_Name	Blood_Typ	Date_Of_E	Departure_	Age	Number
21457896325478	ahmed mohamed hassan	A-	06/12/20...	27/12/2...	25	1234567898
30124112501522	mohamed medhat	B+	26/12/20...	28/12/2...	12	1141512365

4.3.3 Functional Requirements.

Requirements	Description
Requirements (save)	<i>To add new patient user must enter all the required data and then press save, otherwise he cannot add a new patient. ID must be 14 number if user enter more that 14 number system will not accept and also phone number must be 11 number.</i>
Requirements (search)	<i>For the user to search for a specific patient, he must enter patient ID and press search</i>
Requirements (update)	<i>For the user to update a specific patient data, he must first search about patient data and next select data he wants to update , do changes and press update.</i>
Requirements (delete)	<i>For the user to delete patient data, he must first search about patient data and next press delete.</i>

5. Other Nonfunctional Requirements

5.1 Performance Requirements

Response Time:

The system shall give responses in 1 second after checking the patient's information.

Capacity:

The System must support 1000 people at a time.

User-interface:

The user-interface screen shall respond within 5 seconds.

Conformity:

The systems must conform to the Microsoft Accessibility

5.2 Safety Requirements

Humans are error-prone, but the negative effects of common errors should be limited. E.g., users should realize that a given command will delete data and be asked to confirm their intent or have the option to undo.

5.3 Security Requirements

The database server should be as secure as possible to avoid any data breach or data leak that could be harmful to users. The most important part is to properly encrypt the database access key.

Patient Identification: - The system requires the patient to identify himself /herself using Logon ID.

Modification any modification (insert, delete, update) for the Database shall be synchronized and only by the front desk staff.

"Front Desk staff Rights": - Front Desk staff shall be able to view all information in the system, add new patients to system and be able to modify any information in it.

5.4 Software Quality Attributes

Good quality of the framework= produces robust, bug free software which contains all necessary requirements Customer satisfaction.

5.5 Business Rules

We develop the hospital management system for the hospital staff and other department that for record for all the users.

The system functions can be described as follows: Registration: When a patient is admitted, the front-desk staff enters the patients ID Number into the computer. Otherwise, the patient's information such as date of birth, address and telephone number is also entered into computer system.

Patients check out: If a patient checks out, the administrative staff shall delete his ID Number from the system and the just evacuated bed is included in available-beds list.

6. Other Requirements

Appendix A: Glossary

(IEEE): *Institute of Electrical and Electronics Engineers (IEEE) style*

Appendix B: To Be Determined List

We use this application as a reference for us and we have taken some function from it

<https://itsourcecode.com/free-projects/csharp/hospital-management-system-in-c-with-source-code-2021/>

https://en.wikipedia.org/wiki/Hospital_information_system

<https://www.freeprojectz.com/entity-relationship/hospital-management-system-er-diagram>

<https://economictimes.indiatimes.com/definition/minimum-viable-product>