Ex No: 7 HOSPITAL MANAGEMENT APPLICATION

PROBLEM DEFINITION

A hospital application is to be developed which is required to perform the following functions:

It must provide a user in admin mode with the details of a patient, doctor. It must provide a user in doctor mode who can modify the details of the illness and the treatment.

SRS DOCUMENT HOSPITAL MANAGEMENTAPPLICATION

INTRODUCTION

Purpose

The purpose of this SRS is to describe the requirements involved in developing a system to manage hospital records.

The intended audience is any person who wants To check patient and doctor details (both doctor and administrator mode).

To add new treatment details for any particular patient according to his illness. (only doctor mode).

Scope

The product is titled Hospital Management Application (HMA).

The product will perform the following tasks

Allow either an doctor or an administrator to view patient details. Allow the administrator to add a new patient, doctor with corresponding details.

Allow the administrator to modify the detail of an patient, doctor. Allow the doctor to add the records for an ongoing treatment.

Definitions, Acronyms and Abbreviations HMA: Hospital Management Application.

References:

IEEE standard 830-1998 recommended practice for Software Requirements Specifications-Description.

Overview

The SRS contains an analysis of the requirements necessary to help easy design.

The overall description provides interface requirements for the Hospital Management System, product perspective, hardware interfaces, software interfaces, communication interface, memory constraints, product functions, user characteristics and other constraints.

Succeeding pages illustrate the characteristics of typical naïve users accessing the system along with legal and functional constraints enforced that affect Hospital Management Application in any fashion.

THE OVERALLDESCRIPTION

Product perspective

Hardware interfaces

Hard disk: The database connectivity requires a hardware configuration that is on-line. This makes it necessary to have a fast database system (such as any RDBMS) running on high rpm hard-disk permitting complete data redundancy and backup systems to support the primary goal of reliability.

The system must interface with the standard output device, keyboard and mouse to interact with this software.

Software interfaces

Back End: MSAccess

Front End: Microsoft Visual Basic 6.0

Memory Constraints

No specific constraints onmemory.

Operations:

The software allows two modes of operations

The administrator mode allows user to add a new patient, doctor, modify the existing details of a patient & doctor, view the details of an Patient &doctor.

Product Functions

Patient Details

The user (both administrator and doctor) must have the access to Up-to-date information about the patient including.

- PatientID
- PatientName
- PatientAge
- PatientAddress
- Admit and DischargeDate
- DoctorDetails

The user (only in administrator mode) must be able to add and view by supplying the following doctor details.

- Doctor ID
- DoctorName
- DoctorAge
- DoctorAddress
- DoctorQualification

Illness Details

The user (only in doctor mode) must be able to modify the following details of an existing treatment.

PatientID DoctorID

Illness

Medication

User characteristics

The intended users of this software need not have specific knowledge as to what is the internal operation of the system. Thus the end user is at a high level of abstraction that allows easier, faster operation and reduces the knowledge requirement of enduser

The Product is absolutely user friendly, so the intended users can be the naïveusers.

The product does not expect the user to possess any technical background. Any person who knows to use the mouse and the keyboard can successfully use thisproduct.

Constraints

At the time of adding a new patient and doctor, each must be assigneda unique IDnumber.

The ID numbers for the illness table must match the IDs in the respectivetables

SPECIFICREQUIREMENTS

Logical DatabaseRequirements

There is one database which contains all the necessary information about a patient which includes patient ID, patient name, age, address, admit and discharge date

There is a database which contains all the necessary information about a doctor which includes doctor ID, doctor name, age, address, qualification.

There is a database which contains all the necessary information about a treatment which include Patient ID, doctor ID, illness, medication

FRONT – ENDDESCRIPTION

The front end for the Hospital Management Application (HMA) is designed using Microsoft Visual Basic 6.0. The front – end contains a user – friendly interface. It has a welcome screen that provides an option for the user to enter in doctor mode or in administrator mode. The user has to validate himself using password to enter in administrator mode. In administrator mode, apart from viewing the details the user can also add a new patient and doctor by providing details or modify the existing details using the patient ID and doctorID.

BACK – ENDDESCRIPTION

There are 4 tables. The 1st one maintains login details for all the users. The 2nd table correlates a unique patient ID with his name, age, address, admit and discharge date.. The 3rd table correlates a unique doctor ID with his name, age, address and qualification. The 4th table correlates a doctor ID and patient ID with illness and medication

DATASTRUCTURES

LOGINDETAILS

FIELD NAME	TYPE	CONSTRAINTS
ID	NUMBER	NOT NULL
PASSWORD	TEXT	NOT NULL

PATIENTDETAILS

FIELD NAME	TYPE	CONSTRAINTS
ID	NUMBER	NOT NULL
FNAME	TEXT	NOT NULL
LNAME	TEXT	
AGE	TEXT	
ADDRESS	TEXT	
INDATE	DATE/TIME	
OUTDATE	DATE/TIME	

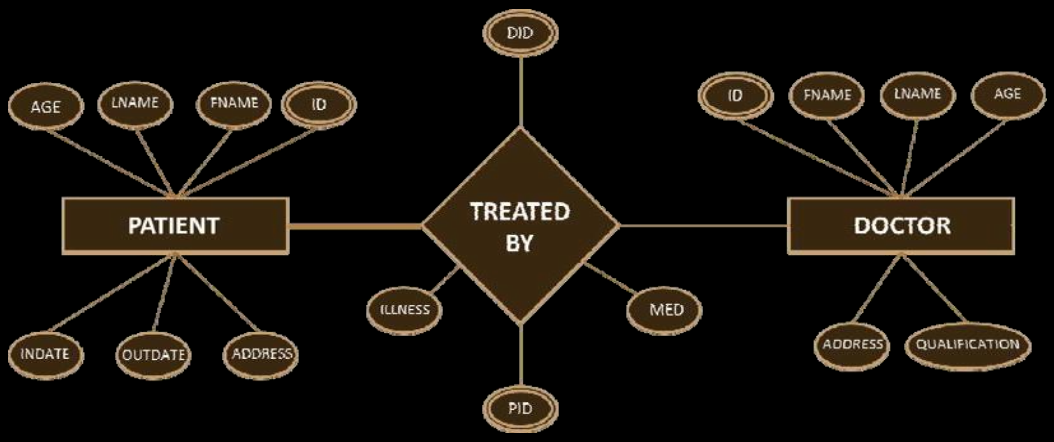
DOCTORDETAILS

FIELD NAME	TYPE	CONSTRAINTS
ID	NUMBER	NOT NULL
FNAME	TEXT	NOT NULL
LNAME	TEXT	
AGE	NUMBER	
ADDRESS	TEXT	
QUALIFICATION	TEXT	

TREATMENTDETAILS

FIELD NAME	TYPE	CONSTRAINTS
PID	NUMBER	NOT NULL
DID	NUMBER	NOT NULL
ILLNESS	TEXT	
MEDICINE	TEXT	

E/RDIAGRAM



TESTING

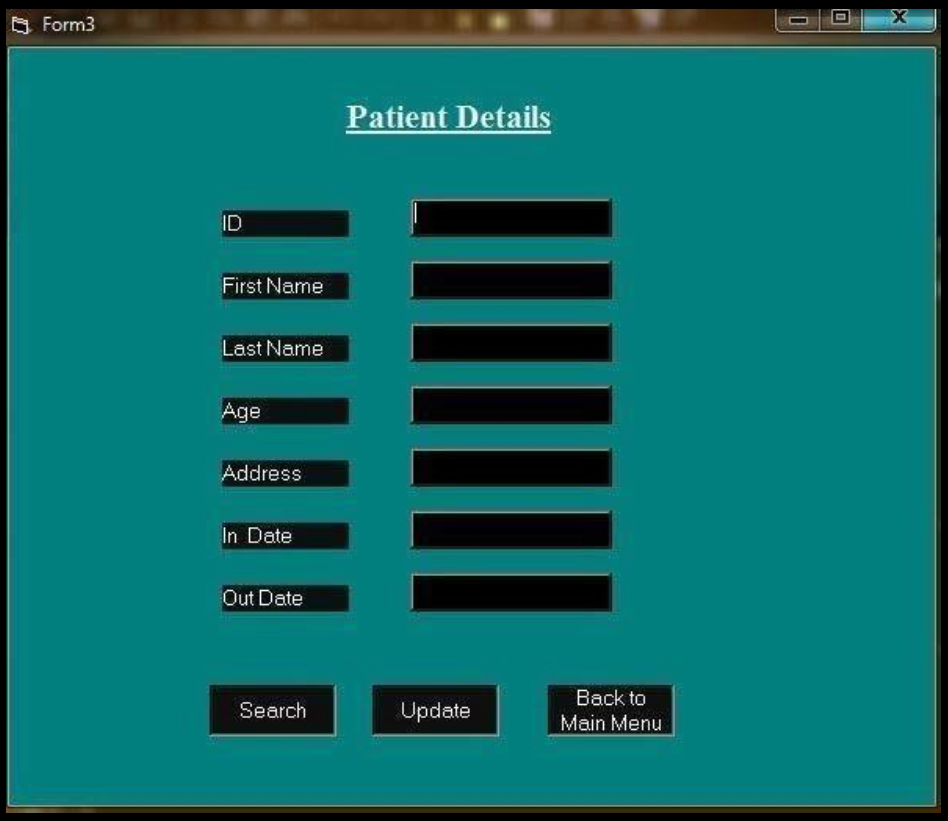
FORM NAME	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
LOGIN FORM	ID and Password	If correct password, main menu must be displayed	If correct password, main menu was displayed	Pass
MAIN MENU FORM	Menu Option	Required Form must be displayed	Required Form must be displayed	Pass
PATIENT DETAILS FORM	Patient ID or Patient details	Patient details must be displayed or updated to database.	Patient details was displayed or updated to database	Pass
DOCTOR DETAILS FORM	Doctor ID	Doctor details must be displayed	Doctor details was displayed	Pass
TREATMENT DETAILS FORM	Patient ID, Doctor ID, Illness and Medicines	Treatment details must be updated to database	Treatment details was updated to database	Pass

SAMPLE FORMS

LOGIN FORM

MAIN MENU FORM

PATIENT DETAILSFORM



DOCTOR DETAILSFORM

TREATMENT DETAILS FORM

RESULT

Thus, the Hospital Management System was implemented using the specified front end and back-end tools.