Indiana University-Purdue University Indianapolis INFO-C451 System Implementation Instructor Shawn Dai



HealthCare Management System System Requirements Documentation

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1. SYSTEM REQUIREMENTS

A database management system is a platform that provides for improved methods of storing and accessing data whenever it is needed. Application programs facilitate the access to data. The system would provide information integrity by continuously syncing the information that has been entered. The system would always ensure that even when more than one person is performing an update operation on the database at the same time, the data will be updated on the right part of the database. The system would reduce storage space by performing automatic archiving of old, infrequently accessed data from expensive storage devices to low cost-effective storage devices. The system would enhance data sharing capabilities by increasing access to the database using queries. This increases the accuracy of access to data, although the information is from the same database. Different users would be able to access the same database from different devices and at different physical locations.

1.1. Functional Requirements

Requirement No.	Priority Weight	Description
REQ-1 Login	18.2	The associate can enter their correct credentials in the login page and will be successfully logged in. If entered data is invalid, an error message will be displayed.
REQ-2 Add new patient	16.8	A receptionist will enter the patient details and the system will assign a unique patient ID.
REQ-3 Add/edit/delete user	14.6	An administrator will have the ability to add, edit, and delete users.
REQ-4 Search for patient	12.7	All associates will be able to search for patient details.
REQ-5 Generate bill	11.0	The Billing Clerk will enter the patient details and charges in order to get a total and generate a bill.
REQ-6 Request lab test	8.9	Doctors can request for lab tests.
REQ-7 View lab test requests	7.1	Doctors and lab associates can view all new lab test requests. Lab associates will be able to approve or deny requests.
REQ-8 View lab tests in progress	6.7	Doctors and lab associates can view all lab tests in progress. Lab associates can complete lab tests.
REQ-9 View lab test results Total: 1	6.0	Doctors and lab associates can view all lab test results.

1.2. Nonfunctional Requirements

Requirement No.	Priority Level	Description
REQ-10 Security	Critical	Secure access by username (ID) and password.
REQ-11 Performance	High	User-friendly interface for better interaction.



REQ-12 Platform	Normal	Can be accessed by any type of platform.
Independent		
REQ-13	Low	Backup of the database will be taken, and extra memory will not be
Maintainability		occupied because there will not be any redundancy in the database.

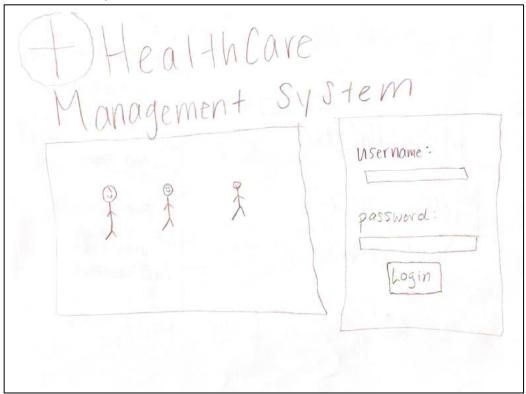
1.3. User Interface Requirements

Requirement No.	Priority Level	Description
REQ-14	High	A login screen for entering username and password
REQ-15	High	Display a homepage for the system
REQ-16	High	Add/edit/delete user
REQ-17	Normal	Patient registration form
REQ-18	Normal	Patient search
REQ-19	Normal	Billing form
REQ-20	Low	Lab test request form
REQ-21	Low	New lab test requests
REQ-22	Low	Lab tests in progress
REQ-23	Low	View lab test results

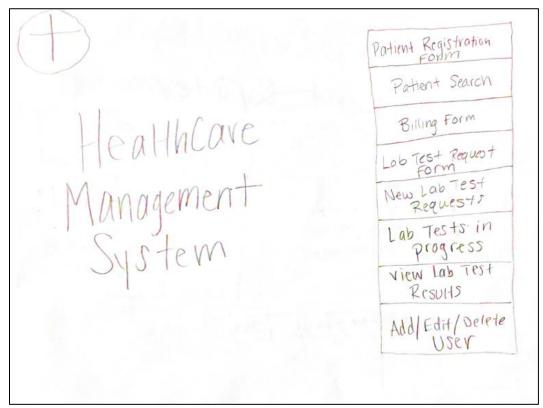


1.3.1. User Interface Requirement Sketches/Graphics

1.3.1.1 REQ-14 sketch



1.3.1.2 REQ-15 sketch





1.3.1.3 REQ-16 sketch

Ada	d/Edit,	/Delete User
Select one Add user O Edituser O Delete user O	IDE	Search
Name [DOB [Con-lact No [Deportment Deportment
Add	Save	Delete Exit

1.3.1.4 REQ-17 sketch

Patient R	Registration Form
Patient ID	Registration Date
Patient Name	Room No
DOB	Doctor
Gender	Incomplete/saved Patient Registration Forms:
Address [Z Registra
Contact No L	
[Add] Sa	IVE Exit

1.3.1.5 REQ-18 sketch

	Search
Patient 10 Patient Searce	nt Name DOB
Potent 10 []	Registration Date
Patient Name	Room November)
DOB [] Gender []	Doctor
Eddress Contact No L	
[Exit] [Sav	e Exit

1.3.1.6 REQ-19 sketch

Bill NO I	Billing Form Date
Patien+ ID [Date of Admission
Name [Date of Discharge
DO B	
Gender [
Room Charges I Doctor Fees [
Lab Fees I Add Sa	ve Exit Total

1.3.1.7 REQ-20 sketch

Lab Test	Request form
Patient Name	Patient IP
DOB Gender	Incomplete / Saved Lab Test Request Forms
Test Name	
Description	
Doctor [
Submit Save	Delete Exit

1.3.1.8 REQ-21 sketch

New Lab	Test Requests
Patient Name	Patient 1D
DOB 🔲	New Lob Requests:
Brender	
Test Name	
Description	
Doctor [
Approve Deny Tave	Delete Exit

1.3.1.9 REQ-22 sketch

Lab Test in	Progress
Patient Name	Patient ID Lob Tests in Progress:
DOB	Lab Tests III 110
Evender	
Test Name	The state of the s
Description	
Doctor	
Complete Save	Delete Exit

1.3.1.10 REQ-23 sketch

	ab Test	
Potient Name		patient ID
Do B		Lab Test Results
Fiender		Completed Lat Tests:
Test Name		Thought with
Description		
Doctor		
	Delete E	xit

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