

DMD Project Phase 1

A database design for a “Hospital Management System”

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Requirement ID	Uniquely identifies requirement
Title	Gives the requirement a symbolic name
Type	Functional or non-functional
Description	The definition of the requirement
Priority	<p>Defines the order in which requirements should be implemented.</p> <p>Priorities are designated (highest to lowest) from 1 to 3.</p> <p>Requirements of priority 1 are mandatory; 2 represents features nice to have, and 3 represents optional features.</p>
Risk	<p>Specifies the risk of not implementing the requirement. It shows how critical the requirement is to the system as a whole. The following risk levels are defined over the impact of not being implemented correctly.</p> <ul style="list-style-type: none"> • Critical (C) It will break the main functionality of the system. The system cannot be used if this requirement is not implemented. • High (H) It will impact the main functionality of the system. Some function of the system could be inaccessible, but the system can be generally used. • Medium (M) It will impact some system features, but not the main functionality. The system can still be used with some limitation. • Low (L) The system can be used without limitation, but with some workarounds.

Requirement ID	0001
Title	Registration
Type	Functional
Description	Any unregistered patient can register in the system. The process of registration includes filling personal information.
Priority	1
Risk	H

Requirement ID	0002
Title	Registered patient and payments
Type	Functional
Description	Registered patient can to pay for the medical treatment using the system (or in the reception). But before it the doctor's bill should be requested by the system.
Priority	1
Risk	M

Requirement ID	0003
Title	Timetable of doctors
Type	Functional
Description	Anybody can see the timetable of doctors on the hospital web portal.
Priority	1
Risk	M

Requirement ID	0004
Title	Contact the reception
Type	Functional
Description	Patients can contact the reception.
Priority	2
Risk	L

Requirement ID	0005
Title	Web portal information for patients
Type	Functional
Description	Registered patients and medics can view appointments, hospital records, notifications, messages in the web portal. A patient can view only his own hospital records. Medic can view hospital records of the patient.
Priority	2
Risk	M

Requirement ID	0006
Title	Appointments
Type	Functional
Description	Registered patients and medics can make and cancel appointments using the system (the web portal).
Priority	1
Risk	C

Requirement ID	0007
Title	Chat in the web portal
Type	Functional
Description	Registered patient and medics can chat via the web portal.
Priority	3
Risk	L

Requirement ID	0008
Title	Doctor and medicines
Type	Functional
Description	Doctor can prescribe medicines.
Priority	1
Risk	H

Requirement ID	0009
Title	Medics and medical records
Type	Functional
Description	Medics can make medical records.
Priority	1
Risk	C

Requirement ID	0010
Title	Medicine requests
Type	Functional
Description	Medics can request medicines from the inventory.
Priority	3
Risk	C

Requirement ID	0011
Title	Doctors intercommunication
Type	Functional
Description	Doctors can make an appointment for patients to another doctor.
Priority	2
Risk	L

Requirement ID	0012
Title	Receptionist and registration
Type	Functional
Description	Receptionist can register patient
Priority	1
Risk	C

Requirement ID	0013
Title	Web-portal information for receptionist
Type	Functional
Description	Receptionist can view appointments, hospital records, notifications, messages
Priority	1
Risk	C

Requirement ID	0014
Title	Receptionist and appointments
Type	Functional
Description	Receptionist can make and cancel appointments
Priority	1
Risk	C

Requirement ID	0015
Title	Payment request
Type	Functional
Description	Receptionist can request a payment
Priority	2
Risk	M

Requirement ID	0016
Title	Medicine providing
Type	Functional
Description	Storekeeper can provide medicine
Priority	1
Risk	H

Requirement ID	0017
Title	Medicine entering
Type	Functional
Description	Storekeeper can enter medicine to the inventory
Priority	1
Risk	M

Requirement ID	0018
Title	Information about accounts
Type	Functional
Description	The system must keep personal information of all registered patients. New accounts must be automatically added to the database.
Priority	1
Risk	C

Requirement ID	0019
Title	Actual information
Type	Functional
Description	The system must display the actual timetables of doctors, contact information.
Priority	1
Risk	M

Requirement ID	0020
Title	Automated medical records
Type	Functional
Description	All patient's medical records must be tracked by the system. New records must be automatically appended to the record list after doctor's appointments.
Priority	1
Risk	C

Requirement ID	0021
Title	Management and distribution of information
Type	Functional
Description	The system must contain information about all appointments, notifications, messages and display them to appropriate users.
Priority	1
Risk	C

Requirement ID	0022
Title	Chat
Type	Functional
Description	The system must support communication between users in form of the chat.
Priority	3
Risk	L

Requirement ID	0023
Title	Access management
Type	Function
Description	The system must provide different permissions and access levels (admin, patient, doctor, receptionist, storekeeper). In particular, receptionist can manage appointments, hospital records and message.
Priority	1
Risk	C

Requirement ID	0024
Title	Medicine inventory management
Type	Functional
Description	The system must track the medicine inventory, remove medications after requests, add medication (requested by a storekeeper) and inform a storekeeper in case of lack of particular medications.
Priority	1
Risk	M

Requirement ID	0025
Title	Fees transferring
Type	Functional
Description	The system must transfer doctor's fees to the receptionist for further payments.
Priority	2
Risk	M

Requirement ID	0026
Title	Availability
Type	Non-functional
Description	The system must work 24/7.
Priority	1
Risk	C

Requirement ID	0027
Title	Backups
Type	Non-functional
Description	The system must periodically backup all data.
Priority	2
Risk	L

Requirement ID	0028
Title	Fault tolerance
Type	Non-functional
Description	The server must automatically restart in case of shut down.
Priority	2
Risk	L

Requirement ID	0029
Title	User-friendly interface
Type	Non-functional
Description	The web portal must have intuitive and user-friendly interface.
Priority	2
Risk	L

Requirement ID	0030
Title	Security
Type	Non-functional
Description	The system must be well-secured
Priority	1
Risk	C

Requirement ID	0031
Title	Scalability
Type	Non-functional
Description	The system must be easily extended for any type of hospitals
Priority	1
Risk	C

