# Pharmacy Website\_

# SRS

**Submitted By: group 17** 

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# **Executive Summary**

symptoms checker is an online Service offer you the ability to check your health and Diagnoses your condition for some types of disease based on some Questions, you can even search for advice from doctors you already know or we can recommend you a doctor for your status, you can also create your own profile that contains your body description and your history with any previous disease if you want or you can use our Service without Creating a profile.

# **Document Overview**

This document introduce online Website product plan. It introduce general System description, System Users, System Modules, System Functions, System models, Non\_functional Requirements, Domain Requirement and System Interfaces.

# **Abbreviation and Technologies**

### **Abbreviation:**

SRS	Software Requirements Specification
DB	Database

# **Terminologies:**

Context boundary	Boundary between the \taucontext of a \tausstem and those parts of the \tauara application domain that are irrelevant for the \tausstem and its \taure\taure\tau\tau\tau\tau\tau\tau\tau\tau\tau\tau
Context diagram	1. A diagrammatic representation of a ↑context model. 2. In  ↑Structured Analysis, the context diagram is the root of the data-flow diagram hierarchy.
System context	The part of a ↑system's environment that is relevant for the definition as well as the understanding of the ↑requirements of a ↑system to be developed.
Domain	A range of relevant things (for some given matter); for example, an
Feature	A delimitable characteristic of a \( \frac{1}{2}\)system that provides value for \( \frac{1}{2}\) stakeholders.
Functional requirement	A \( \tau \) requirement concerning a result of behavior that shall be provided by a function of a \( \tau \) system (or of a \( \tau \) component or service).
Non-functional requirement	A ↑quality requirement or a ↑constraint
Model	An abstract representation of an existing reality or a reality to be created.
Prototype	1. In manufacturing: a piece which is built prior to the start of mass production. 2. In software engineering: An executable piece of software that implements critical parts of a ↑system in advance. In ↑Requirements Engineering, prototypes are used as a means for requirements ↑elicitation and ↑validation.
Requirement	1. A condition or capability needed by a \u03c4 user to solve a problem or achieve an objective. 2. A condition or capability that must be met or possessed by a \u03c4 system or system \u03c4 component to satisfy a contract, standard, specification, or other formally imposed documents.
Reliability	The capability of a \( \)system to maintain a specified level of \( \)functionality and \( \)performance when used under specified conditions. Reliability may be stated as a \( \)quality requirement.
Data-flow diagram	A diagram modeling the \( \)functionality of a \( \)system or \( \)component by processes (also called activities), data stores and data flows. Incoming data flows trigger processes which then consume the received data, transform them, read/write persistent data held in data stores and then produce new data flows which may be intermediate results that trigger other processes or final results that leave the system

Security	The capability of a ↑system to protect (a) its data and resources against unauthorized use and (b) its legitimate ↑users against denial of service.
Sequence diagram	A diagram type in \tag{UML which models the interactions} between a selected set of objects and/or \tag{actors in the} sequential order that those interactions occur
Stakeholder	A person or organization that has a (direct or indirect) influence on a \( \gamma \) system's \( \gamma \) requirements.
Software requirements specification	A ↑requirements specification pertaining to a software system. Abbreviation: SRS
State machine	A ↑model describing the behavior of a system or ↑ component by a finite set of states and state transitions. State transitions are triggered by events and can in turn trigger actions and new events.
System boundary	The boundary between a ↑system and its surrounding ↑context
Usability	The capability of a system to be understood, learned, used, and liked by its ↑users.
Use case	A description of the interactions possible between †actors and a †system that, when executed, provide added value.
Use case diagram	A diagram type in UML that models the ↑actors and the ↑use cases of a ↑system.

User	A person who uses the ↑functionality provided by a ↑system. Also called end user.
Verifiability (of requirements)	The degree to which the fulfillment of a \( \triangle requirement by an implemented \( \triangle \text{system can be checked, e.g., by defining \( \triangle \text{acceptance test cases, measurements or inspection procedures. \)
Validation (of requirements)	The process of checking whether documented \( \text{requirements} \) match the \( \text{\chistakeholders'} \) needs.

# **References**

1) https://www.gasq.org/files/content/gasq/downloads/certific ation/IREB/ireb\_cpre\_glossary\_16\_en.pdf

# > System Description

# Introduction

# system description:

Symptom Checker

what if you don't feel ok ,and you can't see a doctor?! Now ,with our service we can offer you that :

- (1 the ability to check your health by choosing from many choices how do you feel.
- 2) search for advice from a certain doctor you know , Or we can recommend you a doctor for your status
- 3) we can also Diagnosis your condition for some types of disease based on some questions we will ask.
- (4 you can also create a profile that contains your body description ,and your history with any previous disease , you can also use our service without Creating a profile.
  - Diagnosis your condition

you can check if you have a disease by answering some of our carefully chosen MCQ questions .

Doctor recommendation (as a secondary feature):

we can recommend you a doctor for your condition based on your answer on our questions, or you can ask a certain available doctor about your health.

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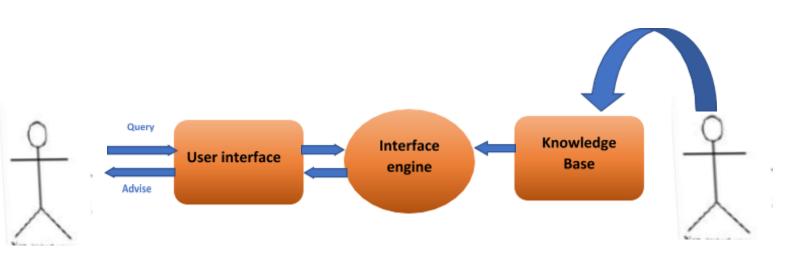
• Creating a profile:

you can create your own profile that contains your health condition, previous injuries or illnesses, and if you have a history with allergic.

# system Architecture:

Pharmacy system introduces huge amount of services contents. The system offers the contents and service to both mobile and desktop users via web-based or dedicated mobile software.

#### **Block:**



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# **System Users**

### • Patient:

The Patient is expected to be Internet literate and be able to use a search engine. The main screen of the pharmacy patient Website interface will have the search function and a link to

- View and Edit Profile
- Doctor Search
- Consult Doctor
- Book Appointment
- Syndrom Search
- View Prescription
- View Prescriptions (Medicine History)
- Report Issue or Contact Support

### • Medical Professional:

The Medical Professional is expected to be Internet literate and be able to use a search engine. The main screen of the pharmacy doctor Website interface will have the search function and a link to

View and Edit Profile

- Patient Charts
- Report Issue or Contact Support

#### • Administrative User:

The Admin is expected to be Windows literate and to be able to use button, pull-down menus, and similar components, as well as familiarity with database management systems. The main screen of the pharmacy, Website admin interface will have the console function and a link to

- User Accreditation
- Update Syndrome Database
- Update Disease Database
- Check Users Orders and Money Transfer
- Respond to Issue or Ticket

# > System Modules

The system consists of following modules:

# (1) Storage

#### Purpose

The purpose of this module is to provide a centralized place where information for the system can be stored, manipulated, and accessed.

#### Rationale

This module is created to centralize and encapsulate all data storage and retrieval duties on the system. This includes user profiles, success stories, banner ads, pictures, and messages. It also provides some services, such as authentication, network communication and search.

### • High-Level Server Design

The server module is broken down into lower-level modules, as shown in Figure 2-1,As is obvious, all communications from the client come through the communications module. The provided interface of the high-level server component and the server communications module are thus identical. Two modules in the

server handle administrator and user functions, respectively. Each of these modules will be described in detail in following sections.

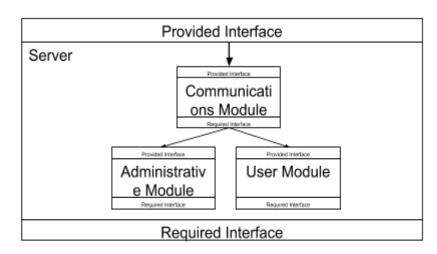


Figure 2-1: High-Level Server Architecture

# (2) General User Area

### Purpose

The purpose of this module is to provide the user interface and view functions for the system. This is the software with which the user directly interacts. It communicates with the server to retrieve and modify persistent data when necessary.

#### Rationale

This module is created to provide the user interface to the system.

#### High-Level Module Design

The user client is broken down into lower-level modules, as shown in Figure 3-1.

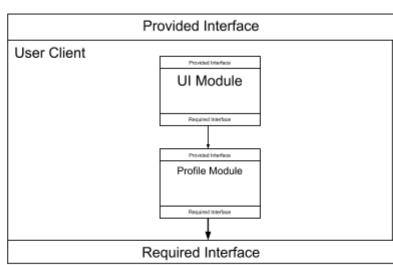


Figure 3-1: High-Level User Client Architecture

#### Provided Interface

This module has no provided interfaces.

### Required Interface

This module's required interface is the union of the provided interfaces of the following components:

- Administrative Module
- User Module

# (3) System Administration Area

#### Purpose

The purpose of this module is to provide the Administration and view functions for the system. This is the software with which the user directly interacts. It communicates with the server to retrieve and modify persistent data when necessary.

#### Rationale

This module is created to provide the user interface to the back end of the system.

### High-Level Module Design

The user client is broken down into lower-level modules, as shown in Figure 3-1.

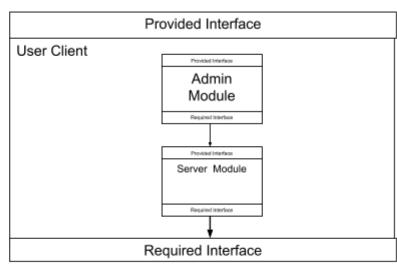


Figure 3-1: High-Level User Client Architecture

# (4) Passwords and Authentication Module

#### Purpose

The purpose of this module is to provide an authentication service, allowing callers to determine whether a username/password combination is valid, and a change-password service, allowing users to change their passwords.

#### Rationale

This module is created to centralize and encapsulate password management and authentication services.

Required Interface

boolean userExists(UserID userID);

Provided Interface

void setPassword(UserID userId, Password password) throws NoSuchUserException;

- Description: Stores a user password of the given user ID.
- Parameters: userID: User ID of the user whose password is being stored.

password: The password for that user.

 Exceptions: NoSuchUserException: If the given user does not exist.

# boolean logon(UserID userID, Password password) throws BannedUserException;

- Description: Determines whether a given user/password combination is valid or not. For security reasons, the incorrect portion of the combination (i.e. user or password) is not given.
- Parameters: userID: User ID of the user whose password is being checked. password: The presumed password for that user.Returns: True if the user ID/password combination is correct, false otherwise.
- Exceptions: BannedUserException: If the given user has been banned.

# void logoff(UserID userID) throws NoSuchUserException, UserNotLoggedOnException;

- Description: Logs a user off the system.
- Parameters: userID: User ID of the user who is logging off.
- Exceptions: NoSuchUserException: If the given user does not exist. UserNotLoggedOnException: If the given user is not logged on.

#### Module ADTs

**UserID: See Profiles Module** 

typedef Password String;

# Non Functional Requirements:

Performance Requirements

### Performance

The system must be interactive and the delays involved must be less .So in every action-response of the system, there are no immediate delays. In case of opening windows forms, of popping error messages and saving the settings or sessions there is delay much below 2 seconds, In case of opening databases, sorting questions and evaluation there are no delays and the operation is performed in less than 2 seconds for opening ,sorting, computing, posting > 95% of the files. Also when connecting to the server the delay is based editing on the distance of the 2 systems and the configuration between them so there is high probability that there will be or not a successful connection in less than 20 seconds for sake of good communication.

# Safety

Information transmission should be securely transmitted to server without any changes in information

# Reliability

As the system provide the right tools for discussion, problem solving it must be made sure that the system is reliable in its operations and for securing the sensitive details.

#### **Software Quality Attributes**

# Availability

If the internet service gets disrupted while sending information to the server, the information can be send again for verification.

### Security

The main security concern is for users account hence proper login mechanism should be used to avoid hacking. The tablet id registration is way to spam check for increasing the security. Hence, security is provided from unwanted use of recognition software.

### Usability

As the system is easy to handle and navigates in the most expected way with no delays. In that case the system program reacts accordingly and transverses quickly between its states.

# System functions

#### User Profile:

Users can register to the system before they can use the website, in urgent cases user can skip making profile.

The profile will contain user's personal information such as: name, age, number,.....etc. Also, the profile will contain user's medical information. Users' profiles show all the activities, as user can review all the related illness.

# • Choose symptom:

"Website" will supply all kinds of symptoms, which will appear in the front page. User must choose the exact symptom of the illness & answer any question related to it, to get the right treatment.

Choosing symptoms will be made by three phases, first "website" will show options of symptoms and user must choose the main symptom.

Second," website" will supply questions about the basic detailed of the symptoms, third, "website" will support detailed questions

User must answer carefully and honestly the questions, to get the right treatment.

After these three phases the right medicine will show immediately to user. If User's Condition is critical or need an extra radiology and medical analysis, the "website" will automatically show the link of doctors' contacts page.

### Doctors' Contacts:

"Website" will supply doctors' contacts of each medical field. In Case user have an emergency or want to meet doctors we will make it easy for him by gathering doctor's contact of each symptom.

"website" will supply all doctors' contacts in all medical fields which will be in categories and user should choose the right field for his condition, then the user will find doctor's contacts in this field in different places.

### User Feedback:

"Website" will supply feedback form, so users can tell their opinion about everything in "website" as we will improve it continuously to make it more friendly and helpful for the users.

# Multi Language Support:

"Website" system interface allows two languages, the main language is Arabic, and it also supports English as well.