Vision Document

Software Requirement Engineering

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Date

Sunday, October 3, 2021

Fall 2021

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1 Document Version

Version	Date	Description	Authors
V1.0	29/09/2021	Initial Vision Document	Muaaz Ulhaq, Zuhaib Shahid, Muhammad Ayyas, Tayyab Naseem
V2.0		Refined Vision Document	

2 Introduction

2.1 Purpose

The purpose of the software is to examine the public health issues, aware the public about those issues, and provide a solution to overcome such issues. The software does not only focus on human life, but it also plays a crucial role on the health of animals. This purpose will lead to the better economic condition of the country by improving the public health.

2.2 Scope

This vision document applies to Health Care System, which will be developed by EZ developers. The system will be based on the client server system and this idea will be the fresh new idea by EZ developers. The HCS will monitor the ratio of diseases including epidemics and pandemics (e.g., Polio, Dengue, HIV, COVID-19 etc.), the environmental condition of an area (e.g., oxygen ratio, water level etc.) and provide a way to deal such situations. The system will support web, android, and iOS application.

2.3 Definitions, Abbreviations and Acronyms

EZ- Easy Zalim, HCS- Health Care System.

2.4 References

To be determined.

3 Business Opportunity

As we discussed in the features of the system, we will have contact will different pharmacies the country-sides due to which we may appoint our company's site in every city for the online delivery of medicines. By which we can offer business opportunities.

Other than that, we will encourage online business by our system. As we offer highly demanded medicines which are not available in Pakistan so, customer can export it by the help of our system.

We are also offering jobs to collect news and for the survey teams. Due to which we also made business opportunities.

We have a research team for updating people about different pandemics details and for the awareness of people.

4 Problem Statement

Problem	Description
The problem of	Unawareness about the nature of diseases and its precautions in different cities
Affects	The people(of all age), the tourists, and environment of that city.
Result of which	Increase in morbidity and mortality rate.
Benefits of	Which can be very productive, people can be up to date about the condition of numerous cities, they can be aware about necessary precautions according to different cities (if they need to be taken), they can prevent tours to dangerous (Affected by some serious disease) cities.

4.1 Problem Position Statement

For	Travelers and patient
Who	Want to travel any place and can be aware of the situation of that place. And patient can take advantage of many features like personal trainer and medicine reminder etc.
The Health Care System	Is an application software and web application.

That	Provides ability to get information about medical surveys of different regions, and provides precautions to numerous diseases.
Unlike	Current available system that provides only the features like information about a particular disease(COVID-19), or that runs only on either web or phone.
Our Product	Provides information about many diseases along their precautions, it keeps its user updated, the online pharmacy option is available, the test for color blindness is available etc. and it runs on both web and phone.

4.3 Stakeholders

4.3.1 Non-User Stakeholders

1. System Analyst
2. Requirements Specifier
3. Technical Reviewer
4. Software Architect
5. Project Manager
6. Market Analyst
7. Database Engineer

4.3.2 User Stakeholders

1. Patient
2. Traveler
3. Doctor
4. Doctor Assistant-who schedule the appointments
5. Pharmacists

5 Summary of Features

In this section, the basic features e.g., database, login, signup etc. are not mentioned, because every system must have these features, so special features are given below:

5.1. Body Survey

This feature will take the medical data of the user and save it.

5.2. Health Companion

This feature will allow to see different precautions about respective diseases, observed by experts.

5.3. Alert and Alarm

The city where any disease is on its peak or which have critical medical condition will be shown red, and if you enter there, an alert will be popped up and alarm rings.

5.4. Regional Survey

This feature will help to check the environmental condition and disease rate of the cities.

5.4.1. Morbidity Survey

This feature will tell the diseases rates, the diseases that are included so far are:

a. Polio
b. Dengue
c. Pandemics
d. Cancer
e. Asthma
f. HIV
g. COVID 19

More diseases will be added in future.

5.4.2. Environmental Survey

The environmental condition will be shown according to:

a. Oxygen level
b. Weather Report
c. Water Ratio

    d.   Forest level

5.5. News

- Helped in various disaster situations.
- Gathers all the information on district and regional level.
- This app will give real-time updates on outbreaks in specific locations.
- It collects online news as well as official reports.
- View of current infectious disease risk locally and globally.
- Very Beneficial for tourists can get analysis of area whether safe for visit or not.

5.6. Research

- Bring about improvement in the health of people by health care system.
- The research can be initiated based on available data on the disease which gathers from different organizations and laboratories.
- Gets the reports of research on different diseases.
- Information on diseases which are not officially announced.

5.7. Awareness

- Awareness about diseases.
- Our system will give the awareness adds.
- System also gives the online consultation.

5.8. Veterinary services

- This system provides 24/7 live chat access to licensed veterinarians.
- This platform gives pet owners access to expert advice veterinarians.
- There are multiple types of Services offered.
- This system focused on services that offer Multiple communication methods.
- Ability to send photos of your pet to doctor to see.

5.9. Personal trainer

- To keep your health maintainable.
- There will be a guideline option for every type of disease.
- The system will Take care of the user diet, what to eat, when to eat.

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- This system will take care of your physique.

- System will keep reminds you to take medicines.
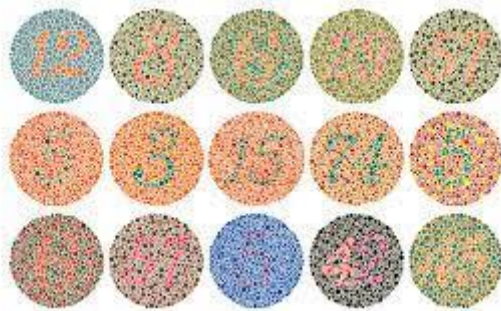
5.10. Appointment

- User will able to fix appointment with hospitals.
- User will fill out form for treatment.
- Our team will contact the user for confirmation.
- We will send his/her an appointment letter through email etc.
- We shall able to change day once.

5.11. Medicine reminder

- User shall able to set ringtone.
- Ringtone will ring on its respective time.
- Ringtone shall ring 4 to 5 seconds.
- User shall also able to off reminder.
- Will help the user to take medicines at time.

5.11. Color blindness

- User will also check color blindness.
- This will include words reading test like given in the below picture
- User shall have 10 McQ's to answer.
- If he scores 10 by 10, no color blindness.
- if user fails in anyone option, color blindness.

5.13. Medicine scanner

- User will able to find purpose of medicine use.
- User shall scan medicine by camera.
- User will also scan by writing name and dose.
- User shall place medicine box right in front of camera.
- We will show you perfect results.

5.14. Feedback

- User shall able to share using opinion.
- User will also tell how to make it better.
- Users will able to share difficulties faced.
- User shall only write opinion and click on submit button.

5.15. EZ Pharmacy:

- To facilitate the customer.
- We have a pharmacy in every big that can supply medicines.
- Opportunity for other pharmacies to do online business.
- This will be very beneficial both for us and customers.

5.16. EZ Assistant:

- Basically, a facility for blind people.
- Operated by using phone's camera or AI, telling user about the obstacles around user.
- This will also tell the distance of obstacles in English by using AI.
- This will also use to operate the application by using voice as we can see
- While we are also adding the voice recognition feature for the security of the application.

6 Product Overview
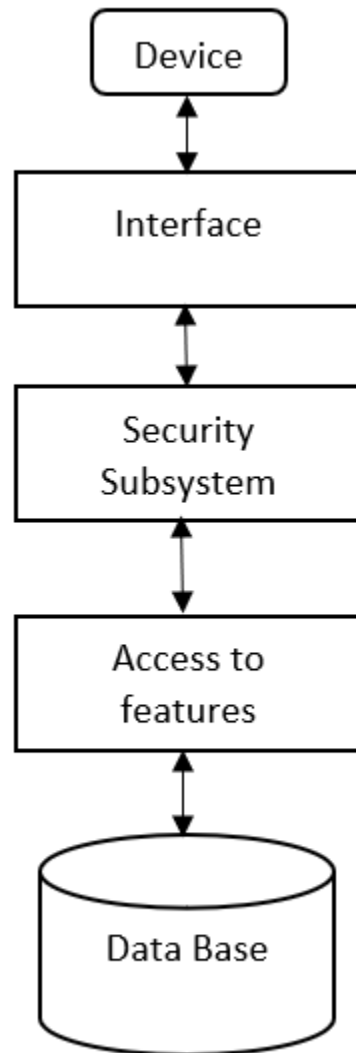
6.1. Product Perspective

Figure #1: Overview of HCS architecture

6.2. Summary of Capabilities

The user can get information about environmental and health condition in different cities, which will help in breaking the spreading chain of viruses and control the pandemics. The 'Veterinary Services' feature can help user to take care about their animals (pets). User can take advantage of

the feature 'medicine reminder' after setting it, which will help to take medicine regularly. Medicine scanner is also provided, that will give all the necessary information about the scanned medicine. The EZ voice assistant is also available. The medicines can be ordered online through various pharmacy by 'Easy Pharmacy' and appointments can also be made online through 'Online Appointments' feature, that will save time of patients.

7 Dependencies and Constraints

Health Care is a data-based application in which following are the dependencies.

- In upstream dependencies we add a feature according to which every time user log-in on website or open the app, system will refresh the current news, research, upcoming threats, weather's reports, and all other features must be refreshed. So, user wait until system finished the updates.
- As downstream dependencies we also add some type of stuff. Since only one task can be performed at a time, so if user is in veterinary service section, server cannot give any advice until user select his/her pet and some other downstream dependencies also exist.

In the section of constraints, we fix some attributes.

Responsiveness:

- System will quickly response it is also dependent on internet connection and device.
- We will complete this project in almost 8 weeks.

Security and useability:

- Only team leader can access the certified documents. And only leader can edit details of the system.
- We will design an easily usable interface.
- Requirement of any type of ambulance or doctor's appointment always available in every area.

8 Cost and Pricing

To be determined.

9 Licensing and Installation

In this section we must fix some constraints according to which customer cannot facilitate until he/she pay for licensed version of application whoever some facilities may be free of cost.

Customer can only log-in through any official licensed application. A person cannot install application unofficially.