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Covid-19 Alert App

Bachelor of Science in Computer Science

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CERTIFICATE

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Abstract

The name of our application is Covid- 19 is an android based application, which helps us provide services at homes. As we know in this situation it's not easy to go outside to appointments that fulfill their requirements and needs. Covid-19 will facilitate those people and make their life easy as we can. This application will be online based. Firstly, the user and doctor will register and then make an account on the application. This account will help a user to be in touch with the doctor. When a user goes to the doctor Infiniti on option, he/she can search the doctor and can communicate with the doctor about his disease. The doctor can update his detail. This application can also give the precaution about the corona disease like how does covid happen, how to avoid covid-19, what are symptoms, Red-zoned, total patients, total deaths, total recovered patients, precautions about the affected patients and other peoples.

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Chapter 1

1. Introduction

We are developing the smart covid-19 alert application that would help the people, who are suffering from this disease or not. In this application, the main target that, we are hoping to achieve is to help those people, who are not aware of this disease. We are providing all details in the application about covid-19. People who cannot go to doctors and hospitals can get all information and precaution here. This application is very, helpful for those people who are not well known about this disease.

1.1 Background

Coronavirus is an infectious disease caused by a severe acute respiratory disorder. The disease was first identified in 2019 in Wuhan, The Capital of Chinese province Hubei, and has since spread globally, resulting in the 2019-20 coronavirus pandemic. The symptoms normally found in Covid-19 patients include fever, dry cough, and difficulty in breathing. Muscle pain, saliva production, diarrhea, and sore throat are lessened common.

1.2 Problem Description

COVID-19 is a zoonotic virus. According to the recent areas, this virus is found in animals that can be transmitted to humans. COVID-19 is neither SARS nor influenza. It is a new virus with its characteristics. The COVID-19 virus is unique among humans and it can highly be spreading.

1.3 Project Objectives

Following are the main objectives of this project

- To assess the knowledge about covid-19
- To assess the knowledge about which areas are affected by this virus
- To assess the attitudes of people about Covid-19

1.4 Project Scope

The scope of this project is that the people who are affected by this disease. This application will keep them informed and aware of the current situations of Covid 19. And will provide all the information they need.

1.5 Methodology

The project of covid-19 analysis system is the main modules:

1.6 Software module

This module of the project will manage the software part of the project and that is the development of the android. The application will be programmed according to the project increments. The Application will be made as many users kindly. The android application developed is to be used by the user. The application is capable of displaying all the values are stores in the database.

CHAPTER 2

2.1 Literature Review

Coronavirus The WHO renamed it to SARS-CoV-2 to denounce the association of the virus with any geographic location or nationality and relate it to the disease symptomatology. The SARS-CoV-2 virus is genetically similar to the SARS Coronavirus of 2002 (SARS-CoV-1). There is a multitude of other coronaviruses that cause the common cold. Coronaviruses can become infective when they attain an animal niche that provides a sufficient cellular environment where the virus can acquire a series this chapter, we will discuss the previously existing system and the current system we are developing. Coronavirus disease (COVID-19) is a deadly disease that is affecting most of the. Public understanding, including knowledge about symptoms, and hygiene of COVID-19, is essential for designing effective control strategies during a public health crisis. Corona virus disease, which mainly targets the respiratory system of the body, was first detected in 2019 in Wuhan, China. More than 1000 deaths have been reported in foreign countries, including the United States, Spain, Italy, Germany, China, Iran, UK, Belgium, Netherlands, Canada, Sweden, Turkey, France, Brazil, and Switzerland. all accredited to COVID-19. This viral outbreak across the world has paralyzed the health care system of nearly every country, sharpen the risk of deaths and distress day by day. Due to the spread of COVID-19 across the majority of countries outside China, a global pandemic was declared by the World Health Organization (WHO) on 12 March 2020. As of November 23, 58.6M confirmed cases of COVID-19, and 1.39M deaths were reported worldwide.

Z.Z Virology

On the 7th January 2020, the China CDC discovered the virus called novel coronavirus 2019 which was unofficially noted as the 'Wuhan's of advantageous genetic mutations. These mutations can then enable the virus to cross-fertilize and infect and multiply within human hosts

The vision structure and pathophysiology of infection

SARS-CoV2 is from the beta Coronavirus family, it is a positive-sense, single-stranded RNA, enveloped virus that is 50-200 nm in diameter. The genomic RNA is 30Kb, one vital encoded structural protein is the Spike Glycoprotein that consists of 3 (S1-S2) heterodimers that bind to angiotensin-converting enzyme 2 (ACE2) Receptor on type II pneumocytes. The other surface protein such as the hemagglutinin-esterase (HE) dimer. The entry of SARS-CoV-2 into the type II pneumocytes is via endocytosis and then multiplies in the cytoplasm. The high protein manufacturing stress induced upon the type II pneumocytes leads to apoptosis. Additionally, the RNA from the SARS-CoV-2 acts as a pathogen-associated molecular pattern (PAMP) and will be recognized by the pattern recognition receptor or toll-like receptors.

Origin of SARS-CoV-2

The origin of the SARS-CoV-2 genome has been linked to the SARS-CoV-1 and MERS-CoV viruses. Interestingly, the SARS-CoV-2 whole-genome aligned with the genomes of viruses (Bat-CoV and Bat-CoV RaTG13) Rhinolophus affinis species of Yunnan province 96% similarity. As seen previously in SARS-CoV-1 and MERS-CoV viruses that undertake residence in the intermediate host, it was suspected that in SARS-CoV-2 pangolins were the natural reservoir. This was based on the analysis of the metagenomics alignment of SARS-CoV-2 like CoV (Renamed: Pangolin-CoV) harbored in the lung tissue of two dead Malayan pangolins. This Pangolin-CoV's whole genome had 91.0236 similarities with SARS-CoV-2 and 90.559% similarity with Bat-CoV RaTG13. Proteomic analysis revealed that the S1 subunit of Spike glycoprotein (S) was more closely related to that of SARS-CoV-2 compared to Bat-CoV RaTG13.

2.2 Interpretation from the above facts

The above-discussed facts confirm that this project is very informative, that will provide us with all the information that is useful to us. Thus, it is safe for our project to integrate to prevent this disease.

CHAPTER 3

3.1 Requirement Specifications

This chapter is about the requirements of the system and two types the functional and non-functional requirements. Moreover, in this chapter, the requirements of the two modules i.e. hardware and software module are also described. In the literature review, we discussed the previously existing system that was working on an idea similar to our project. The one thing observed during the study was that all those systems were not very user friendly and interaction with the user was very less. But our system is much more interactive than all those systems. This system will be capable of storing the values and records in the databases that the user can keep up with the previous records.

3.2 Proposed System

We propose a solution by making an Android application to meet the requirements and needs of people. To give people a platform where they have all the facilities. In the future, we will also make a Web-based system as an admin panel to manage these services.

3.3 Existing System

The COVID-19 Gov. PK provides the same services to everyone and Facilitating to the people. They show all details about covid-19 cases than any other application which provides many facilities for their use. We are using their idea and provide facilities for the Patient at their home place. We are also showing the whole detail about Doctors and also the precaution of this disease and many more.

3.4 Requirement Specification

To use the system, the user must know the following things

3.4.1 Purpose

The main target of our application is to facilitate the people affected by the disease and get the information and communicate with the doctor easily. This app can keep saving the record of the doctors. Doctors can also update our profile.

3.4.2 Product Scope:

This application is to facilitate the covid-19 patient. This product will help the Patient to find the Doctor to discuss the disease. This will help the user to select their own choice by just clicking on their mobile phones, within the home, and any place. It can save time and energy of user which mostly user wants to get facilitation by using technology.

So, our application will be very helpful for those who want to use their time efficiently.

3.5 Overall Description

3.5.1 Product Perspective

Covid-19 is a new and self-contained App. This is an Android-based App and will available on the play store. The main focus to make this application is to provide a platform to the user, by using which a user can use the application is to save time. complete work on time without loss of your energy. The main purpose of our application is to facilitate the user by providing services at any place.

3.6 Product Functions

- Users can do register, login, and communicate with the doctor, and get the information about Covid-19.
- Doctor can do add our all-contact information.
- User Classes and Characteristic

3.7 User Classes and Characteristics

3.7.1 App User:

There are 2 types of Users in it.

3.7.1.1 User:

This user just uses the app to call the doctor he/she wants

3.7.1.2 Doctor:

This user just uses the App to get the work from the field he chooses

3.8 Operating Environment

- Android application programmable interface.

- Firebase Fire

For the user:

- **Internet connection**

As Covid-19 is android based application so the hardware involves in the use of this application will be a mobile phone which has an Android operating system in it.

3.9 External Interface Requirements

3.9.1 User Interfaces

The user interface will be easily understandable for them. This project should be application-based. This application will be easily accessed by the user and doctor. On the back end of this software, the whole system will be attached to the Firebase Fire Store.

The log will appear on every screen. And view the doctor list by just clicking on the button.

3.9.2 Hardware Interfaces

Mobile applications and the web have not any designated hardware. it does not have any direct hardware interfaces. GPS application in mobile and the hardware connection with the database is managed by Operating system on the mobile and web server. Android phones, tablets, IPAD, IOS phones, etc. are hardware interfaces.

3.9.3 Software Interfaces

Communication between the database and Admin concern with only managing its databases. Between the database and mobile application, communication consists of a read-only operation.

3.9.4 Communications Interfaces

The application can be used on any mobile. Simple communication between in this application is just calling.

3.10 System Requirements

3.10.1 Functional Requirement

Register Login Red Zone

COVID-19 Patient

Information about Disease

Change Password

Feedback

Logout

3.10.2 Non-Functional Requirements

3.10.3 Performance Requirements

The main goal of our application is its performance. If the performance is good then people will like this. How the system will fulfill its performance is to be specified clearly. It is simplifying that if the performance is according to the system requirements then the system design will generate no performance issues. In some cases, performance requirements do not fully meet their defined performance requirements.

3.10.4 Safety Requirements

Our application will be safe. And it also not affects other applications installed on that phone. It cannot create any issue and any damage to the phone. Our application fulfills all the safety requirements. We prevent our application from unauthorized persons.

3.10.5 Security Requirements

In our application, one feature is to find the doctor's contact information and access them, in this feature if the user wants to communicate with the doctor about covid-19. While accepting a request the data and information of the user will be secure. This feature is required security featured.

3.11 Software Quality Attributes

3.11.1 Availability

The accessibility of the Covid-19 is not 24 hours it provides service in day time only.

3.11.2 Portability

Users and Doctors can log in to the application anywhere and whenever they want.

3.11.3 Maintainability

It can save the data of the Doctor and user.

3.11.4 Reliability

This application any be used by different users and Doctors simultaneously. It can be used ever a low execution PC

3.11.5 Business Rules

There are mostly two kinds of users utilizing technical support, for example, User. There are 2 types of Users in it

3.12 Use Cases

The use case is a type of diagram that is used to represent the actual functionality of the system. Hereby functionality means that the use case diagram will show how the system will interact with its users and the environment in which it is installed. Use case diagram explains every component of the process in good detail. In the use case, there is a term used 'Actor'. In our system, the actor will be the farmers or any other users of the system. Use case diagram will show how the user and system will interact and how the system will work. Following is the main use case of our device

Each process of the use case is described below:

Fig 1.1

Table 3.1: Register Use case

Use Case ID	01
Title	Register
Primary	User
Description	Registration of user
Pre-Condition	The application should be opened in the system. And the the system should have a stable internet connection.
Post-Condition	The message should be displayed as you as registered in the app

Table 3.2: Login Use case

Use Case ID	02
Title	Login
Primary	User
Description	User logs in to his account using his login ID and Password and is allowed to control the system
Pre-Condition	User enter his valid log in ID and Password
Post-Condition	The user is allowed to use the portal.

Table 3.3: Main Menu Use case

Use Case ID	03
Title	Main Menu
Primary	User.
Description	User login to his account using his login ID and Password and enters the main menu.
Pre-Condition	User login to his account using his login ID and Password.
Post-Condition	The main menu is displayed to the user

Table 3.4: Home Page Use case

Use Case ID	04
Title	Home Page
Primary	User.
Description	User login to his account using his login ID and Password and enters the home page.
Pre-Condition	User login to his account using his login ID and Password.
Post-Condition	Home Page is displayed to the user

Table 3.5: Corona Red Zone Use case

Use Case ID	05
Title	Corona Red Zone
Primary	User.
Description	User can see the Red Zone by using this option
Pre-Condition	The user should have the app on android mobile. And the use should be logged in the app and the red zone option should be selected.
Post-Condition	The corona red zone should be displayed on the screen

Table 3.6: Corona Patient Use case

Use Case ID	06
Title	Corona Patient
Primary	User.
Description	User can see the corona patient by using this option
Pre-Condition	The user should have an app on android mobile. And the user should be logged in to the app. And the corona Patient option should be selected.
Post-Condition	The corona patient should be displayed on the screen

Table 3.7: Search Use case

Use Case ID	07
Title	Search
Primary	User.
Description	After completing the work, the user will click on the search button and will get a search from the Portal
Pre-Condition	The user will click on the Search button.
Post-Condition	The user will get a search from the Portal

Table 3.8: Add RedZone Use case

Use Case ID	08
Title	Add RedZone
Primary	Doctor.
Description	Only the Doctor can add RedZone information. By clicking the add RedZone information button on the doctor page.
Pre-Condition	The doctor should have the app in android mobile And th< the doctor should be logged in to the app.
Post-Condition	The data will be inserted into the database

Table 3.09: Add Corona Patient Use case

Use Case ID	9
Title	Add Corona Patient
Primary	Doctor
Description	The only Doctor can add the corona patient. By clicking the add corona patient button on the doctor page.
Pre-Condition	The doctor should have an app in android mobile And th< the doctor should be logged in to the app.
Post-Condition	The data will be inserted in the database

CHAPTER 4

4.1 Design

In this chapter, we will provide a detailed view of our project. The project is a module-based development. The architecture includes the overall structure of this project. System design will provide the view of the project's modules, its components, interface, and data for specified requirements. This chapter will include the following sections.

4.2 System architecture

Following figure will project conceptual architecture of the project.

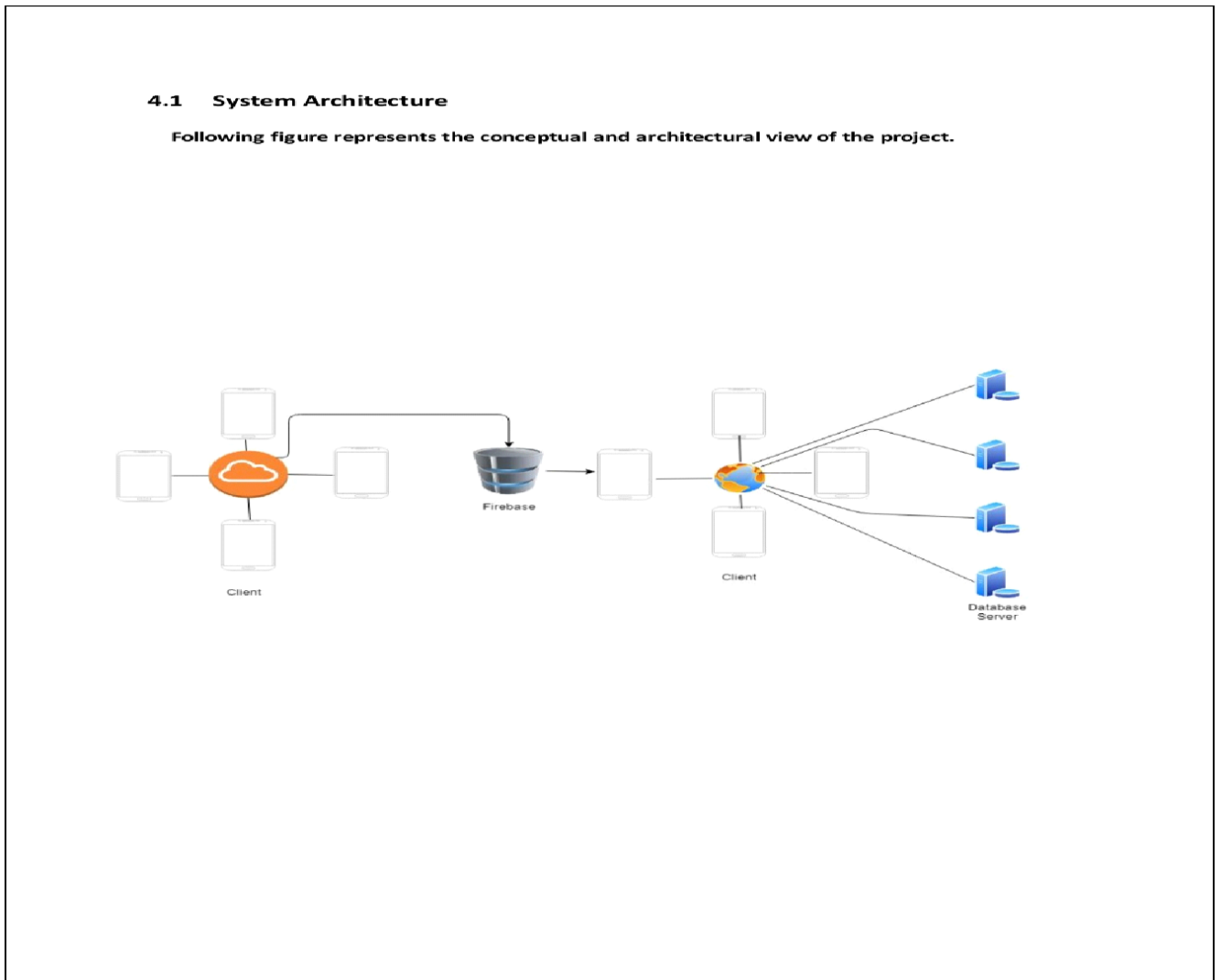
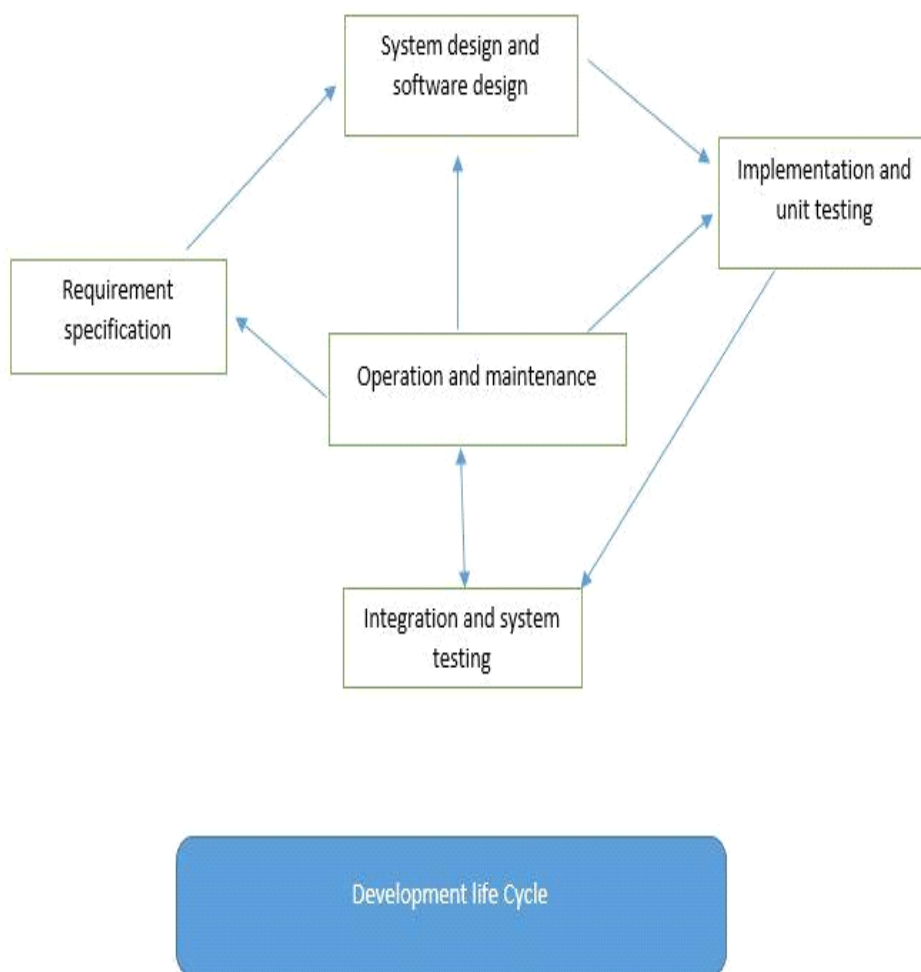


Fig 1.2

4.3 System Design Methodology

For the project development, we will use the incremental model also known as the Iterative Enhancement Model. The reason for choosing the iterative enhancement model is dependent on the project development so that changes can be made easily and according to the need. The incremental model makes progress in the form of iterations and accomplishes the goal.



Development Life Cycle fig.4.2

4.4 Data Flow Diagram:

Data flow diagrams are used to graphically represent data flow in a business Information. DFD explains how data from the input to the collection of files and the

report output processes are carried out in a framework system.

4.5 Zero level DFD:

Zero-level DFD is a context diagram that gives the overall view of the system briefly.

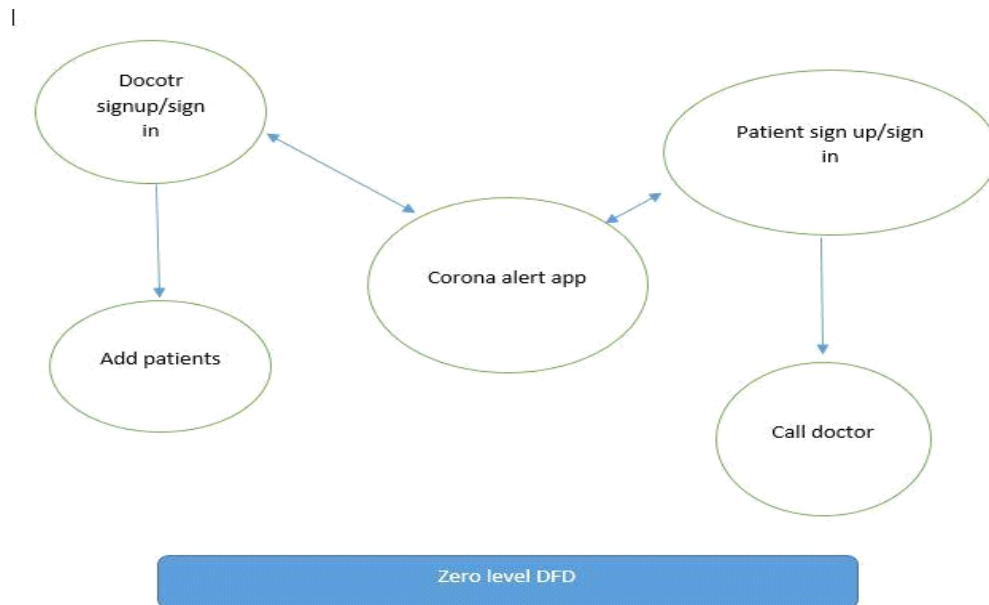


Fig 4.3.1

4.6 1 DFD

It is a broad view of context diagram level 0.

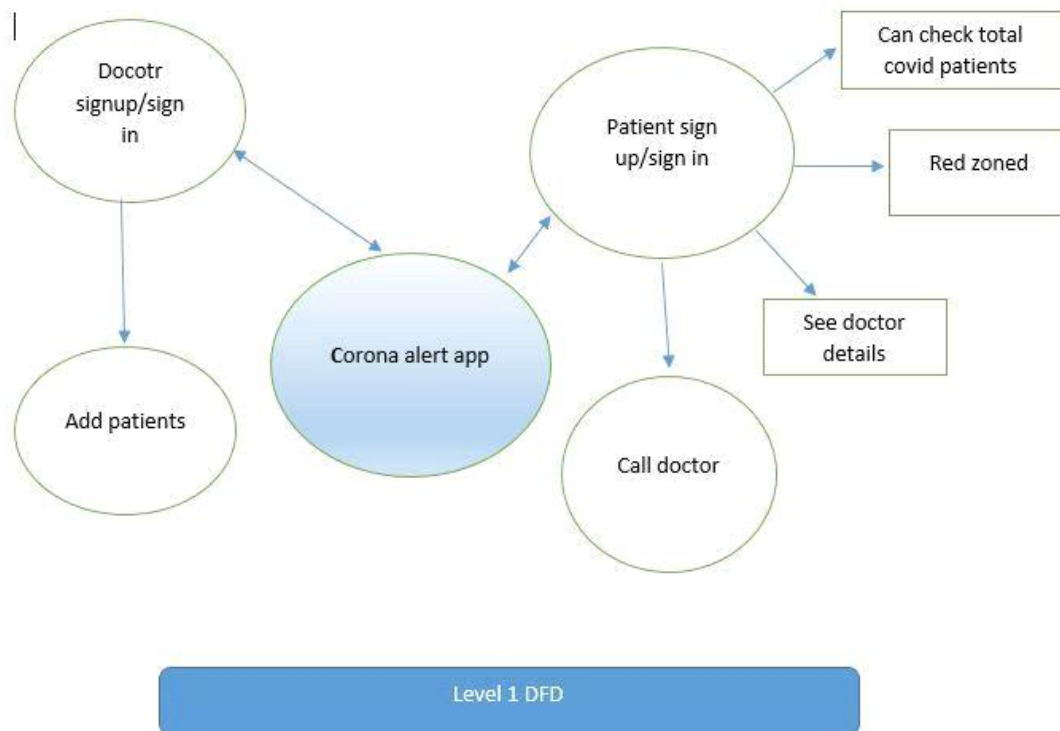


Fig 4.3.2

The context diagram is also can divided into a conceptual and logical view.

4.7 Conceptual View

The conceptual view represents the main feature of the system. It also represents the constraints and the stakeholders involved in the system. Following is the conceptual view diagram.

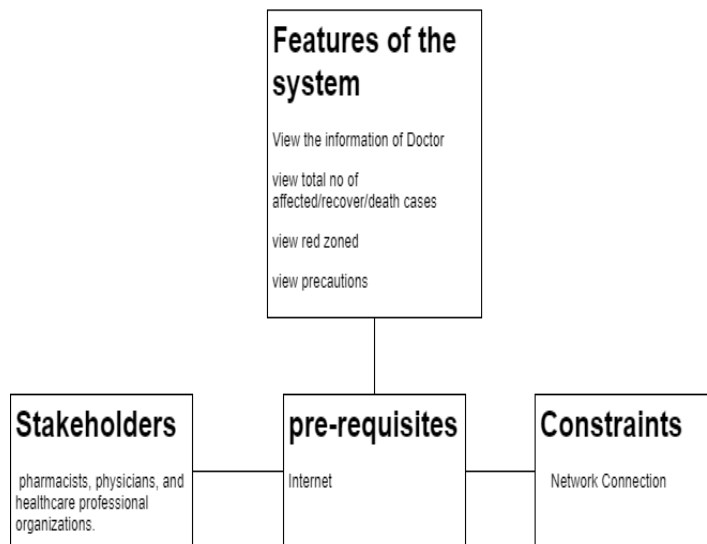


Figure 4.4: Conceptual View

4.9 System Sequence Diagram

Sequence diagram is the basic representation of how the request and response process will take place in the system, basically between actors and entities.

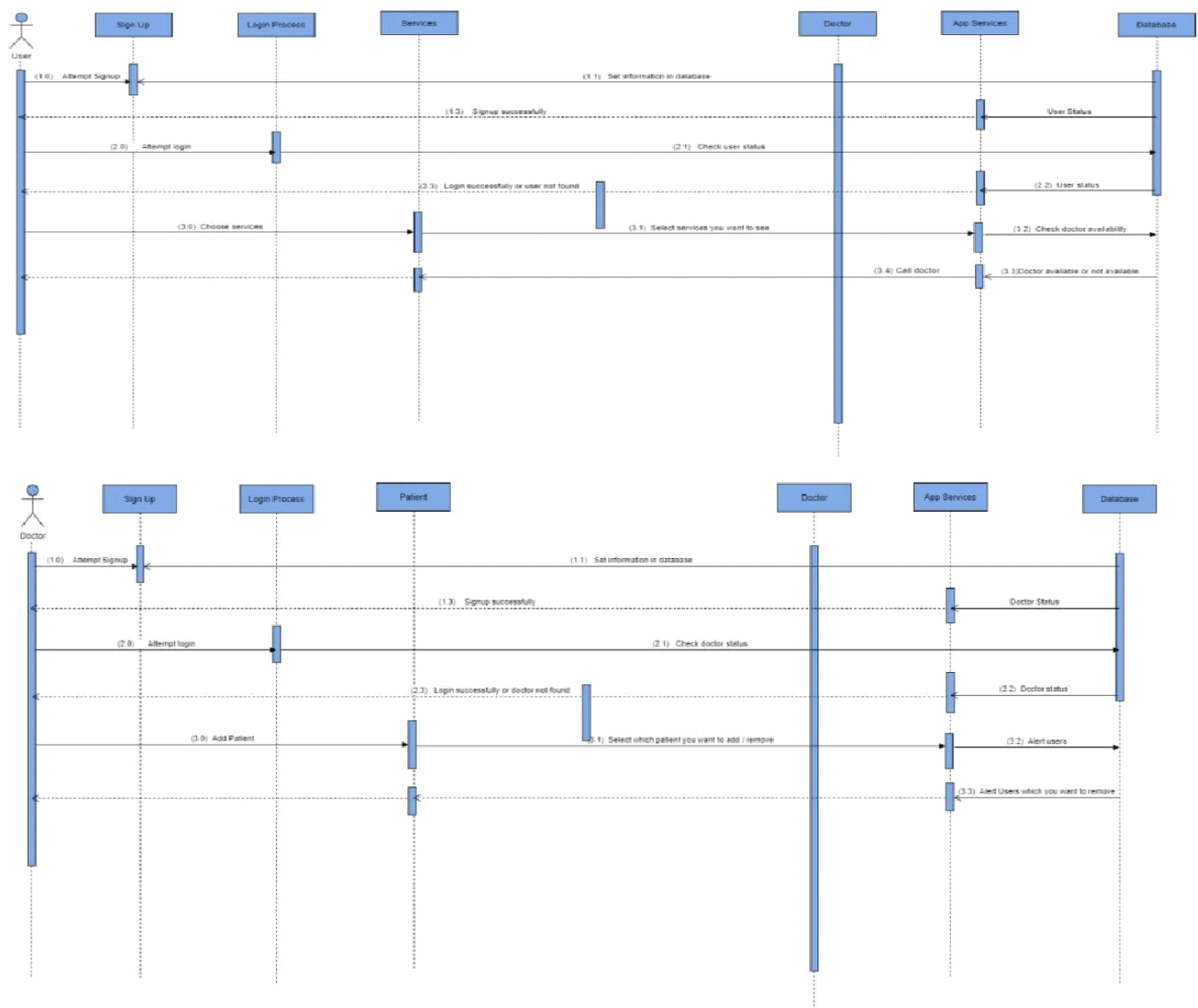


Figure 4.5: Sequence Diagram

Log In



Login Register

A rectangular input field with a light grey background and a thin border. On the left side, there is a small grey icon of a person. The text 'UserName' is displayed inside the field.A rectangular input field with a light grey background and a thin border. On the left side, there is a small grey icon of an envelope. The text 'Email' is displayed inside the field.A rectangular input field with a light grey background and a thin border. On the left side, there is a small grey icon of a padlock. The text 'Password' is displayed inside the field.A rectangular input field with a light grey background and a thin border. On the left side, there is a small grey icon of a padlock. The text 'Confirm Password' is displayed inside the field.

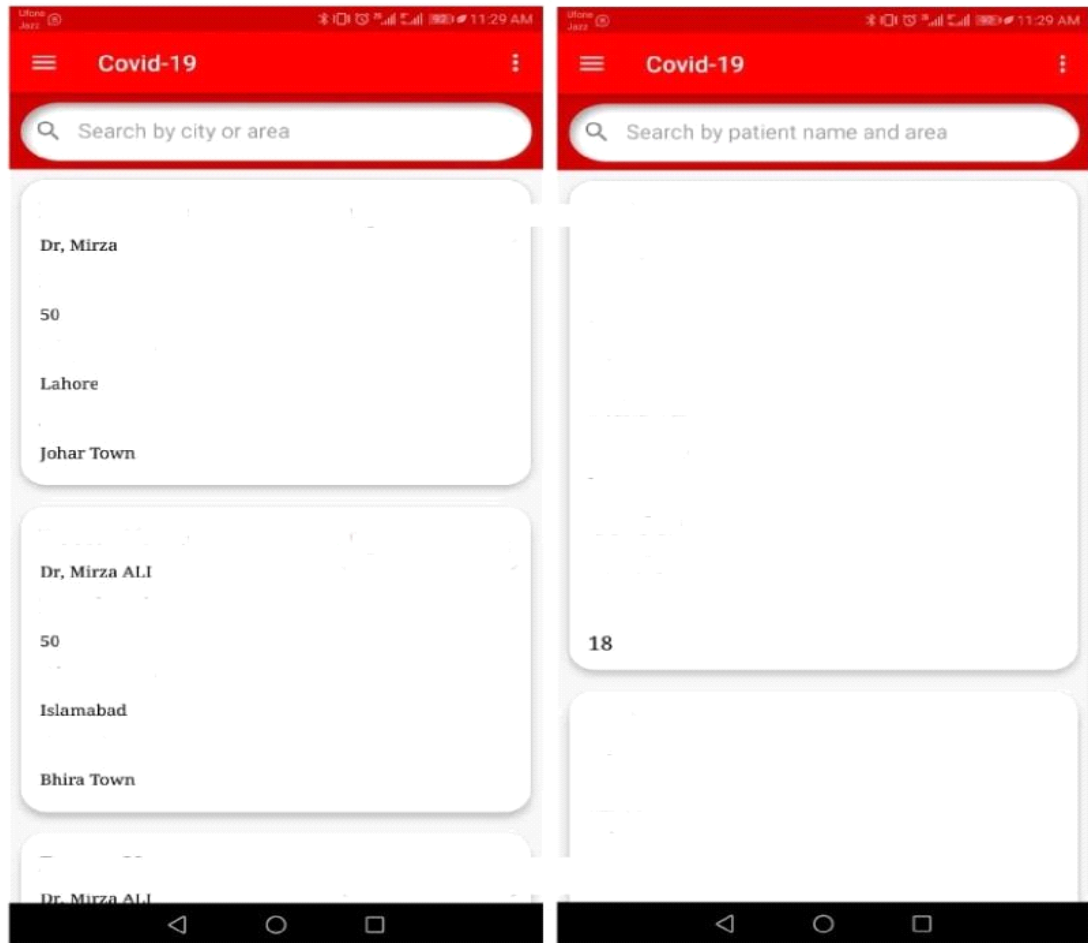
Register

A white, rounded rectangular button with a subtle shadow. The word 'Register' is centered on the button in a bold, black, sans-serif font.

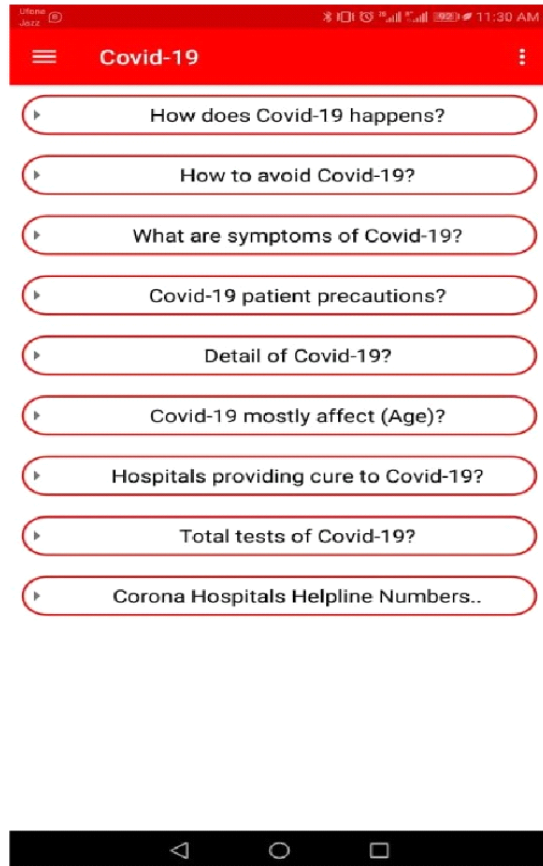
Main Menu



Patient Information



COVID Information



CHAPTER 5

5.1 System Implementation

This chapter will include all tools and technologies we used in the implementation of our project. Implementation is the process of moving ideas from requirements to practical working. Project implementation is an understanding of a technical specification or algorithm as a program, software component, or another computer system through programming and Deployment.

5.2 System Architecture

The architecture of our system is a major part.

A software module (Android application)

5.3 Software Module

The android application developed is to be used by the user. The application is capable of displaying all the values are stores in the database.

5.4 Deployment Environment

To develop our app we use an android environment where we use different tools and technologies and develop an application that provides services. Firebase fire store used for the database. We define the system in different types of diagrams like by system architecture and use case models. Other tools and technologies are also used like Android studio, XML, window form, Java programming Language. The best and the best thing about being a Mobile application developer is that the new Apps are needed accordingly to the customer requirement.

5.5 Tools and Technologies

With the help of the following tools and technologies we built our system:

5.6 Microsoft Word

It is the word processor. We use Microsoft word for documentation purposes in our whole project.

5.7 Draw.io

It is the tool for designing different diagrams that have been used during the Analysis and design phases of the project.

5.8 Android

Use for application development.

5.9 MS SQL SERVER

It is the use of database connection and we have used in our project to save the data of doctors and users.

5.10 Best Practice/Coding Standard

- No coding repetitions
- Function and classes are always commented showing expected input and output.

CHAPTER 6

6.1 System Testing and Evaluation

Testing and evaluation are the processes and techniques use for program or application execution for the identification of any bugs. through this process, some parts of software meet the requirements of business and technology. testing is the process to check whether

the requirements meet or not. after this process, the project is going to evaluate in the presence of testing. The test process is the method that defines different stages of testing that is important for this. These steps are:

- Integrated Testing
- Unit Testing
- Recovery Testing
- System Testing
- Stress Testing

6.2 Performance Testing

This testing is to determine the performance of the system mainly the measure, validation, or verify quality attributes of the system like responsiveness, speed, scalability, stability under a variety of load conditions. The system will be tested under a mixture of heavy loads and then check the time required by the system to respond under varying workloads. This testing is used to test if the application is working as expected under a variety of load conditions. Goad of the performance testing is to find the buys in the system but also eliminate the performance bottlenecks horn the system.

6.3 Stress Testing

Software is the main important part of all software testing techniques that are done and performed by the software testing team. This type of process is important in the way that it prevents the failure of the system and grantee that software can carry the biggest burden under the critical condition. In this process of testing different number checks precision to observe the maintenance of the system.

6.4 Security Testing

We tested the security of our system and made sure that no unauthorized person can get access to the system. For this purpose, we protected our system with a password.

6.5 Unit Testing

Unit testing is a white-box testing technique. The main consideration in this testing technique is the verification of all modules of the software system. Each module is unit tested, as follows: Unit testing for the module User Management is tested by the valid user or invalid user.

Unit testing for the module User Account management is provided by testing Login, Logout and creating new or updating existing users.

Unit testing for the module Theme Management is performed by entering the new theme information.

Unit testing for the module Detail of doctor gives detail accurately.

Unit testing for the module Add/update.

6.6 Integration Testing

This is also the type of testing and the level of testing of software in that we collect and combine the individual units and then it can be tested whether it works or not when we integrate it. The main area that's is tested is the interface between the segments.

In this process of testing a II, the modules are integrated by the incremental approach. And this process is performed in the following way:

x Firstly, the login module is integrating and then test whether the software is connected perfectly with the database.

Secondly, all modules are integrating and then tested by updating and inserting the records.

6.7 System Testing

After all the components were integrated successfully, we tested all components as one whole system and operated the system using the application if all the functionalities are working.

6.8 Installation testing

In this testing, we installed both hardware and software at the user's end and checked that the user is not having any trouble while using the system and all functionalities are completed.

6.9 Acceptance Testing

We tested the system with the data that was given by the system procurer rather than testing the system using simulated data. This was done to make sure that requirements are met at the user end.

6.10 Test Case

We have made several test cases to describe and test each module of the system individually.

6.11 Test Case for Register

Table 6.1: Register Use case

Test Case: Register		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Install and open application.
	2	S: Show the main page with Patient and Doctor option.
	3	A: Use register option if you don't have an account on system.
	4	S: Show register page.
	5	A: Fill in all the required information and press register button.
	6	S: Information stored in the database and a message will be displayed as "successful register".
Extensions:	2a	Slow/ no internet connection. S: the main page will not be opened.
	6a	Email should be valid. S: the message will be displayed of an invalid email.

6.12 Test Case for Login

Table 6.2: Login Use case

Test Case: Login		
	Steps	Description
Main success scenario	1	A: Open the application and select the login option.

A: Actor S: System	2	S: Display login page.
	3	A: Enter valid email and password of the account.
	4	S: Validate email and password.
	5	S: Allow access to the account.
	Extensions:	2a
	4a	Email and password are invalid. S: display the home page

6.13 Test Case for Main Menu

Table 6.3: Main Menu Use case

Test Case: Main Menu		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Open the application and select the login option.
	2	S: Display Main Menu.
	3	A: Enter tvalid email and password of the account.
	4	S: To observe that the main menu of the application is user friendly.
	5	S: Allow access to the account.
Extensions:	2a	Slow/ no internet connection. S: main menu page will not be opened.
	4a	Email and password are invalid. S: display the main menu

6.14 Test Case for Home Page

Table 6.4: Home Page Use case

Test Case: Home Page		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Open the the application and select the login option.
	2	S: Display Home Page.
	3	A: Enter valid email and password of the the account.
	4	S: To observe that the home page of the application is user friendly.
	5	S: Allow access to the account.
Extensions:	2a	Slow/ no internet connection. S: main menu page will not be opened.
	4a	Email and password are invalid. S: display the home page

6.15 Test Case for Corona Red zone

Table 6.5: Corona RedZone Use case

Test Case: Corona Redzone		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Login account with correct information.
	2	S: Display home page.
	3	A: Select the corona redZone option.
	4	S: The system should show the red zone.
Extensions:	1a	Slow/ no internet connection. S: the home page will not be opened.
	4a	Slow internet connection. S: Data cannot be fetched by the database.

6.16 Test Case for Corona Patient

Table 6.6: Corona Patient Use case

Test Case: Corona Patient		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Login account with correct information.
	2	S: Display home page.
	3	A: Select the Corona Patient option.
	4	S: The system should show the corona patient.
Extensions:	1a	Slow/ no internet connection. S: the home page will not be opened.
	4a	Slow internet connection. S: Data cannot be fetched by the database.

6.17 Test Case for Search

Table 6.7: Search Use case

Test Case: Search		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Login account with correct information.
	2	S: Display search option.
	3	A: Select the search option.
	4	S: System Show the search bar for search the doctor
Extensions:	1a	Slow/ no internet connection. S: User must log in Message Display on the Screen User must log in to check the detail of the doctor.
	4a	Slow internet connection. S: Data cannot be fetched by the database.

6.18 Test Case for Add RedZone

Table 6.8: Add RedZone Use case

Test Case: Add Redzone (This test case is for admin use only)		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Admin should log in account with correct information.
	2	S: Display home page.
	3	A: Select add RedZone information.
	4	S: The system should show the add RedZone information page.
	5	A: Admin should insert all the required information and click add button.
	6	S: the system should see if all fields are completely filled and then insert all the data in the database.
Extensions:	2a	Slow/ no internet connection. S: the home page will not be opened.
	6a	Invalid data S: Message will be displayed of "invalid data".
	6b	Slow/ no internet S: the message should display "unsuccessful to add data. Try again later".

6.19 Test Case for Add Corona Patient

Table 6.9: Add Corona Patient Use case

Test Case: Add Corona Patient		
(This test case is for admin use only)		
	Steps	Description
Main success scenario A: Actor S: System	1	A: Admin should log in account with correct information.
	2	S: Display home page.
	3	A: Select add corona patient information.
	4	S: The system should show the add corona patient information page.
	5	A: Admin should insert all the required information and click the add button.
	6	S: the system should see if all fields are completely filled and then insert all the data in the database.
Extensions:	2a	Slow/ no internet connection. S: the home page will not be opened.
	6a	Invalid data S: Message will be displayed of "invalid data".
	6b	Slow/ no internet S: the message should display "unsuccessful to add data. Try again later".

CHAPTER 7

7.1 Conclusion

The name of our application is Covid-19 is an android based app, which helps us and provides services at home place. As we know, in this situation, it's not easy to go outside to an appointment that fulfills their needs. Covid-19 will facilitate those people and make their life easy as we can. This online will be online based. Firstly, the user and doctor will register and then make an account on the application. This account will help a user to be in touch with the doctor. When a user goes to the doctor information option, he/she can search for the doctor and can communicate with a doctor about his disease. The doctor can update his detail. This application can also give the precaution about the corona disease like how does COVID-19 happen, how to avoid covid-19, what are symptoms, Red-zoned, total patients, total deaths, total recovered patients, precautions about the affected patients and other peoples.

7.2 Future Enhancements

Many features and functions are working in our proposed system but the scope of the project is limited to resolve the issues as we identify a blue in the area of problems. The goal of this application is that it will provide a login for doctors and users to make an account on this application and get facilitate. But our main objective is to save the time of the user. And our challenges are to provide a better platform to the Patients where they can get more information about covid-19. We can give the extra further enhancements in our project like Mapping, and Doctors rating, etc.