**E-PATROL**

**ONLINE POLICE SERVICES APPLICATION**

*Project Report Submitted by*

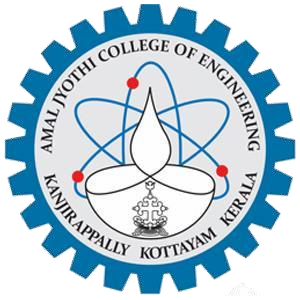
# Melbin Varghese Reg. No: LAJC18MCA037

*In Partial fulfillment for the award of the degree Of*

**MASTER OF COMPUTER APPLICATIONS**

**(MCA)**

# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY



# AMAL JYOTHI COLLEGE OF ENGINEERING KANJIRAPPALLY

[Affiliated to APJ Abdul Kalam Technological University, Kerala. Approved by AICTE, Accredited

by NAAC with ‘A’ grade. Koovappally, Kanjirappally, Kottayam, Kerala - 686518]

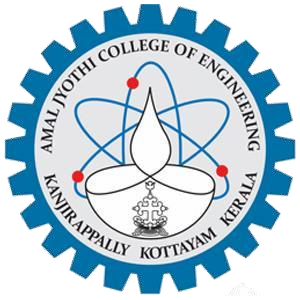
**2019-2021**

# AMAL JYOTHI COLLEGE OF ENGINEERING

[Affiliated to APJ Abdul Kalam Technological University, Kerala. Approved by AICTE, Accredited

by NAAC with ‘A’ grade. Koovappally, Kanjirappally, Kottayam, Kerala - 686518]

## DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS



## CERTIFICATE

This is to certify that the project entitled **“E-PATROL**

**ONLINE POLICE SERVICES APPLICATION”** is a bonafide record of the work done by **Melbin Varghese (Reg. No: LAJC18MCA037),** during the academic year **2019-2021** carried out under our supervision. It is certified that all corrections/suggestions indicated for assessment have been incorporated in the report. The work report has been approved as it satisfies the academic requirements in respect of the project work prescribed by the university for the Master of Computer Applications Degree. Certified further, that to the best of our knowledge the exact work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this to any other candidate.

|  |  |  |
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## DECLARATION

I hereby declare that the project report **“E-PATROL**

**ONLINE POLICE SERVICES APPLICATION”** is a bonafide work done at Amal Jyothi College of Engineering, towards the partial fulfilment of the requirements for the award of the Degree of Master of Computer Applications (MCA) from APJ Abdul Kalam Technological University, during the academic year 2019-2021.

|  |  |
| --- | --- |
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## ACKNOWLEDGEMENT

First and foremost, I thank Almighty God for his gracious guidance through the project. I take this opportunity to express my gratitude to all those who have helped me in completing the project successfully

It has been said that gratitude is the memory of the heart. I acknowledge my deep sense of gratitude to our manager **Rev. Fr. Dr. Mathew Paikatt** for providing all the infrastructural facilities for us, our Principal **Dr. Z V Lakaparampil** for providing good faculty for guidance. I take the immense pleasure in expressing my thanks to Head of the Department of Master of Computer Applications **Fr. Dr. Rubin Thottupurathu Jose,** for his kind patronages in making this project a successful one and also our project coordinator **Sr. Elsin Chakkalackal S.H** and my project guide **Ms. Nimmy Francis** for their guidance and cooperation, without which this would not have been a success.

I am indebted to my beloved teachers whose cooperation and suggestions throughout the project which helped me a lot. I also thank all my friends and classmates for their interest, dedication and encouragement shown towards the project. I convey hearty thanks to parents for the moral support, suggestion and encouragement to make this venture a success.

**Melbin Varghese**

## 

## ABSTRACT

**e-Patrol – Online Police Services Application** is a web-based application for helping and avail all the police services in our fingertip during this pandemic situation. It mainly aims to help public by availing all the services by sitting in their homes. Some of the functionalities in this web application is the public can submit comlaints, applications and other necessary requests from the registered authorities in the web application. The public can apply for travel pass such as inter district and inter state travel pass for travelling to the respective places, and these passes were approved by the police station near to our home. Daily updating of covid cases such as infected person count, confirmed cases, active cases, recovered cases and death reports can be updated and the public can view that.

This web-based application is developed by using the front-end technologies such as HTML, CSS, JavaScript, Bootstrap and PHP, the back-end technology used are MySQL. The administrator can approve all the registrations and have the overall control of the application.

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**LIST OF ABBREVIATIONS**

IDE - Integrated Development Environment

HTML - Hyper Text Markup Language CSS - Cascading Style Sheet

SQL - Structured Query Language

UML - Unified Modeling Language

API - Application Programming Interface

### INTRODUCTION

**“e-Patrol”** – These are a drastic times. With the spread of the Corona virus and the administration of lockdowns, a lot of the people are confined to the space between the walls of their homes. With jobs and studies limited to the online space, a lot of the people are missing their routine life. Also with this lockdowns civil and legal rights too get confined to the living space. During these times, the common public don’t get a proper channel to lodge their complaints with the police or get legal services from the police. The project titled ‘e-Patrol’ tries to fix this issue. e-Patrol is a web based application which helps general public to raise complaints with the police in the comfort of their home online. The service helps the public to lodge complaints, apply for verifications and certificates, see the status of their complaint, download the FIR, when it becomes available etc.

The version control System used during the development time was Git. Git is [a free and open source](https://git-scm.com/about/free-and-open-source) distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

**Amal Jyothi College of Engineering Dept. of Master of Computer Applications**

## 1. USING GIT AS A VERSION CONTROL

**SYSTEM**

### 1.1 Introduction to GitHub

GitHub is a web-based version-control and collaboration platform for software developers. GitHub, which is delivered through a software-as-a-service ([SaaS)](http://searchcloudcomputing.techtarget.com/definition/Software-as-a-Service) business model, was started in 2008 and was founded on Git, an open source code management system created by [Linus Torvalds t](http://whatis.techtarget.com/definition/Linus-Torvalds)o make software builds faster. And it is used to store the source code for a project and track the complete history of all changes to that code. It allows developers to collaborate on a project more effectively by providing tools for managing possibly conflicting changes from multiple developers. GitHub allows developers to change, adapt and improve software from its public repositories for free, but it charges for private repositories, offering various paid plans. Each public or private repository contains all of a project's files, as well as each file's revision history. Repositories can have multiple collaborators and can be either public or private.

GitHub facilitates [social coding b](http://whatis.techtarget.com/definition/social-coding)y providing a web interface to the Git [code](http://whatis.techtarget.com/definition/code) [repository a](http://searchoracle.techtarget.com/definition/repository)nd management tools for collaboration. GitHub can be thought of as a serious [social networking s](http://whatis.techtarget.com/definition/social-networking)ite for software developers. Members can follow each other, rate each other's work, receive updates for specific projects and communicate publicly or privately.

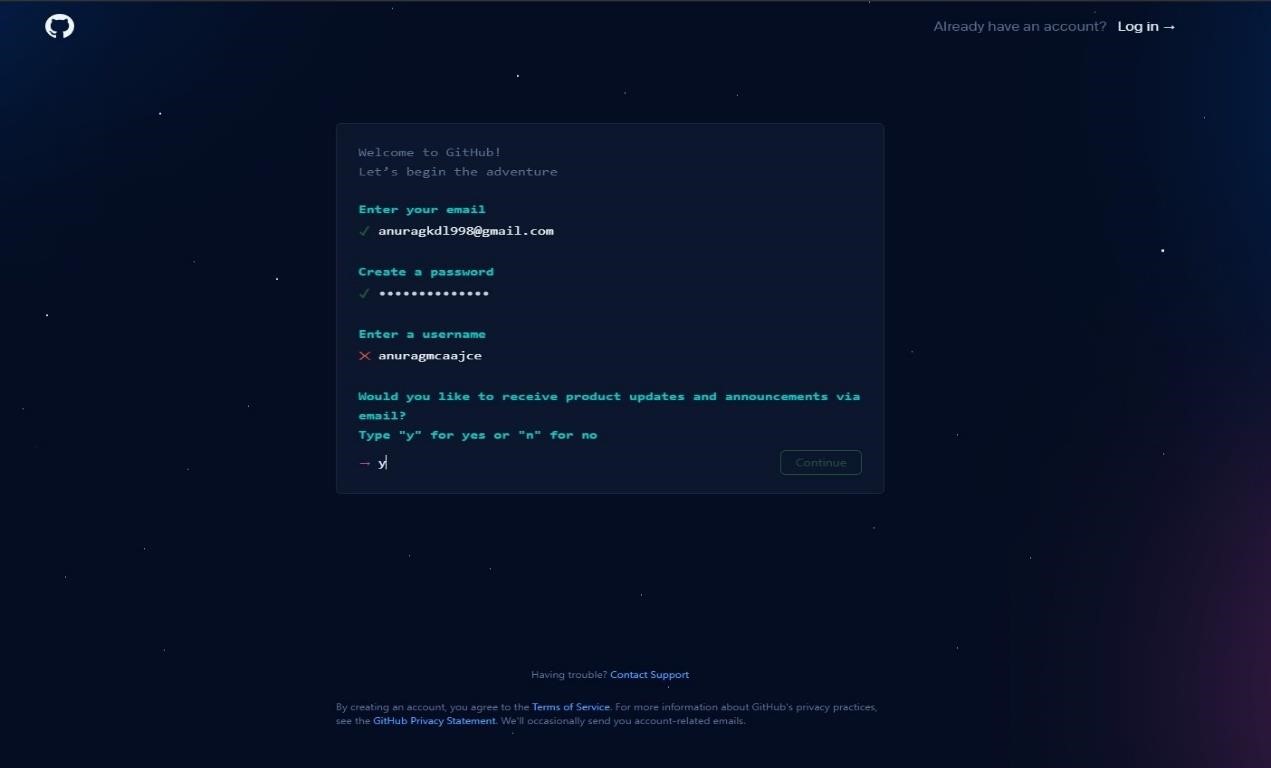
#### GitHub products and features

GitHub offers an on-premises version in addition to the well-known SaaS product. GitHub Enterprise supports integrated development environments and continuous integration tool integration, as well as a litany of third-party apps and services. It offers increased security and auditable than the SaaS version.

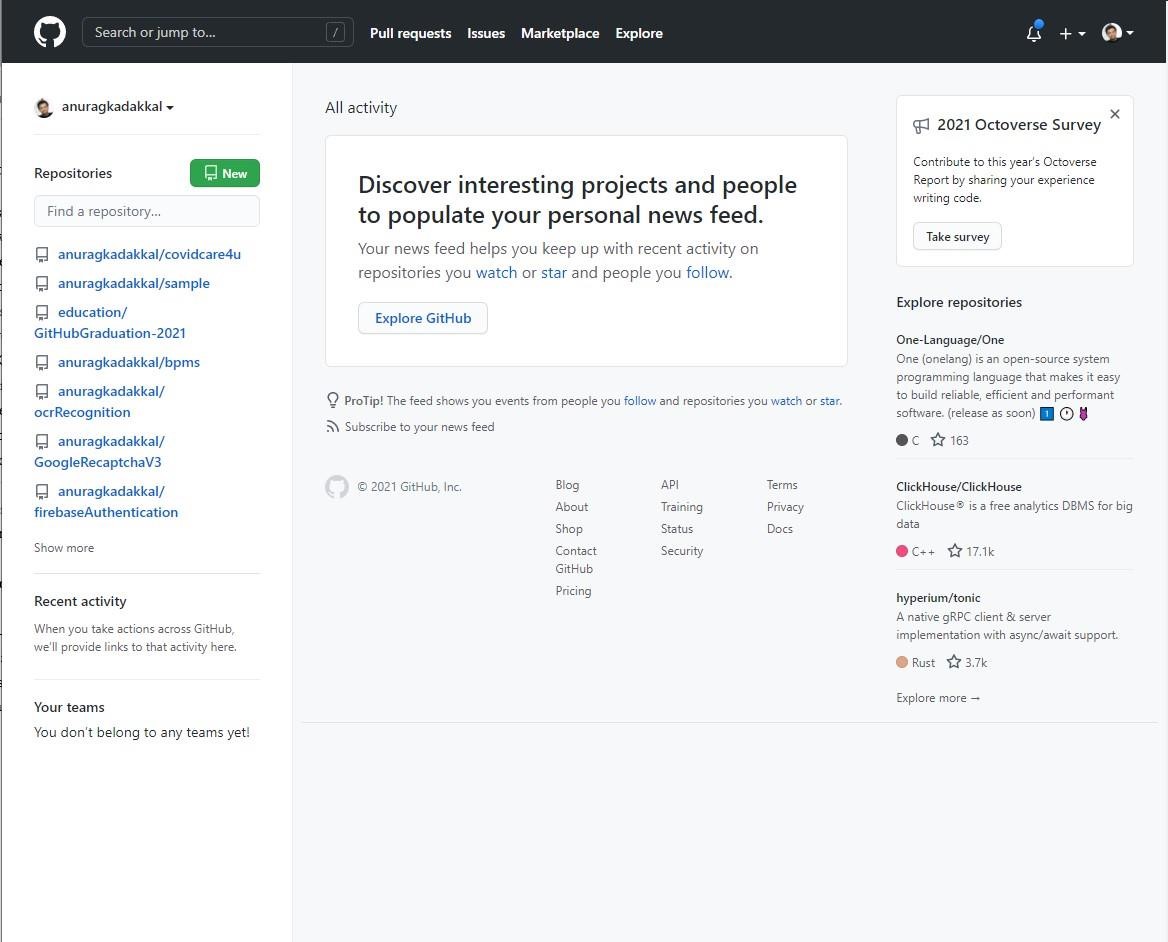
#### 1.2 Working with Git



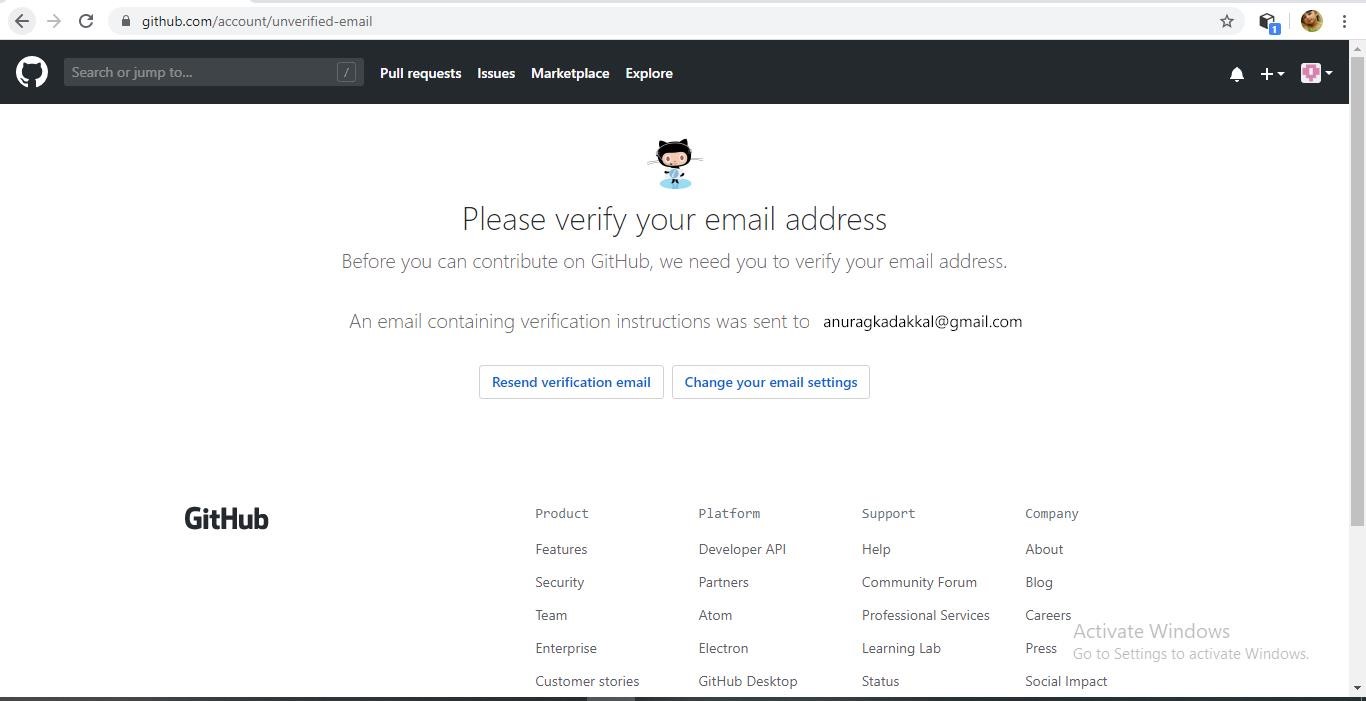
Click on sign up button and create an account in GitHub.com



 Once successfully sign in, set up personal account, and choose your plan by selecting the options given below based on our purpose.



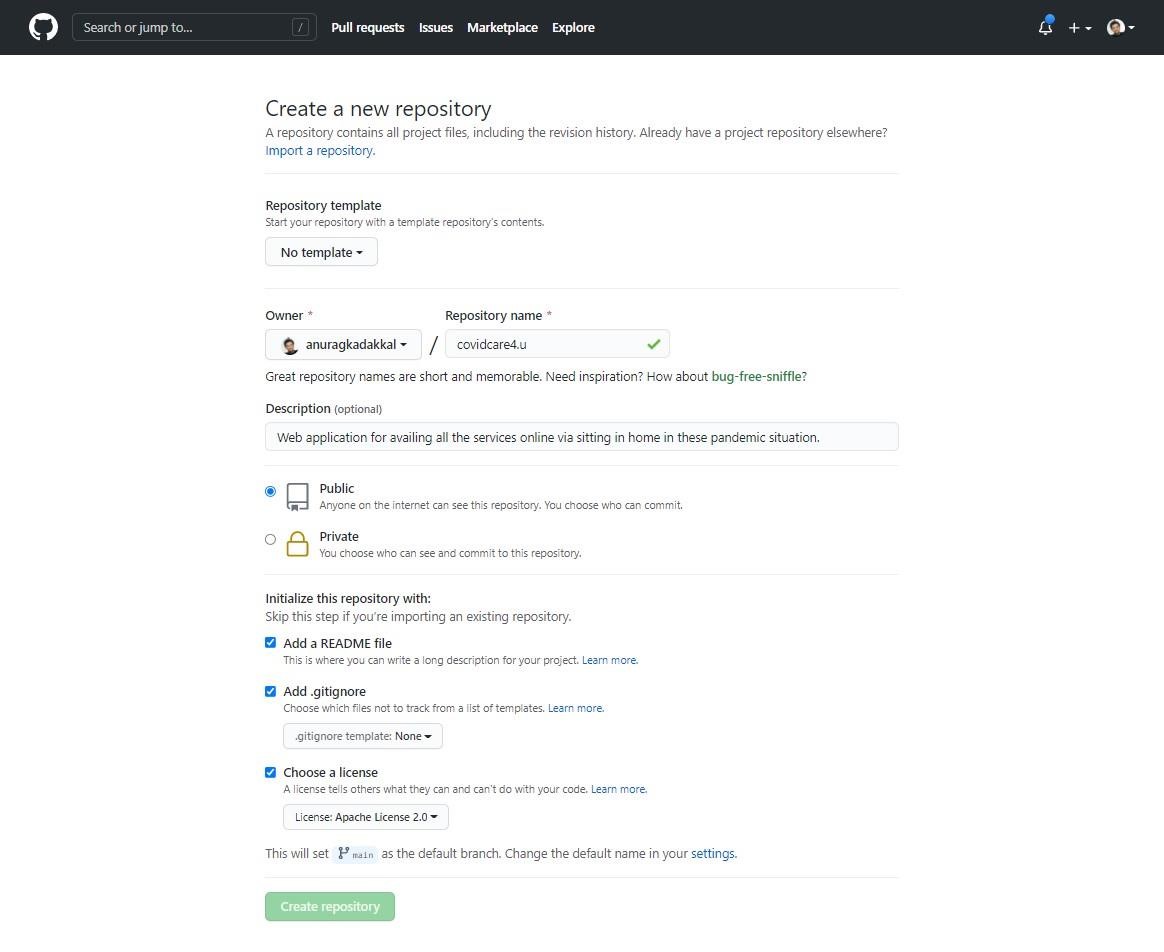
 Once this step is completed then verify the email address and you can access the home page





Create a repository in

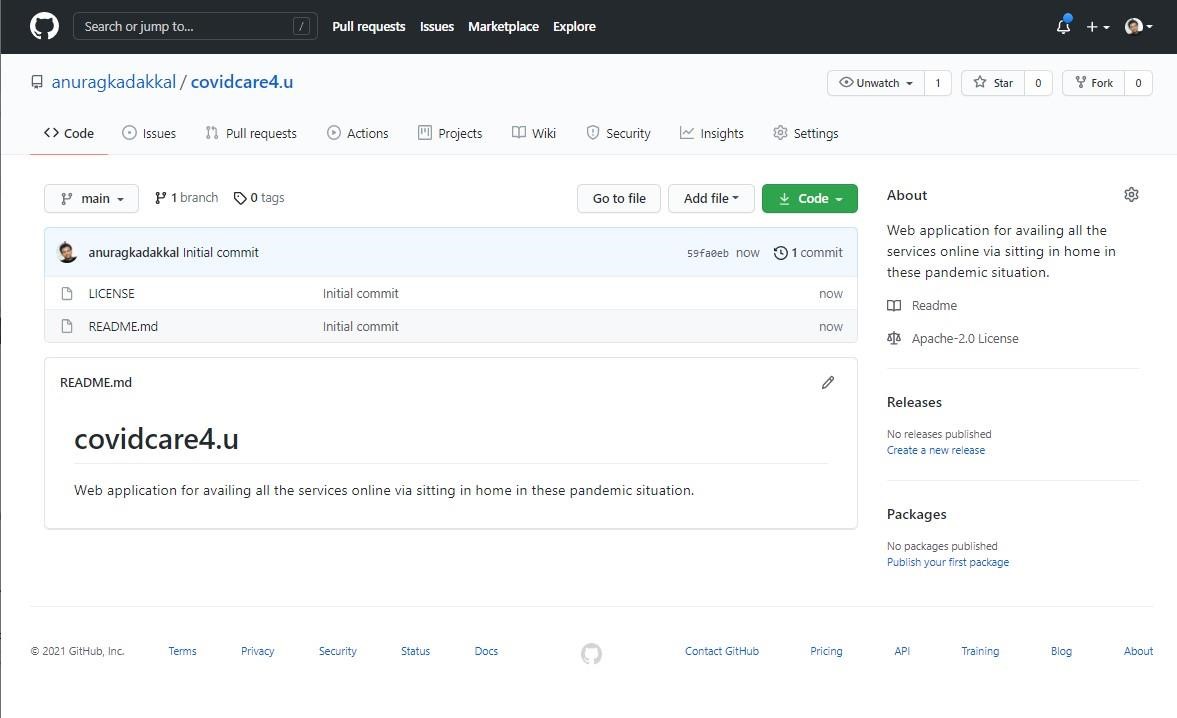
GitHub



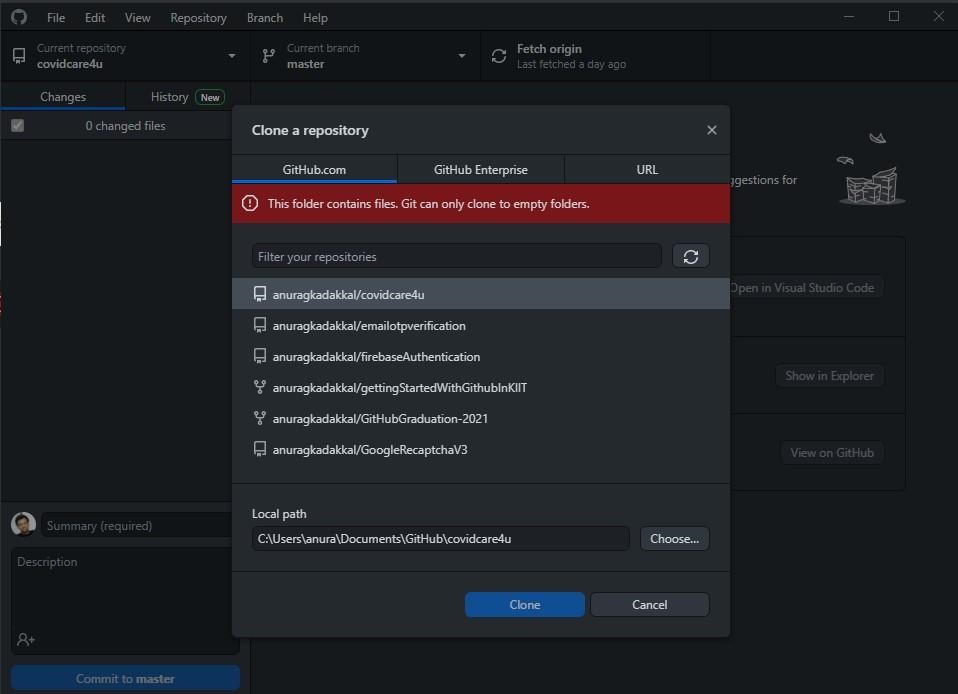
Once

repository is completed, you can setup the

repository



 Download and install GitHub desktop application. Once installed Go to Repository > Clone repository, and select your repository which was created in GitHub.com or Select a local system folder.





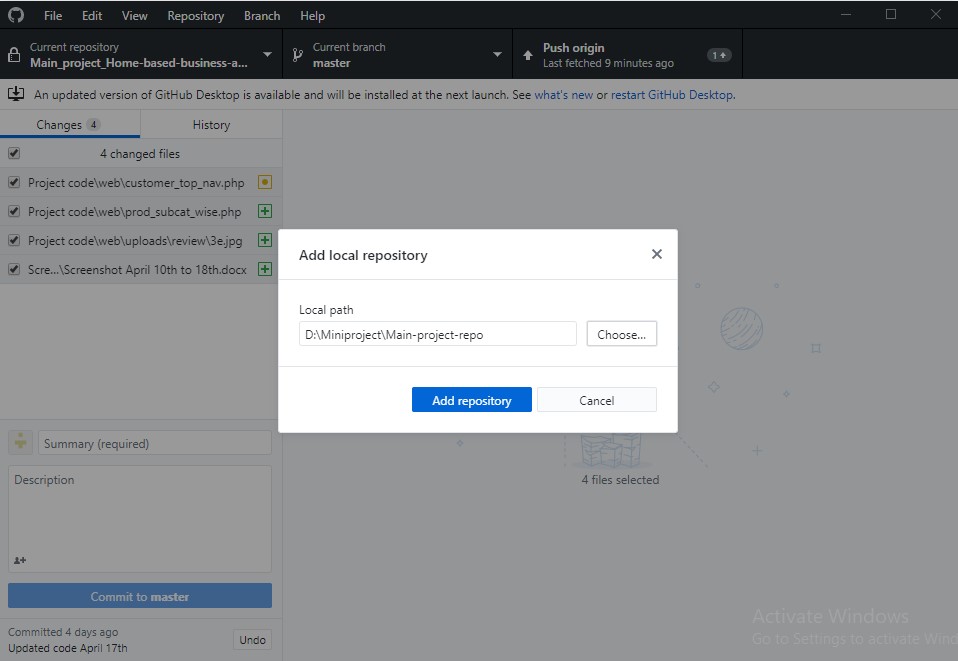
Add local system folder, then create a

local repository with folder

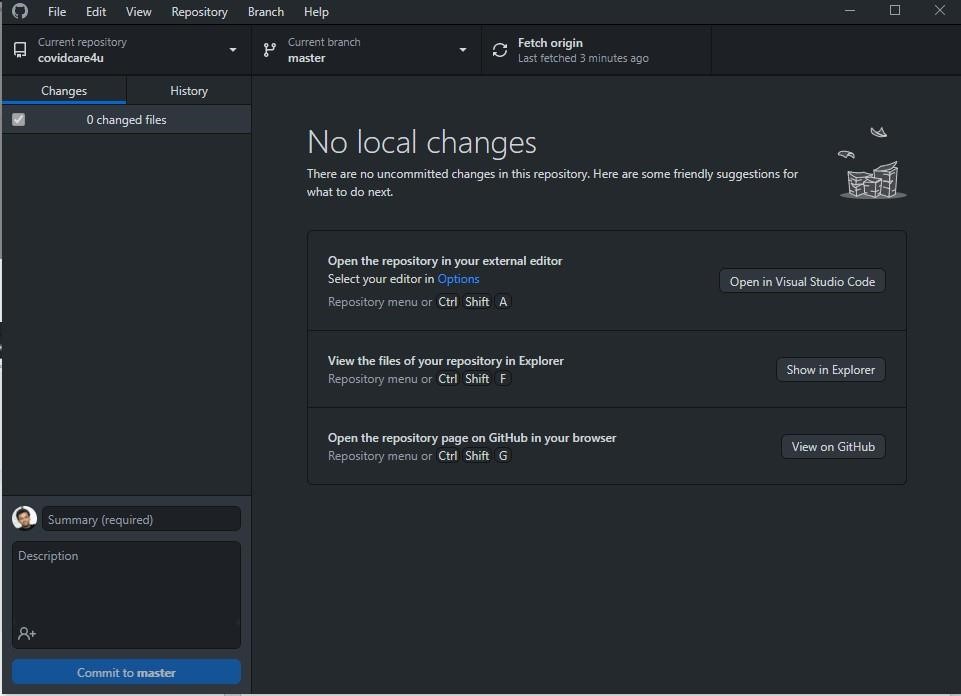
name.



Once repository is created, make changes on the file which is stored inside the local

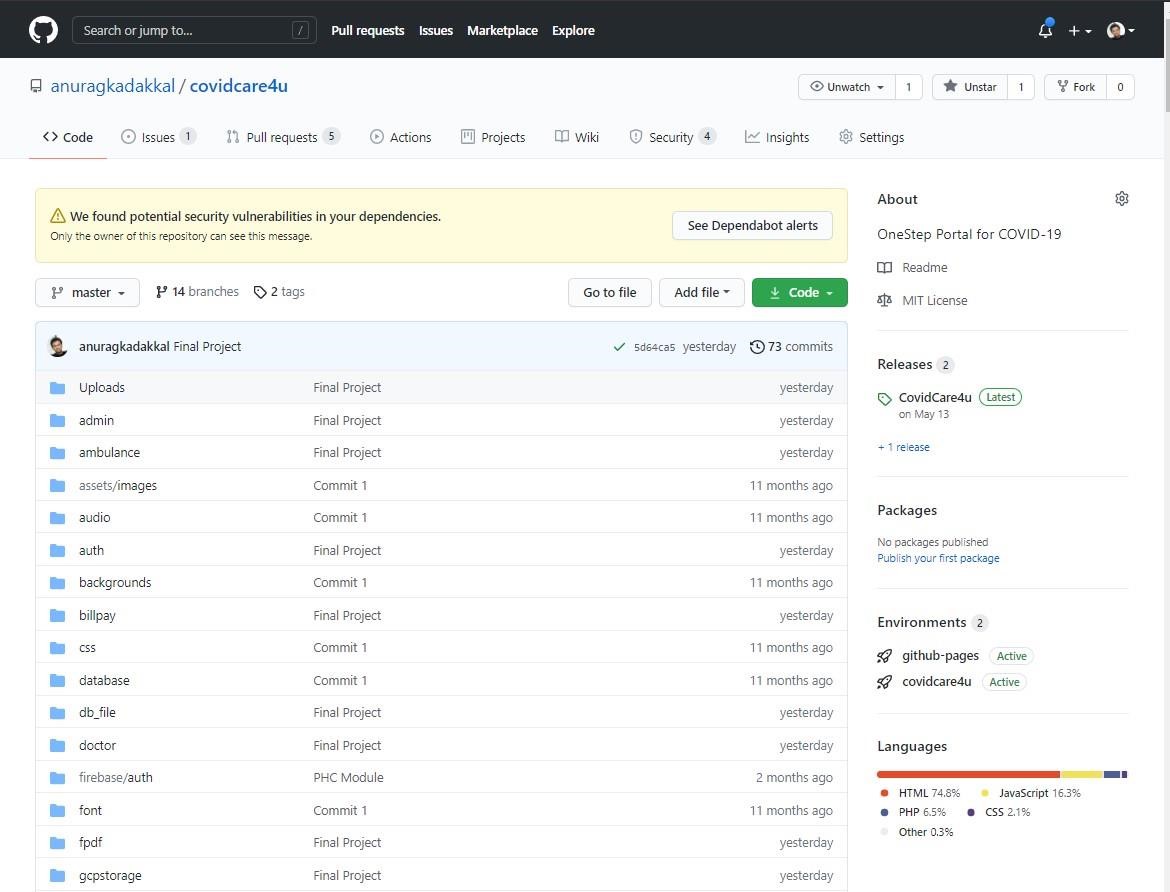


repository and commit to master.



 Push the local repository to origin

Refresh GitHub.com repository to fetch commits



## 2. PROJECT DOCUMENTATION

### 2.1 INTRODUCTION

#### 2.1.1 Project Overview

“CovidCare4U” –It is a web-based application for helping and avail all the services in our fingertip during this pandemic situation. It mainly aims to help public by availing all the services by sitting in their homes. Some of the functionalities in this web application is the public can order medicines, foods and other necessary items from the registered authorities in the web application. The public can apply for travel pass such as inter district and interstate travel pass for travelling to the respective places, and these passes were approved by the police station near to our home. Daily updating of covid cases can be updated and the public can view that. Daily news bulletin report of Chief Minister can also be downloaded as PDF report. Donation for Chief Minister’s distress relief fund daily statistics can also be viewed.

#### 2.1.2 Project Specification

The proposed system is a website in which user can apply for travel pass such as inter district and state vehicle travel pass, order medicines, foods from the nearby food centers such as community kitchen, users can view the daily covid reports, etc. This system includes 8 modules. They are:

##### 1. Admin Module

The site admin has an overall control on the website. He can perform the functionalities like,

 Login to the Application

 Google Authenticator based authentication.

 Add/view/update/delete Public Health Centre.

 Add/view/update/delete Police Stations.

 Verify Karunya Medicals Registration.

 Verify Community Kitchen Registration.

 View login Logs based on Google reCaptchaV3.

##### 2. Public User Module

Public User can perform the functionalities like,

 Registration/login and view/manage profile/change password.

 View daily statistics of covid cases [Source: GoK Dashboard].

 Apply/view inter-district travel passes and status.

 Apply pass document is uploaded in Google Cloud Storage.

 Pass document upload verification using OCR – Google Cloud Vision.

 Order foods and make payment.

 Order medicine and make payment.

 Book doctor appointment.

 Book vaccines.

 SOS Ambulance service registration.

 Quarantine registration.

 Live chat support.

 Payment with PayUmoney Gateway.

##### 3. Police Station Module

Police station can perform the functionalities like,

 Login and view/manage change password

 View travel pass requests and approve/reject it.

 View quarantine status of pubic who registered in this web application.

 Generate sales report based on a given from and to date.

##### 4. Karunya Medicals Module

Karunya Medicals can perform the functionalities like,  Login.

 Add/view/update medicines.

 View/search medicine order by public  View/update payment [COD/Online Payment]  View order status.

##### 5. Community Kitchen

Community Kitchen can perform the functionalities like,  Login.

 Add/view/update medicines.

 View/search medicine order by public  View/update payment [COD/Online Payment]  View order status.

##### 6. Public Health Centre Module

Public Health Centre can perform the functionalities like,  Login and view/manage profile/change password.

 Add/View/Update doctor.

 Send notifications to doctor and view feedbacks.

 Verify ambulance registrations.

 View Quarantine details and send feedbacks.

 Add vaccine availability.

 View/Update vaccine availability.

 View vaccine bookings by public

 Spot registration of dose 2 vaccine.

 Update vaccine taken staff details.

 Generation of vaccine certificate.

 View daily statistics of covid cases [Source: GoK Dashboard].

##### 7. Doctor Module

Doctor can perform the functionalities like,  Login and view/manage profile/change password.

 View public appointments and give response as email.

 Search appointments date-wise.

 View notification from PHC and give feedback.

 View daily statistics of covid cases [Source: GoK Dashboard].

##### 8. Ambulance Module

Ambulance Module can perform the functionalities like,  Login and View/Manage profile/change password.

 View SOS requests and give proper feedback as email.

##### 9. Vaccine Module

Vaccine Module can perform the functionalities like,  Login.

 Add 3 user details for applying vaccine.

 Schedule 1 and 2 vaccines.

 Download vaccine certificate as PDF.

### 2.2 SYSTEM STUDY

#### 2.2.1 Introduction

System analysis is a process of gathering and interpreting facts, diagnosing problems and the information to recommend improvements on the system. It is a problem solving activity that requires intensive communication between the system users and system developers. System analysis or study is an important phase of any system development process. The system is studied to the minute’s detail and analyzed. The system analyst plays the role of the interrogator and dwells deep into the working of the present system. The system is viewed as a whole and the input to the system are identified. The outputs from the organizations are traced to the various processes. System analysis is concerned with becoming aware of the problem, identifying the relevant and decisional variables, analyzing and synthesizing the various factors and determining an optimal or at least a satisfactory solution or program of action.

A detailed study of the process must be made by various techniques like interviews, questionnaires etc. The data collected by these sources must be scrutinized to arrive to a conclusion. The conclusion is an understanding of how the system functions. This system is called the existing system. Now the existing system is subjected to close study and problem areas are identified. The designer now functions as a problem solver and tries to sort out the difficulties that the enterprise faces. The solutions are given as proposals. The proposal is then weighed with the existing system analytically and the best one is selected. The proposal is presented to the user for an endorsement by the user. The proposal is reviewed on user request and suitable changes are made. This is loop that ends as soon as the user is satisfied with proposal.

Preliminary study is the process of gathering and interpreting facts, using the information for further studies on the system. Preliminary study is problem solving activity that requires intensive communication between the system users and system developers. It does various feasibility studies. In these studies, a rough figure of the system activities can be obtained, from which the decision about the strategies to be followed for effective system study and analysis can be taken. The system analyst plays the role of the interrogator and dwells deep into the working of the present system. The system is viewed as a whole and the input to the system are identified. The outputs from the organizations are traced to the various processes. System analysis is concerned with becoming aware of the problem, identifying the relevant and decisional variables, analyzing and synthesizing the various factors and determining an optimal or at least a satisfactory solution or program of action.

#### 2.2.2 EXISTING SYSTEM

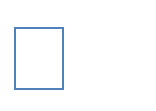
Existing system is not a fully automated system, the public people can’t know the daily covid status and reports. The users need to go to police station for availing the travel pass and purchasing food in the covid time situation and it’s very difficult in these pandemic days.

#### 2.2.3 PROPOSED SYSTEM

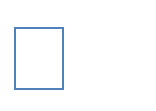
The proposed system is defined to meets all the needs of public in these covid pandemic days. It is necessary to have a system that is more user friendly and user attractive for business growth. On such consideration the system is proposed. In our proposed system there is an admin who can view and manage all the registered sellers and customers. It allows customers to make their orders and do their transactions by using online payment method. Users of this proposed system are admin, public user, community kitchen, police station, PHC, doctor, ambulance drivers. The aim of proposed system is to develop a system of improved facilities. The system provides proper security and reduces the manual work. Online shopping advancements have been so drastic that it has evolved to be a part of our life. Today customer doesn’t drive down to some shop for buying a product but preferably check over the internet for price, offers, reviews and order online. The existing system working procedure is like sellers create their available food items and find their customers via Facebook, Instagram or through any other social networking sites. Similarly, customers do not get a chance to find good products or sellers from the existing method. The major drawbacks in current offline system are poor order or stock management.

##### Advantages of proposed system

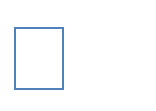
The system requires very low system resources and the system will work in almost all configurations. It has got following features:

 *You are able to get homemade foods: -*

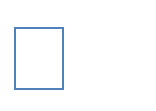
Our public will get homemade foods with affordable price and they have the option to get customized food from the community kitchen. Also, community kitchen owners can able to add daily available foods in the portal.

 *Better security: -*

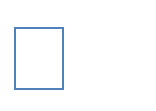
For data to remain secure measures must be taken to prevent unauthorized access. Security means that data are protected from various forms of destruction. The system security problem can be divided into four related issues: security, integrity, privacy and confidentiality. Username and password requirement to sign in ensures security. It will also provide data security as we are using the secured databases for maintaining the documents.

 *Ensure data accuracy: -*

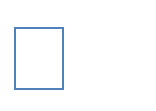
The proposed system eliminates the manual errors while entering the details of the users during the registration.

 *Better service: -*

The product will avoid the burden of hard copy storage. We can also conserve the time and human resources for doing the same task. The data can be maintained for longer period with no loss of data.

 *User friendliness and interactive: -*

The proposed system’s interface helps the users to perform their operations without any confusions or difficulties. A customer can easily find their interested products and can able to purchase it. A seller can get notification when a new order, complaint or if a product running out of stock etc and which helps the seller to immediately take an action on it.

 *Minimum time required: -*

The customers can view foods and medicines in different ways like directly searching a food name or medicine name, which helps to purchase a product with minimum time. Similarly, community kitchen can manage their orders and other operations easily using this website.

### 2.3 REQUIREMENT ANALYSIS

#### 2.3.1 Feasibility study

Feasibility study is made to see if the project on completion will serve the purpose of the organization for the amount of work, effort and the time that spend on it. Feasibility study lets the developer foresee the future of the project and the usefulness. A feasibility study of a system proposal is according to its workability, which is the impact on the organization, ability to meet their user needs and effective use of resources. Thus, when a new application is proposed it normally goes through a feasibility study before it is approved for development.

The document provides the feasibility of the project that is being designed and lists various areas that were considered very carefully during the feasibility study of this project such as Technical, Economic and Operational feasibilities. The following are its features: -

##### 2.3.1.1 Economical Feasibility

The developing system must be justified by cost and benefit. Criteria to ensure that effort is concentrated on project, which will give best, return at the earliest. One of the factors, which affect the development of a new system, is the cost it would require.

The following are some of the important financial questions asked during preliminary investigation:

The costs conduct a full system investigation.



The cost of the hardware and software.



The benefits in the form of reduced costs or fewer costly errors.



The proposed system is developed as part of project work, there is no manual cost to spend for the proposed system. Also, all the resources are already available, it gives an indication of the system is economically possible for development.

The cost of project, CovidCare4U was divided according to the system used, its development cost and cost for hosting the project. According to all the calculations the project was developed in a low cost. As it is completely developed using open-source software.

##### 2.3.1.2 Technical Feasibility

The system must be evaluated from the technical point of view first. The assessment of this feasibility must be based on an outline design of the system requirement in the terms of input, output, programs and procedures. Having identified an outline system, the investigation must go on to suggest the type of equipment, required method developing the system, of running the system once it has been designed.

Technical issues raised during the investigation are:

 Does the existing technology sufficient for the suggested one?

 Can the system expand if developed?

The project should be developed such that the necessary functions and performance are achieved within the constraints. The project requires High Resolution Scanning device and utilizes Cryptographic techniques. Through the technology may become obsolete after some period of time, due to the fact that newer version of same software supports older versions, the system may still be used. So there are minimal constraints involved with this project. The system has been developed using HTML, CSS in front end and MySQL in server in back end, the project is technically feasible for development. The system has been developed using HTML, CSS, PHP and MySQL in server back end, the project is technically feasible for development. The System used was also of good performance of Processor Intel i3 core; RAM 4GB and, Hard disk 1TB

##### 2.3.1.3 Behavioral Feasibility

The proposed system includes the following questions:

Is there sufficient support for the users?



Will the proposed system cause harm?



The project would be beneficial because it satisfies the objectives when developed and installed. All behavioral aspects are considered carefully and conclude that the project is behaviorally feasible. CovidCare4U, GUI is user friendly so that users can easily use it without any training.

### 2.4 Requirement Modeling

#### 2.4.1 UML diagram

UML is a standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems. UML was created by the Object Management Group (OMG) and UML 1.0 specification draft was proposed to the OMG in January 1997.

UML stands for **Unified Modeling Language**. UML is different from the other common programming languages such as C++, Java, COBOL, etc. UML is a pictorial language used to make software blueprints. Although UML is generally used to model software systems, it is not limited within this boundary. It is also used to model non-software systems as well. For example, the process flow in a manufacturing unit, etc. UML is not a programming language but tools can be used to generate code in various languages using UML diagrams. UML has a direct relation with object-oriented analysis and design. After some standardization, UML has become an OMG standard. UML includes the following nine diagrams.

* Activity diagram
* Use case diagram
* Sequence diagram
* Collaboration diagram
* State chart diagram
* Class diagram
* Object diagram
* Component diagram
* Deployment diagram

##### 1. UML Activity Diagram

Activity Diagram describe the dynamic aspects of the system. Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. This flow can be sequential, branched, or concurrent. Activity diagrams are not only used for visualizing the dynamic nature of a system, but they are also used to construct the executable system by using forward and reverse engineering techniques. Activity diagram is sometimes considered as the flowchart. Although the diagrams look like a flowchart, they are not.

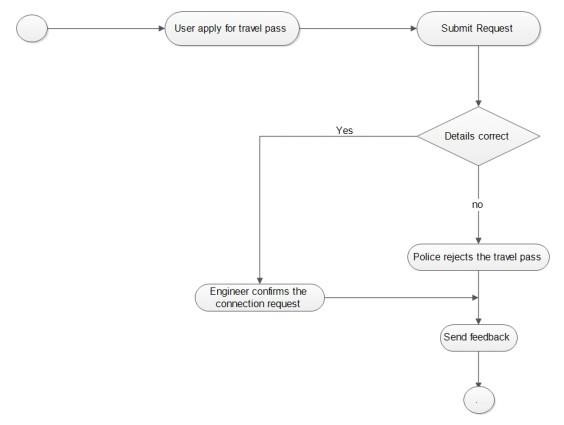


Fig. Activity diagram for user applying travel pass.

##### 2. UML Use Case Diagram

A use case diagram is a graphic depiction of the interactions among the elements of a system. A [use case i](http://searchsoftwarequality.techtarget.com/definition/use-case)s a methodology used in system analysis to identify, clarify, and organize system requirements. In this context, the term "system" refers to something being developed or operated, such as a mail-order product sales and service [Web site.](http://searchsoa.techtarget.com/definition/Web-site) Use case diagrams are employed in [UML](http://searchsoftwarequality.techtarget.com/definition/Unified-Modeling-Language) (Unified Modeling Language), a standard notation for the modeling of real-world objects and systems.

For example, use cases in a product sales environment would include item ordering, catalog updating, payment processing, and customer relations. A use case diagram contains four components.

* The boundary, which defines the system of interest in relation to the world around it.
* The actors, usually individuals involved with the system defined according to their roles.
* The use cases, which the specific roles are played by the actors within and around the system.



The relationships between and among the actors and the use

cases.

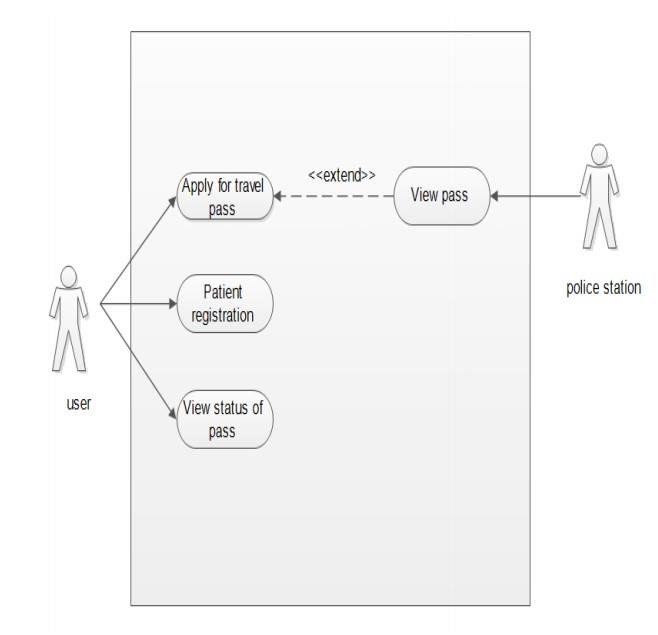
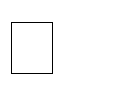


Fig. Use case diagram for user applying travel pass.

##### 3. UML Sequence Diagram

A sequence diagram is a[n interaction diagram t](https://en.wikipedia.org/wiki/Interaction_diagram)hat shows how objects operate with one another and in what order. It is a construct of a [message sequence chart.](https://en.wikipedia.org/wiki/Message_sequence_chart)

A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagrams are typically associated with use case realizations in the Logical View of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios. A sequence diagram shows, as parallel vertical lines (*lifelines*), different processes or objects that live simultaneously, and, as horizontal arrows, the messages exchanged between them, in the order in which they occur.

This allows the specification of simple runtime scenarios in a graphical manner

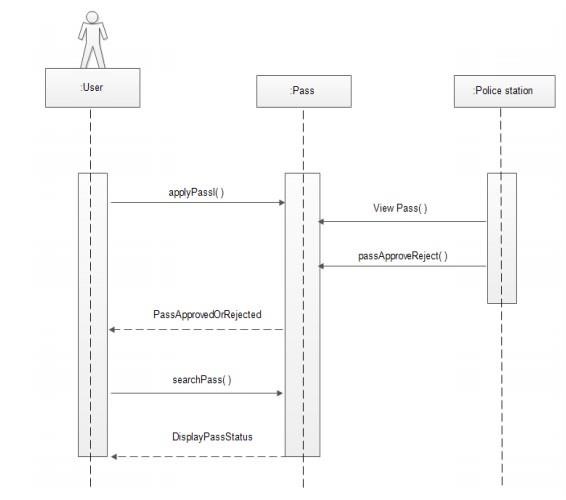


Fig. Sequence diagram for search and order product

##### 4. UML Collaboration Diagram

The collaboration diagram is used to show the relationship between the objects in a system. Both the sequence and the collaboration diagrams represent the same information but differently. Instead of showing the flow of messages, it depicts the architecture of the object residing in the system as it is based on object-oriented programming. An object consists of several features. Multiple objects present in the system are connected to each other. The collaboration diagram, which is also known as a communication diagram, is used to portray the object's architecture in the system.

##### Notations of a Collaboration Diagram

Following are the components of a component diagram that are enlisted below:

1. **Objects:** The representation of an object is done by an object symbol with its name and class underlined, separated by a colon. In the collaboration diagram, objects are utilized in the following ways:
   * The object is represented by specifying their name and class.
   * It is not mandatory for every class to appear.
   * A class may constitute more than one object.
   * In the collaboration diagram, firstly, the object is created, and then its class is specified.
   * To differentiate one object from another object, it is necessary to name them.
2. **Actors:** In the collaboration diagram, the actor plays the main role as it invokes the interaction. Each actor has its respective role and name. In this, one actor initiates the use case.
3. **Links:** The link is an instance of association, which associates the objects and actors. It portrays a relationship between the objects through which the messages are sent. It is represented by a solid line. The link helps an object to connect with or navigate to another object, such that the message flows are attached to links.
4. **Messages:** It is a communication between objects which carries information and includes a sequence number, so that the activity may take place. It is represented by a labeled arrow, which is placed near a link. The messages are sent from the sender to the receiver, and the direction must be navigable in that particular direction. The receiver must understand the message.

The collaborations are used when it is essential to depict the relationship between the object. Both the sequence and collaboration diagrams represent the same information, but the way of portraying it quite different. The collaboration diagrams are best suited for analyzing use cases.

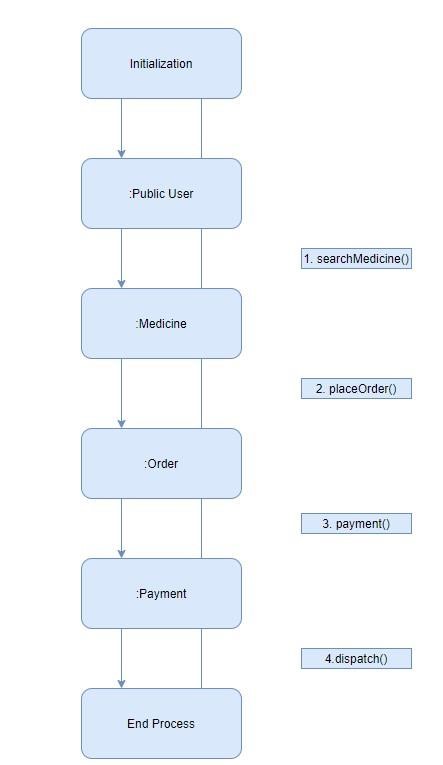


Fig. Collaboration Diagram for online purchasing of medicine.

###### 5. UML State Chart Diagram

It describes different states of a component in a system. The states are specific to a component/object of a system. A State chart diagram describes a state machine. State machine can be defined as a machine which defines different states of an object and these states are controlled by external or internal events

State chart diagram describes the flow of control from one state to another state. States are defined as a condition in which an object exists and it changes when some event is triggered. The most important purpose of State chart diagram is to model lifetime of an object from creation to termination. State chart diagrams are also used for forward and reverse engineering of a system. However, the main purpose is to model the reactive system.

Following are the main purposes of using State chart diagrams −

* To model the dynamic aspect of a system.
* To model the life time of a reactive system.
* To describe different states of an object during its life time.
* Define a state machine to model the states of an object.

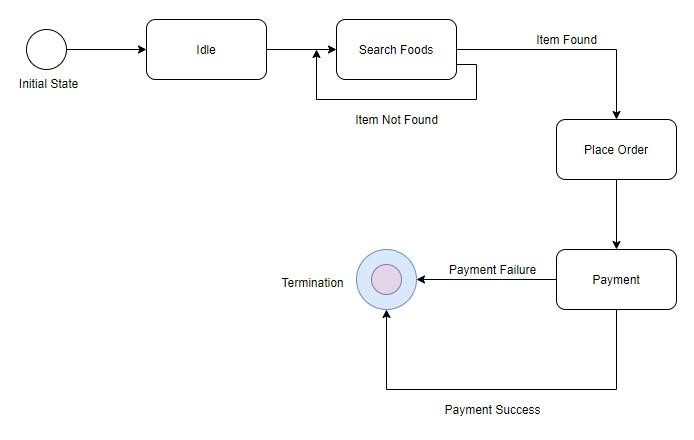


Fig. State chart Diagram for online shopping

###### 6. UML Class Diagram

Class diagram is a static diagram. It represents the static view of an application. Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modeling of object-oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.

The purpose of the class diagram can be summarized as −

* Analysis and design of the static view of an application.
* Describe responsibilities of a system.
* Base for component and deployment diagrams.
* Forward and reverse engineering.

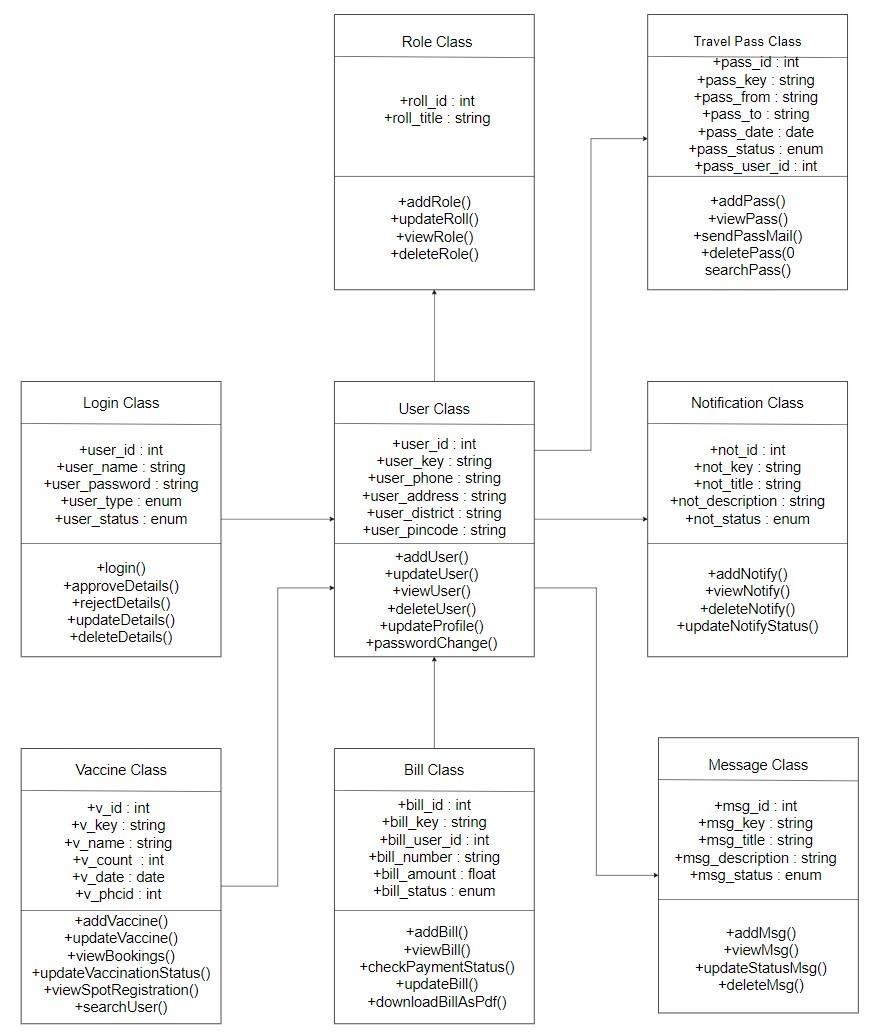


Fig. Class Diagram for CovidCare4U

###### 7. UML Object Diagram

Object diagrams are derived from class diagrams so object diagrams are dependent upon class diagrams. Object diagrams represent an instance of a class diagram. The basic concepts are similar for class diagrams and object diagrams. Object diagrams also represent the static view of a system but this static view is a snapshot of the system at a particular moment. Object diagrams are used to render a set of objects and their relationships as an instance.

The purpose of the object diagram can be summarized as −

* Forward and reverse engineering.
* Object relationships of a system  Static view of an interaction.
* Understand object behavior and their relationship from practical perspective

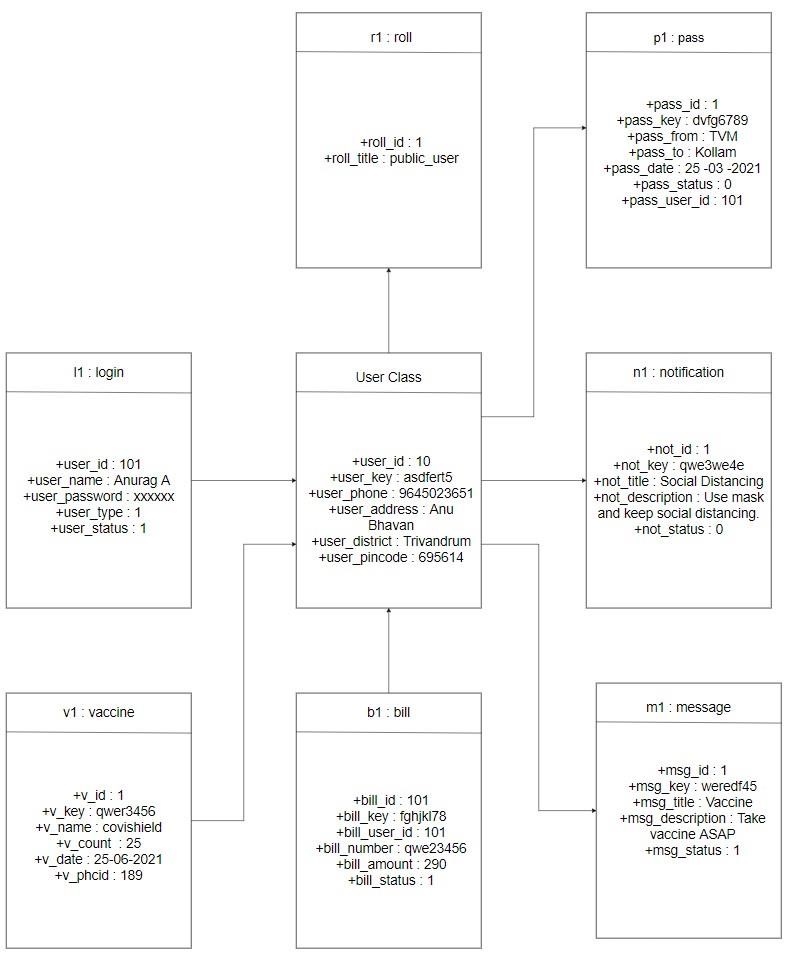


Fig. Object diagram for CovidCare4U

###### 8. UML Component Diagram

Component diagram is a special kind of diagram in UML. The purpose is also different from all other diagrams discussed so far. It does not describe the functionality of the system but it describes the components used to make those functionalities. Thus from that point of view, component diagrams are used to visualize the physical components in a system. These components are libraries, packages, files, etc.

Component diagrams can also be described as a static implementation view of a system. Static implementation represents the organization of the components at a particular moment. A single component diagram cannot represent the entire system but a collection of diagrams is used to represent the whole.

The purpose of the component diagram can be summarized as −

* Visualize the components of a system.
* Construct executable by using forward and reverse engineering.
* Describe the organization and relationships of the components.

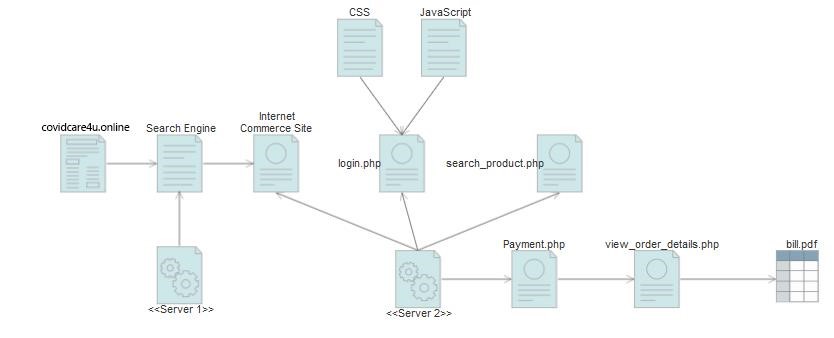


Fig. Component diagram for CovidCare4U

###### 9. UML Deployment Diagram

Deployment diagrams are used to visualize the topology of the physical components of a system, where the software components are deployed. Deployment diagrams are used to describe the static deployment view of a system. Deployment diagrams consist of nodes and their relationships.

It ascertains how software is deployed on the hardware. It maps the software architecture created in design to the physical system architecture, where the software will be executed as a node.

Since it involves many nodes, the relationship is shown by utilizing communication paths.

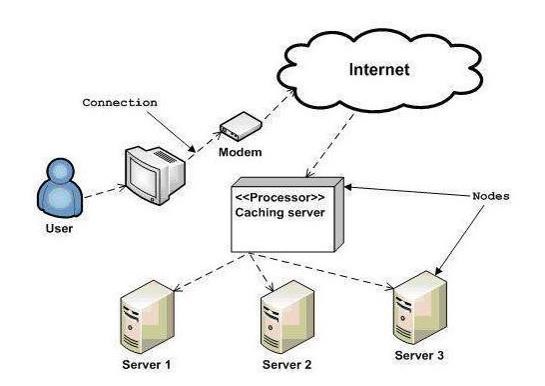


Fig. Deployment diagram

### 2.5 System specification

#### 2.5.1 Hardware Specification

|  |  |
| --- | --- |
| Processor | - Intel core i3 |
| RAM | - 4 GB |
| Hard disk | - 1 TB |

#### 2.5.2 Software Specification

|  |  |  |
| --- | --- | --- |
| Front End | - | HTML, CSS |
| Backend | - | MYSQL |
| Client on PC | - | Windows 7 and above. |
| Technologies used | - | JS, HTML5, AJAX, J Query, PHP, CSS |

### 2.6 Software description

#### 2.6.1 PHP

PHP is a server side scripting language designed for web development but also used as a general purpose programming language. PHP is now installed on more than 244 million websites and 2.1 million web servers. Originally created by Rasmus Ledorf in 1995, the reference implementation of PHP is now produced by the PHP group. PHP is a server scripting language, and a powerful tool for making dynamic and interactive PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.

While PHP originally stood for personal home page, it now stands for PHP:

HypertextPreprocessor, a recursive acronym PHP code is interpreted by a web server with a PHP processor module which generates the resulting web page. PHP commands can be embedded directly into a HTML source document rather than calling an external file to process data.

It has also evolved to include a command-line interface capability and can be used in standalone incompatible with the GNU General Public License (GPL) due to restrictions on the usage of the term PHP.PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

##### 2.6.2 MySQL

MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Oracle Corporation. The MySQL Web site provides the latest information about MySQL software.

###### MySQL is a database management system

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

 **MySQL databases are relational.**

A relational database stores data in separate tables rather than putting all the data in one big storeroom. The database structures are organized into physical files optimized for speed. The logical model, with objects such as databases, tables, views, rows, and columns, offers a flexible programming environment. It has also evolved to include a command-line interface capability and can be used in standalone incompatible with the GNU General Public License (GPL).

You set up rules governing the relationships between different data fields, such as one-to-one, one-to-many, unique, required or optional, and “pointers” between different tables. The database enforces these rules, so that with a well-designed database, your application never sees inconsistent, duplicate, orphan, out-of-date, or missing data.

The SQL part of “MySQL” stands for “Structured Query Language”. SQL is the most common standardized language used to access databases. Depending on your programming environment, you might enter SQL directly (for example, to generate reports), embed SQL statements into code written in another language, or use a language-specific API that hides the SQL syntax.

SQL is defined by the ANSI/ISO SQL Standard. The SQL standard has been evolving since 1986 and several versions exist. In this manual, “SQL92” refers to the standard released in 1992,“SQL: 1999” refers to the standard released in 1999.

“SQL: 2003” refers to the current version of the standard. We use the phrase “the SQL standard” to mean the current version of the SQL Standard at any time.

 **MySQL software is Open Source*.***

Open Source means that it is possible for anyone to use and modify the software. Anybody can download the MySQL software from the Internet and use it without paying anything. If you wish, you may study the source code and change it to suit your needs. The MySQL software uses the GPL (GNU General Public License), to define what you may and may not do with the software in different situations. If you feel uncomfortable with the GPL or need to embed MySQL code into a commercial application, you can buy a commercially licensed version from us. See the MySQL Licensing Overview for more information. A relational database stores data in separate tables rather than putting all the data in one big storeroom. The database structures are organized into physical files optimized for speed. The logical model, with objects such as databases, tables, views, rows, and columns, offers a flexible programming environment.

 **The MySQL Database Server is very fast, reliable, scalable, and easy to use.**

If that is what you are looking for, you should give it a try. MySQL Server can run comfortably on a desktop or laptop, alongside your other applications, web servers, and so on, requiring little or no attention. If you dedicate an entire machine to MySQL, you can adjust the settings to take advantage of all the memory, CPU power, and I/O capacity available.

 **MySQL Server works in client/server or embedded systems*.***

The MySQL Database Software is a client/server system that consists of a multi-threaded SQL server that supports different back ends, several different client programs and libraries, administrative tools, and a wide range of application programming interfaces (APIs). A relational database stores data in separate tables rather than putting all the data in one big storeroom. The database structures are organized into physical files optimized for speed. The logical model, with objects such as databases, tables, views, rows, and columns, offers a flexible programming environment.

We also provide MySQL Server as an embedded multi-threaded library that you can link into your application to get a smaller, faster, easier-to-manage standalone product.

 **A large amount of contributed MySQL software is available.**

MySQL Server has a practical set of features developed in close cooperation with our users. It is very likely that your favorite application or language supports the MySQL Database Server.

##### 2.6.3 Google Cloud Platform

Google Cloud Platform (GCP), offered by Google, is a suite of cloud computing services that runs on the same infrastructure that Google uses internally for its end-user products, such as Google Search, Gmail, file storage, and YouTube. Alongside a set of management tools, it provides a series of modular cloud services including computing, data storage, data analytics and machine learning. Registration requires a credit card or bank account details. Google Cloud Platform provides infrastructure as a service, platform as a service, and serverless computing environments. In April 2008, Google announced App Engine, a platform for developing and hosting web applications in Google-managed data centers, which was the first cloud computing service from the company. The service became generally available in November 2011. Since the announcement of App Engine, Google added multiple cloud services to the platform. Google Cloud Platform is a part of Google Cloud, which includes the Google Cloud Platform public cloud infrastructure, as well as Google Workspace (G Suite), enterprise versions of Android and Chrome OS, and application programming interfaces (APIs) for machine learning and enterprise mapping services.

###### Google Cloud Vision API

Google Cloud’s Vision API offers powerful pre-trained machine learning models through REST and RPC APIs. Assign labels to images and quickly classify them into millions of predefined categories. Detect objects and faces, read printed and handwritten text, and build valuable metadata into your image catalog. Vision API can review your images using Safe Search, and estimate the likelihood that any given image includes adult content, violence, and more. including the location of each object within the image. Learn more about object detection with Vision API and Vertex AI’s vision AutoML. Gain intelligence at the edge Gain intelligence at the edge Use AutoML Vision Edge to build and deploy fast, high-accuracy models to classify images or detect objects at the edge, and trigger real-time actions based on local data. AutoML Vision Edge supports a variety of edge devices where resources are constrained and latency is critical. Vision API uses OCR to detect text within images in more than 50 languages and various file types. It’s also part of Document AI, which lets you process millions of documents quickly and automate business workflows. Detect and classify multiple objects including the location of each object within the image. Learn more about object detection with Vision API and Vertex AI’s vision AutoML. You can work with either one, or reap the benefits of both products by using Vision API to quickly categorize content using thousands of predefined labels, and using AutoML to create additional custom labels to suit your specific needs.

###### Google Cloud Storage

Object storage for companies of all sizes. Store any amount of data. Retrieve it as often as you’d like. Configure your data with Object Lifecycle Management (OLM) to automatically transition to lower-cost storage classes when it meets the criteria you specify, such as when it reaches a certain age or when you’ve stored a newer version of the data. Cloud Storage has an ever-growing list of storage bucket locations where you can store your data with multiple automatic redundancy options. Whether you are optimizing for split-second response time, or creating a robust disaster recovery plan, customize where and how you store your data. Storage Transfer Service and Transfer Service for on-premises data offer two highly performant, online pathways to Cloud Storage—both with the scalability and speed you need to simplify the data transfer process. For offline data transfer our Transfer Appliance is a shippable storage server that sits in your datacenter and then ships to an ingest location where the data is uploaded to Cloud Storage. Google Cloud Storage is a RESTful online file storage web service for storing and accessing data on Google Cloud Platform infrastructure. The service combines the performance and scalability of Google's cloud with advanced security and sharing capabilities. It is an Infrastructure as a Service (IaaS), comparable to Amazon S3 online storage service. Contrary to Google Drive and according to different service specifications, Google Cloud Storage appears to be more suitable for enterprises.

###### Storage classes for any workload

Save costs without sacrificing performance by storing data across different storage classes. You can start with a class that matches your current use, then reconfigure for cost savings.

 Standard Storage: Good for “hot” data that’s accessed frequently, including websites, streaming videos, and mobile apps.

 Nearline Storage: Low cost. Good for data that can be stored for at least 30 days, including data backup and long-tail multimedia content.

 Cold line Storage: Very low cost. Good for data that can be stored for at least 90 days, including disaster recovery.

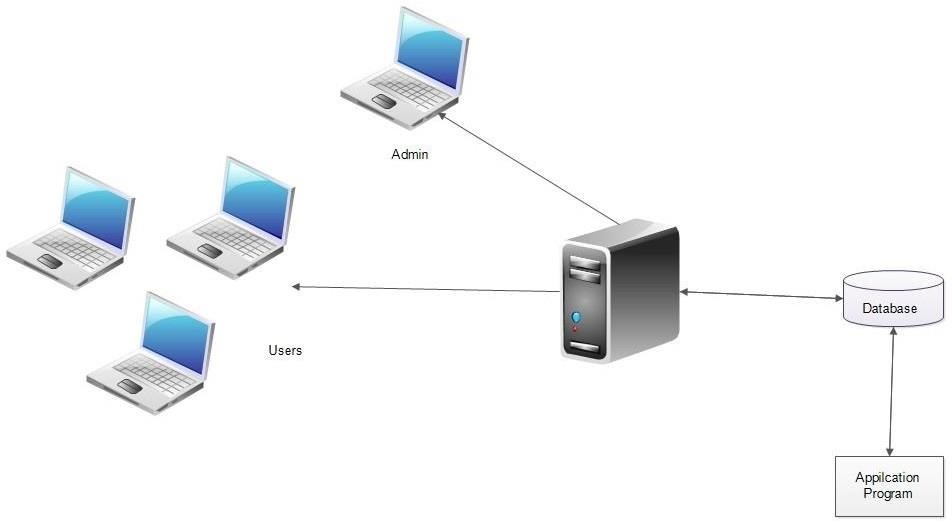
 Archive Storage: Lowest cost. Good for data that can be stored for at least 365 days, including regulatory archives.

### 2.7 System design

Design is the first step into the development phase for any engineered product or system. Design is a creative process. A good design is the key to effective system. The term “design” is defined as “the process of applying various techniques and principles for the purpose of defining a process or a system in sufficient detail to permit its physical realization”. It may be defined as a process of applying various techniques and principles for the purpose of defining a device, a process or a system in sufficient detail to permit its physical realization. Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm that is used. The system design develops the architectural detail required to build a system or product. As in the case of any systematic approach, this software too has undergone the best possible design phase fine tuning all efficiency, performance and accuracy levels. The design phase is a transition from a user oriented document to a document to the programmers or database personnel. System design goes through two phases of development:

Logical and Physical Design.

#### 2.7.1 Architectural Design



The registered customer, seller, and admin can access the website through internet using their

Laptop, Smart Phone, Tablet or Desktop Computer. The System’s application program processes the user’s request and provides the required services by taking data from the system database.

**2.7.2 Module Design**

#### Admin Module

The administrator of the company is allowed to access all the services in the system. Admin has the overall control of the system. Admin can add or update police stations and public health centers categories, seller categories etc. Admin can View all the registered users and all user login logs.

|  |  |
| --- | --- |
| Manage police stations and public health centers details, Add public health centers and police stations. | Deactivate/Activate the registered users. |
| Approve/Reject Karunya Medicals and Community Kitchens. | View user login logs.  Give live support. |

#### Registered Public User Module

The functionalities of public user module are discussed below,

|  |  |
| --- | --- |
| Customer registration, login. | Search products/add to cart/add to Wish list. |
| Checkout and order products. | View order details/order summary. |
| Track ordered products. | Make payment. |

#### Registered Police Station Module

The functionalities of police station module are discussed below,

|  |  |
| --- | --- |
| Police station login. | View/update travel passes. |
| View public user quarantine status. | Update profile and password change. |

#### Registered Public Health Centre Module

The functionalities of police station module are discussed below,

|  |  |
| --- | --- |
| PHC login.  Add/view/update vaccine details. | View vaccine bookings and vaccination status updating. |
| Add doctor and verify ambulance request registration. | Update profile and password change. |

#### Registered Karunya Medicals Module

The functionalities of police station module are discussed below,

|  |  |
| --- | --- |
| Karunya Medicals login. | View/update available medicines. |
| View medicine bookings. | View payment status and payment updating of cash on delivery. |

#### Registered Community Kitchen Module

The functionalities of police station module are discussed below,

|  |  |
| --- | --- |
| Community Kitchen login. | View/update available foods. |
| View foods bookings. | View payment status and payment updating of cash on delivery. |

#### Registered Doctor Module

The functionalities of police station module are discussed below,

|  |  |
| --- | --- |
| Doctor login. | View/update profile/password. |
| View/respond notifications from PHC. | View appointments and give feedback. |

#### Registered Ambulance Module

The functionalities of police station module are discussed below,

|  |  |
| --- | --- |
| Ambulance login. | View/update profile/password. |
| View SOS ambulance requests and give feedback. | |

##### 2.7.3 Database Design

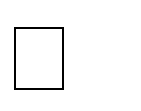
A database is an organized mechanism that has the capability of storing information through which a user can retrieve stored information in an effective and efficient manner. The data is the purpose of any database and must be protected.

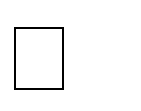
The database design is a two level process. In the first step, user requirements are gathered together and a database is designed which will meet these requirements as clearly as possible.

This step is called Information Level Design and it is taken independent of any individual DBMS.

In the second step, this Information level design is transferred into a design for the specific

DBMS that will be used to implement the system in question. This step is called Physical Level Design, concerned with the characteristics of the specific DBMS that will be used. A database design runs parallel with the system design. The organization of the data in the database is aimed to achieve the following two major objectives.

 Data Integrity

 Data independence

###### Relational Database Management System (RDBMS)

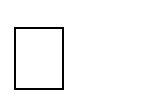
A relational model represents the database as a collection of relations. Each relation resembles a table of values or file of records. In formal relational model terminology, a row is called a tuple, a column header is called an attribute and the table is called a relation. A relational database consists of a collection of tables, each of which is assigned a unique name. A row in a tale represents a set of related values.

###### Relations, Domains & Attributes

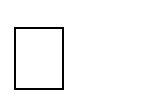
A table is a relation. The rows in a table are called tuples. A tuple is an ordered set of n elements. Columns are referred to as attributes. Relationships have been set between every table in the database. This ensures both Referential and Entity Relationship Integrity. A domain D is a set of atomic values. A common method of specifying a domain is to specify a data type from which the data values forming the domain are drawn. It is also useful to specify a name for the domain to help in interpreting its values.

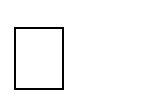
Every value in a relation is atomic, that is not decomposable.

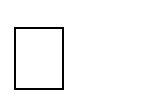
###### Relationships

 Table relationships are established using Key. The two main keys of prime importance are

 Primary Key & Foreign Key. Entity Integrity and Referential Integrity Relationships can be established with these keys.

 Entity Integrity enforces that no Primary Key can have null values.

 Referential Integrity enforces that no Primary Key can have null values.

 Referential Integrity for each distinct Foreign Key value, there must exist a matching

###### Normalization

Data are grouped together in the simplest way so that later changes can be made with minimum impact on data structures. Normalization is formal process of data structures in manners that eliminates redundancy and promotes integrity. Normalization is a technique of separating redundant fields and breaking up a large table into a smaller one. It is also used to avoid insertion, deletion, and updating anomalies. Normal form in data modelling use two concepts, keys and relationships. A key uniquely identifies a row in a table.

There are two types of keys, primary key and foreign key. A primary key is an element or a combination of elements in a table whose purpose is to identify records from the same table. A foreign key is a column in a table that uniquely identifies record from a different table. All the tables have been normalized up to the third normal form.As the name implies, it denotes putting things in the normal form. The application developer via normalization tries to achieve a sensible organization of data into proper tables and columns and where names can be easily correlated to the data by the user. Normalization eliminates repeating groups at data and thereby avoids data redundancy which proves to be a great burden on the computer resources. These include:

 Normalize the data.

 Choose proper names for the tables and columns.

 Choose the proper name for the data.

###### First Normal Form

The First Normal Form states that the domain of an attribute must include only atomic values and that the value of any attribute in a tuple must be a single value from the domain of that attribute.

In other words 1NF disallows “relations within relations” or “relations as attribute values within tuples”. The only attribute values permitted by 1NF are single atomic or indivisible values. The first step is to put the data into First Normal Form. This can be donor by moving data into separate tables where the data is of similar type in each table. Each table is given a Primary Key or Foreign Key as per requirement of the project. In this we form new relations for each non-atomic attribute or nested relation. This eliminated repeating groups of data. A relation is said to be in first normal form if only if it satisfies the constraints that contain the primary key only.

###### Second Normal Form

According to Second Normal Form, for relations where primary key contains multiple attributes, no non-key attribute should be functionally dependent on a part of the primary key. In this we decompose and setup a new relation for each partial key with its dependent attributes. Make sure to keep a relation with the original primary key and any attributes that are fully functionally dependent on it. This step helps in taking out data that is only dependent on a part of the key. A relation is said to be in second normal form if and only if it satisfies all the first normal form conditions for the primary key and every non-primary key attribute of the relation is fully dependent on its primary key alone.

###### Third Normal Form

According to Third Normal Form, Relation should not have a non-key attribute functionally determined by another non-key attribute or by a set of non-key attributes. That is, there should be no transitive dependency on the primary key. In this we decompose and set up relation that includes the non-key attributes that functionally determines other non-key attributes. This step is taken to get rid of anything that does not depend entirely on the Primary Key. A relation is said to be in third normal form if only if it is in second normal form and more over the non key attributes of the relation should not be depend on other non-key attribute.

### TABLES

|  |  |
| --- | --- |
| **Table No 01** | **: tb\_login** |
| Primary Key | : id |
| Foreign Key | : |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| id | int | 11 | Id of the user |
| username | varchar | 100 | Name of the user |
| utype | enum | 0,1,2,3,4,5,6,7 | User type |
| password | varchar | 32 | Password of user |
| status | enum | 0,1,2 | Status of users account  [approved/rejected/pending] based on email otp. |

#### Table No 02 : tb\_ambulance

Primary Key : amid

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| amid | int | 10 | Id |
| ambkey | varchar | 8 | key |
| fname | varchar | 20 | First name |
| lname | varchar | 30 | Last Name |
| brand | varchar | 100 | Brand |
| phno | varchar | 10 | Phone number |
| address | varchar | 50 | Address |
| district | varchar | 20 | District |
| pincode | varchar | 6 | Pin code |
| model | varchar | 100 | Model |
| rcbook | varchar | 100 | Ambulance RC Book |
| drlicence | varchar | 100 | Driving license |
| phcfeedback | varchar | 100 | feedback |
| phcid | int | 11 |  |
| loginid | int | 11 | Login id of user taken from login table id[primary key] |

#### Table No 03 : tb\_logginglogin

Primary Key : loginid Foreign Key :

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| loginid | int | 11 | Login id |
| logtoken | text | - | Token |
| loginusername | varchar | 255 | Login user name |
| curdate | varchar | 255 | Current date |

|  |  |
| --- | --- |
| **Table No 04** | **: tb\_foodbill** |
| Primary Key | : fbid |
| Foreign Key | : fbloginid |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| fbid | int | 11 | Food Bill id |
| fbkey | char | 8 | Key |
| fbdate | date | - | Date |
| fbamount | float | - | Total amount |
| fborderkey | char | 8 | Order key |
| fbloginid | int | 11 | Loginid of user |

|  |  |
| --- | --- |
| **Table No 05** | **: tb\_communitykitchen** |
| Primary Key | : cmid |
| Foreign Key | : loginid |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| cmid | int | 11 | Id |
| cmkey | char | 8 | Key |
| cmname | varchar | 50 | Name |
| cmaddress | varchar | 100 | Address |
| cmdistrict | varchar | 70 | District |
| cmpincode | varchar | 6 | Pincode |
| cmcity | varchar | 50 | City |
| cmcertificate | varchar | 100 | Certificate |
| cmphone | varchar | 10 | Phone number |
| loginid | int | 11 | ogin id taken from login table id[primary key] |

#### Table No 06 : tb\_vehiclepass

Primary Key : id

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| id | int | 11 | Id |
| tpkey | varchar | 8 | Key |
| traveldate | date | - | Travel date |
| returndate | date | - | Returning date |
| fromplace | varchar | 30 | From place |
| toplace | varchar | 30 | To place |
| carregno | varchar | 20 | Car register number |
| personcount | int | 11 | Number of members |
| passkey | varchar | 8 | Passkey |
| email | varchar | 50 | Email |
| namelist | varchar | 100 | List of name |
| purpose | varchar | 100 | Purpose of journey |
| status | enum | 0,1,2 | Status |
| curdate | date | - | Current date |
| feedback | varchar | 100 | Feedback |
| pkey | char | 8 | Key |

|  |  |  |  |
| --- | --- | --- | --- |
| idnumber | varchar | 20 | Id number |
| filename | varchar | 100 | File name |
| loginid | int | 11 | Login id taken from login table |

#### Table No 07 : tb\_vaccine

Primary Key : vid

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| vid | int | 11 | Vaccine id |
| vkey | varchar | 8 | Key |
| vname | varchar | 50 | Vaccine name |
| vtotal | int | 11 | Total vaccine count |
| availdate | varchar | 100 | Available date |
| vstatus | enum | 0,1,2,3 | Status |
| loginid | int | 11 | Login id taken from login table |

#### Table No 08 : tb\_vaccinebookhistory

Primary Key : vbid

Foreign Key : vid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| vbid | int | 11 | Vaccine book id |
| vkey | varchar | 8 | Vaccine key |
| uid | varchar | 8 | User id |
| phcid | int | 11 | PHC Id |
| bkdate | varchar | 40 | Booking date |
| vid | int | 11 | Vaccine |

#### Table No 09 : tb\_vaccinereg

Primary Key : vid Foreign Key :

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| vid | int | 11 | Id |
| vkey | varchar | 8 | Key |
| fname | varchar | 20 | First name |
| phone | varchar | 10 | Phone |
| gender | varchar | 20 | Gender |
| idcard | varchar | 20 | ID card |
| yob | varchar | 10 | Year of birth |
| vaccinestatus | enum | 0,1,2,3,4 | Vaccine status |
| vacdate | varchar | 100 | Vaccine dose1 date |
| vaccdate2 | varchar | 30 | Vaccine dose2 date |
| vacdtaffname | varchar | 255 | Vaccine staff name dose1 |
| vacstaff2 | varchar | 255 | Vaccine staff name dose2 |
| vacphcname | varchar | 255 | PHC name |
| vacphcaddress | varchar | 255 | PHC address |

#### Table No 10 : tb\_sosambreg

Primary Key : sosid

Foreign Key : ambid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| sosid | int | 11 | Id |
| soskey | varchar | 8 | Unique key |
| ambid | int | 11 | Ambulance id |
| fname | varchar | 50 | First name |
| email | varchar | 100 | Email |
| lname | varchar | 50 | Last name |
| phcid | int | 11 | PHC id |
| address | varchar | 255 | Address |
| status | enum | 0,1,2,3 | Status |
| curdate | varchar | 100 | Current date |
| district | varchar | 50 | District |
| phone | varchar | 15 | Phone number |
| feedback | varchar | 255 | Feedback |
| purpose | varchar | 255 | Purpose |

#### Table No 11 : tb\_phc

Primary Key : pid

Foreign Key : loginid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Name** | **Type** | | | **Size** | **Description** |
| pid | int | | | 11 | Id |
| phckey | varchar | | | 8 | key |
| fname | varchar | | | 100 | First name |
| address | varchar | | | 100 | address |
| email | varchar | | | 40 | email |
| district | varchar | | | 30 | district |
| pincode | varchar | | | 6 | Pin code |
| phone | varchar | | | 12 | Phone number |
| Loginid | int | | | 11 | Login id taken from login table |
|  | | |  |
| **Table No 12** | | | **: tb\_medicine** |
| Primary Key | | | : m\_id |
| Foreign Key | | | : loginid |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| m\_id | Int | 11 | Id |
| fname | varchar | 50 | First name |
| address | varchar | 200 | Address |
| items | varchar | 200 | Items |
| phno | varchar | 10 | Phone number |
| qstatus | varchar | 7 | Status |

|  |  |  |  |
| --- | --- | --- | --- |
| prescription | varchar | 100 | Prescription |
| district | varchar | 20 | District |
| filekey | varchar | 8 | File key |
| pincode | varchar | 6 | Pin code |
| curdate | date | - | Current date |
| loginid | Int | 11 | Login id taken from login table |
| medkey | char | 8 | Medicine key |
| status | enum | 0,1,2,3,4,5,6 | Status |

#### Table No 13 : tb\_medbill

Primary Key : mbid

Foreign Key : mbloginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| mbid | int | 11 | Medicine bill id |
| mbkey | char | 8 | Key |
| mbdate | date | - | Medicine bill date |
| mbamount | float | - | Total amount |
| mborderkey | char | 8 | Order key |
| mbloginid | int | 11 | User id |

#### Table No 14 : tb\_quarreg

Primary Key : qid Foreign Key :

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| qid | Int | 11 | Id |
| qkey | varchar | 8 | Key |
| fname | varchar | 100 | First name |
| lname | varchar | 100 | Last name |
| address | varchar | 100 | Address |
| email | varchar | 50 | Email |
| district | varchar | 100 | District |
| phno | varchar | 15 | Phone number |
| pcid | int | 11 | Police station id |
| phcid | int | 11 | PHC id |
| sdate | varchar | 100 | Date |
| edate | varchar | 50 | End date |
| idno | varchar | 50 | Id no |
| qfeedback | varchar | 100 | Feedback |
| idcard | varchar | 100 | Id card |
| status | enum | 0,1,2,3 | Status |

#### Table No 15 : tb\_policestation

Primary Key : pid

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| pid | Int | 11 | id |
| address | varchar | 100 | address |
| email | varchar | 40 | email |
| district | varchar | 30 | district |
| pincode | varchar | 6 | pincode |
| phone | varchar | 12 | Phone number |
| policekey | varchar | 8 | key |
| loginid | int | 11 | Login id taken from login table |

#### Table No 16 : tb\_drbooking

Primary Key : dbid Foreign Key :

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| dbid | int | 11 | Booking id |
| dbkey | varchar | 8 | Unique key |
| dbtime | varchar | 255 | Booking time |
| dbname | varchar | 50 | Booking name |
| dbemail | varchar | 50 | Email |
| dbdistrict | varchar | 50 | District |
| dbaddress | varchar | 255 | Address |
| dbpurpose | varchar | 255 | Purpose |
| dbphone | varchar | 20 | Phone number |
| dbfeedback | varchar | 255 | Feedback |
| dbstatus | enum | 0,1,2,3 | Status |
| dbdrid | int | 11 | Doctor id |

#### Table No 17 : tb\_drnotify

Primary Key : drnotid

Foreign Key : phcid, drid

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** |  | **Description** |
| drnotid | int |  | 11 | Notification id |
| drnotkey | varchar |  | 8 | Key |
| drnotdate | varchar |  | 200 | Date |
| drnormaldate | date |  | - | Notification date |

|  |  |  |  |
| --- | --- | --- | --- |
| curtime | varchar | 40 | Current time |
| drnotmsg | varchar | 500 | Notification message |
| drid | int | 11 | Doctor id |
| notstatus | enum | 0,1,2 | Notification status |
| phcid | int | 11 | PHC id |
| notfeedback | varchar | 100 | Feedback |

#### Table No 18 : tb\_customer

Primary Key : id

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| id | Int | 11 | id |
| custkey | varchar | 8 | key |
| fname | varchar | 20 | First name |
| lname | varchar | 20 | Last name |
| address | varchar | 100 | Address |
| phno | varchar | 10 | Phone number |
| gender | varchar | 10 | Gender |
| district | varchar | 40 | District |
| pincode | varchar | 6 | Pincode |

|  |  |  |  |
| --- | --- | --- | --- |
| loginid | int | 11 | Login id taken from login table |

|  |  |
| --- | --- |
|  |  |
| **Table No 19** | **: tb\_doctor** |
| Primary Key | : id |
| Foreign Key | : loginid |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| id | int | 11 | Id |
| drkey | varchar | 8 | Key |
| fname | varchar | 20 | First name |
| lname | varchar | 20 | Last name |
| address | varchar | 100 | Address |
| phno | varchar | 10 | Phone number |
| gender | varchar | 10 | Gender |
| district | varchar | 40 | District |
| qual | varchar | 50 | Qualification |
| specs | varchar | 50 | Specialization |
| exp | varchar | 50 | Experience |
| pincode | varchar | 6 | Pincode |
| loginid | int | 11 | Login id from login table |
| phcid | int | 11 | PHC id |

#### Table No 20 : tb\_food

Primary Key : fid

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| fid | int | 11 | Id |
| filekey | varchar | 8 | File key |
| fname | varchar | 30 | First name |
| address | varchar | 100 | Address |
| items | varchar | 250 | Items |
| phno | varchar | 10 | Phone number |
| qstatus | varchar | 7 | Status |
| district | varchar | 20 | District |
| pincode | varchar | 6 | Pin code |
| status | enum | 0,1,2,3,4,5 | Status |
| curdate | date | - | Current date |
| kitkey | char | 8 | Kitchen key |
| loginid | int | 11 | Login id taken from login table |

#### Table No 21 : tb\_foodreg

Primary Key : fid

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| fid | int | 11 | id |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| fkey | varchar | | 8 | | File key |
| fname | varchar | | 50 | | First name |
| fdate | varchar | | 100 | | Date |
| ftime | varchar | | 70 | | Time |
| fdesc | varchar | | 100 | | Description |
| fprice | varchar | | 10 | | Price |
| fqty | int | | 11 | | Quantity |
| fstatus | enum | | 0,1 | | Status |
| delstatus | enum | | 0,1 | | Delete status |
| loginid | int | | 11 | | Login id taken from login table |
|  | | |  | |
| **Table No 22** | | | **: tb\_karunyamedicals** | |
| Primary Key | | | : kmid | |
| Foreign Key | | | : loginid | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| kmid | int | 11 | Id |
| kmkey | char | 8 | Key |
| kmname | varchar | 50 | Name |
| kmaddress | varchar | 100 | Address |
| kmdistrict | varchar | 70 | District |
| kmpincode | varchar | 6 | Pin code |
| kmcity | varchar | 50 | City |
| kmphone | varchar | 10 | Phone number |

#### Table No 23 : tb\_medicinereg

Primary Key : fid

Foreign Key : loginid

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Type** | **Size** | **Description** |
| fid | int | 11 | Id |
| fkey | varchar | 8 | Key |
| mfgcompany | varchar | 100 | Company name |
| fname | varchar | 50 | First name |
| mfgdate | date | - | Manufacture date |
| expdate | date | - | Expires date |
| fdate | varchar | 100 | From date |
| ftime | varchar | 70 | Time |
| fdesc | varchar | 5000 | Description |
| fprice | varchar | 10 | Price |
| fqty | int | 11 | Quantity |
| fstatus | enum | 0,1 | Status |
| delstatus | enum | 0,1 | Delete status |
| loginid | int | 11 | Login id taken from login table |

### 2.8 System testing

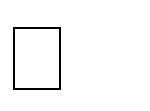
#### 2.8.1 Introduction

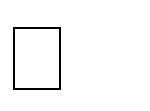
Software Testing is the process of executing software in a controlled manner, in order to answer the question - Does the software behave as specified? Software testing is often used in association with the terms verification and validation. Validation is the checking or testing of items, includes software, for conformance and consistency with an associated specification. Software testing is just one kind of verification, which also uses techniques such as reviews, analysis, inspections, and walkthroughs. Validation is the process of checking that what has been specified is what the user actually wanted.

Other activities which are often associated with software testing are static analysis and dynamic analysis. Static analysis investigates the source code of software, looking for problems and gathering metrics without actually executing the code. Dynamic analysis looks at the behavior of software while it is executing, to provide information such as execution traces, timing profiles, and test coverage information.

Testing is a set of activity that can be planned in advanced and conducted systematically. Testing begins at the module level and work towards the integration of entire computers based system. Nothing is complete without testing, as it vital success of the system testing objectives, there are several rules that can serve as testing objectives. They are:

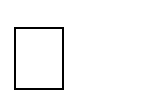
Testing is a process of executing a program with the intent of finding an error.

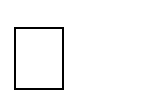
 A good test case is one that has high possibility of finding an undiscovered error.

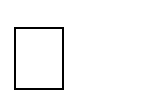
 A successful test is one that uncovers an undiscovered error.

If a testing is conducted successfully according to the objectives as stated above, it would uncover errors in the software. Also testing demonstrate that the software function appear to be working according to the specification, that performance requirement appear to have been met.

There are three ways to test program.

 For correctness

 For implementation efficiency

 For computational complexity

Test for correctness are supposed to verify that a program does exactly what it was designed to do.

This is much more difficult than it may at first appear, especially for large programs.

#### 2.8.2 Test Plan

A test plan implies a series of desired course of action to be followed in accomplishing various testing methods. The Test Plan acts as a blue print for the action that is to be followed. The software engineers create a computer program, its documentation and related data structures. The software developers is always responsible for testing the individual units of the programs, ensuring that each performs the function for which it was designed. There is an independent test group (ITG) which is to remove the inherent problems associated with letting the builder to test the thing that has been built. The specific objectives of testing should be stated in measurable terms. So that the mean time to failure, the cost to find and fix the defects, remaining defect density or frequency of occurrence and test work-hours per regression test all should be stated within the test plan.

The levels of testing include:  Unit testing

 Integration Testing

 Data validation Testing

 Output Testing

##### 2.8.2.1 Unit Testing

Unit testing focuses verification effort on the smallest unit of software design – the software component or module. Using the component level design description as a guide, important control paths are tested to uncover errors within the boundary of the module. The relative complexity of tests and uncovered scope established for unit testing. The unit testing is whitebox oriented, and step can be conducted in parallel for multiple components. The modular interface is tested to ensure that information properly flows into and out of the program unit under test. The local data structure is examined to ensure that data stored temporarily maintains its integrity during all steps in an algorithm’s execution. Boundary conditions are tested to ensure that all statements in a module have been executed at least once. Finally, all error handling paths are tested.

Tests of data flow across a module interface are required before any other test is initiated. If data do not enter and exit properly, all other tests are moot. Selective testing of execution paths is an essential task during the unit test. Good design dictates that error conditions be anticipated and error handling paths set up to reroute or cleanly terminate processing when an error does occur.

Boundary testing is the last task of unit testing step. Software often fails at its boundaries.

##### 2.8.2.2 Integration Testing

Integration testing is systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. The objective is to take unit tested components and build a program structure that has been dictated by design. The entire program is tested as whole. Correction is difficult because isolation of causes is complicated by vast expanse of entire program. Once these errors are corrected, new ones appear and the process continues in a seemingly endless loop. After performing unit testing in the System all the modules were integrated to test for any inconsistencies in the interfaces. Moreover differences in program structures were removed and a unique program structure was evolved.

##### 2.8.2.3 Validation Testing or System Testing

This is the final step in testing. In this the entire system was tested as a whole with all forms, code, modules and class modules. This form of testing is popularly known as Black Box testing or System tests.

Black Box testing method focuses on the functional requirements of the software. That is, Black Box testing enables the software engineer to derive sets of input conditions that will fully exercise all functional requirements for a program.

Black Box testing attempts to find errors in the following categories; incorrect or missing functions, interface errors, errors in data structures or external data access, performance errors and initialization errors and termination errors.

##### 2.8.2.4 Output Testing or User Acceptance Testing

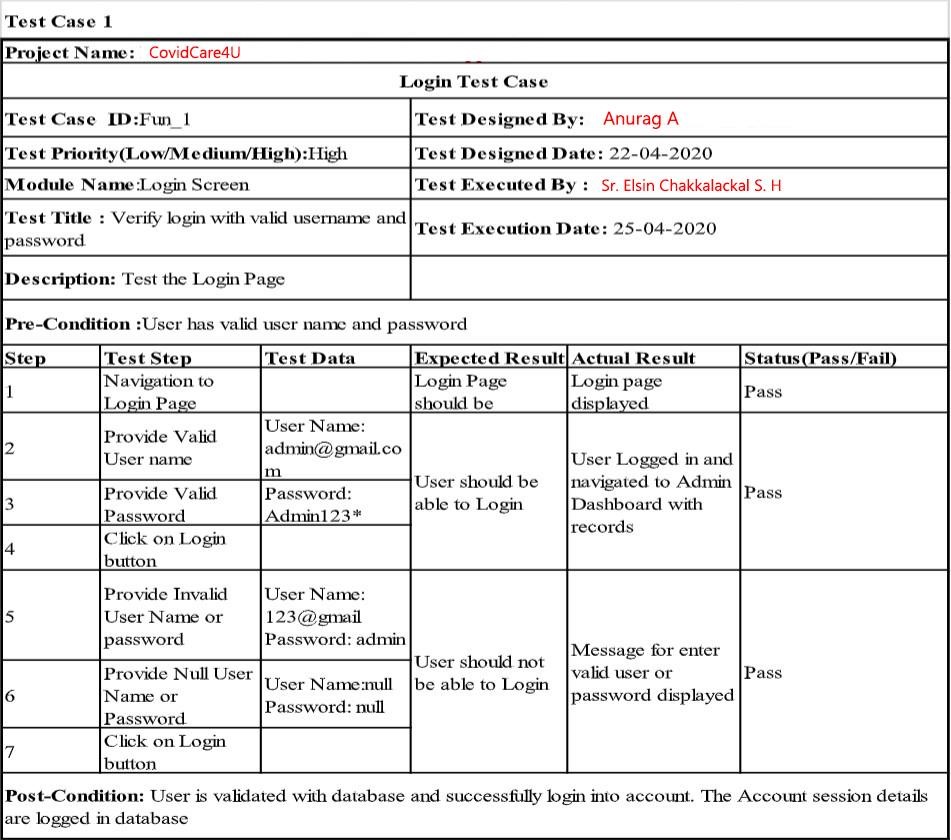
The system considered is tested for user acceptance; here it should satisfy the firm’s need. The software should keep in touch with perspective system; user at the time of developing and making changes whenever required. This done with respect to the following points:

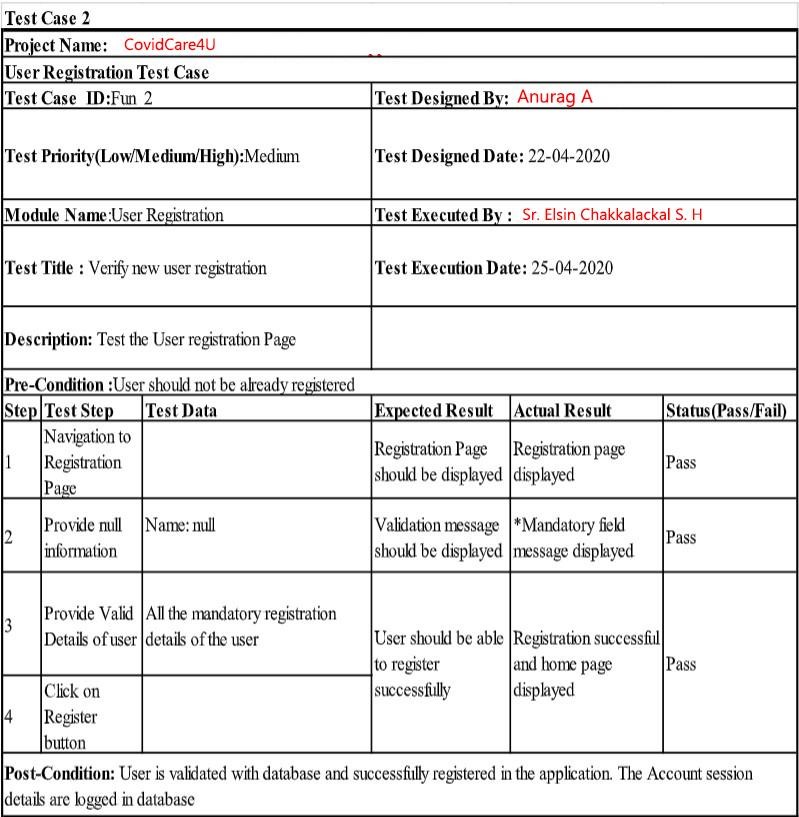
 Input Screen Designs,

 Output Screen Designs,

The above testing is done taking various kinds of test data. Preparation of test data plays a vital role in the system testing. After preparing the test data, the system under study is tested using that test data. While testing the system by which test data errors are again uncovered and corrected by using above testing steps and corrections are also noted for future use.

#### 2.8.3 Test Case





### 2.9 Implementation

Implementation is the stage of the project where the theoretical design is turned into a working system. It can be considered to be the most crucial stage in achieving a successful new system gaining the users confidence that the new system will work and will be effective and accurate. It is primarily concerned with user training and documentation. Conversion usually takes place about the same time the user is being trained or later. Implementation simply means convening a new system design into operation, which is the process of converting a new revised system design into an operational one.

At this stage the main work load, the greatest upheaval and the major impact on the existing system shifts to the user department. If the implementation is not carefully planned or controlled, it can create chaos and confusion.

Implementation includes all those activities that take place to convert from the existing system to the new system. The new system may be a totally new, replacing an existing manual or automated system or it may be a modification to an existing system. Proper implementation is essential to provide a reliable system to meet organization requirements. The process of putting the developed system in actual use is called system implementation. This includes all those activities that take place to convert from the old system to the new system. The system can be implemented only after through testing is done and if it is found to be working according to the specifications. The system personnel check the feasibility of the system. The more complex the system being implemented, the more involved will be the system analysis and design effort required to implement the three main aspects: education and training, system testing and changeover.

The implementation state involves the following tasks:

 Careful planning.

 Investigation of system and constraints.

 Design of methods to achieve the changeover.

#### 2.9.1 Implementation Procedures

Implementation of software refers to the final installation of the package in its real environment, to the satisfaction of the intended uses and the operation of the system. In many organizations someone who will not be operating it, will commission the software development project. In the initial stage people doubt about the software but we have to ensure that the resistance does not build up, as one has to make sure that:

 The active user must be aware of the benefits of using the new system.

 Their confidence in the software is built up.

 Proper guidance is imparted to the user so that he is comfortable in using the application.

Before going ahead and viewing the system, the user must know that for viewing the result, the server program should be running in the server. If the server object is not up running on the server, the actual process won’t take place.

#### 2.9.2 User Training

User training is designed to prepare the user for testing and converting the system. To achieve the objective and benefits expected from computer based system, it is essential for the people who will be involved to be confident of their role in the new system. As system becomes more complex, the need for training is more important. By user training the user comes to know how to enter data, respond to error messages, interrogate the database and call up routine that will produce reports and perform other necessary functions.

#### 2.9.3 Operational Document

After providing the necessary basic training on computer awareness the user will have to be trained on the new application software. This will give the underlying philosophy of the use of the new system such as the screen flow, screen design type of help on the screen, type of errors while entering the data, the corresponding validation check at each entry and the ways to correct the date entered. It should then cover information needed by the specific user/ group to use the system or part of the system while imparting the training of the program on the application. This training may be different across different user groups and across different levels of hierarchy.

#### 2.9.4 System Maintenance

Maintenance is the enigma of system development. The maintenance phase of the software cycle is the time in which a software product performs useful work. After a system is successfully implemented, it should be maintained in a proper manner. System maintenance is an important aspect in the software development life cycle. The need for system maintenance is for it to make adaptable to the changes in the system environment. Software maintenance is of course, far more than "Finding Mistakes".

### 2.10 Conclusion and Future Enhancements

#### 2.10.1 Future Enhancement

 Develop a mobile application for the website  UPI payment system integration.

 Include an option for public to post complaints and get feedback.

 Provide more security.

 Google based sign in.

 Voice recognition feature for using the website.

#### 2.10.2 Conclusion

The current system working technology is old fashioned and there is no usage of commonly used technologies like internet, digital money. The proposed system introduces facility for customer to place orders and track orders. Provides lots of advantages like viewing vaccine details, contact information of PHC, enhanced user interface, payment options, delivery options, order process estimate, order status and many more.

### 2.11 Bibliography

**Books/References:**

 Gary B. Shelly, Harry J. Rosenblatt, “*System Analysis and Design*”, 2009.

 Roger S Pressman, “*Software Engineering*”, 1994.

 PankajJalote, “So*ftware engineering*: a precise approach”, 2006.

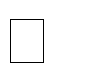
 James lee and Brent ware Addison, “Open source web development with LAMP”, 2003

 IEEE Std 1016 Recommended Practice for Software Design Descriptions.

**Websites:**

 www.w3schools.com  www.jquery.com

<http://homepages.dcc.ufmg.br/~rodolfo/es-1-03/IEEE-Std-830-1998.pdf>



 [www.agilemodeling.com/artifacts/useCaseDiagram.html](http://www.agilemodeling.com/artifacts/useCaseDiagram.html)

### 2.12 APPENDIX

#### 2.12.1 SAMPLE CODE

##### Connection code

<?php

$conn=mysqli\_connect('151.106.124.151','u389386359\_anuragkadakkal','CovidCare4u','u389386359\_covi dcare4u') or die('error connecting to mysql server');

?>

##### Public User Registration

<?php include 'mainheader.php'; ?>

<br><br>

<section id="about" style="background-color: #ecf5ff; box-shadow: 0px 0px 12px 0px #aeb8ba;">

<div class="container ">

<header class="section-header">

<h3>User Registration</h3><br>

</header>

<script type="text/javascript">

function firstName() { var f1 = document.getElementById("f1");

var fname = document.getElementById('fname').value;

if(!/^[A-Za-z ]{3,16}$/.test(fname))

{ f1.textContent = "\*\*Invalid First Name"; var x = document.getElementById("fname"); x.focus(); return false;

} else { f1.textContent = ""; return true;

}

}

function lastName() {

var f2 = document.getElementById("f2"); var lname = document.getElementById('lname').value;

if(!/^[A-Za-z ]{1,16}$/.test(lname))

{ f2.textContent = "\*\*Invalid Last Name"; document.getElementById("lname").focus(); return false; } else { f2.textContent = ""; return true;

}

}

function emailUser() { var f3 = document.getElementById("f3"); var email = document.getElementById('email').value;

if (!/^[a-zA-Z0-9.\_-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$/.test(email))

{ f3.textContent = "\*\*Invalid Email Format"; document.getElementById("email").focus(); return false; } else { f3.textContent = ""; return true;

}

}

function addrUser() { var f4 = document.getElementById("f4"); var address = document.getElementById('address').value; if (!/^[#.0-9a-zA-Z\s,-]{8,50}$/.test(address))

{

f4.textContent = "\*\*Invalid Address Format"; document.getElementById("address").focus();

return false; } else { f4.textContent = ""; return true;

}

}

function phoneUser() { var f5 = document.getElementById("f5"); var phone = document.getElementById('phone').value;

if(!/^[6-9]{1}[0-9]{9}$/.test(phone))

{ f5.textContent = "\*\*Invalid Phone # Format"; document.getElementById("phone").focus(); return false; } else { f5.textContent = ""; return true;

}

}

function distUser() {

var f7 = document.getElementById("f7"); var district = document.getElementById('district').value;

if(district=="null")

{

f7.textContent = "\*\*Select any District"; document.getElementById("district").focus(); return false;

}

else { f7.textContent = ""; return true;

}

}

function distPin() {

var f8 = document.getElementById("f8"); var pincode = document.getElementById('pincode').value;

if(!/^[0-9]{6}$/.test(pincode))

{ f8.textContent = "\*\*Enter Correct Pincode"; document.getElementById("pincode").focus(); return false;

} else { f8.textContent = ""; return true;

}

}

function passUser() { var f9 = document.getElementById("f9"); var pass = document.getElementById('pass').value;

if(!/^(?=.\*\d)(?=.\*[a-z])(?=.\*[A-Z]).{6,20}$/.test(pass))

{

f9.textContent = "\*\*Password Must Have 1(Uppercase,Lowercase,Digit) & 6 to 20 Character Length"; document.getElementById("pass").focus(); return false;

} else

{

f9.textContent = ""; return true;

}

}

function conpassUser() { var f10 = document.getElementById("f10"); var conpass = document.getElementById('conpass').value; var pass = document.getElementById('pass').value;

if(conpass!=pass)

{ f10.textContent = "\*\*Password Doesn't Match"; document.getElementById("conpass").focus(); return false;

} else { f10.textContent = ""; return true;

}

}

function checkAll() {

if(firstName()&&lastName()&&emailUser()&&addrUser()&&phoneUser()&&distUser()&&distPin() &&passUser()&&conpassUser())

{

return true;

} else { return false;

}

}

</script>

<form role="form" method="POST" action="customerreg1.php" name="myform">

<div class="row">

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<input type="text"

name="fname" class="form-control input-sm" placeholder="First Name" id="fname" onkeyup="firstName()">

<span style="color: red;font-size: 14px" id="f1"></span>

</div>

</div>

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<input type="text"

name="lname" class="form-control input-sm" placeholder="Last Name" id="lname" onkeyup="lastName()">

<span style="color: red;font-size: 14px" id="f2"></span>

</div>

</div>

</div>

<div class="form-group">

<input type="email" name="email"

class="form-control input-sm" placeholder="Email Address" value="" id="email" onkeyup="emailUser()">

<span style="color: red;font-size: 14px" id="f3"></span>

</div>

<div class="form-group">

<textarea rows="2" class="form-control input-sm" name="address" placeholder="Address" id="address" onkeyup="addrUser()"></textarea>

<span style="color: red;font-size: 14px" id="f4"></span>

</div>

<div class="row">

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<input type="text"

name="phno" class="form-control input-sm" placeholder="Phone Number" id="phone" onkeyup="phoneUser()">

<span style="color: red;font-size: 14px" id="f5"></span>

</div>

</div>

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<div class="formcheck"><label class="form-check-input" for="exampleRadios1" style="color: black;font-weight: bold;">Gender</label><br>

<input

class="form-check-input" type="radio" name="gender" value="Male" checked="">

<label class="form-check-label" for="exampleRadios1" style="color: grey;">

Male

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

</label>

<input

class="form-check-input" type="radio" name="gender" value="Female">

<label class="form-check-label" for="exampleRadios2" style="color: grey;">

Female

</label>

</div>

</div>

</div>

</div>

<div class="row">

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<select

class="form-control bfh-states" name="district" data-country="US" data-state="CA" id="district" onclick="distUser()">

<option

value="null">Select District</option>

<option value="Trivandrum">Trivandrum</option>

<option value="Kollam">Kollam</option>

<option value="Idukki">Idukki</option>

<option value="Kottayam">Kottayam</option>

</select>

<span style="color: red;font-size: 14px" id="f7"></span>

</div>

</div>

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<input type="text"

name="pincode" class="form-control input-sm" placeholder="Pincode" id="pincode" onkeyup="distPin()">

<span style="color: red;font-size: 14px" id="f8"></span>

</div>

</div>

</div>

<div class="row">

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<input

type="password" name="pass" class="form-control input-sm" placeholder="Password" id="pass" onkeyup="passUser()">

<span style="color: red;font-size: 14px" id="f9"></span>

</div>

</div>

<div class="col-xs-6 col-sm-6 col-md-

6">

<div class="form-group">

<input type="password" name="conpass" class="form-control input-sm" placeholder="Confirm Password" id="conpass" onkeyup="conpassUser()">

<span style="color: red;font-size: 14px" id="f10"></span>

</div>

</div>

</div><br>

<input type="submit" value="Register" class="btn btn-info btn-block" onclick="return checkAll()">

</form>

<br>

</div>

</div>

</section>

<footer id="footer">

<div class="footer-top">

<div class="container">

<div class="row">

<div class="col-lg-4 col-md-6 footer-info">

<br><h4>Disclaimer</h4>

<p class="text-justify">Conceptualized and designed by

Anurag A engaging Master Of Computer Application in Amal Jyothi College Of Engineering, Kanjirampally, Kottayam.

</p>

</div>

<div class="col-lg-4 col-md-6 footer-links">

<br><h4>Useful Links</h4>

<ul>

<li><a href="http://dhs.kerala.gov.in/"

target="\_blank" rel="noopener noreferrer">Directorate of Health Services</a></li>

<li><a

href="https://play.google.com/store/apps/details?id=com.qkopy.prdkerala&amp;hl=en\_IN" target="\_blank" rel="noopener noreferrer">GoK - Direct Kerala

app</a></li>

<li><a

href="https://play.google.com/store/apps/details/?id=in.nic.kerala.nicscanner" target="\_blank" rel="noopener noreferrer">NIC QR Scanner</a></li>

<li>

</ul>

<!-- <a href="https://itmission.kerala.gov.in/" target="\_blank"

rel="noopener noreferrer"><img src="resources/images/itmission.png" alt="IT Mission Logo" style="width: 100px; height: 70px;" class="mt-3"></a>

--> </div>

<div class="col-lg-3 col-md-6 footer-contact">

<h4 style="margin-top: 20px;">Contact Us</h4>

<i class="fa fa-envelope mr-1 text-white mb-

2"></i>directoratehealthcare@kerala.gov.in<br> <a href='resources/downloads/helpline.pdf' class="textwhite view"><i class="fa fa-phone mr-1 text-white"></i>Helpline</a>

<!-- -->

<h4 class="mt-5">Hit Count:&emsp;1</h4>

</div>

</div>

</div>

</div>

<?php include 'mainfooter.php';

?>

##### Login Check

<?php session\_start();

include 'connection.php';

if(isset($\_POST['post']))

{

$usr = $\_POST["username"];

$en = md5($\_POST["pass"]);

$url = "https://www.google.com/recaptcha/api/siteverify";

$data = [

'secret' =>

"6LfujBcbAAAAABoVKMrbF4uRISWt4fcW0ZYXArTG",

'response' => $\_POST['token'],

];

$options = array(

'http' => array(

'header' => "Content-type: application/x-www-form-urlencoded\r\n",

'method' => 'POST',

'content' => http\_build\_query($data)

)

);

$context = stream\_context\_create($options);

$response = file\_get\_contents($url, false, $context);

$res = json\_decode($response, true);

//echo $res;exit; if($res['success'] == true)

{

$sql="insert into tb\_logginglogin(logtoken,loginusername,curdate)

values('".$\_POST['token']."','".$usr."','".date("d-m-Y h:i:sa")."')";

$result = mysqli\_query($conn,$sql);

$sql="select id,status,utype from tb\_login where username='".$usr."' and password='".$en."'";

$result = mysqli\_query($conn,$sql);

$a=0;

while ($row=mysqli\_fetch\_array($result))

{

$a++;

$b=$row['id'];

$c=$row['utype'];

$d=$row['status'];

}

if($a>0)

{

if($d==1)

{

setcookie("lkey",$b);

if ($c==0)

{

//$\_SESSION["auth"] = 1;

$\_SESSION["em"] = $usr;

//header("location:admin/adminhome.php");

echo "<SCRIPT

type='text/javascript'>alert('Use Google Authenticator For Authentication'); window.location.replace(\"auth/index.php\");

</SCRIPT>";

//header("location:auth/index.php");

/\*Admin SESSION - Completed -

Validation Completed\*/

}

else if($c==1)

{

header("location:customerhome.php");

/\*Customer SESSION - Completed -

Validation Completed\*/

}

else if($c==2)

{

$\_SESSION["logined"] = 1; header("location:police/"); /\*Police Station SESSION -

Completed - Validation Completed\*/

}

else if($c==3)

{

$\_SESSION["logined"] = 1; header("location:kitchen/"); /\*Community SESSION - Completed -

Validation Completed\*/

}

else if($c==5)

{

$\_SESSION["logined"] = 1; header("location:phc/");

/\*PHC SESSION - Completed -

Validation Completed\*/

}

else if($c==6)

{

$\_SESSION["logined"] = 1; header("location:doctor/"); /\*Doctor SESSION - Completed -

Validation Completed\*/

}

else if($c==7)

{

header("location:ambulance/");

/\*Ambulance SESSION - Completed -

Validation Completed\*/

}

else{}

}

else if ($d==2)

{

echo "<SCRIPT type='text/javascript'>alert('Permission

Denied.....!!');

window.location.replace(\"index.php\");

</SCRIPT>";

}

else

{

echo "<SCRIPT type='text/javascript'>alert('Approval Pending.....!!'); window.location.replace(\"index.php\");

</SCRIPT>";

}

}

}

}

else

{

echo "<SCRIPT type='text/javascript'>alert('Google reCaptcha Failed'); window.location.replace(\"index.php\");

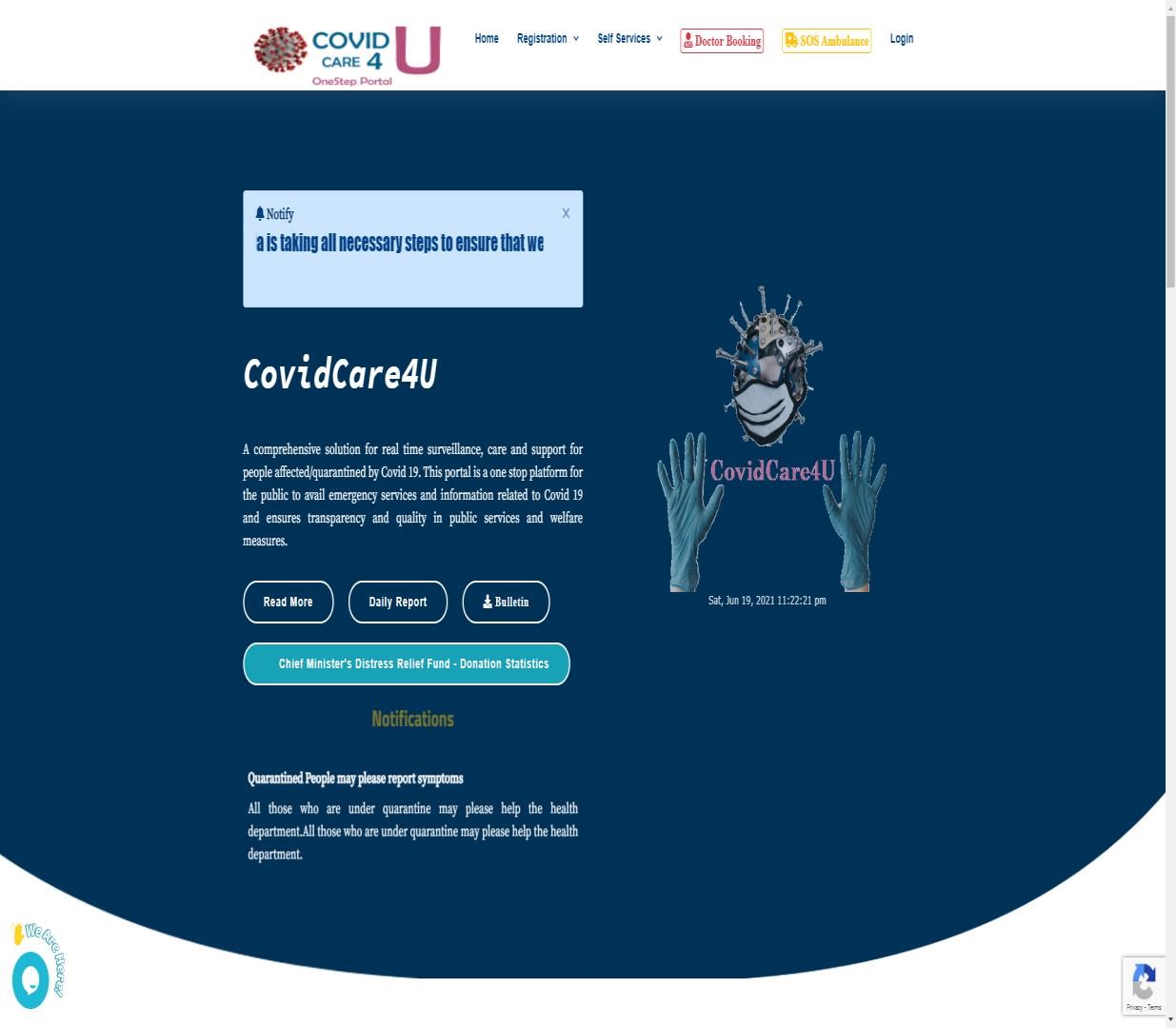
</SCRIPT>";

}

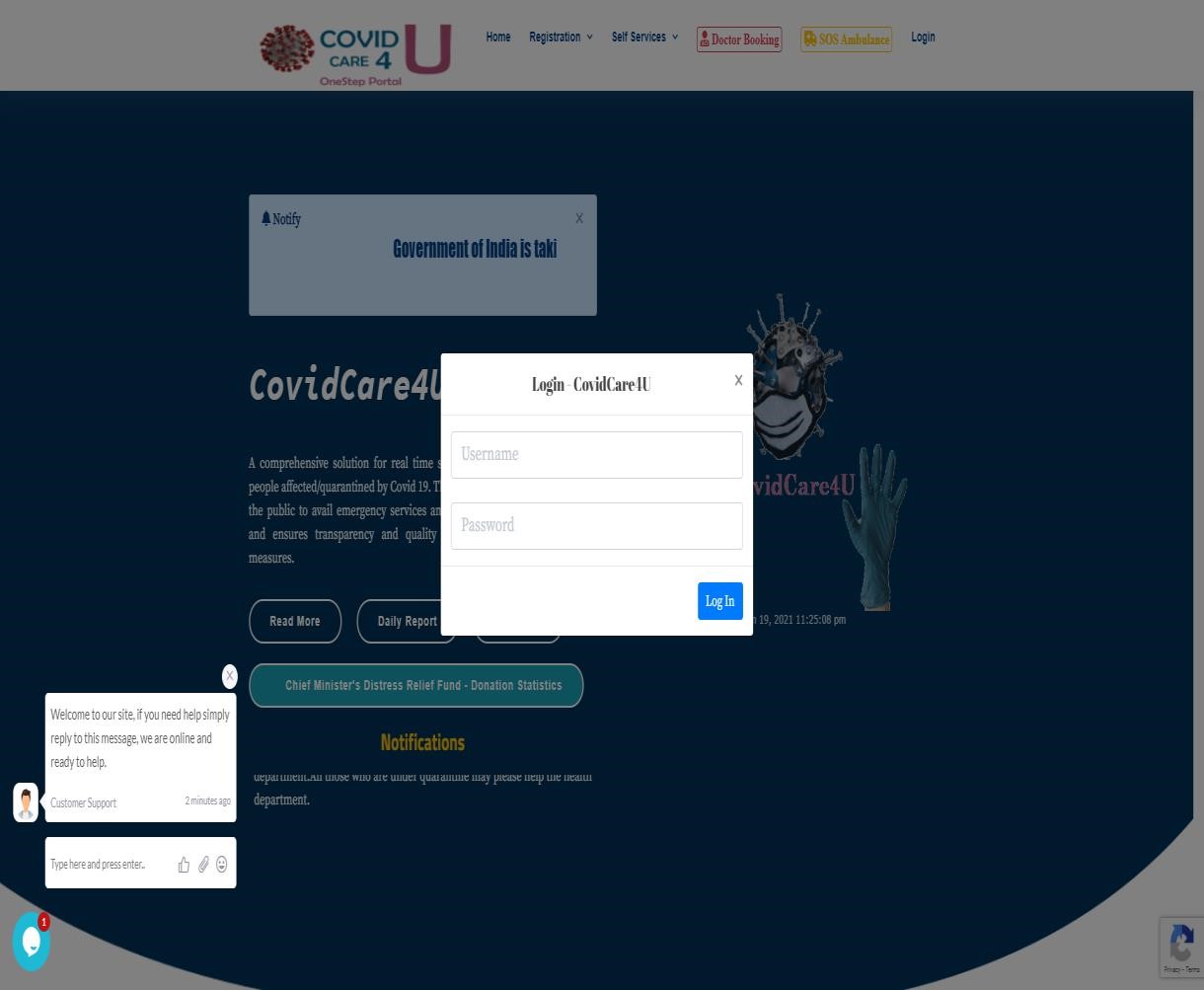
?>

#### 2.10.2 SCREENSHOTS

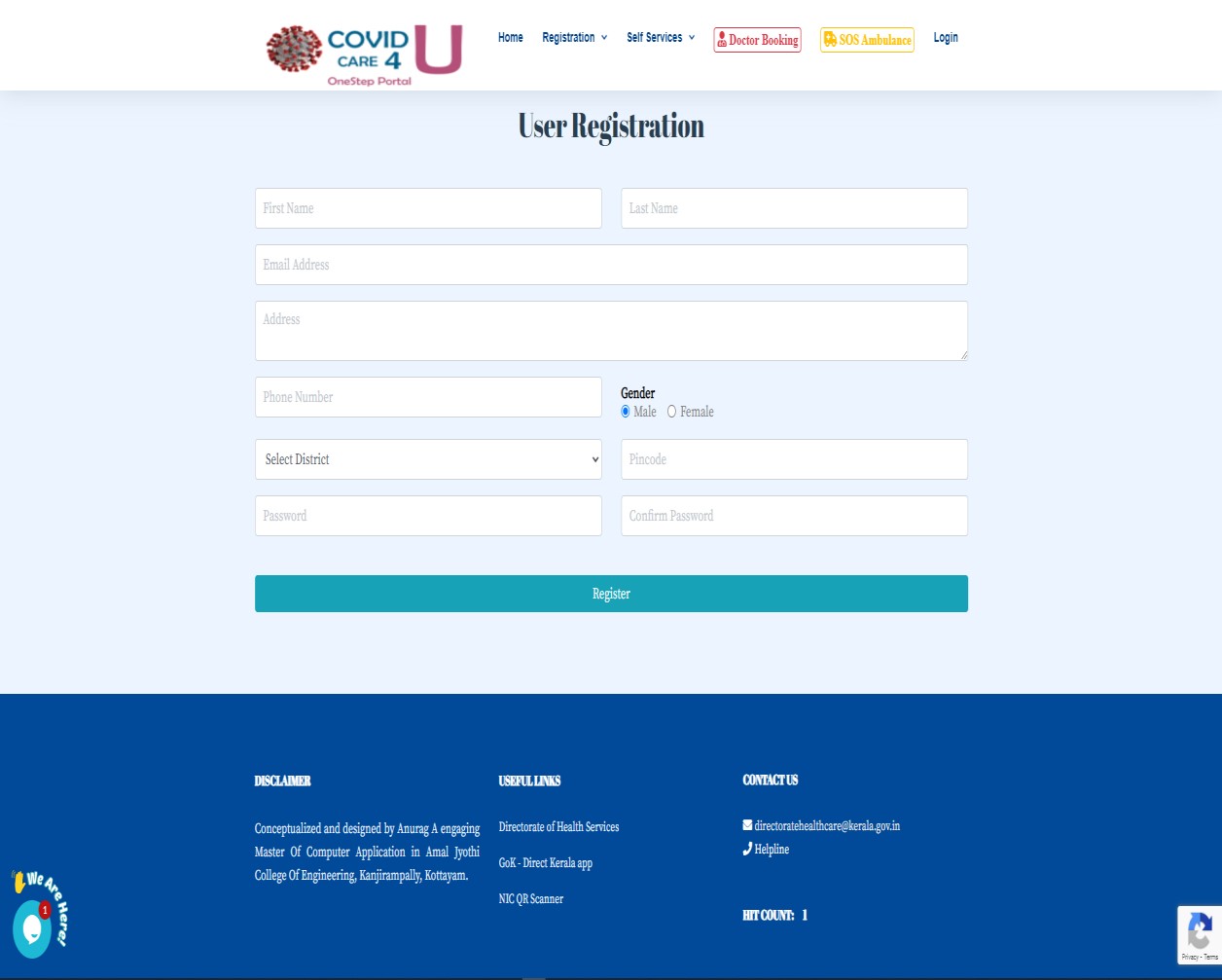
##### Home Page



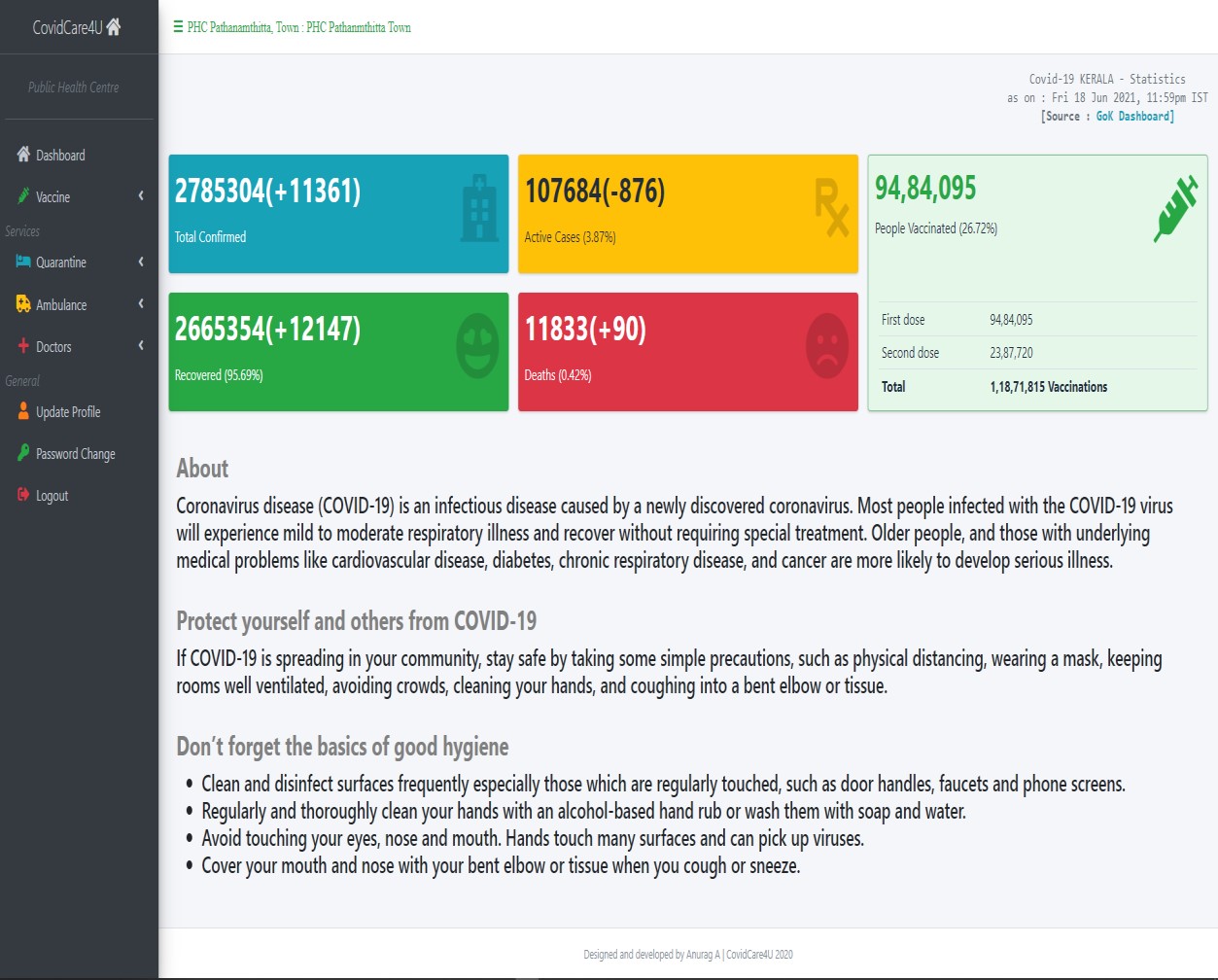
##### Login Page



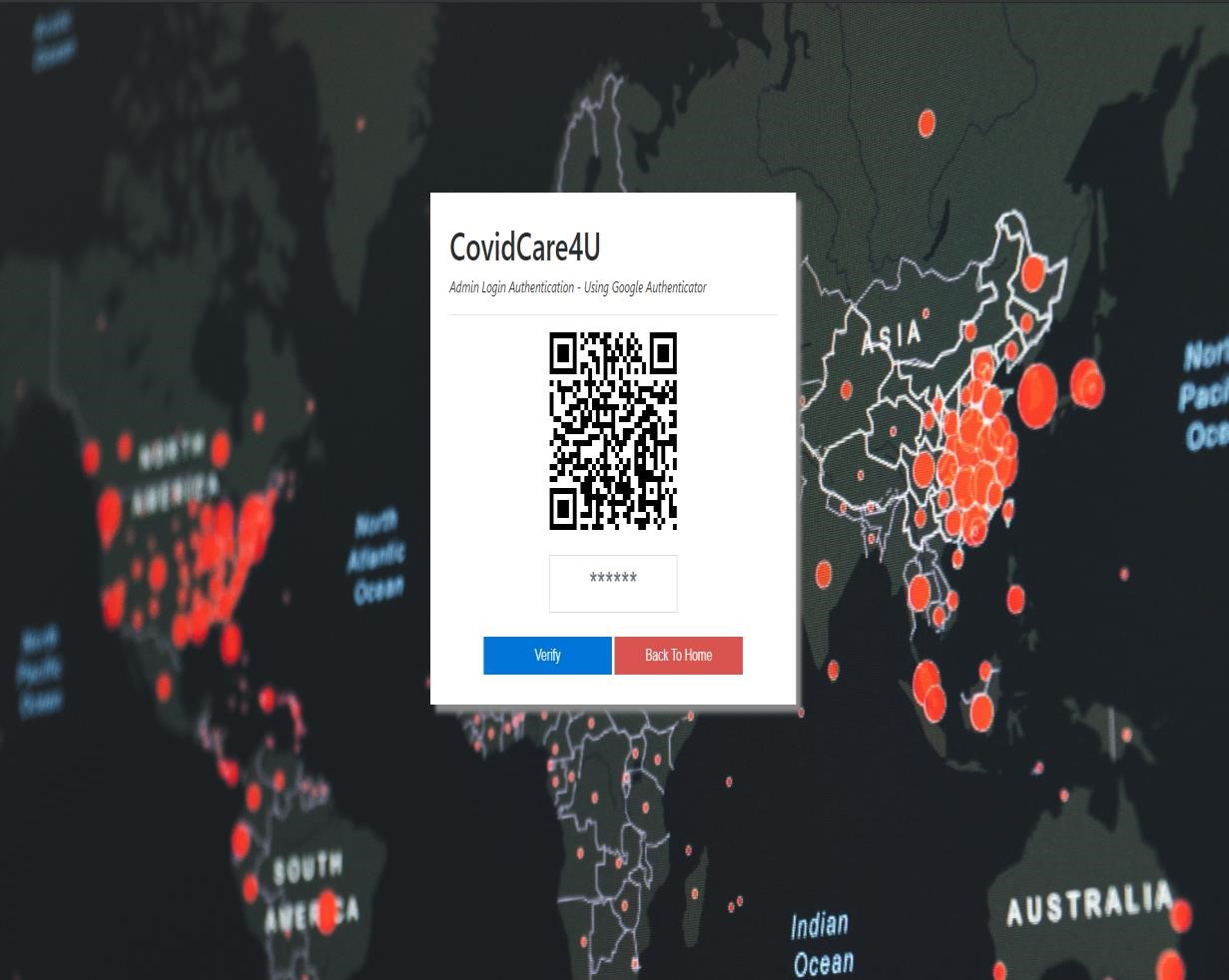
##### Customer Registration Page



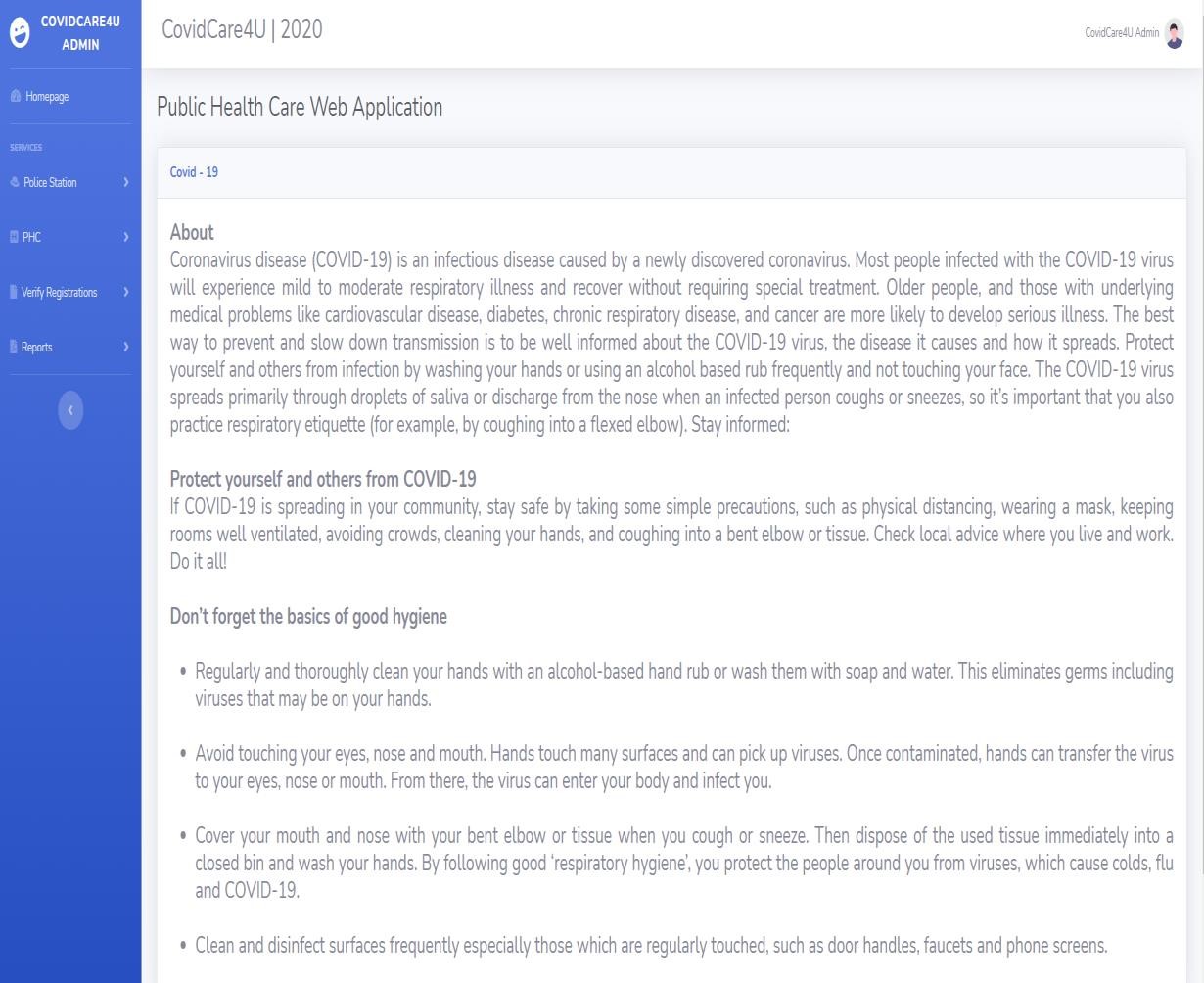
##### PHC Home Page



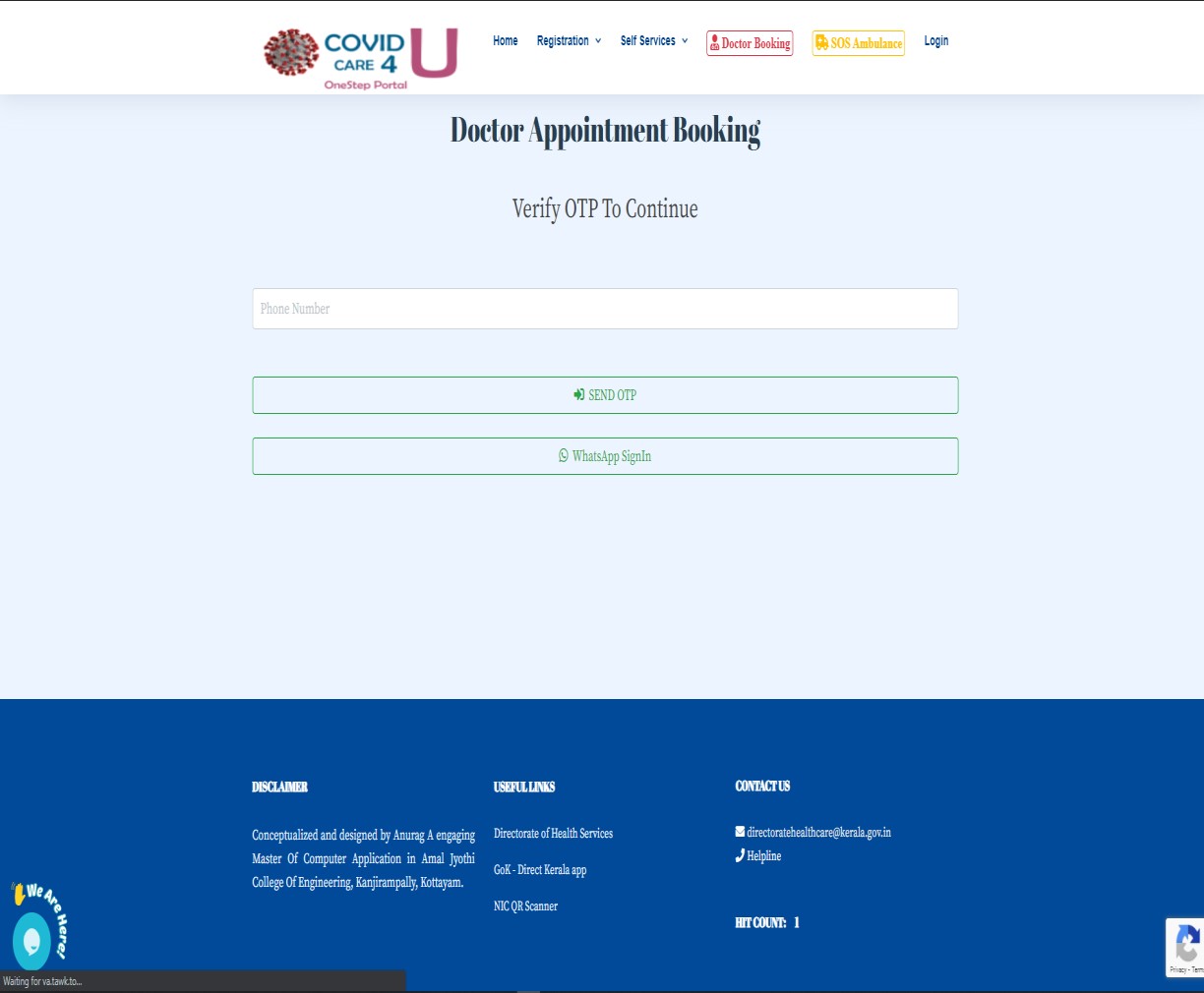
##### Admin Login Authentication Page



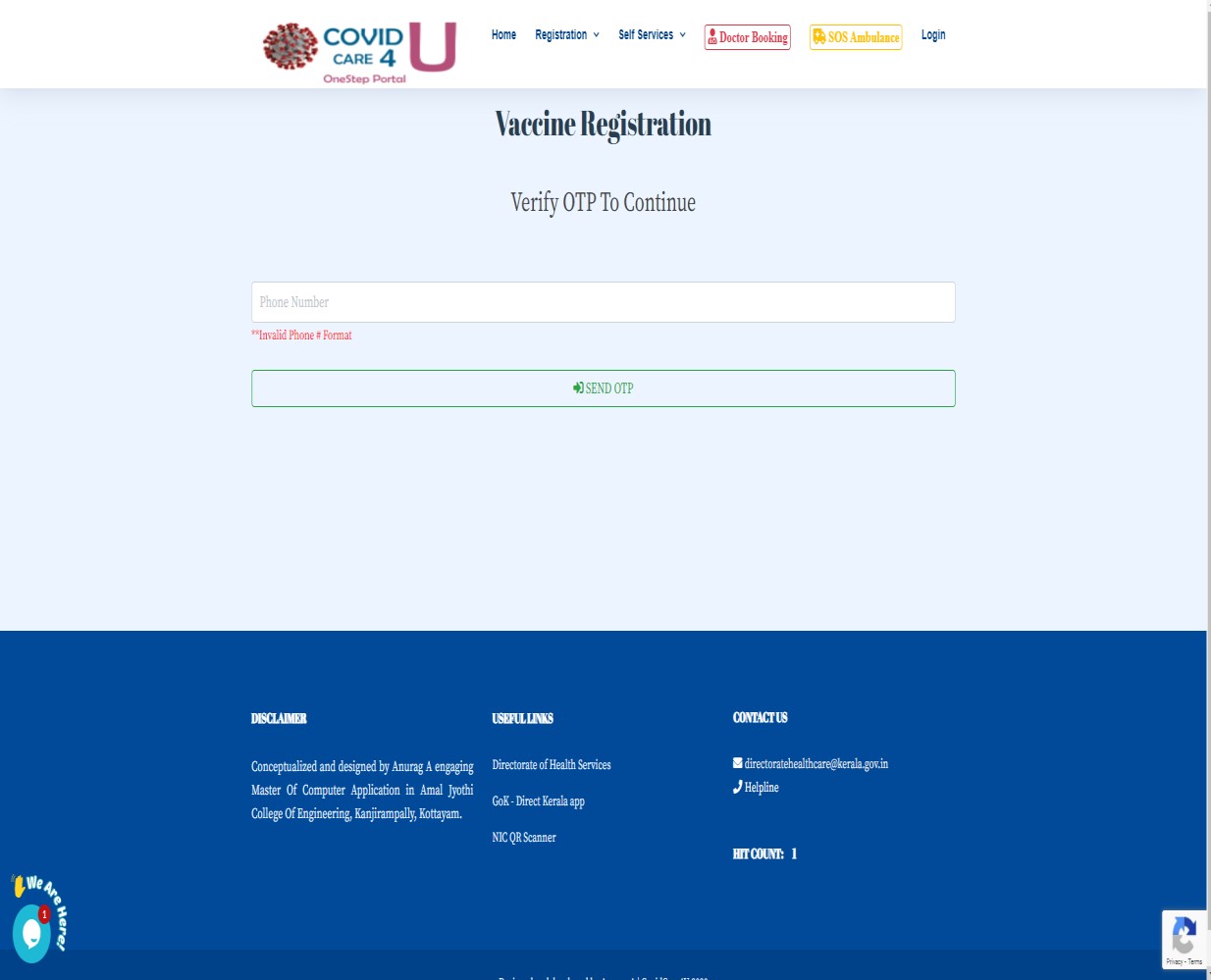
##### Admin Home Page



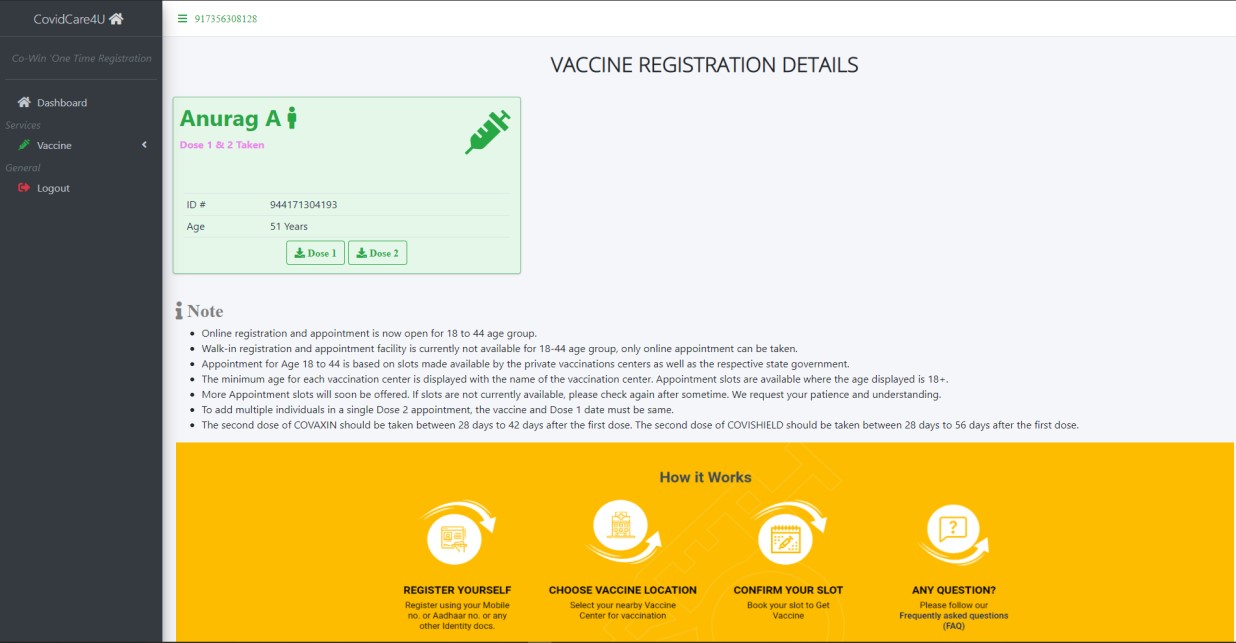
##### Doctor Appointment Booking



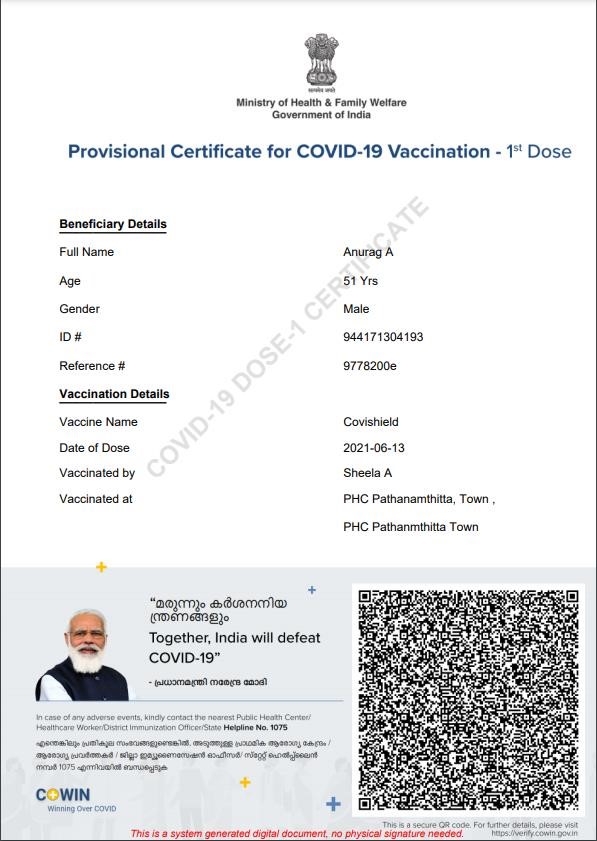
##### Vaccine Registration Authentication Page



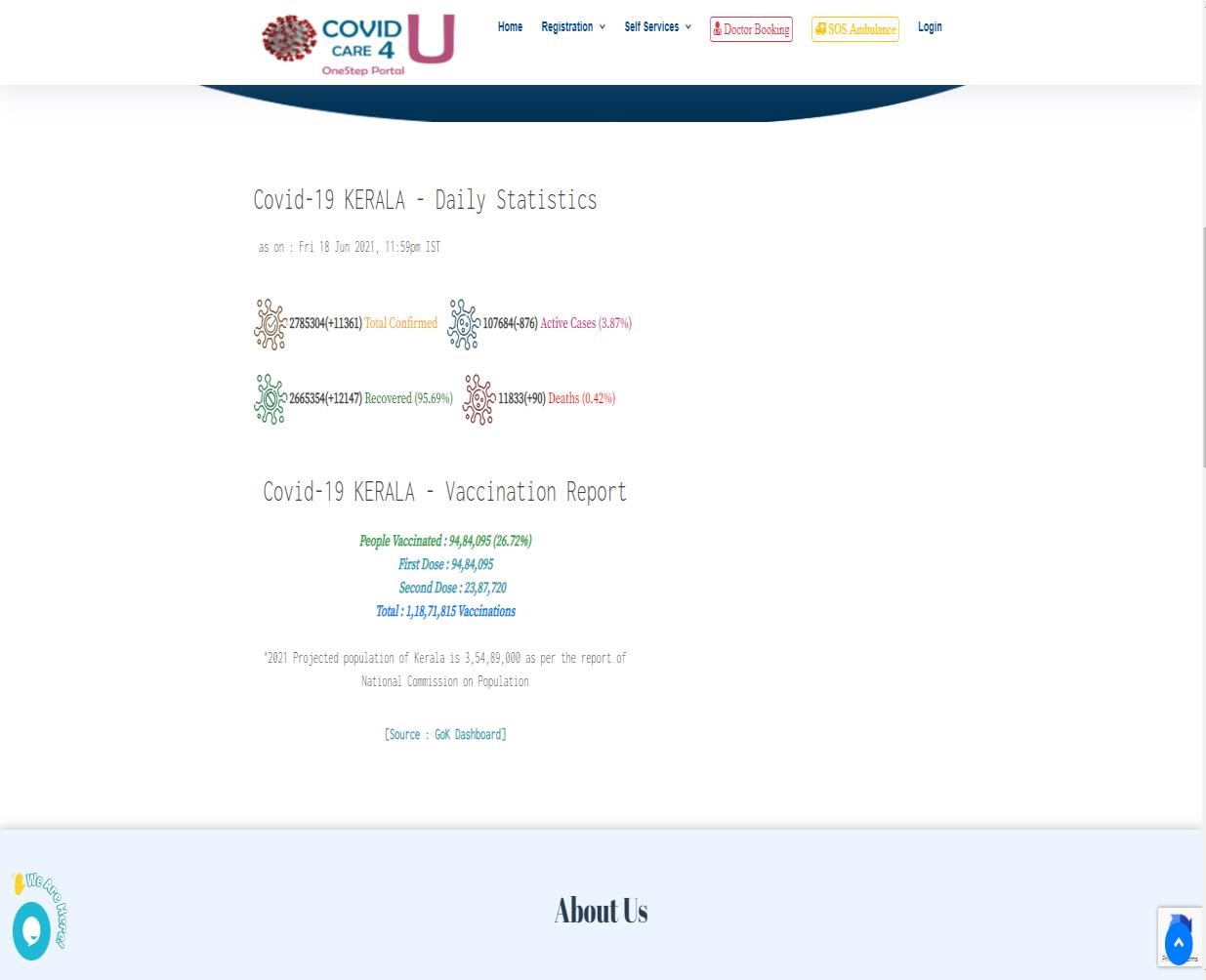
##### Vaccine Registration ID Card Adding Page



##### Dose 1 Certificate PDF



##### Covid 19 Daily Statistics Page



###### CM Distress Relief Fund Page

