

SAFE HOUSE

QUARANTINE MANAGEMENT SYSTEM

A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF
REQUIREMENT FOR THE AWARD OF THE DEGREE

MASTER OF COMPUTER APPLICATIONS(MCA)

OF

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

By

ROJILA SANTHOSH
REG No:22PMC146



**MARIAN COLLEGE
KUTTIKKANAM**

(AUTONOMOUS)

MAKING COMPLETE

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**By
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Under the guidance of
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Marian College Kuttikanam (Autonomous)



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PG DEPARTMENT OF COMPUTER APPLICATIONS
Marian College Kuttikkanam Autonomous

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
KUTTIKKANAM – 685 531, KERALA.

CERTIFICATE

This is to certify that the project work entitled
SAFE HOUSE

is a bonafide record of work done by

ROJILA SANTHOSH
REG No:22PMC146

In partial fulfilment of the requirements for the award of Degree of
MASTER OF COMPUTER APPLICATIONS [MCA]

During the academic year 2022-2023

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ACKNOWLEDGEMENT

First of all, I thank the "God Almighty" for His immense grace and blessings in my life and at each stage of my project work.

I express my sincere gratitude to Dr. Ajimon George, Principal, Marian College Kuttikkanam(Autonomous), Dr. Mendus Jacob, Director, PG Department of Computer Applications for the support given throughout the project work.

I extend my gratitude to Mr. Win Mathew John, HoD, PG Department of Computer Applications, who is a constant source of inspiration and whose advice helped me to complete this project work successfully.

I express my deep sense of gratitude to my project guide, MR. SATHEESH KUMAR S, Assistant Professor, PG Department of Computer Applications, for his profound guidance for the successful completion of this project work.

With great enthusiasm, I express my gratitude to all the faculty members of the PG Department of Computer Applications for their timely help and support.

Finally, I express my deep appreciation to all my friends and family members for the moral support and encouragement they have given to complete this project work successfully.

ROJILA SANTHOSH

ABSTRACT

The COVID-19 pandemic has highlighted the critical importance of efficient quarantine management systems in curbing the spread of infectious diseases. is to help people through the unfortunate virus outbreak. The QMS offers a user-friendly web or mobile interface for individuals to register and provide essential personal and contact information. The website provide information about the quarantine centers in each district and the users will be able to search location by district and choose available centers. The Quarantine Management System offers a comprehensive solution to enhance the efficiency and safety of managing quarantine facilities.

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INTRODUCTION

1. INTRODUCTION

1.1 PROBLEM STATEMENT

The existing system is fully manual. It requires users to directly visit places to view the houses, by doing so they are risking their own health. They had to manually contact government officials or others for places to stay in quarantine. The users were responsible for their daily needs. The existing system does not equip citizens with necessary information and features. Citizens often have to undergo long waiting processes in order to contact officials and can't completely rely on them for their needs.

1.2 PROPOSED SYSTEM

The proposed system is completely integrated online, and the users are needed to register in order to book a house to stay. Its implementation can significantly contribute to minimizing the spread of contagious diseases and maintaining the well-being of individual under quarantine. This Quarantine Management System offers a comprehensive solution to enhance the efficiency and safety of managing quarantine facilities.

FUNCTIONAL REQUIREMENTS

2. FUNCTIONAL REQUIREMENTS

1. A User Registration and Authentication:

- Designing a user-friendly registration process that captures essential user information while ensuring data security and privacy.
- Implementing a robust authentication mechanism to verify user credentials and protect user accounts from unauthorized access.

2. House Viewing on the Home Page:

- Creating an intuitive and visually appealing home page that showcases available houses to users.
- Displaying relevant information such as property details, images, location, amenities, and pricing to attract user interest.

3. Search Functionality:

- Developing a comprehensive search feature that allows users to filter houses based on specific criteria, such as location, price range, number of rooms, and amenities.
- Implementing an efficient search algorithm that retrieves accurate and relevant search results to enhance user satisfaction.

4. House Booking:

- Designing a seamless and user-friendly house booking process that enables users to select desired houses and initiate booking requests.
- Implementing a scheduling system that handles date availability, duration, and any additional user requirements during the booking process.

5. Document Upload and Verification:

- Creating a secure and streamlined document upload feature that allows users to submit required documents for verification, such as identification or proof of income.
- Implementing a verification process that efficiently reviews and validates the uploaded documents to ensure authenticity and reliability.

6. Owner House Addition:

- Creating a user-friendly interface that enables property owners to add new houses to the platform.
- Implementing a system that securely manages and stores house information, including descriptions, images, pricing, and capacity, making it accessible to users during the search and booking processes.

NON-FUNCTIONAL REQUIREMENTS

3. NON-FUNCTIONAL REQUIREMENTS

RELIABILITY

The reliability of the overall project depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes, Also the system will be functioning inside a container. Thus, the overall stability of the system depends on the stability of container and its underlying operating system.

AVAILABILITY

The system should be always available, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. A customer-friendly system which is access of people around the world should work 24 hours. In case of a hardware failure or database corruption, a replacement page will be shown. Also, in case of a hardware failure or database corruption, backup of the database should be retrieved from the server and saved by the Organizer. Then the services will be restarted. It means 24 X 7 availability.

MAINTAINABILITY

A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the project will be done. Also, the software design is being done with modularity in mind so that maintainability can be done efficiently.

SUPPORTABILITY

The code and supporting modules of the system will be well documented and easy to understand. Online documentation and help system requirements.

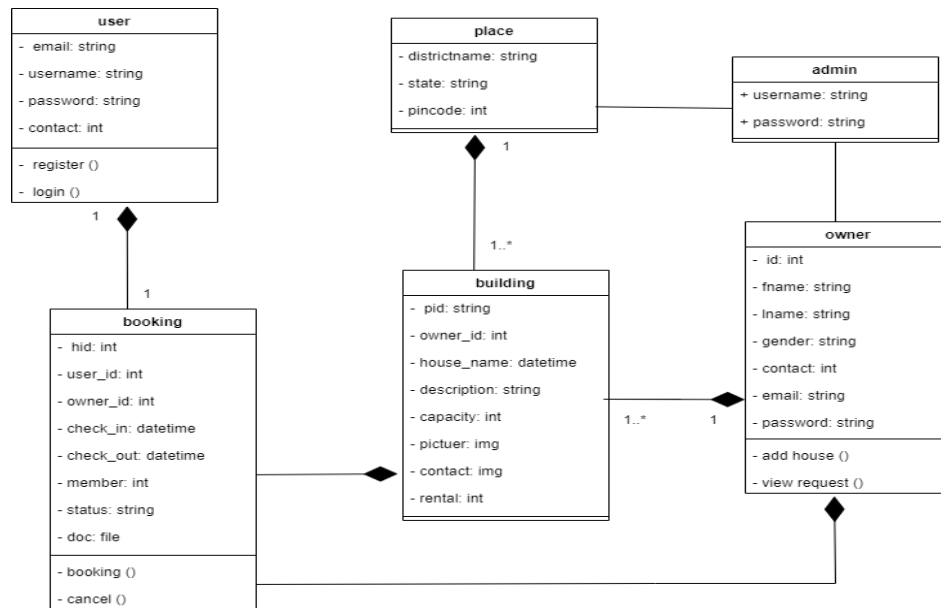
FEATURES AND HIGHLIGHTS

4.1 FEATURES AND HIGHLIGHTS

- There are 3 users in the system admin, owner, user.
- User can search a house based on location and capacity.
- During booking user can select check in and check out date.
- Users can upload documents while booking
- Owner verifies the documents uploaded by user and approve or reject bookings.
- Owner can add stay homes details.
- Admin approves or reject the owner based on the documents they upload during registration
- The owner will be able to login to the system if the admin approves him/her.

CLASS DIAGRAM

5.1 CLASS DIAGRAM



FUTURE ENHANCEMENT

6. FUTURE ENHANCEMENT

- **Payment Options:**

Implement a secure and convenient payment system that allows users to make online payments for house bookings.

- **Chat Option between Users and Owners:**

Develop a real-time chat feature that enables direct communication between users and property owners.

- **Daily Updates of COVID-19 Positives:**

Integrate a reliable data source or API to provide daily updates on COVID-19 positive cases in relevant areas.

CONCLUSION

7. CONCLUSION

In conclusion, a quarantine home management system is a vital tool for efficiently and effectively managing individuals' isolation and quarantine periods. The system provides an easy medium for citizens to access its features. The objective of the project is to provide an online portal for the user. The purpose is to design a system which reduces the burden of having to visit people and houses for rent. The development of a quarantine home management system is crucial for effectively managing individuals' isolation and quarantine periods. The system serves as an online portal that provides convenient access to its features, streamlining the process of finding and booking suitable quarantine homes. The primary goal of the project is to alleviate the burden of physically visiting various locations to find available houses for rent during quarantine. By offering an online platform, individuals can easily search and view houses from the comfort of their homes, saving time and effort.

The system aims to simplify the process of finding suitable quarantine homes by providing comprehensive information about available properties. Users can access details such as location, pricing, and availability, enabling them to make informed decisions. Additionally, the system facilitates the booking process, ensuring a seamless and efficient experience. By implementing a user-friendly interface, the system enhances accessibility and convenience for users. They can easily navigate through the platform, search for specific criteria, and make bookings with minimal hassle.

In summary, the quarantine home management system aims to revolutionize the way individuals find and book suitable quarantine homes. By providing an online portal, the system simplifies the process, reduces physical visits, and enhances the overall experience for users.

REFERENCE

8. REFERENCE

<https://www.mohfw.gov.in/>

<https://www.fabhotels.com/hotels-with-quarantine-facility>

<https://www.travelguru.com/hotels/quarantine-self-isolation-hotels-in-cochin>

ANNEXURE

9.1 OWNER LOGIN PAGE

The screenshot shows a web browser window with the URL `127.0.0.1:8000/ownerlogin`. The browser's address bar and tabs are visible at the top. The page has a blue header with the text "Quarantine System" and a "Home" link. On the right side of the header, there are two yellow buttons: "User Login" and "Owner Login". The main content area features a white login form with two tabs: "Login" (selected) and "Signup". The form is titled "Staff login form" and contains two input fields: "username:" with a placeholder "Enter email" and "Password:" with a placeholder "password". Below these fields are two blue buttons: "Login" and "Signup". At the bottom of the page, there is a file explorer bar showing three files: "solutions infinity final.pdf", "today 1 infinity soluti...pdf", and "infinity solutions sa...pptx". A "Show all" button is located on the right side of the file bar.

9.2 USER LOGIN PAGE

The screenshot shows a web browser window with the URL `127.0.0.1:8000/login`. The browser's address bar and tabs are visible at the top. The page has a blue header with the text "Quarantine System" and a "Home" link. On the right side of the header, there are two yellow buttons: "User Login" and "Owner Login". The main content area features a white login form with two tabs: "Login" (selected) and "Signup". The form is titled "User login form" and contains two input fields: "username:" with a placeholder "username" and "Password:" with a placeholder "Enter password". Below these fields are two blue buttons: "Login" and "Signup". At the bottom of the page, there is a file explorer bar showing three files: "solutions infinity final.pdf", "today 1 infinity soluti...pdf", and "infinity solutions sa...pptx". A "Show all" button is located on the right side of the file bar.

9.3 USER REGISTRATION

The screenshot shows a web browser window with the URL `127.0.0.1:8000/signup`. The page features a blue navigation bar with the text "Quarantine System" and a "Home" link. On the right side of the bar are two yellow buttons: "User Login" and "Owner Login". Below the navigation bar, there is a central white box containing the "User Signup form". This form has two tabs: "Login" and "Signup", with "Signup" being the active tab. The form includes four input fields: "username", "email", "contact" (with a placeholder "Enter contact"), and "password" (which is currently selected with a blue border). The browser's address bar and tabs are visible at the top, and a taskbar with various application icons is at the bottom.

9.4 USER HOME PAGE

The screenshot displays the user's home page in the "Quarantine System". The blue header contains "Quarantine System", "Home", and "My Bookings" links. On the right, it says "Hello, sijji" next to a yellow "Logout" button. The main content area features a search section with a "Location" dropdown menu, a "No of persons" input field with a "Number" placeholder, and a blue "Check Availability" button. Below this is a section titled "All Houses available". It contains a table with two columns: "Information" and "View". The first row of the table shows details for a house named "Kunnel", with a price of 1700 and a capacity of 10 persons. A small image of the house is shown in the "View" column. The browser window shows the URL `127.0.0.1:8000` and various open tabs.

9.5 BOOKING PAGE

The screenshot displays a web application interface for a quarantine system. The browser's address bar shows the URL '127.0.0.1:8000/mybook'. The page features a blue navigation bar with the title 'Quarantine System' and links to 'Home' and 'My Bookings'. A user profile section on the right indicates the user is 'Hello, silji' and provides a 'Logout' button. The main content area is titled 'My Bookings' and contains a table with the following data:

User	Building	Location	Members	Check in	Check out	Price	Status	Action
silji	vakayil	Ernakulam	5	May 27, 2023	May 28, 2023	1000	Approved	cancel

9.6 MY BOOKINGS

127.0.0.1:8000/book/4

Apps (108) WhatsApp Maps Adobe Express HackerRank Best Coaching for CA... Instances | EC2 Mana... MCKA-S- ROJILA SA... Buy Max Women Ope...

Quarantine System Home My Bookings Hello, silji Logout

House Name:

Owner Name:

Capacity:

Location:

No. of Persons:

Check-in:

Show all

9.7 OWNER SIGNUP

The screenshot displays a web browser window with the URL `127.0.0.1:8000/ownersignup`. The browser's tab bar shows several open tabs, including 'Untitled Diagram', '(1) WhatsApp', 'solutions infinity', 'Database Lab', 'Introducing C...', 'https://chat.co...', 'Download file...', and 'staff'. The browser's address bar shows the URL `127.0.0.1:8000/ownersignup`. The browser's toolbar includes navigation buttons (back, forward, refresh, home), a search bar, and icons for bookmarks, extensions, and the user profile.

The web application has a blue header bar with the text 'Quarantine System' and a 'Home' link. On the right side of the header bar, there are two buttons: 'User Login' and 'Owner Login'. The 'Owner Login' button is highlighted in yellow.

The main content area features a 'Staff Signup form' with the following fields:

- fname:** Firstname
- lname:** Lastname
- gender:** Enter gender
- email:**
- contact:** Enter contact
- Password:**
- Documents:** Choose File No file chosen

A blue 'Sign Up' button is located at the bottom of the form.

9.10 OWNER HOME PAGE

Quarantine System Home View Requests Logout

Building Added

[Add New Building](#)

House Name	Location	Owner	Description	Capacity	Contact	Image	price
Kattayil	Malappuram	rojila@gmail.com	qwertyuioplkjhgfdsazxcvbnm	5	9876543212		1200
vakayil	Ernakulam	rojila@gmail.com	mnbvcxzasdfghjklpoiuytrewq	10	9876543234		1000

saasaaaaaaaaa.pn...html Show all

9.13 ADMIN DASHBOARD

Django administration

rojila

Dashboard

Authentication and Authorization

- Groups
- Users

Myapp

- Bookings
- Building_detailss
- Owner_detailss
- Payments
- Places

Recent actions

- 3 hours, 52 minutes ago
rojila@gmail.com
Changed is approved.
- 3 hours, 59 minutes ago
kattayil
- 7 hours, 31 minutes ago
tomy@gmail.com
Changed is approved.

saasaaaaaaaaa.pn...html Show all

9.11 ADD BUILDING PAGE

Quarantine System Home View Requests Logout

Add Building

House Id:

Place:

House Name:

Description:

Capacity:

Image:

9.12 HOUSE REQUEST PAGE

Quarantine System Home View Requests Logout

REQUESTS

User	Building	Location	Members	Check In	Check out	Price	Status	Action
silji	vakayil	Ernakulam	5	May 27, 2023	May 28, 2023	1000	Approved	view Request