

CARE CONNECT ANDROID APP FOR ORPHANAGE CHILDREN

Submitted in partial fulfillment of the required for the award of

Masters of Computer Science

by

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DEPARTMENT OF COMPUTER SCIENCE

SCHOOL OF SCIENCE AND HUMANITIES

SATHYABAMA

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(DEEMED TO BE UNIVERSITY)

Accredited with Grade “A++” by NAAC

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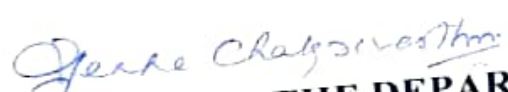
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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **TRISHA C (42734024)** who carried out the project entitled "Care Connect Android App for orphanage childrens" under our supervision from January 2024 to April 2024.

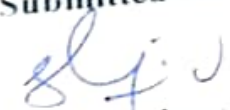

INTERNAL GUIDE

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I, **TRISHA C (42734024)** hereby declare that the Project Report entitled "**Care Connect android App for orphanage children**" done by me under the guidance of **Mrs.Jesintha J M.Sc., Assistant Professor, Department of Computer Science** at **SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY**, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600 119 is submitted in partial fulfilment of the requirements for the award of Master of Science degree in Computer Science.

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ACKNOWLEDGEMENT

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I convey my thanks to **Dr.REKHA CHAKRAVARTHI M.E. Ph.D., Dean of Arts and Science** for providing me necessary support and details at the right time during the progressive reviews.

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TRISHA C

ABSTRACT

Care connect is an Android app for orphanage and old-age people don't have parents. The Orphanage Connect Android app aims to bridge the gap between orphanages, caretakers, and potential supporters. The app facilitates instant communication between orphanage staff, volunteers, and supporters through a secure messaging system. Push notifications ensure that important updates, events, and urgent needs are promptly conveyed to all relevant stakeholders. Orphanages can list their specific needs, such as food, clothing, educational materials, and financial support. The app supports educational programs by providing a platform for sharing learning resources, organizing virtual classes, and connecting students with mentors connect and interact with them. An integrated calendar system for scheduling and managing medical appointments, check-ups, and follow-up visits. A feature to track and manage medications, including dosage schedules and reminders for caregivers to administer medications. Integration with a donation portal to facilitate contributions for medical supplies, medications, and healthcare services. Customization to account for cultural and regional differences in healthcare practices, ensuring that the app is culturally sensitive and relevant. This app will connect the gap between who don't have parents and caretakers and we can help them with giving education and extracurricular activities etc.

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CHAPTER 1

INTRODUCTION

Orphanage Maintenance Care Connect is a comprehensive software solution designed to streamline and optimize the management and operations of orphanages and child care facilities. It aims to provide a centralized platform for managing various aspects of orphanage maintenance, care, and connectivity, ultimately improving the well-being and outcomes for children under institutional care.

Educational Support and Progress Tracking

Coordinate educational activities, including school enrollments, tutoring sessions, and extracurricular programs, to support the academic development of children. Track academic progress, attendance, and performance to identify areas for improvement and provide targeted interventions.

Communication and Connectivity

Facilitate communication and collaboration among staff, caregivers, volunteers, and external stakeholders through a centralized platform. Enable real-time messaging, notifications, and updates to keep everyone informed about important events, announcements, and emergencies.

Reporting and Analytics

Generate reports and analytics on key metrics such as child well-being, program effectiveness, resource utilization, and compliance with regulatory standards. Use data-driven insights to identify trends, measure impact, and make informed decisions about resource allocation and program improvements. Orphanage Maintenance= Care Connect aims to streamline administrative tasks, improve communication and collaboration, and enhance the quality of care provided to children in institutional settings. By leveraging technology to automate and optimize operations, orphanages can focus more on providing nurturing environments and support systems for vulnerable children, ultimately improving their outcomes and opportunities for a brighter future.

1.1 PROJECT DESCRIPTION

The objective of Orphanage Maintenance Care Connect is to provide a comprehensive software solution that addresses the unique challenges faced by orphanages and child care facilities. The primary objectives of this software platform are as follows

Enhanced Child Care Facilitate personalized and holistic care for each child under institutional care by maintaining detailed profiles, tracking health and educational progress, and providing access to necessary support services.

Improved Communication Foster better communication and collaboration among staff, caregivers, volunteers, and external stakeholders through a centralized platform, enabling real-time messaging, notifications, and updates.

Safe and Comfortable Environment Ensure the safety, security, and well-being of children by effectively managing facility maintenance, inventory levels, and compliance with regulatory standards to provide a safe and comfortable living environment.

Educational Support Provide educational support and resources to children, including school enrollments, tutoring, and extracurricular activities, to support their academic development and future opportunities.

Healthcare Management Manage healthcare appointments, medical records, medications, and treatment plans for each child to ensure timely access to healthcare services and support their overall health and well-being.

CHAPTER 2

SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

The existing system for orphanage maintenance and care typically involves manual processes, paper-based documentation, and fragmented communication channels. Here's an key components and functionalities of the existing system

Manual Documentation

Orphanages rely on manual paperwork to maintain records of children under care, including their personal information, medical history, educational records, and behavioral assessments. Documentation may include handwritten forms, files, and folders stored in cabinets or shelves, leading to challenges in organization, accessibility, and data security.

Spreadsheet and Offline Tools

Some orphanages may use spreadsheet software or offline tools to manage basic administrative tasks, such as staff scheduling, inventory tracking, and budget management. However, these tools often lack integration, real-time updates, and collaboration features, making it difficult to maintain accurate and up-to-date information.

Communication Challenges

Communication among staff, caregivers, volunteers, and external stakeholders may be fragmented and inefficient, relying on phone calls, emails, or in-person meetings.

Lack of centralized communication channels leads to delays, miscommunication, and difficulties in coordinating activities and sharing important updates. This will help you get the information faster and Secure limited access to information. There is a need for a modernized software solution that streamlines administrative tasks

Limited Access to Information

Access to critical information, such as medical records, educational progress, and behavioral assessments, may be limited to specific staff members or departments. Retrieving information from paper-based records or offline systems may be time-consuming and prone to errors, hindering decision-making and responsiveness.

Resource Management

Orphanages manually manage inventory levels of essential supplies, such as food, clothing, bedding, and medical supplies, often relying on manual counts and periodic inspections. Facility maintenance tasks, such as repairs, renovations, and equipment servicing, may be managed reactively rather than proactively, leading to inefficiencies and potential safety hazards.

Limited Reporting and Analysis

Generating reports and analyzing data related to child well-being, program effectiveness, and resource utilization is challenging due to the lack of automated reporting tools and centralized data management. Decision-making may be based on anecdotal evidence rather than data-driven insights, limiting opportunities for improvement and optimization.

The existing system for orphanage maintenance and care, while well-intentioned, faces challenges related to inefficiency, communication barriers, and limited access to information. There is a need for a modernized software solution that streamlines administrative tasks, improves communication and collaboration, and enhances the quality of care provided to children in institutional settings.

2.2 PROPOSED SYSTEM

The proposed system for orphanage maintenance and care, referred to as Care Connect Orphanage Maintenance System designed to overcome the challenges of the existing manual processes and streamline operations, enhance communication, and improve overall efficiency. Here's an outline of the proposed system's key components and functionalities

Child Information Management

This will include a comprehensive database to manage detailed profiles of each child under care. This includes personal information, medical history, educational progress, behavioral assessments, and any other relevant details.

Staff members can easily access and update the child profiles, ensuring accurate and up-to-date information.

Staff and Volunteer Management

Management of staff members, caregivers, and volunteers associated with the orphanage. It will include features for managing their roles, schedules, contact information, and training records. Staff members can view their schedules, assignments, and communicate with each other through the system, improving coordination and collaboration.

Facility Maintenance and Inventory Control

Modules for managing facility maintenance tasks, such as repairs, renovations, and cleaning schedules. It will also track inventory levels of essential supplies, including food, clothing, bedding, and medical supplies. Automated alerts and reminders will notify staff members when maintenance tasks are due or when inventory levels are low, ensuring timely action and efficient resource management.

Donation Management

Enable secure online donations with multiple payment options .Maintain a wish list of items needed by the orphanage and allow donors to contribute directly towards specific needs.

Reporting and Analytics

This will provide reporting and analytics tools to track key metrics related to child well-being, program effectiveness, resource utilization, and compliance. Staff members can generate custom reports, analyze trends, and identify areas for improvement, enabling data-driven decision-making and continuous quality improvement.

Security and Access Control

This will prioritize security and access control to protect sensitive information and ensure compliance with data protection regulations. It will implement role-based access control, encryption, and audit trails to safeguard data integrity and privacy.

Educational Resources

Educational materials, tutorials, and online courses to support the academic development of the children. Provide tools for tracking educational progress and achievements. Adding extra curricular activities like educational based like tutoring, computer classes and Dancing, singing, Drawing, Tailoring, Music etc.

Medical and Physical checkups

Basic physical examinations to assess overall health status. Immunizations to prevent common diseases. Screening for common health issues such as malnutrition, dental problems, and vision or hearing impairments. Mental health assessments to identify any psychological or emotional needs. Education on hygiene practices and preventive healthcare measures. Access to specialized medical care if needed, such as consultations with pediatricians, dentists, or mental health professionals.

CHAPTER 3

LITERATURE SURVEY

3.1 PAPER TITLE: Rice donation system in orphanage based on internet of things. Raspberry-Pi.

AUTHOR : Miraz suwono,Euis Liani

YEAR OF PUBLISHING : September 2018

JOURNAL NAME : IEEE

https://www.researchgate.net/publication/332434936_Rice_Donation_System_in_Orphanage_Based_on_Internet_of_Things_Raspberry-Pi_and_Blockchain

IoT utilization in daily lives is very potential and can be applied in various fields, unfortunately the implementation in the social field still lacking. The large number of orphanages in Indonesia caused information distribution not easily available, however donors find it difficult to get the right information about food reserves, especially rice stock in orphanages. This paper proposes an IoT-based system where rice stocks in orphanages can be detected by Raspberry pi which is connected to sensors, data information from raspberry-pi connected to the network that can be accessed and monitored by mobile applications. This application designed for service providers, donors and rice suppliers. Donors send rice through financial transactions with service providers, and rice suppliers will ship items to the orphanage. Block chain technology is applied to all parties in order to be transparent and reduce transaction manipulation.

3.2 PAPER TITLE: Tracing the parents of orphanage children in cloud computing environment by integrating dna databank with aadhar and fir databases.

AUTHOR: S.Muthuselvan, E. Srividhya

YEAR OF PUBLISHING : February 2020

JOURNAL NAME : IEEE

https://www.researchgate.net/publication/343994360_A_novel_approach_towards_tracing_the_parents_of_orphanage_children_and_dead_bodies_in_cloud_and_IoT-based_distributed_environment_by_integrating_DNA_data_bank_with_Aadhar_and_FIR_data_bases

An Aadhar card is a unique and authentic identity card in India which is being used as a valid identity proof for all types of day-to-day transactions including sale, purchase, opening bank account, air tickets, train tickets, bus tickets, and for getting benefits of government of India and state government's schemes. An Aadhar card of a person includes finger prints, thumbprints, iris images (left eye & right eye), and face image for a normal. But, for a differently able persons like blind, deaf, and physically handicapped persons it includes face, fingerprints, and thumbprints. In this research work the author has proposed a novel technique in which the Aadhar database is integrated with short tandem Repeat (STR) part of DNA database & first information report (FIR) lodged online in different police stations to trace the parents of orphanage children and unclaimed decomposed dead bodies using cloud computing, Internet of Things (IoT), spiral search and block chain technologies. The proposed technique is giving promising results in searching the parents of orphanage children in India and its worldwide implementation will help to millions of orphanage children in tracing their parents.

3.3 PAPER TITLE : Search of orphanages to use the formula factor.

AUTHOR : Abara karamkar, Bhaskar Chakraborty, Trisha ghosh

YEAR OF PUBLISHING : January 2016;

JOURNAL NAME : IEEE

By having provided a 2 different messaging platform for such adoption agency to publish its necessities while also allowing the benefactor to view how anything accurately is needed by that of the children's home to make beneficial charitable contributions toward the street children, the objective is to develop a site web software that allows charitable contributions both of finances and necessary materials. By precisely locating the neighbouring schools using the Haar wavelet equations, researchers have reduced the amount of human labour required of the material donor and resources recipient. In addition to calling the orphan directly to give the required items,

modules for making payments for contributions online have really been introduced. There is a search filter added to display the charities according to the stated criteria. An operator element was added to ensure that any orphanages being established in our web service is legitimate and has the necessary evidence and documents. When opposed to other applications and websites.

3.4 PAPER TITLE : Parenthesis Syntactic Integration or Orphanage A Rejoinder to Ott 2016

AUTHOR : Cawangan Johor, Kampus Pasir Gudang;

YEAR OF PUBLISHING : September 2018

JOURNAL NAME : IEEE

https://www.researchgate.net/publication/326643003_Parenthesis_Syntactic_Integration_or_Orphanage_A_Rejoinder_to_Ott_2016

In Griffiths and De Vries 2013 (G&dV), we offer an argument in favor of treating appositive relative clauses (ARCs) as syntactically integrated into their hosts, an argument that revolves around the distribution of ARCs in clausal ellipsis environments. In a reply, Ott (2016) counters this specific argument, rejects the more general integration analysis adopted in on conceptual grounds, and contends that an orphanage analysis of ARCs provides a more parsimonious explanation for the data introduced there. In this rejoinder, we demonstrate that, while presents some relevant data and provides welcome discussion, his specific counterargument does not withstand scrutiny. We also defend the integration approach to ARCs on conceptual and empirical grounds and examine the orphanage analysis of ARCs, arguing that such an approach has conceptual and empirical inadequacies that no integration approach exhibits.

3.5 PAPER TITLE : Patronization for orphans and adoption using android application.

AUTHOR : Pawar, Prachi Jadhav, Sushant Bhosale

YEAR OF PUBLISHING : Febuary 2019

JOURNAL NAME : IEEE

https://www.researchgate.net/publication/335642202_Patronization_for_Orphans_and_Adoption_Using_Android_Application.

All around the world, every 30 seconds two children become orphans. Almost there are more than 100 million orphans worldwide. In Asia alone there may be 65 million orphans. They are hungry, afraid and lonely. Their main issues are lack of foods and clothes for their daily usage and lack of education and money. Here, we are introducing an android application which will defeat these issues in an easy manner as well as quickly without spending more time. The notion of this paper is to support orphans of different orphanages by the people who wish to contribute the children and adopting children through online by using our android application. They can help orphans in the orphanages by contributing foods and clothes to the particular orphanage they wish, through online. The people who wish to adopt children can use this application to see the children's details with their photos in different orphanages and they can choose the child they like and other formalities is done by visiting that particular orphanage where the chosen orphan is. Fund transaction is also made by our application. This paper will be beneficial for the orphans. The weary persons can make use of this application for contributing orphans and adopting children. This android application not only indulges in the process of adopting the orphans and providing shelter but also impulses their life by donating food, clothes and money.

S.No	PAPER TITLE	JOURNAL NAME	AUTHOR NAME	YEAR OF PUBLISHING
1	Rice donation system in orphanage based on internet of things ,Raspbessrry-Pi.	IEEE	Miraz suwono,Euis Liani	2018
2	Tracing the parents of orphanage	IEEE 2020 International Conference on Emerging Tren	S.Muthuselvan, E. Srividhya	2020

	children in cloud computing environment by integrating dna databank with aadhar and fir databases.	ds in Information Technology and Engineering (ic-ETITE)		
3	Search of orphanages to use the formula factor.	IEEE	Abara karamkar, Bhaskar Chakraborty, Trisha ghosh	2016
4	Parenthesis Syntactic Integration or Orphanage? A Rejoinder to Ott 2016	IEEE	Cawangan Johor, Kampus Pasir Gudang	2018
5	Patronization for orphans and adoption using android application.	Conference 2019 3rd International Conference on Computing and Communications Technologies (ICCCT)	Pawar, Prachi Jadhav, Sushant Bhosale	2019

Table 3.1 Summary of Literature Survey

CHAPTER 4

SYSTEM DESIGN

A UML (Unified Modeling Language) diagram is a graphical representation of a system or process using standardized symbols and notation. UML diagrams are widely used in software engineering and other fields to visually depict various aspects of a system, such as its structure, behavior, interactions, and architecture.

There are several types of UML diagrams, each serving a different purpose and focusing on different aspects of the system being modeled. Some common types of UML diagrams include

Unified Modeling Language (UML) diagram for the proposed automated college timetable scheduling system. Here's an example of a high-level UML class diagram for the system

4.1 USE CASE DIAGRAM

A Use Case Diagram is a type of UML (Unified Modeling Language) diagram that illustrates the interactions between actors (users or external systems) and a system under consideration. It provides a high-level view of the functionalities or features of a system from the perspective of its users. Use case diagrams are often used during the requirements analysis phase of software development to capture and communicate the system's behavior and requirements.

Add Orphanage Information The administrator can add details about the orphanage, including its name, location, contact information, facilities available, and any upcoming events. **Update Orphanage Information** Allows the administrator to modify existing information about the orphanage. **Remove Orphanage Information** Provides the ability to delete outdated or incorrect information from the system.

View Volunteer Opportunities Volunteers can browse through available opportunities, such as teaching sessions, recreational activities, or mentoring programs.

Sign up for Volunteer Activities Allows volunteers to sign up for specific activities they're interested in. **Update Volunteer Availability** Volunteers can update their availability for future activities, ensuring proper scheduling.

Make a Donation Provides a platform for donors to make financial contributions to the orphanage. They can choose to make one-time donations or set up recurring payments. Donation can view their donation history, including past contributions and receipts.

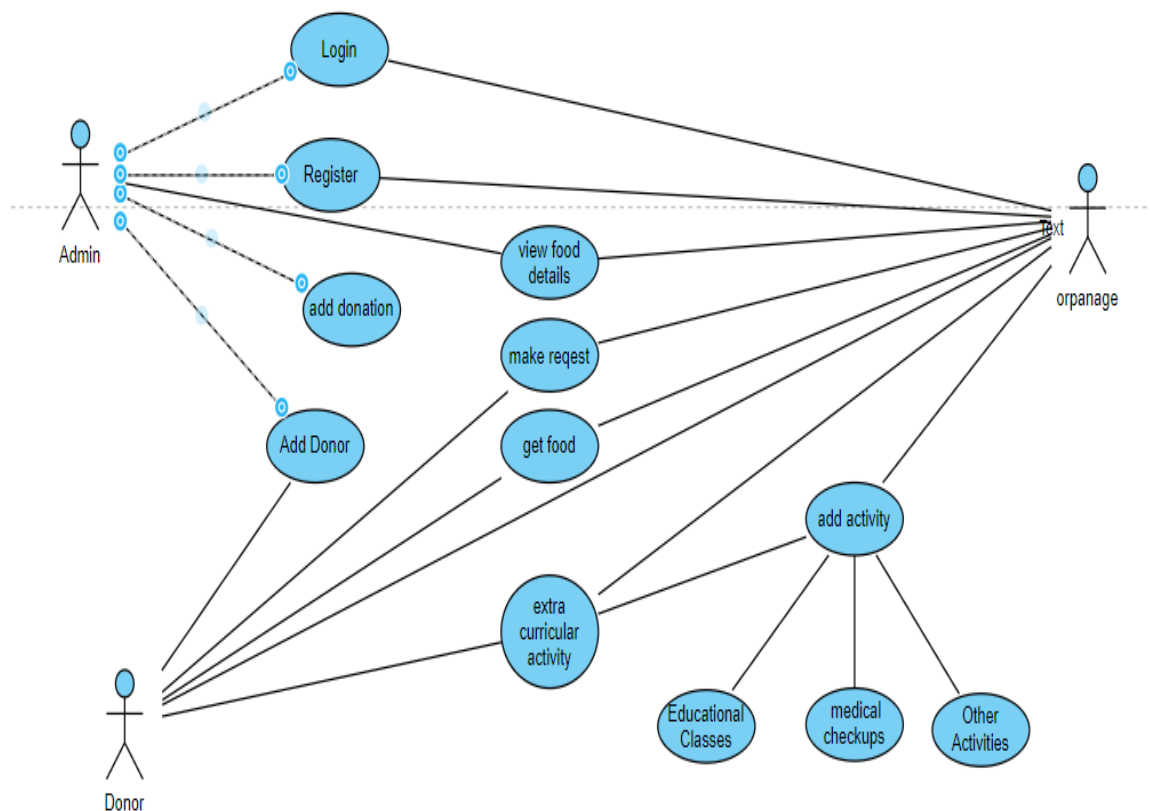


Fig 4.1 Use case diagram for care connect

4.2 SEQUENCE DIAGRAM

A Sequence Diagram is a type of UML (Unified Modeling Language) diagram that depicts the interactions between objects or components within a system over time. It illustrates the sequence of messages exchanged between these objects to accomplish a specific behavior or scenario. Sequence diagrams are particularly useful for visualizing the flow of control and collaboration among objects during the execution of a use case or scenario.

Login/Registration

The orphanage staff opens the app and either logs in with their existing credentials or registers if they are new users. Authentication The app sends the entered credentials to the server for authentication. The server verifies the credentials and sends back a response indicating success or failure. The staff member selects a specific task to view its details. The app sends a request to the server for detailed information about the selected task. The server retrieves the details from the database and sends them back to the app. The staff member marks a task as completed within the app. The app sends a request to the server to update the task status. The server updates the task status in the database accordingly. If authorized, staff members can add new tasks to the system. The app collects the details of the new task entered by the staff member. It sends a request to the server to add this task to the database. The server updates the database with the new task details. Staff members may need to view details of specific orphans. The app sends a request to the server for orphan details. The server retrieves the required information from the database and sends it back to the app. Authorized staff members can update orphan details if necessary. The app collects the modified details from the staff member .It sends a request to the server to update the orphan details in the database. The server updates the orphan details accordingly.

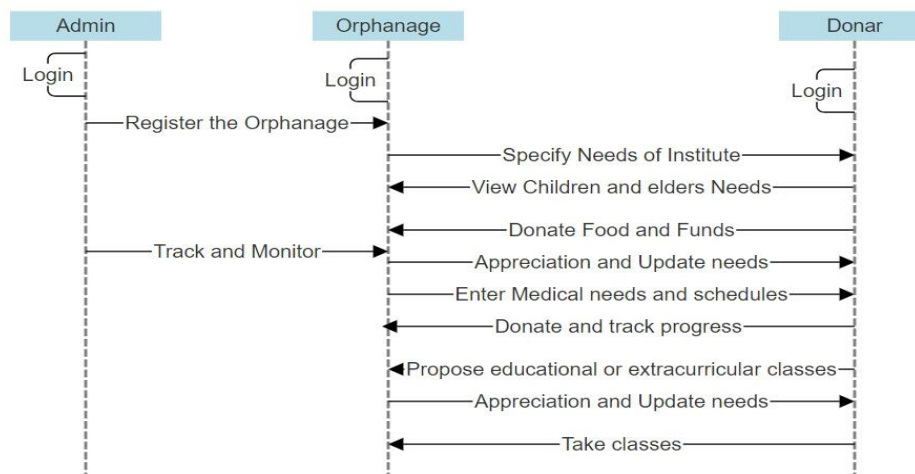


Fig 4.2 Sequence Diagram for care connect

4.3 ACTIVITY DIAGRAM

An Activity Diagram is a type of UML (Unified Modeling Language) diagram that visualizes the flow of activities or actions within a system or a specific business process. It provides a graphical representation of the sequential and parallel activities involved in accomplishing a task, use case, or workflow. Activity diagrams are particularly useful for modeling the dynamic behavior of a system and understanding the sequence of actions and decision points involved in a process.

The care connect Android app initiates with the start of the application. Users are presented with the choice to either login with existing credentials or register for a new account. Upon selecting "Login," users input their credentials, while selecting "Register" prompts them to provide necessary information for account creation. The app then validates the entered credentials, directing authenticated users to the main menu, which offers options like viewing available tasks, orphan details, adding new tasks, and logging out. When users choose to view available tasks, the app retrieves and displays the list of tasks. They can select a task to view its details or mark it as completed, which triggers an update in the task status. users can opt to add a new task, where they input details such as description and deadline, sent to the server for processing. Another option includes viewing orphan details, which retrieves and displays the relevant information. Users can also edit orphan details, modifying information as needed, with updates sent to the server. Register The user will make a registration with the account creation system where they enter their personnel details with the system Login – The registration module will automatically creates the login session for the concern user. Using the username and password session the user will make a login system. Request accept status – In this module, the user will make a view on the orphanage request and if they have food. View Orphanage information – The admin will view the details of the orphanage who are all suffering not to get food. These orphanage details will be added only when they get registered with the system. View User information - The user information who all registered with the system will be manageable and maintained by the admin

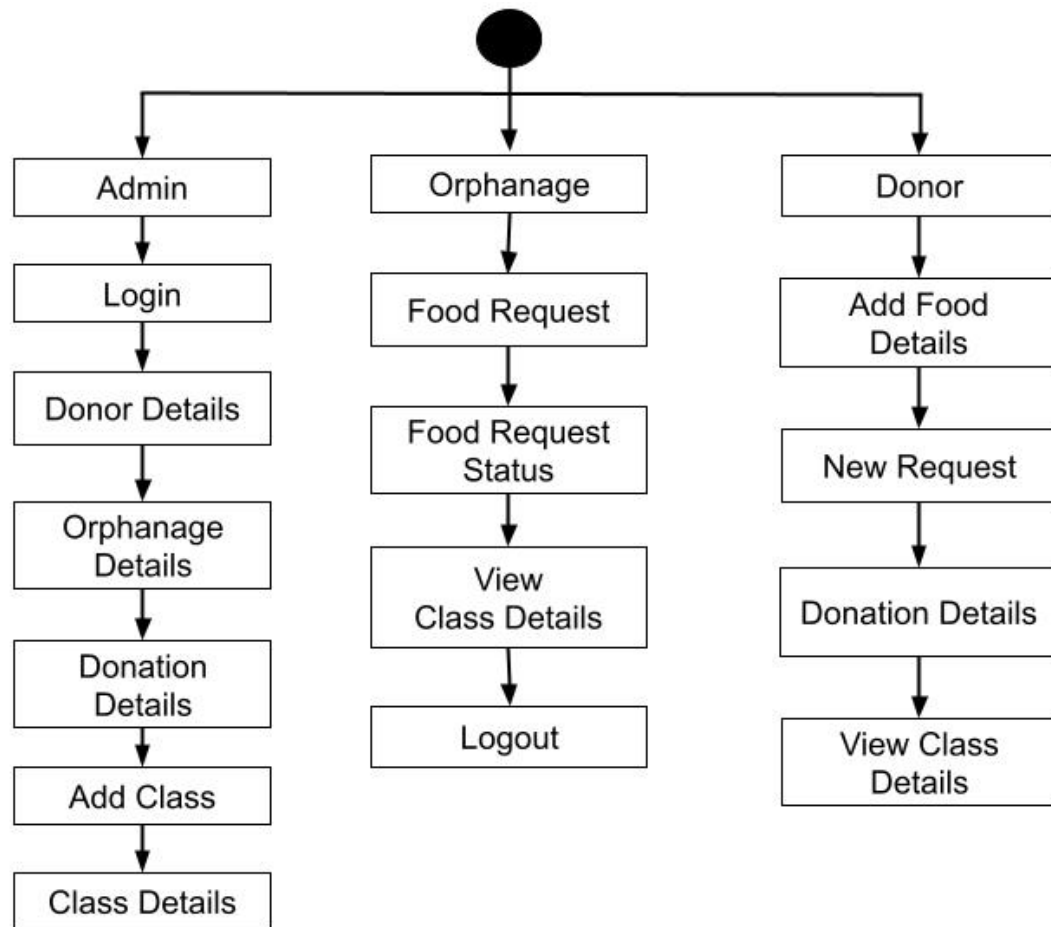


Fig 4.3 Activity Diagram for care connect

4.4 PACKAGE DIAGRAM

A Package Diagram is a type of UML (Unified Modeling Language) diagram that provides a high-level overview of the organization and dependencies among packages in a system or software application. It depicts the modular structure of a system by grouping related elements, such as classes, interfaces, or other packages, into cohesive units called packages. Package diagrams help in managing complexity, promoting modularity, and facilitating understanding of the system's architecture.

Activity Contains classes representing different screens or components of the app. Activities handle user interactions and typically correspond to one screen in the app's interface. For example, the Main Activity handles the main screen, while Profile Activity manages

user profile-related functionalities. Fragments: Consists of fragment classes, which represent reusable UI components that can be combined to create dynamic and flexible user interfaces. Fragments are often used to modularize elements and support responsive design. For instance, Profile Fragment might display user profile information, while Donation Fragment provides interfaces for making donations Models: Contains model classes representing the data entities used within the app. Models encapsulate the properties and behaviors of data objects, facilitating their management and manipulation. Examples include Orphan Model for representing orphanage residents, Donation Model for storing donation details, and User Model for managing user-related information.

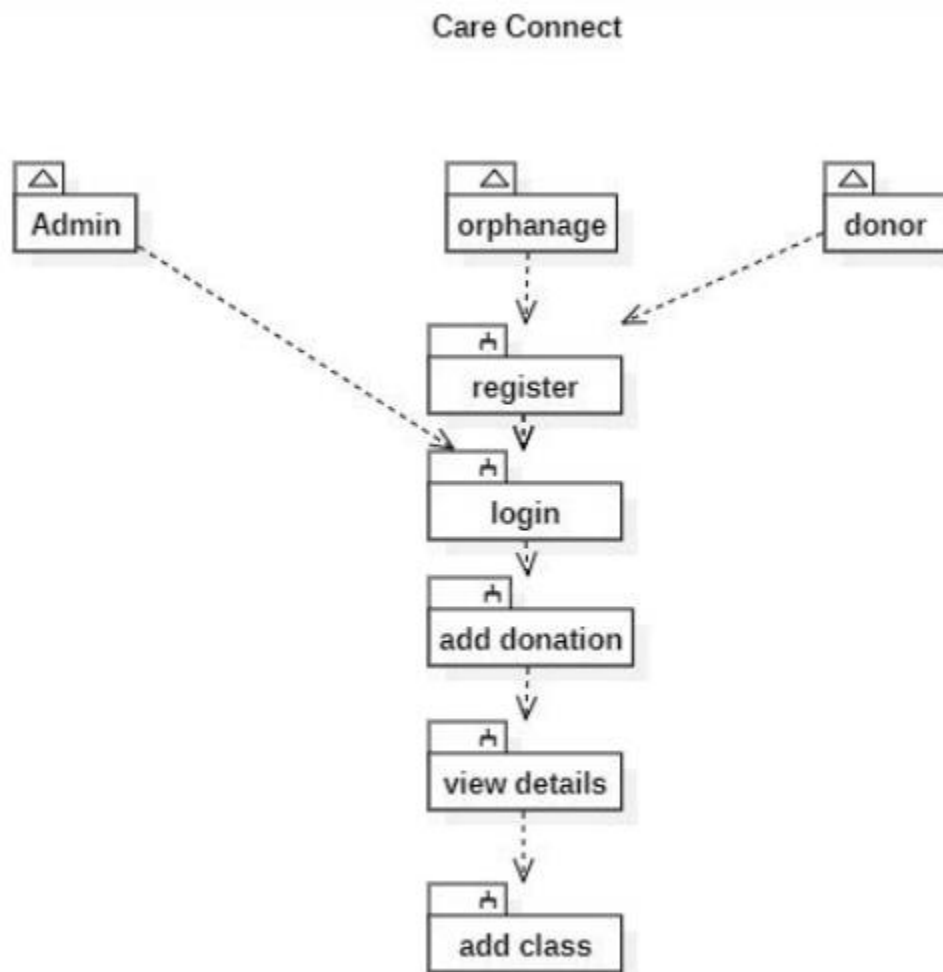


Fig 4.5 Package Diagram for care connect

4.5 COMPONENT DIAGRAM

A Component Diagram is a type of UML (Unified Modeling Language) diagram that depicts the organization and dependencies among components in a system or software application. It provides a high-level view of the physical components (e.g., software modules, libraries, executables) and their relationships within the system's architecture.

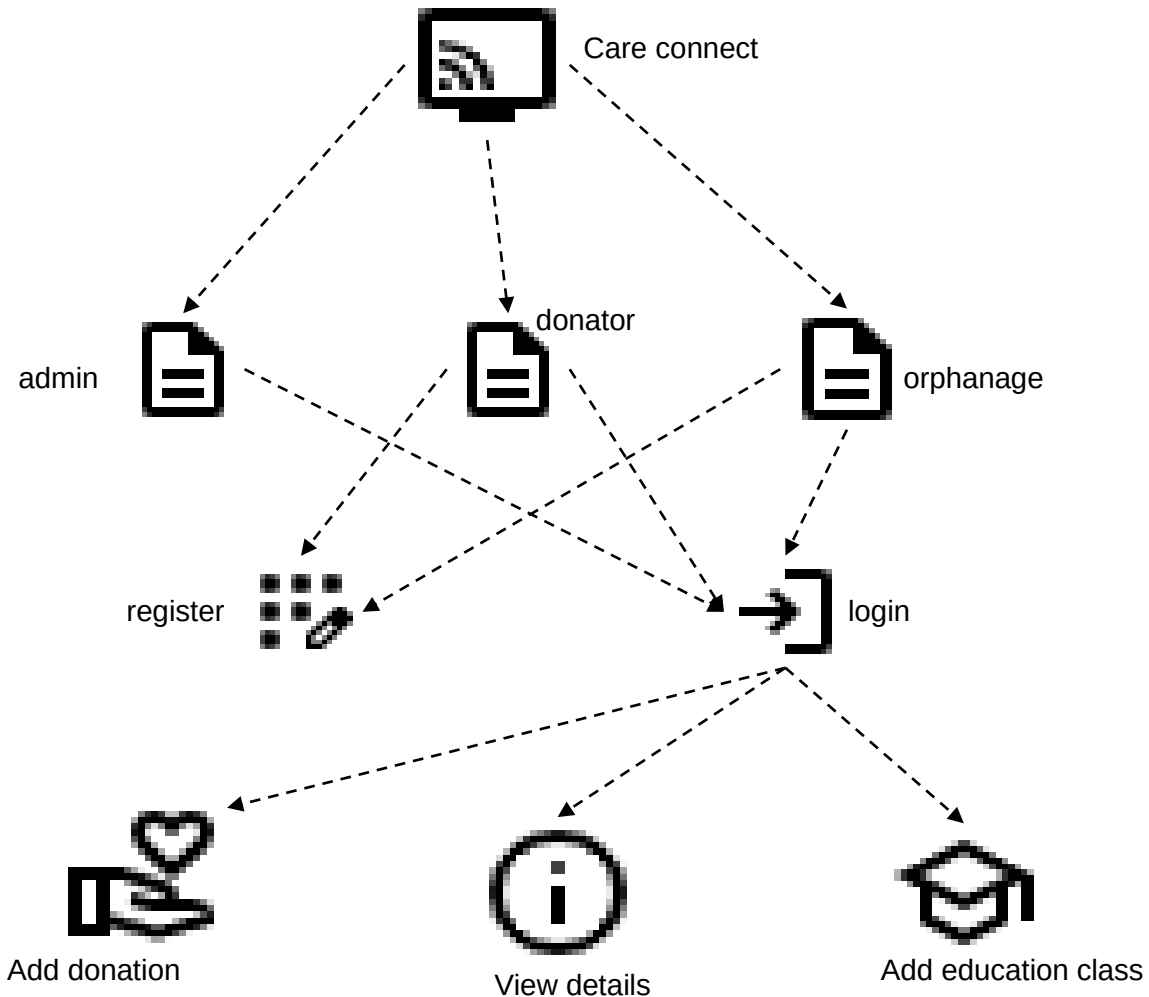


Fig 4.5 Component diagram for UML

Component diagrams help in visualizing the structural aspects of a system and understanding how different components interact with each other to achieve the system's functionality.

CHAPTER 5

SYSTEM ARCHITECTURE

System architecture refers to the conceptual structure and organization of a complex system. It defines the components or modules of the system, their relationships, and how they interact to achieve the system's objectives. A well-designed system architecture provides a blueprint for implementing and managing the system effectively. The system architecture of Care Connect, a hypothetical healthcare platform, would encompass various components and technologies to support its functionality. Below is an outline of the key components and their roles within the system architecture

In Software Engineering system Architecture encompasses

- **Presentation Layer:** These are the building blocks of the user interface. Activities represent the screens, while Fragments can be used for reusable UI components within Activities.
- **Local Development Environment:** Choose a development environment for Android app development on your computer. Android Studio is the official IDE for Android development, and it comes with a built-in emulator and tools for testing and debugging your apps.
- **Testing APIs:** If your Android app communicates with a backend server via APIs you'll need to ensure that the APIs are accessible during development. You can set up a local development server on your computer to host the backend APIs and configure your Android app to communicate with it. Tools like Postman can help you test and debug the APIs software.
- **Network Configuration:** Ensure that your Android device and development machine are on the same network if you want to test the app on a physical device while accessing backend services hosted locally.
- **Network Configuration:** Ensure that your Android device and development machine are on the same network if you want to test the app on a physical device while accessing

backend services hosted locally. Configure the network settings on your computer to allow inbound connections to the services you're running.

- **Debugging and Testing:** Android Studio's debugging tools to test and debug your app while it interacts with backend services. Also monitor network traffic between your Android app and the backend server using tools like Wireshark or Android Studio's Network.
- **Deployment:** Once your app is ready for deployment, package it for distribution through the Google Play Store or other distribution channels. Ensure that any backend services your app relies on are deployed to production servers and accessible to user.

Android Application

The frontend application is the user interface that allows healthcare providers, patients, and administrators to interact with the system. It could be implemented using web technologies (Android) for app-based access or native mobile app development frameworks for mobile devices. The frontend application communicates with the backend services to retrieve and display data, submit requests, and handle user interactions.

Backend Services

The backend services form the core functionality of the Care Connect platform, handling data processing, business logic, and integration with external systems.

Components within the backend

Authentication and Authorization Manages user authentication, authorization, and access control to ensure secure access to the system's resources. API Gateway Acts as a single entry point for client requests, routing requests to the appropriate backend services.

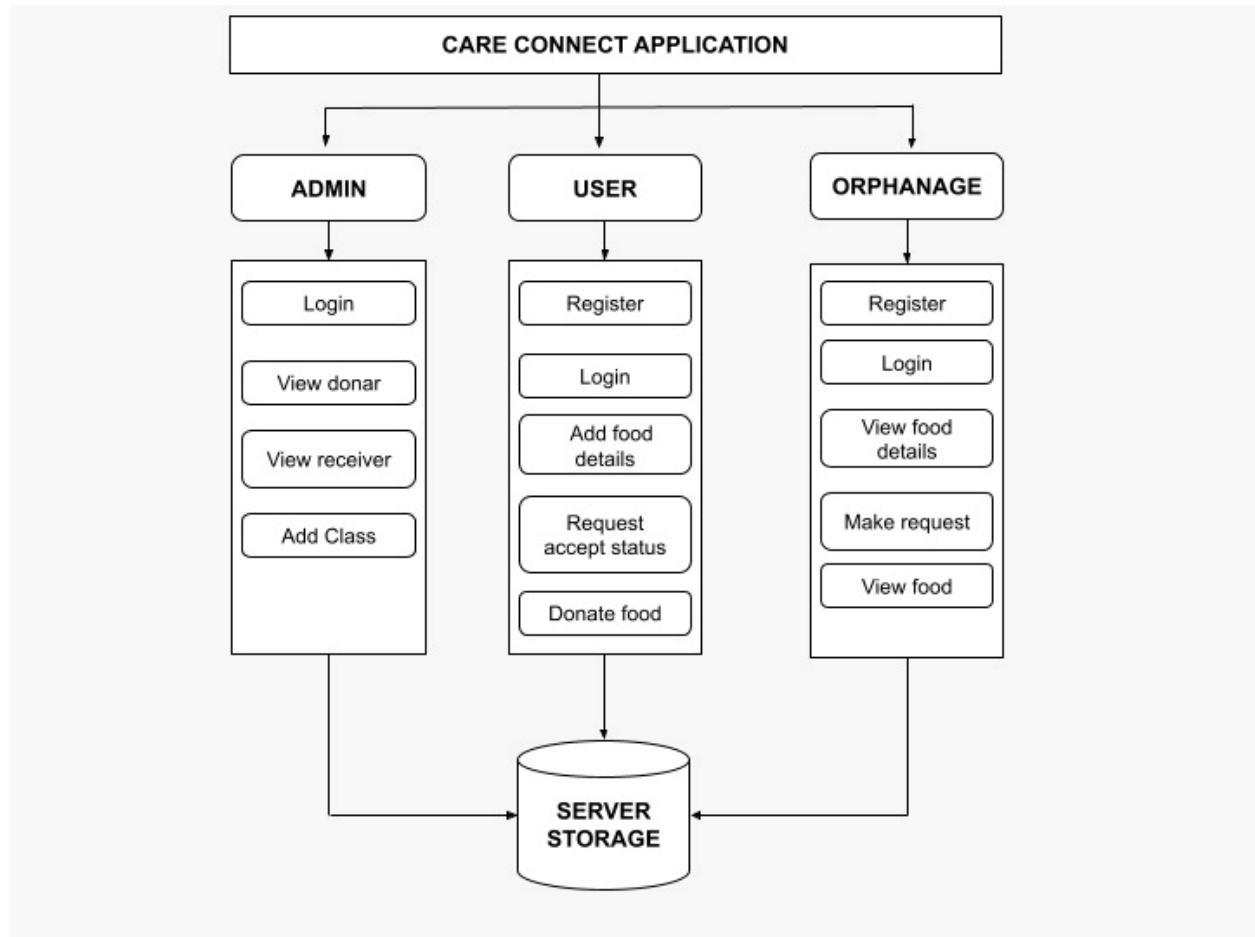


Fig 4.1 System Architecture for care connect App

1. Login and Registration

Admins can securely log in to the system using their credentials. New users can register themselves by providing necessary details such as email, username, and password.

2. View Orphanage

View Orphanage information – The admin will view the details of the orphanage who are all suffering not to get food. These orphanage details will be added only when they get registered with the system.

View User information - The user information who all registered with the system will be manageable and maintained by the admin.

3. Add class

The admin in this module will add the details of the class in which the details of the class information like if they schedule class dance, Singing , yoga etc. Add class – the admin in this module will add the details of the class in which the details of the class information will be added Provide a platform for staff to log daily activities and routines for the children, including meals, recreational activities, educational sessions, and any medical treatments or appointments. Offer arts and crafts workshops where children can explore their creativity through painting, drawing, sculpting, and other artistic mediums. Provide supplies and guidance for creating handmade crafts, DIY projects, and art exhibitions to showcase their talents and accomplishments

Adding classes are very useful gain knowledge.

4. Orphanage Info

The orphanage will view the details of the food availability where the donors who all added. Make request – The orphanage will make a food request when they need food for their people using this module with the total count of food Get food .

When the donors accept the request of the orphanage or if the donor adds food automatically they will get the food directly from them.

CHAPTER 6

MODULES

6.1 ADMIN

Login – Admin will make a login with their default username and password session where the login will be create Allow administrators, staff, and perhaps even volunteers to create accounts and log in securely. Users should be able to create and manage their profiles, including adding necessary personal information, background checks, etc.

View Orphanage information – The admin will view the details of the orphanage who are all suffering not to get food. These orphanage details will be added only when they get registered with the system. Admin can add the orphanage details Like name, place ,email etc.

Donation information: Integrate a module for accepting donations and managing sponsorships for individual children or specific programs within the orphanage. Provide options for donors to contribute one-time or recurring payments securely through the app.

View User information - The user information who all registered with the system will be manageable and maintained by the admin.

Add class – the admin in this module will add the details of the class in which the details of the class information will be added Provide a platform for staff to log daily activities and routines for the children, including meals, recreational activities, educational sessions, and any medical treatments or appointments. Offer arts and crafts workshops where children can explore their creativity through painting, drawing, sculpting, and other artistic mediums. Provide supplies and guidance for creating handmade crafts, DIY projects, and art exhibitions to showcase their talents and accomplishments. Include options for adding notes and observations about each child's participation and behavior during these activities. and also you can add medical checkups Provide educational resources on topics such as nutrition, hygiene, and common childhood illnesses to empower staff members and guardians to take proactive measures for promoting children's health. educational workshops and clubs focused on topics such as science, technology, engineering, mathematics environmental conservation, or entrepreneurship. Invite guest speakers, experts, or professionals to conduct interactive sessions and hands-on activities that inspire curiosity and critical thinking.

6.2 ORPHANAGE

Register – The orphanage will make registration by using their personnel details and create an account with the system. The account creation will get stored in the server space

Login – The orphanage will make a login with the created username and password session.

View food details – The orphanage will view the details of the food availability where the donors who all added Maintain a database of food items and ingredients available in the orphanage's pantry or kitchen

Make request – The orphanage will make a food request when they need food for their people using this module with the total count of food Integrate the request module with an inventory management system to monitor stock levels and availability of requested items. Allow administrators to check current inventory levels and determine whether requested items are in stock or need to be procured. Enable donors to request and receive tax receipts or donation certificates for their contributions, providing them with necessary documentation for claiming tax deductions or benefits

Get food – When the donors accept the request of the orphanage or if the donor adds food automatically they will get the food directly.

View Class details :Orphanages can also view class detail what is happening for orphanages it give information to detailed about each extracurricular activity, including the name, date, time, location, description, and any special instructions or requirements.

Include multimedia content such as photos, videos, or event flyers to provide visual context and attract interest.

6.3 DONOR

Register – The user will make a registration with the account creation system where they enter their personnel details with the system

Login – The registration module will automatically create the login session for the concern user. Using the username and password session the user will make a login system.

Request accept status – In this module, the user will make a view on the orphanage request and if they have food with them they will accept and give food Enable donors to request and

receive tax receipts or donation certificates for their contributions, providing them with necessary documentation for claiming tax deductions or benefits

Donate food – The user will donate food with their account access my orphanage status verification system, Integrate a module for accepting donations and managing sponsorships for individual children or specific programs within the orphanage. Provide options for donors to contribute one-time or recurring payments securely through the app.

CHAPTER 7

REQUIREMENT SPECIFICATION

7.1 INTRODUCTION

The System utilizes a constraint based approach, smartphones have become essential personal devices to support our activities in virtually every area of our lives. The enormous developments of smartphone technology platforms This paper focuses on proposing an mobile application for orphanage management which could be a better option for the Prospective Adaptive Parent(PAP) and the With that as well, the users are given several possibilities to support the children. The users are instructed to login in and use their contact number for specific authentication.

Basic physical examinations to assess overall health status. Immunizations to prevent common diseases. Screening for common health issues such as malnutrition, dental problems, and vision or hearing impairments. Mental health assessments to identify any psychological or emotional needs

Collaborate with volunteers or educational organizations to offer virtual tutoring sessions in various subjects such as math, science, language arts, and even coding. Online Workshops and Webinars Host interactive workshops and webinars on topics like art, music, dance, cooking, gardening, or any skill-building activities that can engage and educate children. Storytelling Sessions .these all helpful physical and mental health. Interested persons can help using this app.it will help all the orphanage people to become happy and safe.

7.2 HARDWARE REQUIREMENTS

- | | |
|----------------|-----------------------|
| ● Processor | Dual Processor |
| ● RAM | 1GB |
| ● Hard disk | 160 GB |
| ● Compact Disk | 650 MB |
| ● Keyboard | Standard keyboard |
| ● Monitor | 15 inch color monitor |

7.3 SOFTWARE REQUIREMENTS

- | | |
|-------------|------------|
| ● Front End | Android |
| ● Back End | MYSQL |
| ● Platform | Windows 10 |
| ● Tool | Eclipse |
| ● Host Name | Local Host |

7.4 SOFTWARE DESCRIPTION

Front End (Android)

Android, also known mobile operating system created by Google that is based on the Linux kernel and is primarily intended for touchscreen mobile devices like tablets and smart phones. With a virtual keyboard for text input and a touch interface that loosely mimics real-world motions like swiping, tapping, and pinching, Android's student interface mostly relies on direct manipulation..

Android Operating System

Android operating system definition In the past 15 years, operating systems have advanced significantly. Mobile OS has gone a long way since the early days of black and white phones to modern smart phones or mini PCs. Mobile OS has undergone significant development, then to Blackberry OS and Android today. Android place a major role in the operating systems executions. Android is a software suite that includes an operating system, middleware, and important applications.

Features and Specifications

Android is a potent operating system that supports many different mobile applications. The students' lives are improved and made more modern by these applications. The majority of Android-compatible hardware is based on the ARM architecture platform. Android currently has the following features and specifications an online software shop called the Android Market is included with Android.

Back End (MySQL)

MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack use MySQL. applications MySQL is used in this android app as backend it is used to see the output of the application using mysql we can easily correct the mistakes and all it easy to access.

Command line

MySQL ships with some command line tools. Third-parties have also developed tools to manage a MySQL server, some listed below. Maatkit - a cross-platform toolkit for MySQL, packages are available for Programming. MySQL works on many different system that can be used to for seeing output in android app using Sql we can edit edit the output see the output.

Wamp Server:

Vamp Server (Virtual Apache MySQL PHP Server) is primarily designed for Windows environments and is used to set up a local server for developing and testing PHP-based web applications. It runs on desktop or laptop computers, not on Android devices. However, if you need to mimic a server environment on an Android device for development or testing purposes, you can achieve something Local Development Environment on Android You can install server applications directly on some Android devices using apps available on the Google Play Store. These apps often provide a simplified version of server software like Apache, MySQL or PHP.

Display or Use Sorted Data: Once the sorting process is complete, you can display the sorted data in your Android app's user interface or use it for further processing, depending on your app's requirements.

7.5 WORKING OF SOFTWARE APPLICATION:

Eclipse: eclipse was once the primary Integrated Development Environment (IDE) for Android app development before Google introduced Android Studio. Eclipse, a popular IDE for Java development, was adapted for Android development with the Android Development Tools (ADT). In android app eclipse used as a tool we can develop the app using eclipse Tool.

Using Xml: xml coding is used for adding styles and buttons in android application layouts: XML files are used to define the layout of user interface components in Android apps. These layout files are typically found in the res/layout directory of your project. Create XML files for different screen sizes and orientations to ensure your app looks good on various devices. Example of a simple layout XML file (activity_main.xml)

Inserting Buttons: insert buttons in your XML layout file, you can use the <Button> tag. Here's an example of how to insert a button in your layout. android:layout_width and android:layout_height: Specify the width and height of the button. android:text: Sets the text displayed on the button. android:onClick: Specifies the method name in your activity that will be called when the button is clicked.

CHAPTER 8

CODING AND SAMPLE OUTPUT

8.1 SOURCE CODE

```
package com.example.care_connect;
import java.io.DataInputStream;
import java.math.BigInteger;
import java.net.HttpURLConnection;
import java.net.URL;
import java.net.URLEncoder;
import java.util.Random;
import android.app.Activity;
import android.util.Log;
import android.view.Gravity;
import android.view.Menu;
import android.view.View;
    result = sb.toString();
} catch (Exception e) {
    System.out.println("Error 2 "+e.toString());
}
System.out.println("result "+result);
res = result;
public class user_home extends Activity {

    Button add_food_details,new_request,donation_details,class_details;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_user_home);
```

```

add_food_details = (Button) findViewById(R.id.button1);
new_request = (Button) findViewById(R.id.button2);
donation_details = (Button) findViewById(R.id.button3);
class_details = (Button) findViewById(R.id.button4);
add_food_details.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View arg0)
    {
        Intent in = new Intent(getApplicationContext(), user_add_food_details.class);
        startActivity(in);
    }
});
new_request.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View arg0)
    {
        Intent in = new Intent(getApplicationContext(), user_new_request.class);
        startActivity(in);
    }
});
donation_details.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View arg0)
    {
        Intent in = new Intent(getApplicationContext(), user_donation_details.class);
        startActivity(in);
    }
});

```

```

    }
});
class_details.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View arg0)
    {
        Intent in = new Intent(getApplicationContext(), user_class_details.class);
        startActivity(in);
    }
});
}
@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}
JSONObject food_object;

//    TextView txtFirstName = (TextView) rootView.findViewById(R.id.txtFirstName);
//    txtFirstName.setText(""+res);

try {
    //food_object = new JSONObject(result);
    if(result.contains("result")){
        isError = false;
    }
    food_object = new JSONObject(result.substring(result.indexOf("{"), result.lastIndexOf("}")
+ 1));
    JSONArray foo_array = food_object.getJSONArray("result");

```

```

        values = new String[foo_array.length()];
        for (int i = 0; i < foo_array.length(); i++) {
            // categories1.add(js.getString("tname"));

            // System.out.println("value q "+values[i]);

        } catch (JSONException e) {
            // TODO Auto-generated catch block
            System.out.println("Error 3 "+e.toString());
            e.printStackTrace();
        }
    }

    String res = "", status = "";
    ArrayAdapter<String> adapter;
    String values[];
    try {
        BufferedReader reader = new BufferedReader(new InputStreamReader(is, "iso-8859-1"),
8);

        StringBuilder sb = new StringBuilder();
        String line = null;
        while ((line = reader.readLine()) != null) {
            sb.append(line + "n");
        }
        is.close();
        result = sb.toString();
    } catch (Exception e) {
        System.out.println("Error 2 "+e.toString());
    }
    System.out.println("result "+result);
    res = result;

```

```

JSONObject food_object;

//    TextView txtFirstName = (TextView) rootView.findViewById(R.id.txtFirstName);
//    txtFirstName.setText(""+res);

try {
    //food_object = new JSONObject(result);
    if(result.contains("result")){
        isError = false;
    }
    food_object = new JSONObject(result.substring(result.indexOf("{"), result.lastIndexOf("}")
+ 1));
    JSONArray foo_array = food_object.getJSONArray("result");

    values = new String[foo_array.length()];
    for (int i = 0; i < foo_array.length(); i++) {
        JSONObject js = foo_array.getJSONObject(i);

        user_id.add(js.getString("id"));
        // String sts=js.getString("username");
        // String contact=js.getString("contact");
        String d=js.getString("id")+" "+js.getString("food")
            +"\nContact "+js.getString("contact")
            +"\nQuantity "+js.getString("quantity")
            +"\nUser "+js.getString("user")
            +"\nAddress "+js.getString("address")
            +"\nArea "+js.getString("area")
            +"\nStatus "+js.getString("status")
            +"\n"
        values[i] = d;
        categories.add(d);
    }
}

```

```

        // categories1.add(js.getString("tname"));

        // System.out.println("value q "+values[i]);

    }

} catch (JSONException e) {
    // TODO Auto-generated catch block
    System.out.println("Error 3 "+e.toString());
    e.printStackTrace();
}
}

String res = "", status = "";

ArrayAdapter<String> adapter;
String values[];
List<String> user_id = new ArrayList<String>();
List<String> ownername = new ArrayList<String>();
Context context = this;
Toast toast;
public void toast(String str) {
    try {
        toast.cancel();
    } catch (Exception e) {
        // TODO handle exception
    }
    toast = Toast.makeText(this, str, Toast.LENGTH_SHORT);
    toast.setGravity(Gravity.BOTTOM, 0, 0);
    toast.show();
}

```

```

public class user_home extends Activity {

    Button add_food_details,new_request,donation_details,class_details;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_user_home);

        add_food_details = (Button) findViewById(R.id.button1);
        new_request = (Button) findViewById(R.id.button2);
        donation_details = (Button) findViewById(R.id.button3);
        class_details = (Button) findViewById(R.id.button4);
        add_food_details.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View arg0)
            {
                Intent in = new Intent(getApplicationContext(), user_add_food_details.class);
                startActivity(in);
            }
        });

        @Override
        public void onClick(View arg0)
        {
            Intent in = new Intent(getApplicationContext(), user_new_request.class);
            startActivity(in);
        }
    }
}

```

```

});
donation_details.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View arg0)
    {
        Intent in = new Intent(getApplicationContext(), user_donation_details.class);
        startActivity(in);
    }
});
class_details.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View arg0)
    {
        Intent in = new Intent(getApplicationContext(), user_class_details.class);
        startActivity(in);
    }
});
}

```

```

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}

```

8.2 SCREENSHOT

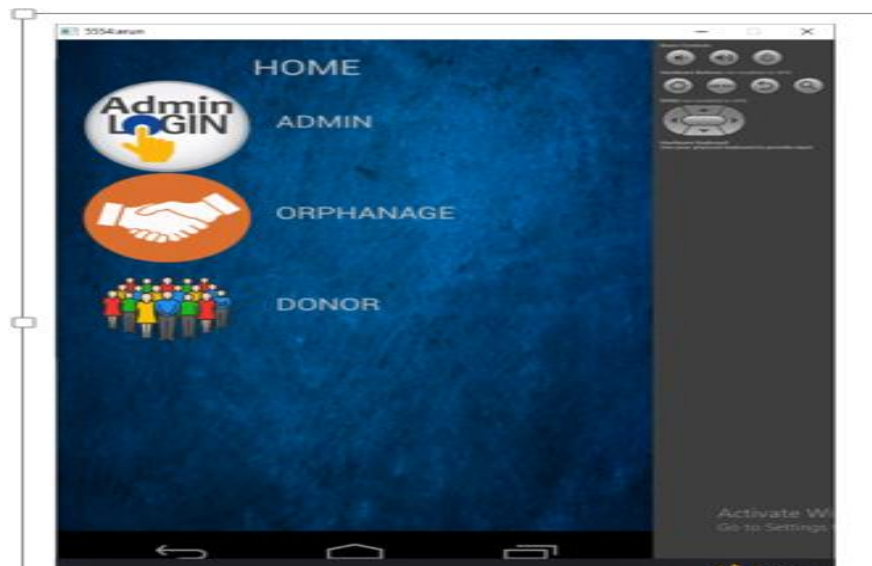


Fig 8.1 Home page



Fig 8.2 Admin login

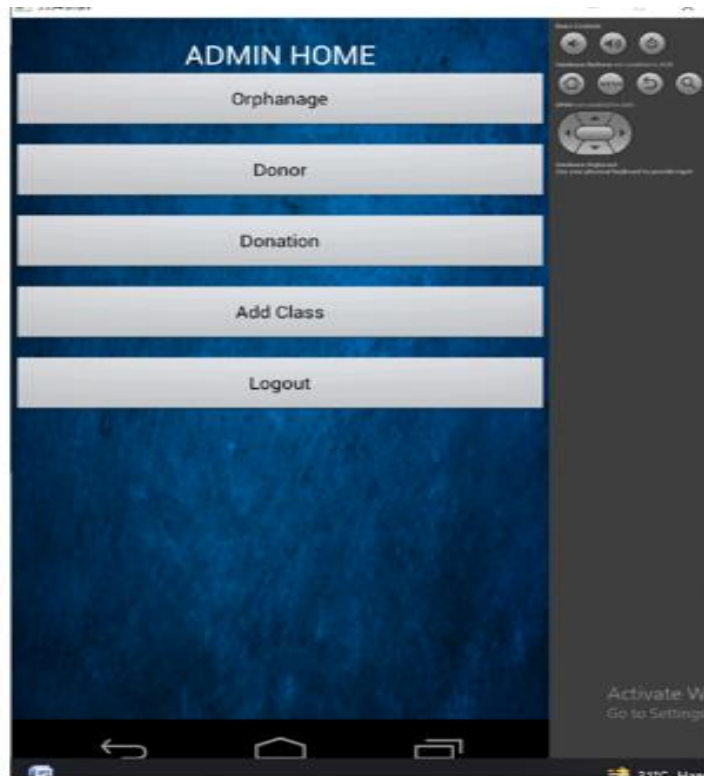


Fig 8.3 Admin Hone page

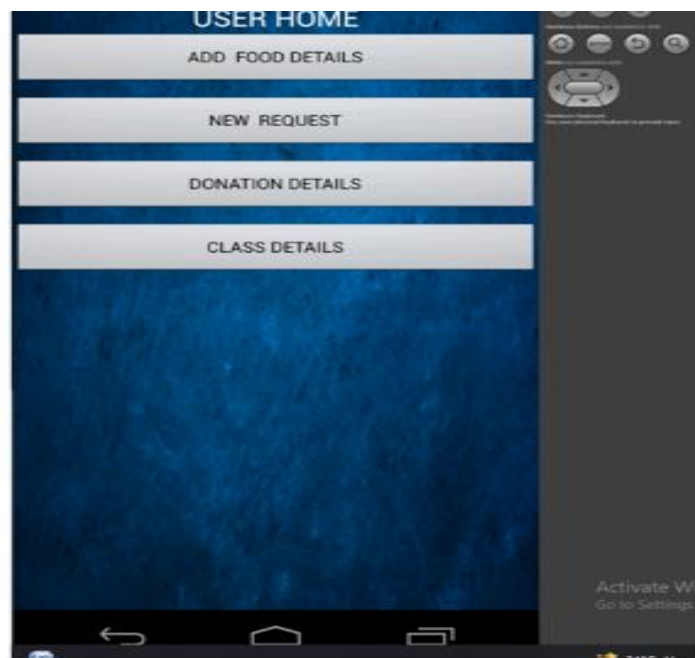


Fig 8.4 User home page

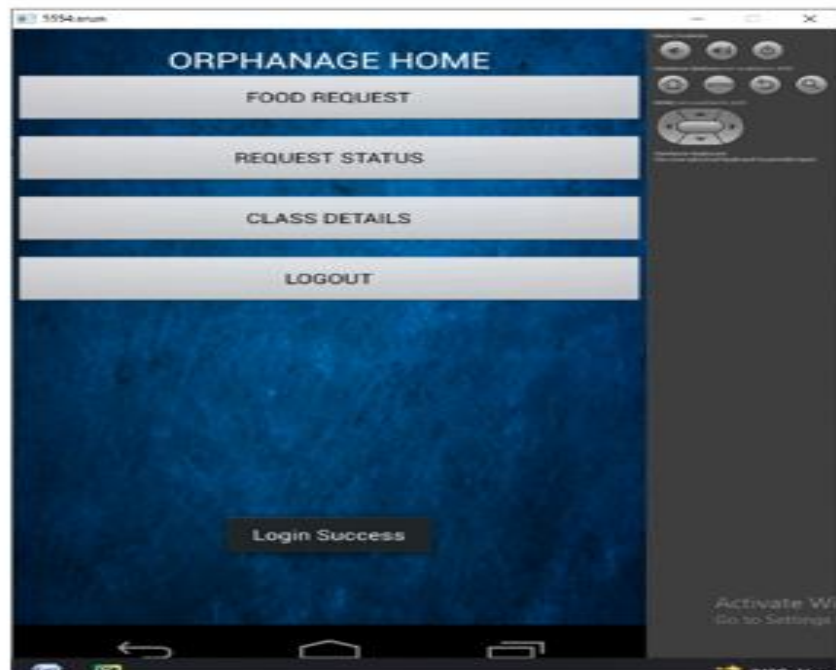


Fig 8.5 Orphanage Home page



Fig: 8.6 Add classes and medical checkups

CHAPTER 9

CONCLUSION AND FUTURE WORK

9.1 CONCLUSION

In conclusion, Orphanage Care Connect presents a holistic solution aimed at improving the management and care within orphanages and child care facilities. By leveraging technology, Orphanage Care Connect addresses the challenges faced by traditional orphanage systems, such as manual documentation, fragmented communication, and resource management inefficiencies. Orphanage Care Connect offers a comprehensive set of features including child profile management, staff and volunteer management, facility maintenance and inventory control, healthcare management, educational support, communication and collaboration tools, reporting and analytics capabilities, and security measures.

These features work together to streamline administrative tasks, enhance communication and coordination among stakeholders, and improve the overall quality of care provided to vulnerable children. Through its user-friendly interface, Orphanage Care Connect empowers staff, caregivers, volunteers, and external stakeholders to efficiently manage operations, access critical information, and collaborate effectively. By providing insights through analytics and reporting, the platform enables data-driven decision-making to optimize resource allocation, monitor child well-being, and drive continuous improvement efforts.

Care Connect not only enhances the efficiency and effectiveness of orphanage management but also promotes a nurturing and supportive environment for children under institutional care. By promoting transparency, accountability, and communication, Orphanage Care Connect ultimately aims to improve the outcomes and opportunities for children, ensuring they receive the care and support they deserve for a brighter future.

9.2 FUTURE ENHANCEMENT

Future enhancements for Orphanage Care Connect could include

AI-Powered Insights Implement artificial intelligence (AI) and machine learning algorithms to analyze data collected by the platform, providing insights into trends, patterns, and predictive analytics related to child well-being, resource utilization, and program effectiveness.

Partnerships and Collaborations: Explore partnerships with other organizations, businesses, or government agencies to expand the app's reach and impact. Collaborate on initiatives such as health campaigns, educational programs, or vocational training opportunities.

Virtual Support Services Introduce virtual support services such as telemedicine, online counseling, and educational resources to supplement in-person care and provide additional support to children and caregivers, especially in remote or underserved areas.

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