RESEARCH ARTICLE

OPEN ACCESS

Foster Care Management Using Web Application

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ABSTRACT

A more expedited adoption procedure is urgently needed because there are an increasing number of orphans who require a loving home. This can be resolved by developing an online platform that will take the place of manual record-keeping and streamline the adoption procedure. A consolidated database that directs prospective donors and adopters through the process will help overcome the existing lack of awareness and knowledge about the adoption procedure and orphanages. The suggested framework will also enable simple and safe online donations to aid orphanages and their initiatives in the end this computerized administration set-up can significantly impact the lives of risk-at kids and provides assistance.

Keywords – Adoption. Donation, Foster care, Orphans, Website.

Date of Submission: 01-03-2023 Date of acceptance: 12-03-2023

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INTRODUCTION

An adoption agency is a place where orphaned children are cared for and housed, providing them with hope for a fresh start in life. While some orphanages attempt to offer amenities, they often struggle to meet the basic needs of these children or provide them with a better life beyond food and shelter. To address this, our online project for an orphanage management system is designed to assist people who wish to donate.

The login page is a crucial aspect of this system. Users can proceed with the adoption process or make donations by providing clothing, funds, and other resources for the orphans, depending on their preferences. Authentication requires users to enter their phone number on the login page. The primary purpose of the website is to provide proper guidance to adoptive parents, as the adoption process is often unclear and can benefit from a smoother, more user-friendly

As recently as 2020, a survey revealed that many orphanage homes in Ghana still rely on paper for storing orphaned children's details. An orphanage management system is needed to track transaction details and manage information for future reference. In Indonesia, many orphanages face limitations in terms of finance, facilities, and care for the children they serve.

Our proposed orphanage management system aims to address issues related to information processing, such as redundant data, data security, and recovery methods. The system prioritizes secure access, utilizing internet archiving techniques to enhance cloud data security. Anonymization techniques are used to modify data and prevent it from being used to identify valuable information. Encryption and anonymization are used to protect sensitive data sets stored in the cloud, ensuring data privacy and security.

In today's world, smartphones have become essential to our daily lives, supporting a wide range of tasks through mobile applications. Our goal is to recommend an orphanage management website that benefits both orphanages and adoptive parents. The website offers resources to support orphans, including food, clothing, and money, while also providing guidance for adoptive parents to navigate the adoption process effectively. The website uses statistics to identify the best matches between orphans and potential parents.

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II. LITERATURE SURVEY

ORPHANAGE AS A COERCIVE MOBILITY:

In a typical baby home, infants who have been abandoned, rejected, or taken away are housed together with other similar children, regardless of whether or not they have any disabilities. However, in some limited regions, children suspected of being HIV positive are segregated from the others.

In 2017, Tom Disney proposed an article on orphanages as institutions that use coercive mobility to provide

opportunities for people who wish to adopt but are unwilling to do so for various reasons. The article was focused on orphaned children with disabilities in Russian orphanages and their management.

Children who are considered outside the norm are often placed on a predetermined path into state-run institutions that provide care for parentless children. This placement can be seen as a form of coercive mobility, similar to what prisoners' DEDUCTION OF ORPHANS AND SUITABLE PARENT CANDIDATES USING STATISTICAL MODELLING:

The proposed work, Deduction of Orphans and Appropriate Parent Candidates using Statistical Modelling, was came-up byNaren. J, Anuraag Vikram Kate, Achyuth Mohan which aims to enhance the adoption system in the nation by Parent-Child matching is the step of the procedure that requires the longest[2].

The tool enables the parents to instantly reduce the pool of available youngsters to a small number by

ORPHANAGE HOME MANAGEMENT SYSTEM USING CLOUD WITH DATA ANONYMIZATION:

The suggested Orphan Home Management Set-up is anticipated to solve common issues with data management, such as data redundancy, security, time consumption, and recovery techniques. Our system's main objective is to offer highly secure Cloud computing online storage. anonymization are used in the implementation of our system. Enterprises can utilize anonymization as a method to improve the security of their cloud data. Data deidentifying is modifying the data that will be used or published in a way that makes it impossible to identify important information. Key secret data elements are hidden through data depersonalize, preserving data privacy.

Many approaches have been proposed to deal with the problem of retaining privacy. It is crucial that experience. Once inside, these children have no control over their mobility and find that their movements are being regulated as a form of control.

Description- To begin with, admission to these institutions can be seen as a means of confinement. On one hand, children are separated from the rest of society as a way of segregation due to being deemed by state instruments of biopower as "defective" members of society, posing a risk to the overall well-being of the nation and requiring correction and confinement.

Additionally, children in disability orphanages perceive movement as punishment for their perceived disorderly conduct, resulting in their transfer to other institutional spaces, such as other orphanages or psychiatric facilities, or being physically restrained within the orphanage itself. Lastly the orphanage staff and volunteers found micro-scale bodily movements to be a complex phenomenon.

matching their preferences to all orphans in the nation. The process is accelerated greatly and ensures a prompt adoption, giving more orphaned children homes [3].

In order to match preferences, a modified Naive Bayes Classifier method is used. The programme evaluates the couple's preferences and then offers them with a set of kids that might correspond to their expectations. The couple can then proceed to meet and adopt one of these kids.

The entire process of providing the couple with options will be finished in a matter of hours [4].

privacy be protected at all times and in all places[5]. The data can be made anonymous using a variety of methods, including encryption, substitution, field nullification, number and date variance, and substitution. As discussed there are various methods some of them used are data hiding, hashing, shifting, data enumeration, and Ip prefix preservation as anonymization approaches to mask data in databases[6].

The authorsMr.N.Jayapandian, Dr.A.M.J.Zubair Rahman, A.Sowntharya, U.Kasthuri , M.Sowntharya, V.Nivedhacame-up with this concept **orphanage home administrating set-up using cloud with data anonymization**[7] to overcome the existing set-up's drawback. The current system does not have adequate security. Consider the instance of the Orphanage Project where data reliability is not guaranteed because we have no backup. There are various security risks as a result of the way we store our data in databases.

Lack of security, poor data retrieval, inconsistent and redundant data, and no backup and recovery

FUND RISING INFORMATION SYSTEM:

The scheme is made up of a number of components that are equally liquid with one another and cooperate to accomplish objectives. A system may be abstract or physical; an abstract system is an idea that is organised in a consistent and related manner. While the physical system consists of components that work together to accomplish a specific objective. The system's advantage is that it unifies every component that is part of a scope in which it is impossible for any one piece to exist independently. To accomplish the objectives of the system, components or subsystems must integrate to form a cohesive whole. Data is a collection of meaningless facts that are not ordered. Using processing of data, it will be transformed into information that is more helpful, understandable, and used when deciding what to do[8]. Maulianap, Ricky Firmansyah, Ai Surtika Dew, 2019 raised a concept of Web based fund rising information set-up and through thisbenefactor's will be able to see the profits gained by orphanages, activities of orphanages and how to make donations.

A web page can hold a variety of information about all things that are commercial or not. Among that he had used a Unified Modelling Language (UML)

ORPHANAGE MANAGEMENT USING DATA MINING TECHINQUE:

The methodology of **managing an orphanage** using data mining technique with the use of algorithm "Support Vector machine" by Kasturi Karuppiah, 2021[9]. The existing system's drawback before it gets implemented is that the donators had experienced like the process is more manual as it took lot more time for each and everything to obtain an exact orphan they need based on gender or some other reasons and later what if the selection of the adopter is inadequate. That is the current adoption and donation procedure involves a lot of physical work, which the donors

ORPHAN ADOPTION MANAGEMENT SYSTEM:

Kaladevi R, Jeevitha B, Jeevitha V, Madhumitha P, Shanmugasundaram Hariharan, Andraju Bhanu Prasad, 2022 proposed a methodology of **Orphan adoption management system using machine** This portion of the article focuses on a few isolated systems that were created for an orphanage home centre to keep the orphan registration current. The

are a few issues.

Architecture Diagram to describe a system designed with the aim of making it easier for programmers to make programs using object-oriented programming languages (OOP). UML is nothing but it contains diagrams that show how a system works. Programmatically, he had used PHP and MYSQL to develop this fund rising information system.

The software testing process held in developing the fund rising details set-upincludes,

Requirements Analysis- To know about the existing problem and completing the sequence according to the need.

System Design is the stages of system design as a solution of existing problems by UML diagrams utilizing system modelling tools.

Implementation- This stage is carried out by the programmer and is the core stage in working on a system.

Testing- It is a final stage where the programs will be tested.

Deployment and maintenance- The information system that has been created and then implemented, while preservation is needed to keep the system workingproperly.

have to deal with. The PAP must register with a recognised organisation. study at home and the child, submitting the form, accepting the child Foster-care before adoption, child referral, Court order and hearing etc. [10][11][12]

So, to overcome this drawback this technique has introduced. It comes with major asJava, MYSQL, PHP

The use of this techniques outcomein predicting the best match of the child for the adoptees. The concept of data mining is used here when there is the need of extracting useful information. For example, to match the child record and parent record in an orphanage. So that it won't be time consuming also.

learning which includes Support Vector Machine algorithm. It will create a dataset based on gender ie) Data's will be collected, Data's will be processed, classification will be done by using SVM, Gender and age will be classified and the final result will be produced for the donor based on that for the decision

system uses Structure System Analysis and Design (SSAD) as its primary technique. They collected logically relevant files that could be combined and

structured using the database to create a single comprehensive file system.

The features provided here are faster data processing and accessing, backup and recovery, data integrity. This system uses PHP and CSS for front-end development and for back-end done using MySQL.

A mechanism for orphans to receive assistance of any type from volunteers or donors willing to make a donation to an orphanage.

Users can sign up and donate food, cash, and clothing to orphanages. The administrator is primarily responsible for gathering donations from donors and distributing them to all orphanages listed on the website. The adoption procedure is also described. After using the eligibility checker for adoption, parents can begin looking for the child to adopt. This approach offers an adoption process that is quicker and more efficient.

In tasks like text categorization, image classification, future prediction, etc., classification

III. RESEARCH METHODOLOGY

In research methodology the following steps has occurred.

Problem statement: The main objective of this research is to build an online foster care management set-up to provide a better life for orphan children and assist individuals who wish to donate or adopt a child.

Literature review: A literature review has been conducted to gather information on existing orphanage management systems and their effectiveness in providing a better life for orphan children.

Research design: A qualitative research design will be used to gather data on the current state of orphanages in Ghana, including their current methods of management and the challenges they face.

Data collection: Data will be collected through online surveys and interviews with orphanage staff and potential adopters/donors.

Data analysis: The collected data will be analyzed to identify key issues and challenges faced by orphanages in Ghana, and to determine the specific needs of the orphanage management system.

System development: Based on the findings from the literature review and data analysis, a foster care management organization will be developed and tested for usability and effectiveness.

Evaluation: The developed system will be evaluated for its effectiveness in providing a better

is regarded as being the most important one. Orphan systems primarily concentrate on four separate data sets, including data on diabetes, heart disease, and satellite information, each with a unique collection of features, classifications, training data, and testing data [13].

The proposed methodology used here is,

Adataset is created and stored in the database servers for easy retrieval and access. The selection constraints provide options for the Donor to give their preference of orphan based on gender. Gender can be classified as either male or female and provide result according to user input. Then, age can be classified into below 10 and above 10, within the classified results of gender. Finally, the donor selects any orphan from the classified results that are displayed, following by which a request is sent to the orphanage owner for donating that orphan.

Classification concept plays an important role as it is based on age and gender of orphans.

life for orphan children and assisting individuals who wish to donate or adopt a child.

The most suprememethodologyis publishing about this in television/social medias in which people can come to know the procedure status and options available. Not only television and mobile phones there are other resources like newspaper, telephonic and e-mail, catalogues etc.and through statistical analysis suitable parents for the orphans can be founded.

This website is not specifically designed for aged people it also suits couple who doesn't have a child over years or an individual who is not married but wish to adopt a child. Youngsters who havegenetic defects may go for this option or people above the age or in 45 can go for the adoption process.

The objective of orphanage management is enabling any organization's administrator to access, modify, and discover the personal information of an orphanand allows the guardian to maintain their profile's accuracy.

Stakeholder involvement: Engage relevant stakeholders, such as orphanage administrators, volunteers, and orphan children, in the research and development process to guarantee that their needs and views are taken into account, orphan children should be included in research and development.

User-centred design: Adopt a user-centred design approach to ensure that the system is intuitive,

user-friendly, and meets the needs of those who will be using it.

System security: Implement robust security measures to protect the privacy and confidentiality of data stored in the system.

Scalability: Considering the scalability of the system, ensuring that it can be easily adapted to accommodate the needs of different sizes and types of orphanages with respective requirements.

Monitoring and evaluation: Establish a system for monitoring and evaluating the impact of the online system on the management of orphanages and the lives of orphan children.

Project Management: Develop a project management plan to ensure that the development of the system is executed in a timely and efficient manner, with regular check-ins and progress updates.

IV. Algorithm and Technology

It may be a website, android application or some other manual process, there a technology or algorithm must be used for the purpose of successful process because it uses a definite procedure and step by step manner.

It includes various steps and the process/steps included in creating a website for orphanage home management are as follows-

Step 1:

The below **Fig4.1**, represents the dashboard of this orphanage home management. Here, generallywelcoming the user, adoption details, and the user can able to see various options like Adopt a child, Make donation (Where users not only need to adopt also they can donate), View child (with respect to gender either Male or Female) and a volunteer (A Person who wish to Interact with the children over there day to day by providing them some education, meditation practices like yoga, extracurricular activities etc...)

System Architecture: Design the system architecture, including the hardware and software components, to ensure that the system is scalable, secure, and able to meet the needs of the stakeholders.

User Acceptance Testing: Engage with the primary users of the system, the orphanage staff, and the children, to conduct user acceptance testing and gather feedback on the system's functionality, usability, and effectiveness.

Integration with Existing Systems: Plan for the integration of the online system with existing systems, such as financial management systems, to ensure seamless and efficient operation.

Implementation and Deployment: Plan for the implementation and deployment of the system, including the training of the orphanage staff and the children on how to use the system.



Fig 4.1Official welcome page

Step 2:

In this step a dashboard appears with the process of adopting a child, making donations, viewing child based on their gender and being a volunteer as shown in the **Fig 4.2**.



Fig 4.2 Elaboration

Step 3:

The below imageFig 4.3 is about adding some description generally about adoption and below an e-mail address, and phone number of the user and with a menu icon at top right corner of the page for a few more options like Adoption details, Admin login, user login, Registration, aboutthis website and to contact option for the user to contact the orphanage manager.





Fig 4.3 Details and Procedures

Step 4:

This process is about the registration page and what information it needs from the user to proceed further.

The information needed are likely to be the name of the user, e-mail id, their password with respective to agree terms and a register button down to it which is mentioned in the below **Fig 4.4**.

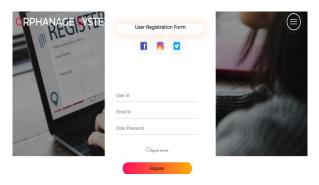


Fig 4.4 User's registration form

Step 5:

This process is about the page for admins to log in as shown in **Fig4.5**. Itcontains options like user-id and password to proceed further categories like create orphan, manage orphan and manage user.

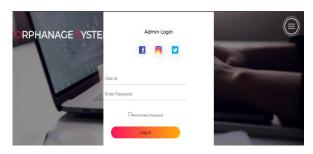


Fig 4.5Admin's login page

Step 6:

The below **Fig 4.6**shows the dashboard of the admin pagewhich consists of the options as creating an orphan details', managing the orphans to edit or remove the necessary details and same as manage the user where they can edit their details too.

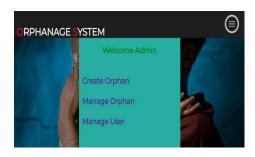


Fig 4.6 Dashboard of admin

Step 7:

In **Fig 4.7**, Suppose if new orphan is to be joined, first we need to create a database for them so by using the option create orphan, we can collect the details of that new orphan as shown in the below image.



Fig 4.7 Registration form for new orphan

Step 8:

The below **Fig 4.8** that how an existing orphan detail's will be.To edit the detail of an orphan (for example their age), there should be an option to edit, so if the admin clicks on manage orphan optionshe can found the orphan details serially with the edit and delete option.

Orphan list



Fig 4.8Existing page of an orphan

Step 9:

Coming to the user welcome page as shown in the **Fig 4.9**, Parallelly there will be three options such as Add donation where the users can donate, View orphan where the users can view the orphans they need(for example either Male child or Female child), View donation where they can view their process.



Fig 4.9User's welcome page

Step 10:

The below **Fig 4.10**comes with a page of the information details needed from the donor. So here in the add donation part, the end users can donate amount after providing their Id, name, age, Date of birth, gender, their occupation, annual income, the amount need to be donated, contact information, address. After these details are processed, thencan proceed with the donate button below.



Fig 4.10 Registration form for donors

Step 11:

The following **Fig 4.11**is to know about the process or the successful donation status. For this purpose, they can use the view donation option.

V. PROPOSED METHODOLOGY

The process mentioned above in 'algorithm and technology' involves utilizing front-end and backend technologies, including HTML, CSS, PHP, JavaScript, and MySQL. These technologies were employed to incorporate various features such as adoption and donation details on the welcome page. This has made the website more user-friendly and simplified the process of accessing information for users.

NEED FOR THIS TECHNOLOGY:

HTML- Used here for creating the orphanage website.

CSS- Cascading Style Sheets has been used for the purpose of styling that webpage with various options.

PHP- Hypertext pre-processor which is also a scripting language for the dynamic interaction of the websitewhich can't be done only using HTML and also it allows access to various databases.

JAVASCRIPT – By adding the JS code in html either in body of the html, we can also style or change the values or content of the html file (ie, dynamic changes) form validation (either the details entered are correct or wrong).

MYSQL- Used as a back-end part, where we can store the information's of the orphan and staffs. From the below database images, we have created a table with table name entities for donation, orphan, user, admin with respective attributes which is the use of MYSQL.



Fig 4.11 Page of viewing donation

Followed in backend, four tables have been created on the basis of four options namely,

- 1.Donation
- 2.Orphan
- 3.User
- 4.Admin

where it takes and stores the data given by the user accordingly.

A Donation table has been created with the following attributes such as donor Id, donor Name, donor age, date of birth, gender of the donor, occupation, annual income, amount, contact, address.

The Orphan table with the following attributes such as orphan Id, orphan name, orphan age, dob, gender, date of joining, contact, address.

The User which has the attributes such as user Id, email and password.

The admin table which has the attributes such as user-id and password.

Problem Statement: Clearly defining the difficulty that the system is meant to address is the first step. This stage offers the production process an

understandable direction and help to guarantee that the system is focused on tackling the right problem.

Requirement's Analysis: Sequentially we need to analyse the requirements for the above problem statement and perform based on that by providing

VI. RESEARCH AND DISCUSSIONS

Coming to the discussions had on research part, we have analysed with the description and findings that our website to be used and how does it work with various options in our point of view to the users. That is, considering the overall research how the website can be done and what basis it works to the end-users.

The steps involved in the discussions has been represented below,

KEY-FINDINGS:

There is a lack of technology in storing the details of an orphan and maintain it. So, a website for the orphanages has been created to maintain the database of everyone out there using the well-known technologies such as front-end (HTML, JS,CSS) and back-end (SQL).

RELATION WITH PREVIOUS RESEARCH:

There are various websites and research available specifically for an orphanage like fund-rising, managing records using machine learning, Helping system for them, etc,...By that way relating our context with previous researches helps in managing orphan records, staff records and even they can provide donations and volunteers can able to interact with the orphans by providing extracurricular activities.

UNEXPECTED METHODOLOGY:

The initial design and development of this project is to create a website and store the details of everyone which needs to be. Unexpectedly, we

VII. CONCLUSION

Hence, it proposes the adoption of a digital platform for orphanages, which not only facilitates the adoption process but also allows users to provide much-needed support such as food, medication, clothing, and financial aid. With the increasing population, digital migration can ease the pressure on paper-based processes and reduce the risk of data loss due to natural disasters.

the details in an efficient manner to the user. So that they can clearly understand about the process.

Development: This website is developed based on scalability so that in future some features could be added based on the growth of the technologies.

came up with the idea clash of also making optionsto make them donate and view their donations.

LIMITATIONS AND THREAT:

However, this orphanage home management system benefits the users in many ways, even it has some drawbacks that the whole process could not be able to done in online. Threats- server crash may happen which is unpredictable or some other reasons.

EXISTING SYSTEM'S LIMITATIONS:

When the orphanage management system uses a paper format to store data because of the less number in children, that too has drawbacks such as There will be no recovery and backup database files even if the children are in countable state, it don't have technical skills to manage those files, Data will be insecure because the paper might get damaged.

ADVANTAGE AND AVAILABILITY:

There may be the availability of helping system, managing system individually but they both commonly will be available in this orphanage home management system. The users don't need to shift to every website.

Since it is an online process, more features could be added accordingly. For example, using javascript, a windowalert can be made like a pop-up message aftereither a successful login or unsuccessful login (invalid number or any other issues).

Orphans may end up in orphanages due to various reasons such as unexpected death, poverty, and suicide of parents. Regardless of the reason, it is essential to provide them with a caring environment to avoid loneliness and help them adjust to the real world. Adoption is not the only way to give them a better life; Interacting with them can also provide happiness and offer valuable life lessons. The implementation of this programmatic website offers data backup and recovery, system security, and faster data processing to efficiently match prospective

adopting parents with orphaned children. This website allows users to browse children based on age, gender, and other preferences, making the adoption process more accessible. Furthermore, it provides a range of options for financial support, including direct donation to orphanages. By supporting this website, individuals can improve the living conditions of orphaned children, making their lives happier, and contributing to their overall well-being.

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