

Charity Connecting System

M.Archana¹, K.Mouthami²

Assistant Professor^{1,2}, Dr. N.G.P Institute of Tehnology^{1,2}
Coimbatore, Tamilnadu, India

Abstract: - Orphanage Connecting System is being developed for the welfare of the orphanage and can be used by NGOs for co-operative social work. System is mainly for the systematic usage of the website by the user and the admin. The objective of this application is to develop a centralized website for orphanages. To provide facilities of various social activities in a single website. People can adopt the children and they can donate through online.

Keywords: Orphanagae, NGO, adopt

I. SYSTEM OVERVIEW

A. Existing system

Existing Systems consists of only the orphanages details such as, address contact numbers etc.. It does not have any centralized and separate website for orphanages

B. Drawbacks

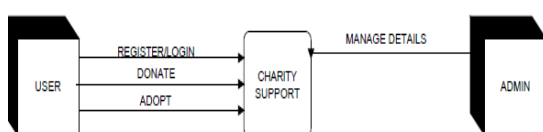
In existing system people can view only the address of the particular orphanages which are searched by the users. In that people cannot do any donation or sponsorships. This is the main drawback of the existing system. And also this is the main disadvantage of the orphanages those who are in need of getting help from others .

C. Project Overview

The online orphanage connecting system is developing to facilitate the orphanages. Here the user's visit the website by registering their details. After that the registration process got over they can enter into the site. They can view the orphanage details .those who is willing to donate to the orphanage can donate amount by giving their details such as name, account number etc...

As soon as admin receives that particular amount from the user, response message will be sent to the user's mail. Amount which is given by the users will be sent to the admin account. Admin will transfer that particular amount to the orphanages which have been registered. Adding the children to the orphanages, viewing the user details, updating the data base these are the jobs of the admin.

Adoption option is also included with the eligibility checker. This is for those who wish to adopt the child from the orphanage.



System Context Diagram

D. Functional Requirements

1. *Requirements in scope:*-The admin should remotely use the web portal or the software to handle the request of different users and organization.

2. *Requirement out of scope:*-The proposed system is implemented for the orphanages in Coimbatore premises. It can be extended to state level or national level. Other organizations such as old age home, relief camps also can be included in this project. The details of each child such as medical, education can be added to inform their sponsors.

3. *User interface:* - User Interface used is web portal.

E. Non Functional Requirements

1. *Security:* - Access to the website is limited to the admin, user and the organisation. The details of each user are kept secured from other users. Secured way of fund transfer can be carried with unique account number and pin number. The system must automatically log out all customers after a period of inactivity.

The system should not leave any cookies on the customer's computer containing the user's password .The system's back-end servers shall only be accessible to authenticated administrators. Sensitive data will be encrypted before being sent over insecure connections like the internet.

2. *Audit trail:* - All the user sessions will be tracked in history table with the details of every recent action like the recent visit with time location etc.

3. *Error logging:* - Any errors that occur due to system malfunctioning and downtime will be logged in a separate log file.

The performance depends upon the network speed. In the proposed system the efficiency also depends upon the database availability.

4. *Scalability:* - The speed of server gives the quality of service.

5. *Availability/Reliability:*-The portal will be available in local area network and the World Wide Web .The user can use it with the URL or IP address. Reliability is high as multipath routing is being implemented.

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. Thus the

overall stability of the system depends on the stability of container and its underlying operating system.

Also in case of a hardware failure or database corruption, backups of the database should be retrieved from the server and saved by the administrator. Then the service will be restarted.

6. *Data migration*:- The data is currently saved in MySQL and it is possible to migrate data to other compatible databases (eg: Oracle).

7. *Data retention*:-Data retention is about 2yrs.

8. *Legal/Regulatory requirements*:- Depending on the interest of NGOs and orphanages, this project will be displayed in their website to be viewed by the public.

II. SOFTWARE DESCRIPTIONS

A. Front end

1. *JSP (Java Server Pages)*:- The Sun Microsystems's java server pages technology allows you to rapidly develop and easily maintain rich, dynamic web pages. As a part of java family JSP enables development of web based applications that are platform independent. The web applications build using JSP technology works with a wide variety of web servers, application servers, browsers and development tools. The logic that generates the content is encapsulated in tags and JavaBeans components and tied together in scriptlets, all of which are executed on the server side. If the core logic is encapsulated in tags and Beans then other individuals, such as web masters and page designers, can edit and work with JSP pages without affecting the generation of the content. Thus the JSP technology separates the user interface from the content generation.

JSP page is simply an HTML web page, which contain additional bits of code that generates dynamic content of the page. JSP technology is a part of java family. It uses a java programming language based scripting language and JSP are compiled into java servelets the first time they are invoked. JSP pages may call JavaBeans, EJB components, RMI objects, DBC objects to perform processing on the server. Example JSP page may contain HTML that display static text and graphics, as well as a method call to JDBC object that access database, when the page is displayed in a user's browser.

2. *Features of JSP*:- JSP technology follows the write once run anywhere rule which is the basic of the java language. JSP uses pure java and takes the advantage of its object oriented nature. JSP uses a combination of tags and scripting to create dynamic web pages. The JSP page uses the components like EJB, JavaBeans which are reusable. This gives the JSP reusability capabilities. Applications made using JSP technology are easier to maintain.

3. JAVASCRIPT

Features:- JavaScript is a prototype-based scripting language that is dynamic, weakly typed, and has first-class functions. Its syntax was influenced by the language C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics. The key design principles within JavaScript are taken from the self and Scheme programming languages. It is a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles.

JavaScript's use in applications outside of web pages—for example, in PDF documents, site-specific browsers, and desktop widgets—is also significant. Newer and faster JavaScript VMs and frameworks built upon them (notably Node.js) have also increase the popularity of JavaScript for server-side web applications.

JavaScript was formalized in the ECMA Script language standard and is primarily used as part of a web browser (client-side JavaScript). This enables programmatic access to computational objects within a host environment.

4. *Prototypes*:- JavaScript uses prototypes instead of classes for inheritance. It is possible to simulate many class-based features with prototypes in JavaScript.

5. *Functions as Object Constructors*:- Functions double as object constructors along with their typical role. Prefixing a function call with new will create an instance of a prototype, inheriting properties and methods from the constructor (including properties from the Object prototype. ECMAScript 5 offers the Object.create method, allowing explicit creation of an instance without automatically inheriting from the Object prototype (older environments can assign the prototype to null) The constructor's prototype property determines the object used for the new object's internal prototype. New methods can be added by modifying the prototype of the object used as a constructor. JavaScript's built-in constructors, such as Array or Object, also have prototypes that can be modified. While this is possible it is generally considered bad practice to modify the Object prototype as most objects in Javascript will inherit methods and properties from the Object prototype and may not expect those to be modified.

6. *Accessibility*:- Assuming that the user has not disabled its execution, client-side web JavaScript should be written to enhance the experiences of visitors with visual or physical disabilities, and certainly should avoid denying information to these visitors.

Screen readers, used by the blind and partially sighted, can be JavaScript-aware and so may access and read the page DOM after the script has altered it. The HTML should be as concise, navigable and semantically rich as possible whether the scripts have run or not. JavaScript should not be totally reliant on mouse-specific events so as to deny its benefits to users who either cannot use a mouse or who choose to favor the keyboard for whatever

reason. Equally, although hyperlinks and web forms can be navigated and operated from the keyboard, accessible JavaScript should not require keyboard events either. There are device-independent events such as on focus and on change that are preferable in most cases.

JavaScript should not be used in a way that is confusing or disorienting to any web user. For example, using script to alter or disable the normal functionality of the browser, such as by changing the way the back-button or the refresh event work, is usually best avoided. Equally, triggering events that the user may not be aware of reduces the user's sense of control as do unexpected scripted changes to the page content.

Often the process of making a complex web page as accessible as possible becomes a nontrivial problem where issues become matters of debate and opinion, and where compromises are necessary in the end. However, user agents and assistive technologies are constantly evolving and new guidelines and relevant information are continually being published on the web.

Completely customizable styling with CSS

Powered by jQuery

Extremely small - 3kb uncompressed

7. Apache Tomcat Server:- Apache Tomcat (or simply Tomcat, formerly also *Jakarta Tomcat*) is an open source web server and servlet container developed by the Apache Software Foundation (ASF). Tomcat implements the Java Servlet and the JavaServer Pages (JSP) specifications from Sun Microsystems, and provides a "pure Java" HTTP web server environment for Java code to run in.

B. BACKEND

1. MYSQL:- MySQL is a relational database system. If you can believe many diehard MySQL fans, MySQL is faster, more reliable, and cheaper -- or, simply put, better - than any other database system (including commercial systems such as Oracle and DB2). Many MySQL opponents continue to challenge this viewpoint, going even so far as to assert that MySQL is not even a relational database system.

We can safely say that there is a large bandwidth of opinion.

The fact is that there is an ever increasing number of MySQL users, and the overwhelming majority of them are quite satisfied with MySQL. Thus for these users we may say that MySQL is good enough.

It is also the fact, however, that MySQL still lacks a number of features that are taken for granted with other database systems. If you require such features, then MySQL is (at least for the present) not the database system for you. MySQL is not a panacea.

2. Features of MYSQL:- The following list shows the most important properties of MySQL. This section is directed to the reader who already has some knowledge of relational databases. We will use some terminology from the relational database world without defining our terms exactly. On the other hand, the explanations should make it possible for database novices to understand to some extent what we are talking about.

a. Relational Database System: Like almost all other database systems on the market, MySQL is a relational database system.

b. Client/Server Architecture: MySQL is a client/server system. There is a database server (MySQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they query data, save changes, etc. The clients can run on the same computer as the server or on another computer (communication via a local network or the Internet).

Almost all of the familiar large database systems (Oracle, Microsoft SQL Server, etc.) are client/server systems. These are in contrast to the file-server systems, which include Microsoft Access, dBase and FoxPro. The decisive drawback to file-server systems is that when run over a network, they become extremely inefficient as the number of users grows.

c. SQL compatibility: MySQL supports as its database language -- as its name suggests -- SQL (Structured Query Language). SQL is a standardized language for querying and updating data and for the administration of a database. There are several SQL dialects (about as many as there are database systems). MySQL adheres to the current SQL standard (at the moment SQL: 2003), although with significant restrictions and a large number of extensions.

Through the configuration setting `sql-mode` you can make the MySQL server behave for the most part compatibly with various database systems. Among these are IBM DB/2 and Oracle.

d. SubSELECTs: Since version 4.1, MySQL is capable of processing a query in the form `SELECT * FROM table1 WHERE x IN (SELECT y FROM table2)` (There are also numerous syntax variants for subSELECTs.).

e. Views: Put simply, views relate to an SQL query that is viewed as a distinct database object and makes possible a particular view of the database. MySQL has supported views since version 5.0.

Stored procedures: Here we are dealing with SQL code that is stored in the database system. Stored procedures (SPs for short) are generally used to simplify certain steps, such as inserting or deleting a data record. For client programmers this has the advantage that they do not have to process the tables directly, but can rely on SPs. Like views, SPs help in the administration of large database projects. SPs can also increase efficiency. MySQL has supported SPs since version 5.0.

Triggers: Triggers are SQL commands that are automatically executed by the server in certain database operations (INSERT, UPDATE, and DELETE). MySQL has supported triggers in a limited form from version 5.0, and additional functionality is promised for version 5.1.

f. Unicode: MySQL has supported all conceivable character sets since version 4.1, including Latin-1, Latin-2, and Unicode (either in the variant UTF8 or UCS2).

g. User interface: There are a number of convenient user interfaces for administering a MySQL server.

h. Full-text search: Full-text search simplifies and accelerates the search for words that are located within a text field. If you employ MySQL for storing text (such as in an Internet discussion group), you can use full-text search to implement simply an efficient search function.

i. Replication: Replication allows the contents of a database to be copied (replicated) onto a number of computers. In practice, this is done for two reasons: to increase protection against system failure (so that if one computer goes down, another can be put into service) and to improve the speed of database queries.

j. Transactions: In the context of a database system, a transaction means the execution of several database operations as a block. The database system ensures that either all of the operations are correctly executed or none of them. This holds even if in the middle of a transaction there is a power failure, the computer crashes, or some other disaster occurs. Thus, for example, it cannot occur that a sum of money is withdrawn from account A but fails to be deposited in account B due to some type of system error.

Transactions also give programmers the possibility of interrupting a series of already executed commands (a sort of revocation). In many situations this leads to a considerable simplification of the programming process. In spite of popular opinion, MySQL has supported transactions for a long time. One should note here that MySQL can store tables in a variety of formats. The default table format is called MyISAM, and this format does not support transactions. But there are a number of additional formats that do support transactions.

k. Foreign key constraints: These are rules that ensure that there are no cross references in linked tables that lead to nowhere. MySQL supports foreign key constraints for InnoDB tables.

l. GIS functions: Since version 4.1, MySQL has supported the storing and processing of two-dimensional geographical data. Thus MySQL is well suited for GIS (geographic information systems) applications.

m. Programming languages: There are quite a number of APIs (application programming interfaces) and libraries for the development of MySQL applications. For client programming you can use, among others, the languages C, C++, Java, Perl, PHP, Python, and Tcl.

n. ODBC: MySQL supports the ODBC interface Connector/ODBC. This allows MySQL to be addressed by all the usual programming languages that run under Microsoft Windows (Delphi, Visual Basic, etc.). The ODBC interface can also be implemented under Unix, though that is seldom necessary.

o. Platform independence: It is not only client applications that run under a variety of operating systems; MySQL itself (that is, the server) can be executed under a number of operating systems. The most important are Apple Macintosh OS X, Linux, Microsoft Windows, and the countless Unix variants, such as AIX, BSDI, FreeBSD, HP-UX, OpenBSD, Net BSD, SGI Iris, and Sun Solaris.

p. Speed: MySQL is considered a very fast database program. This speed has been backed up by a large number of benchmark tests (though such tests -- regardless of the source -- should be considered with a good dose of scepticism).

III. PROJECT DESCRIPTIONS

A. Problem definition

This project is being developed for the welfare of the orphanage and can be used by NGOs for co-operative social work. This is mainly for the systematic usage of the website by the user and the admin.

The objective of this application is to develop a centralized website for orphanages. To provide facilities of various social activities in a single website. People can adopt the children and they can donate through online.

B. Module Description and Evaluation

1. Login and registration: - Users can visit the website by registering their details. After that the registration process got over they can enter into the site by logging in with their registered user name and password they after that user can enter into the web site.

Login and registration

2. Orphanage details:- The user can view the different orphanage details such as name, address, person-in-charge, contact number and also user can view the children details in each orphanage. The admin can modify and add children detail for orphanages listed. The admin can modify and update the children detail in each orphanage. He can also view the registered user list.

Orphanage Details

3. **Fund transfer:-** Amount which are given by the users will be sent to the admin account .admin will transfer that particular amount to the orphanages which have been registered.

Fund Transfer

Adding the children to the orphanages, viewing the user details, updating the data base these are the jobs of the admin. Adoption option is also included with the eligibility checker this is for those who wish to adopt the child from the orphanage.

4. **Adoption:-** Parents or the users those who are likes to adopt the children from the orphanages can adopt the child by adhering rules and regulations of the orphanage. In this module there will be the form which consists of all the rules and eligibility to adopt the child. The user /the parents should agree the form and then they can proceed with their adoption activities.

The rules will be like annual income of the parents, age of the parents etc... This is applicable for single parent also.

5. **Feedback:-** In the feedback module, the user can send queries regarding donation or any difficulty faced in website. This is directed to admin who can view the feedback report and reply is send to the user mail.

IV. RESULT AND CONCLUSION

Charity Support provides a platform to the welfare of the orphanage and can be used by NGOs for co-operative social work. The user can register here and carry on their charity work by viewing the details of the orphanage. It improves the efficiency to the user towards their social work.

Charity Page

V. FUTURE ENHANCEMENT

- 1 Enhancements that can be included in the Charity Support are
- 2 Orphanages all across India can be included.
- 3 Notifications via SMS can be done for donation and registration.
- 4 Education and medical details can be added to children details.

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