

ONLINE CHARITY MANAGEMENT SYSTEM

PROJECT SYNOPSIS

Of Major Project

BACHELOR OF TECHNOLOGY

Computer Science

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Section- B

Proposed Topic- ONLINE CHARITY MANAGEMENT SYSTEM

SUBMITTED BY- GROUP NO-16

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INTRODUCTION

A charity management system is a software/website solution for a non-profit organization. It manages the charitable donations and also the donor base. Such a system includes features such as electronic fund transfer, donation management, fundraising, donor management, and event management.

There are certain key features that these systems offer to non-profits:

- Easily track donations and donors.
- Send gift messages to donors.
- Set up recurring payment plans.
- Get reports on their donations.

Why Online Charity Management System?

A charity management system is a specialized software/website designed for organizations to automate the process of managing their donor relations, fundraising campaigns, and overall financial operations. It can also be used to create reports on how well an organization is meeting its goals.

These systems are designed to be user-friendly and flexible to serve the needs of various types of non-profits. Some features that are often included in these systems are databases for storing information about donors, volunteers, events, products, pledges etc., customizable reporting tools for generating customized reports on fundraising progress etc., online donation processing system for accepting cash donations etc.

These management systems have benefited non-profits in a variety of ways including making it easier for organizations to track their progress towards goals and save time by automating manual processes.

- Design and integrate an automated system to improve the services and decreased the time spent calls and searching for services offered in the donation.
- Configure a gateway system for online payment to enable individual's ease of payment from their mobile devices.

Therefore, we propose to build a charity management system for the distribution of donations between charities, giving people the ability to notify about the surplus, and to inform about the poor who need help.

- ❖ Development of income resources (donation).
- ❖ Management and distribution of contributions to all the needy and low-income families.
- ❖ Optimum provision and utilization of operational, physical, and human resources.
- ❖ Organization and maintenance of facilities and family's data to allow the ease of their access.
- ❖ Speeding up the practical procedures. Helping decision Makers in their strategic action plans.

Objectives

The main aims and objectives of this project is to design a web-based app that helps the Donors and The NGO's Ease their work. Specifically, the aims are to; i. Design and integrate an automated system to improve the services and decreased the time spent calls and searching for services offered in the donation. ii. Configure a gateway system for online payment to enable individual's ease of payment from their mobile devices. 8 iii. Design and implement users register page, login, and online appointment booking. Therefore, we propose to build a charity management system for the distribution of donations between charities, giving people the ability to notify about the surplus, and to inform about the poor who need help.

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Literature Review

A literature review on web based-development for an online charity management system would encompass studies, articles, and research related to the technological aspects, design considerations, user experience, security, and the impact of online charity systems. Here is a structured outline for such a literature review:

S.No	Title	Author	Summary
1.	Improve quality of servicing of website.	Buuer, H.H.Falk, Hammerschmidt	A transaction process-based approach for improving the service quality of online transactions and make the website response faster.
2.	Online wait managed.	Lee, Chen, A.n. Ilie.	The effect of filter interfaces and presentations modes on perceived waiting time online and enhance the quality of response to the customers query online fastly or in time.
3.	Contribution. Giving lead to happiness	Liu, Aaker	Two distinct mind-set that influence consumers' willingness to donate a chantable causes (monetary donation and volunteer time). This effect reaches from different mindsets caused by money versus time.

4.	Prosocial attitude, Organizational ownership norm, Information Sharing.	Fisher and Ackerman	The impact of prosocial attitude and organizational norms in information sharing in organization. Promotional appeals based on group need and promised recognition are effective only when they are used in combination.
5.	Volunteering. Charitable giving(gifts).	Farrow and Yuan	Effects of alumni network ties in Facebook on charitable giving. Activation participation in Facebook groups is positively associated strength of network ties.
6.	Dropout: A Simple Way to Prevent Neural Networks from Overfitting.	Nitish Srivastava, Geoffrey Hinton, Alex Krizhevsky, et al.	Dropout is a widely-used regularization technique to prevent overfitting in neural networks. It has been applied to improve the generalization capabilities of digit recognition models.
7.	SVM and Kernels on the Generalized RBF Networks for DigitRecognition".	Peng-Yeng Yin and Chia-Hua Ho	This paper explores the use of Support Vector Machines (SVMs) with radial basis function (RBF) kernels for digit recognition, providing an alternative approach to deep learning methods.
8.	Handwritten Digit Recognition with a Committee of Recurrent Neural Nets.	Raia Hadsell, Sumit Chopra, and Yann LeCun	This paper introduced the concept of using a committee of recurrent neural networks (RNNs) for digit recognition, highlighting the benefits of ensemble learning.

9.	Enhancing the Performance of Convolutional Neural Networks on Quality Handwritten Digit Recognition through Data Augmentation.	Jyoti Sinha, A. G. Ramakrishnan, and Surekha Bhanot	Data augmentation techniques, such as rotation and translation, were discussed in this paper to improve the robustness of CNN-based digit recognition models.
10.	A Survey of Recent Advances in Handwritten Chinese Character Recognition.	Chao Yao, Cheng-Lin Liu, and Yi-Zhang Jiang	While primarily focused on Chinese character recognition, this survey paper provides insights into various techniques that can be adapted for digit recognition, including CNNs and recurrent models.

Feasibility Study

A feasibility study for a charity management website is a crucial step to determine whether the project is viable and worth pursuing. Here is a step-by-step guide to conducting a feasibility study:

Project Description and Objectives:

Define the purpose of the charity management website. What are the primary objectives? Who are the target users, and what problems will the website solve for them?

Market Research:

Conduct market research to understand the demand for such a website. Analyze the current landscape of charity management tools and platforms. Identify competitors and potential partners.

Technical Feasibility:

Assess whether the technology required to develop the website is readily available and feasible. Consider factors like the required software, hosting, and technical expertise.

Financial Feasibility:

Calculate the estimated costs for developing and maintaining the website. Include expenses such as web development, hosting, domain registration, and ongoing maintenance. Compare these costs to the expected benefits and revenue streams.

Revenue Model:

Determine how the website will generate income for the charity. Common revenue sources for charity websites include donations, sponsorships, grants, and fundraising events.

Legal and Regulatory Compliance:

Research and understand the legal and regulatory requirements related to operating a charity management website. Ensure compliance with data protection laws, tax regulations, and any other relevant rules.

Risk Analysis:

Identify potential risks and challenges that could affect the success of the website. This may include technical issues, financial constraints, or unexpected competition.

Resource Assessment:

Assess the availability of human resources, including web developers, designers, and content creators. Determine if you have the necessary skills in-house or if you need to hire external help.

Timeline and Milestones:

Create a project timeline with clear milestones. Estimate the time required for development, testing, and launch. Ensure that the timeline aligns with the charity's goals and needs.

User Feedback and Validation:

Gather feedback from potential users, charities, and stakeholders. Conduct surveys or focus groups to validate the need for the website and identify any additional features or improvements.

Sustainability and Scalability:

Consider the long-term sustainability of the project. How will the website evolve over time, and how will it handle increased user loads as it grows?

Conclusion and Recommendations:

Summarize the findings from the feasibility study and provide a clear recommendation on whether to proceed with the charity management website project. Include a cost-benefit analysis and potential alternatives if applicable.

Methodology

Stage 1. Getting to know a client

After the company gets a message from a client that he or she wants to work with the developers' team, a project manager (PM from here) and a client's representative discuss the client's needs (or the specifications if clients already know what they want).

Stage 2. Discovery and project research

Discovery means that the development team only investigates client's business requirements and decide for themselves whether they can really solve a client's problem. An outcome is getting to know a client's goal, business specifics, and initial requests.

Stage 3. Wireframes and prototypes creation

Following is the work on the wireframes and prototypes in collaboration with the client and the team's designer.

Stage 4. Design

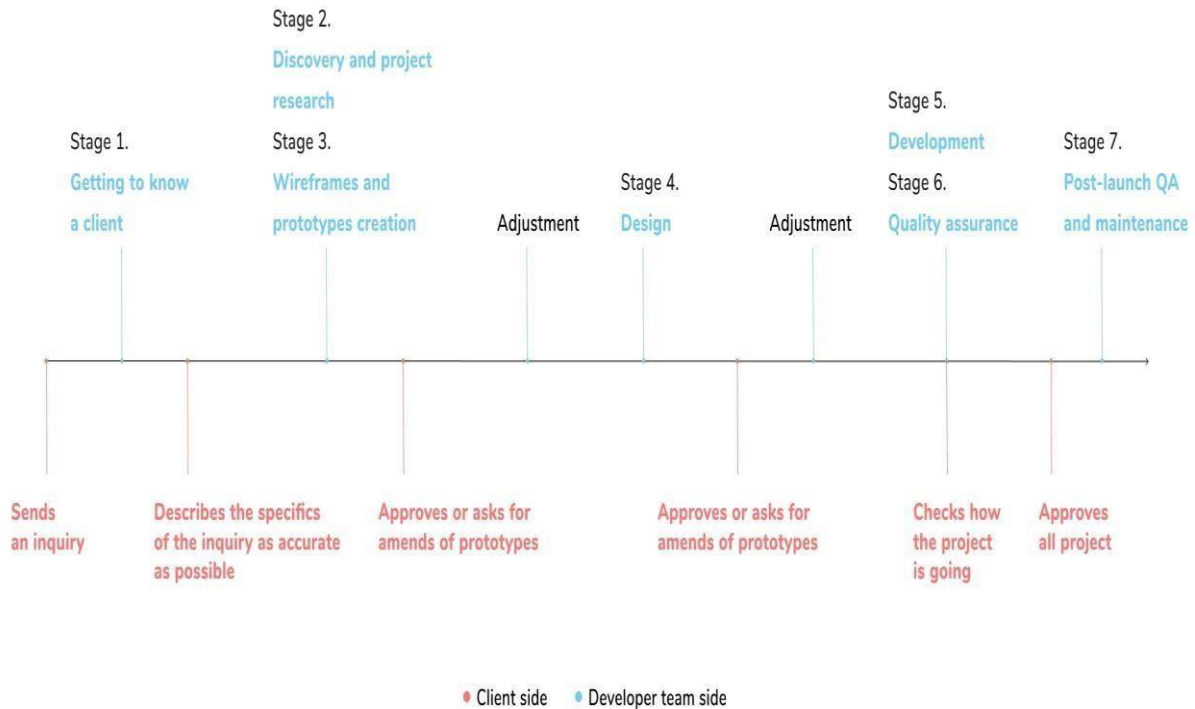
Working on design comps until final approval. The company carefully asks for all the details about the impression a client's project should create.

Stage 5. Development

Initial installation and configuration go first. Then developers set up all necessary settings of modules. They make sure every website page was approved, and the client has gone through demo versions of every feature on the website. It was a little hint from the development side to the client: check and test all the options. There are no minor ones when it comes to website usage. Believe us, your website's visitors will notice every teeny-tiny bug.

Stage 6. Quality assurance

Remember the hint from stage 5? Never ever omit the testing stage. After the integration test, we move to the functional and UI tests and end up with manual tests.



Facilities Required For The Proposed Work

Recommended Operating Systems:

- Windows: 7 or newer
- MAC: OS X v10.7 or higher
- Linux: Ubuntu

Hardware Requirements:

- Processor: Minimum 1GHz; Recommended 2GHz or more
- Hard Drive: Minimum 32GB; Recommended 64GB or more
- Memory (RAM): Minimum 1GB; Recommended 4GB or above
- Ethernet connection (LAN) or a wireless adapter (Wi-Fi)
- Sound card w/speakers

Recommended Software:

- Supported Browsers: Chrome, Firefox, Edge, etc.
- IDE: Notepad++, Visual Studio Code
- Apache PHP 8.1
- My SQL Database Server 8.0

Expected Outcome

The expected outcomes for a charity management project can vary depending on its specific goals and objectives. However, here are some common expected outcomes for such a project:

1. Improved Efficiency in Charity Operations:

The project should lead to increased efficiency in managing the charity's operations. This includes streamlined processes for accepting and tracking donations, managing volunteers, and coordinating events.

2. Enhanced Transparency and Accountability:

Transparency is crucial in the charity sector. The project should result in a transparent system that allows donors and stakeholders to track how their contributions are used and ensures accountability in financial management.

3. Increased Fundraising and Donations:

A successful charity management project should boost fundraising efforts. This may involve making it easier for donors to contribute, implementing effective fundraising campaigns, and providing clear communication about the impact of donations.

4. Improved Communication and Engagement:

The project should facilitate better communication with donors, volunteers, and beneficiaries. This can include newsletters, social media integration, and interactive features that engage stakeholders.

5. Enhanced Reporting and Analytics:

A charity management system should provide robust reporting and analytics tools. This enables the charity to measure the impact of its programs, identify trends, and make data-driven decisions.

6. Effective Volunteer Management:

For charities relying on volunteers, the project should result in better volunteer recruitment, training, and scheduling. An effective system can help match volunteers with suitable opportunities and track their contributions.

7. Scalability and Growth:

The project should be designed with scalability in mind. As the charity grows, the system should be able to accommodate increased demand for services, donations, and volunteer involvement.

8. **Cost Reduction and Resource Optimization:**

By streamlining processes and reducing manual administrative tasks, the project can lead to cost savings, allowing more resources to be directed toward the charity's mission.

9. **Enhanced Donor Retention:**

A well-managed charity project can improve donor retention rates by building trust and fostering a sense of community among supporters.

10. **Compliance and Reporting:**

The system should facilitate compliance with legal and regulatory requirements, making it easier to submit reports to relevant authorities and maintain the charity's tax-exempt status.

11. **Positive Impact on Beneficiaries:**

Ultimately, the project's success should translate into a positive impact on the charity's beneficiaries. This may include improved access to services, better living conditions, education opportunities, healthcare, or any other area of focus for the charity.

Applications

A charity management website can have a wide range of applications that can greatly benefit charitable organizations and their stakeholders. Here are some key applications:

1. **Donation Management:** Charities can use the website to accept online donations securely. Donors can make one-time or recurring donations, specify the purpose of their contribution, and receive digital receipts for tax purposes.

2. **Fundraising Campaigns:** The website can host and manage various fundraising campaigns, including crowdfunding, peer-to-peer fundraising, and special events. It allows charities to set fundraising goals, track progress, and engage donors.

3. **Volunteer Management:** Charities can recruit, register, and manage volunteers through the website. Volunteers can sign up for specific tasks or events, and the website can help coordinate schedules and communicate with volunteers.

4. **Event Planning and Promotion:** The website can serve as a platform to plan, promote, and manage charity events, such as charity runs, auctions, and galas. Event details, registration, and ticket sales can all be facilitated online.

5. **Impact Tracking and Reporting:** Charities can use the website to track the impact of their programs and initiatives. This includes collecting data on beneficiaries, measuring outcomes, and generating reports to share with stakeholders and donors.

6. **Transparency and Accountability:** The website can provide transparency by sharing financial information, annual reports, and updates on projects. Donors and stakeholders can access this information to ensure their contributions are used effectively.

7. Communication and Engagement: The website can facilitate communication between charities and their supporters. It can include blogs, newsletters, and social media integration to engage with donors, volunteers, and the community.

8. Grant Management: Charities can use the website to apply for grants, manage grant applications, and report on grant outcomes. This streamlines the grant-seeking and reporting process.

9. Membership Management: For charities with membership programs, the website can help manage member registrations, renewals, and communication. It can also provide members with access to exclusive content and benefits.

10. Resource Library: The website can host a resource library with educational materials, research findings, and best practices in the field. This can be valuable for both internal staff and external stakeholders.

11. Online Shopping and Merchandise Sales: Charities can sell merchandise, such as t-shirts, calendars, or other branded items, through the website to generate additional revenue for their causes.

12. Grantmaking and Foundation Management: For foundations that provide grants to other organizations, the website can serve as a platform for managing grant applications, reviewing proposals, and tracking grant disbursements and impact.

13. Secure Donor Data Handling: Ensure the website complies with data protection regulations and handles donor data securely to maintain donor trust and privacy.

14. Collaboration and Networking: The website can facilitate collaboration among charitable organizations, allowing them to share resources, information, and best practices within the sector.

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