



SOFTWARE REQUIREMENTS

Donation Management Software



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COMP 220-B: Software Engineering

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Assignment Due Date: 02/05/2023

Stake Holder Interviews

Donation Management Software

Stakeholders:

1. NGO Representative
2. Main Donors
3. NGO Volunteer Workers
4. Software Developers- Team Members

Interview Questions:

1. Interview Questions for the Non-Governmental Organizations (NGOs):
 - Can you tell me a bit about your organization and the specific causes or projects that you focus on?
 - How do you currently manage and track donations? Are there any pain points or challenges you face in this process?

- What are some of the key features you would like to see in a donation management app? Are there any must-have features or functionalities that you consider crucial?
- How does your organization measure the impact of the donations it receives? Can you provide an example of a successful project and the outcomes it achieved?

2. Interview Questions for the main Donors of NGO (Falah Foundation):

- What is your criteria for selecting an NGO to donate to? Are there any specific causes or projects that you prioritize?
- How do you see the future of philanthropy and charitable giving evolving in the next few years? What role do you think technology will play in this?

Answers to the Interview Questions:

Answers to the interview questions for the NGOs – (Falah Foundation):

- 1.** Can you tell me a bit about your organization and the specific causes or projects that you focus on?

- Our organization focuses on animal welfare and conservation.
- We provide education and resources to underprivileged children in rural areas.
- We provide relief and aid during natural disasters.

2. How do you currently manage and track donations? Are there any pain points or challenges you face in this process?

- We currently use spreadsheets and manual record-keeping to track donations.
- Our biggest pain point is the lack of transparency and difficulty in providing donors with real-time updates on how their donations are being used.

3. What are some of the key features you would like to see in a donation management app? Are there any must-have features or functionalities that you consider crucial?

- A secure and user-friendly platform for donors to make donations.
- Real-time tracking and reporting of donations and their impact.
- A streamlined process for communication and updates with donors.
- A feature for donors to book a visit to our organization or projects.

4. How does your organization measure the impact of the donations it receives? Can you provide an example of a successful project and the outcomes it achieved?

- Our organization uses a combination of qualitative and quantitative measures to track the impact of donations.
- We track the number of individuals or communities impacted by our projects, as well as any improvements in their well-being or quality of life.
- For example, in our recent project to provide clean water to a rural community, we measured:
 - The number of households that gained access to clean water
 - The reduction in water-borne illness cases reported.
- We also conduct interviews and surveys with beneficiaries to understand their feedback and the effectiveness of our interventions.
- One of our successful projects was a health education program for adolescent girls in a low-income community, which resulted in:
 - Improved knowledge about health and hygiene
 - increased school attendance
 - Decrease in teenage pregnancies.

- We tracked the outcomes through surveys and interviews with the girls and their families, as well as data from the local schools and healthcare providers.
- We believe it's important to measure and communicate the impact of our work to our donors and stakeholders to build trust and accountability.

Answers to the interview questions for Donor:

1. What is your criteria for selecting an NGO to donate to? Are there any specific causes or projects that you prioritize?

As a foundation, our goal is to support organizations and projects that align with our mission and values. We prioritize causes that address issues such as poverty, education, healthcare, and humanitarian relief. When selecting an NGO to donate to, we consider factors such as:

- The organization's track record and reputation
- Their financial transparency and accountability
- The impact of their projects and the beneficiaries they serve
- The efficiency of their operations and the use of resources

- The alignment of their goals with our foundation's mission and values

2. How do you see the future of philanthropy and charitable giving evolving in the next few years? What role do you think technology will play in this?

- Philanthropy and charitable giving will continue to grow and become more diverse in the next few years.
- There is a shift towards more strategic and impact-driven giving, with donors increasingly interested in measurable outcomes and long-term sustainability.
- Technology will play a crucial role in enabling greater transparency, efficiency, and accountability in the donation process.
- Mobile apps and online platforms will make it easier for donors to find and donate to trusted organizations, as well as track the impact of their donations in real-time.
- Donors will have access to more data and information to help them make informed decisions about their giving.

- We expect to see more collaboration and partnerships between donors, NGOs, and other stakeholders, as we work towards common goals and solutions.
- Technology will also enable new forms of giving, such as crowdfunding and peer-to-peer fundraising, that can mobilize a larger and more diverse pool of donors.
- Overall, we see technology as a key enabler of positive social change and look forward to leveraging its potential in our philanthropic work.

Organized Requirements by Priority:

1. Validation of NGO and Security of user data
2. Payment Processing with existing payment gateways
3. User-friendly interface for user management
4. Donation Tracking and generating reports
5. Book a visit to desired organization.

Structured Specification of Requirements:

1.

Function: Validation of NGO and Security of user data

Description: Strong security features must be included into the software's design to protect against unauthorized access and assure the confidentiality, integrity, and accessibility of sensitive data. The software must include strong security features to validate NGOs and protect user data's confidentiality, integrity, and accessibility.

Inputs: NGO and user registration data.

Source: stored data and user input.

Outputs: Confirmation of NGO and user registration.

Destination: The software application

Requirements:

- To prevent sensitive data from being accessed or disclosed by unauthorized parties, the software must have data encryption techniques.
- The software must use secure data storage mechanisms to protect sensitive data from unauthorized modification or deletion.
- Security measures must be regularly reviewed and updated to address emerging threats and vulnerabilities.
- The software must comply with relevant privacy regulations and data protection laws.
- The software must allow users to view and modify their own personal information and provide a mechanism for deleting their account and data.

- Strong password restrictions like minimum length, complexity, and expiration must be implemented by the software.
- For data backup the software must have procedures.
- The software must have a verification process for NGOs to ensure that only legitimate organizations are allowed to use the platform.
- The verification process must involve a thorough background check of the NGO, including its registration status and reputation.
- The software must have a mechanism to monitor and track the activities of NGOs on the platform to ensure compliance with the terms of service.
- The software must provide a reporting system for users to report any suspicious or unauthorized activity by NGOs on the platform.
- The software must have a mechanism for revoking access to NGOs that violate the terms of service or engage in fraudulent activities.
- The software must ensure that user data is not shared with NGOs without the user's explicit consent.

Post-condition: The NGO and user management system must have the appropriate security measures.

Precondition: To use the user management system, the user needs a working login and authentication.

Issues: None

2.

Function: Accurately and securely process payments. Multiple payment gateway integration.

Description:

The software must be able to securely handle payments and ensure the accuracy of payment transactions.

Inputs: Payment information, including payment amount, payment method, and client details.

Source: Data retrieved from a database or information submitted by the client.

Outputs: Confirmation of a successful transaction, including the transaction ID and payment receipt.

Destination: a system of processing payments

Requirements:

- payment options like credit/debit cards, EasyPaiza/JazzCash, or other electronic payment systems must be supported by the software.
- To safeguard payment information while it is being transmitted and stored, the software must utilize encryption and other security procedures.
- Payment data must be verified by the software to make sure it is correct.
- The payment amount must match the total cost of the transaction and be verified by the software.
- The software must have the ability to detect and stop fraudulent payment transactions.

- A payment receipt and transaction ID, together with other proof of a successful transaction, must be provided by the software.
- Refunds and cancellations must be handled by the software in line with the payment provider's policies.

Pre-condition: The customer must provide valid payment information.

Post-condition: The payment must be processed and registered in the system successfully.

Issues: It can take a long time and requires careful attention to detail to integrate with a secure payment gateway.

3.

Function: Provide a user-friendly interface for user management

Description: For managing user accounts, permissions, and access levels, the software must have a simple and user-friendly interface.

Inputs: User account information, such as username, password, email, and access level.

Source: User input and user data that has been saved.

Outputs: User account information, including verification of account creation, update, and deletion.

Destination: User management system.

Requirements:

- For establishing, editing, and removing user accounts, the software must have a simple and user-friendly interface.
- Administrators must be able to set and alter user access levels and permissions in the software.
- Users must be able to manage their account details and reset their passwords through the software.
- The interface needs to be uniform, with recognizable navigational components and buttons.
- The user interface must be aesthetically appealing, simple to use, and provide short feedback messages.
- The software must verify user input and display error warnings when it detects inaccurate or missing data.

Pre-condition: The user cannot use the user management system without a working login and authentication.

Post-condition: The system must correctly record and preserve user account data.

Issues:

4

Function: Track donations and generate reports

Description: The system should be able to monitor donations from different sources and produce reports that display trends and patterns in donations. Donations should be classified by donor, amount, date, and purpose in the system. Users should be able choose data based on certain criteria.

Inputs:

- Donor information (name, contact information, donation history)
- Donation amount
- Donation date
- Donation purpose

Source: Online donations

Outputs: Donation reports e.g., total donations received, donations by donor, donations by purpose.

Destination: Donors for receipt and acknowledgement purposes.

Structured Requirements:

- Information about donors, including contact details should be simple to input into the system.
- The system should be able to produce reports outlining trends and patterns in donations, such as total donations received, donations made by donors, and donations made for specific purposes.
- When donation is received or donor information is changed, the system should alert the employees and management.

- To ensure smooth operation and to fix any bugs, the system should undergo regular maintenance and updates.

Pre-condition: The user must have logged in with proper credentials.

Post-condition: After a donation is made, a receipt is created and sent to the donor.

Issues:

- Compatibility issues
- Security concerns

5.

Function: Book a visit to the NGO

Description: The system should allow users to reach a NGO and book a visit to their organization by submitting an online application.

Inputs: User's name, User's CNIC ,User's contact number and User's email.

Source: Information provided by the User.

Outputs: Confirmation of submitting the application.

Destination: The relative NGO.

Structured Requirements:

- The system should allow users to access the application for booking the visit.
- The system should be such that the User can enter their data and submit it.

- NGOs should be able to access the information submitted by the user through online application.

Pre-conditions:

- The User must be registered with the system.
- The relative NGO must have allowed this feature for their organization.

Post-conditions:

- The NGO must be able to access user's submitted online application.

Issues:

- **Not all organizations would allow users to visit.**
- **Security concerns**