GAWAD KALINGA

Software Requirements Specification

Team Number   6

Section   S11

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Table of Contents

1 Executive Summary

The Gawad Kalinga Community Development Foundation, otherwise known as Gawad Kalinga (GK), is a Philippine-based non-governmental organization that aims to build a nation empowered by people with faith and patriotism, dedicated to eradicating poverty and restoring human dignity. Through their vast network of partners and volunteers on-ground, they are able to deliver assistance where and when it is needed the most (Gawad Kalinga, n.d.-a).

Gawad Kalinga has a multitude of projects, primarily focusing on community development. Other projects involve shelter and land security, child and youth development, health and well-being, and social business and family productivity (Gawad Kalinga, n.d.-b).

Volunteers play a vital role in supporting Gawad Kalinga in terms of manpower during events and activities. Gawad Kalinga offers multiple different ways to get involved, such as volunteering in a community, supporting one of their programs, or supporting a community project (Gawad Kalinga, n.d.-c). One of their most notable events is the annual Bayani Challenge, an event that focuses on inspiring community members to come together to fight against poverty (Gawad Kalinga, n.d.-d).

2 Overview of the Business Process

2.1 Existing Business Process

Gawad Kalinga Community Development Foundation is a non-governmental organization that involves a lot of volunteer work during events. For large events such as the Bayani Challenge, they involve having to pre-register online first while some smaller events allow walk-ins. During the event, the volunteer visits the attendance booth for either a confirmation of the pre-registration for big events, or a general record of attendance for small events. Usually, Gawad Kalinga's system of attendance taking simply involves writing volunteer information down with pen and paper. During these events, information that is taken down consists of the complete volunteer name, complete address, cellular phone number, email address. After an event has concluded, the attendance records are then manually transferred into either a spreadsheet (small scale events) or a database (large scale events). Gawad Kalinga uses the volunteer data to generate reports of the amount of people that attended certain events. The reports are then used in order to improve future events. Attendance data also serves as a record of volunteers to contact for future events.

When Gawad Kalinga wants to contact volunteers, they send a message to every single volunteer that has an email address or cellular phone number in their record.

The existing business processes are visualized in Figures 2.1.1 and 2.1.2:
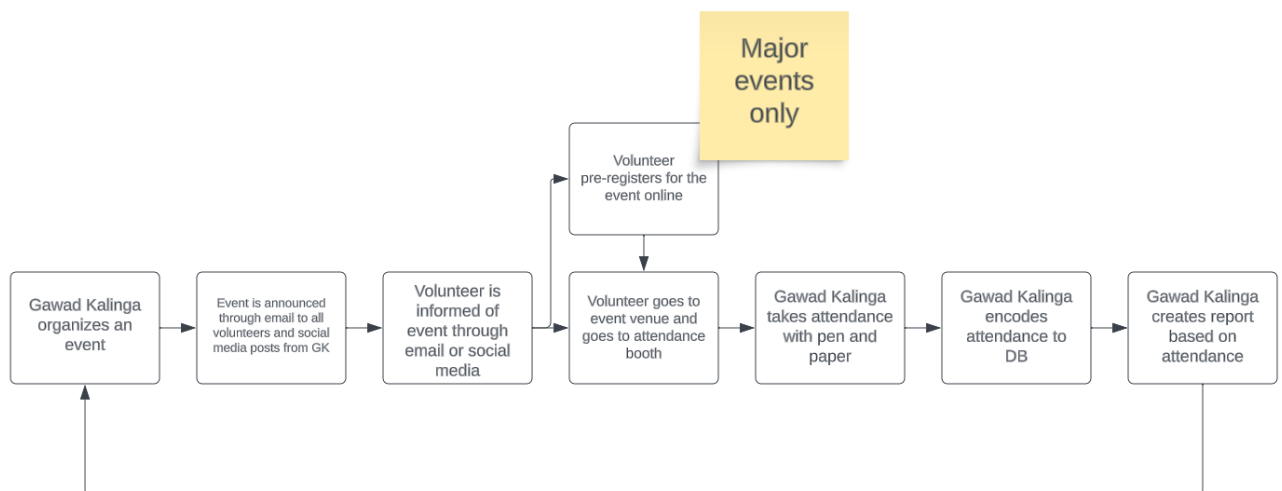
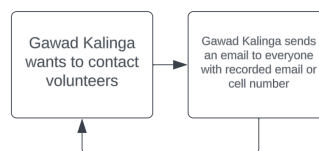Figures 2.1.1. Existing Business Process - Events

Figure 2.1.2. Existing Business Process - Contacting Volunteers

2.2   Data Requirements

A volunteer record under Gawad Kalinga Community Development Foundation contains the following personal information namely, complete name, complete address, cellular phone number, email address. The information is typically not recorded under individual forms for each volunteer and usually just comprises papers where all relevant information is recorded together for all volunteers that attend an event. This information is used to contact the volunteer for future events.

2.3   Roles in the Business Process

Various employees are involved in the business process of Gawad Kalinga Community Development Foundation events. The roles of these employees and their tasks are summarized in Table 2-1.

Role	Description of Tasks
Full time GK workers	● Takes volunteer attendance ● Creates event attendance reports ● Creates events records
Area Coordinators	● Takes volunteer attendance ● Creates event attendance reports ● Creates events records
Information Technology Staff	● Maintains the GK website
Local Government Officials	● Takes part in events by freely assisting Gawad Kalinga in their undertakings
Partners	● Takes part in events by freely assisting Gawad Kalinga in their undertakings ● Actively contributes resources, competencies, or expertise in order to assist Gawad Kalinga
FTWs	● Takes part in events by freely assisting Gawad Kalinga in their undertakings ● Coordinates events in their specific areas
Communities	● Takes part in events by freely assisting Gawad Kalinga in their undertakings
Volunteers	● Takes part in events by freely assisting Gawad Kalinga in their undertaking
Beneficiaries	● Takes part in events by receiving assistance from Gawad Kalinga

Table 2-1. Employee Roles and Tasks in ECTPA

3   Problem Analysis

This chapter presents the findings of the investigation on the organization's needs and problems to be addressed by the software. (Only problems to be ADDRESSED) This section will also provide the reader with a background of the organization which is the primary stakeholder of the system to be developed. The various users and stakeholders of the software are also presented here.

#ID	Description What's the problem?	Cause What causes the problem?	Symptoms How do we know the problem exists?	Impact Why is this important? What are the consequences?
1	It is difficult for Gawad Kalinga to track volunteer attendance during events	Gawad Kalinga lacks a definite, well organized system to track volunteers and their attendance.	Some records are missing, incomplete, or inaccurate. Sometimes pre-registration and attendance records for volunteers during a specific event are not combined and lead to duplicate entries.	Attendance has to be taken manually by pen and paper. This system takes up a lot of time and manpower that could be used elsewhere. The information could also be very easily lost since it's just handwritten. It is also difficult to use the information across the organization since the information still needs to be encoded digitally.
2	It is difficult to maintain volunteer data to ensure that volunteers are active and their information is up to date.	Gawad Kalinga's current online registration system goes nowhere and there is no way to find out who is active or not from looking at the record.	Gawad Kalinga cannot easily identify active volunteers by looking at the records.	Gawad Kalinga are wasting resources contacting every single volunteer on record without even knowing if the volunteer is active or if the messages are still going to the right email or phone number.

| 3 | Volunteers cannot easily see all upcoming events in one place | Volunteers lack a channel to see all of the upcoming events in one place. The event info in Gawad Kalinga's website is very minimal and mostly only has information for big events. Information for some events are not being actively updated. Volunteers find out about events primarily from emails and social media posts. | Volunteers do not find out about events from the Gawad Kalinga website, which should be the centralized posting hub for all events. | Volunteers might miss out on events because they were not able to see the announcement due to other things in their email/social media. Volunteers would also have to personally note down all the events they might possibly be interested in due to a lack of centralized posting of all upcoming events. |

4 Software Solution

4.1 Objectives

The development team aims to create a registration web application for Gawad Kalinga in order to address the issues Gawad Kalinga is facing with regards to tracking volunteers and their attendance during events.

"The specific objectives of the software are as follows:

- To provide a facility for prospective and old Gawad Kalinga volunteers to digitally register as a volunteers, serving as their new, digital volunteer record;
- To provide a facility for taking volunteer attendance during events;
- To provide a facility for managing and viewing volunteer information;
- To provide a facility for managing and viewing upcoming Gawad Kalinga events;"

4.2 Characteristics

This section discusses the non-functional requirements that need to be addressed to achieve the business goals state

Security

The software implements account creation in order to access specific information, with standard volunteers only being able to view their own account information as well as public event information. Administrator accounts are able to access all relevant information of all users and events and are able to edit information as necessary. In order to access accounts, the system requires the user to enter the correct username and input the generated One Time Pin sent to their registered email address. Passwords are also hashed for security purposes.

Portability and Compatibility

The software is able to run on modern devices that have up to date web browsers such as Chrome, Edge, Firefox, Opera, and Brave. It is compatible with mobile devices so long as they have a compatible web browser installed.

Capacity

The software should be able to serve multiple users simultaneously. During events, the software should be able to scan around 250 QR code IDs in a row. The software should also allow 5 admins accounts to actively be scanning QR code IDs at the same time. The software should also be able to handle scanning for multiple events that may coincide at the same time.

Usability

The software application is easy to navigate for both the volunteers and the administrators. Users can easily get around the application through the use of the navbar, which can redirect them to their profile, the events list, and the login and register pages. In the events list page, users can sort events by certain conditions such as temporal proximity and alphabetical ordering. Users can also directly look for an event through the search bar on top of the list. For administrators, they can easily add and edit events through the add and edit event pages, respectively, wherein they are presented with a UI that allows them to input details of the events and the event organizers if there are any. They may choose to add more organizers as they see fit so long as they fill out the corresponding details. The edit event page also already presents the administrator with the existing details of the event and its organizers so as to facilitate a more convenient time in editing event details.

Appendix A – Improved Business Process

With the implementation of the proposed software solution, Gawad Kalinga's business process should be vastly improved.

Firstly, Gawad Kalinga will have a way to easily track volunteers and their attendance during events. This will allow them to save time and manpower that was originally allocated to manually taking down attendance using pen and paper. Furthermore, the data can easily be used to generate reports as information is now being directly added to their database, as opposed to when it would have to be manually transferred from the paper records. The data is now also less likely to be lost and is more easily accessible by the organization from across all their locations as compared to the paper records.

Next, Gawad Kalinga will waste less time and resources contacting every single volunteer in the database. They will now be able to easily identify which volunteers have been active in the past 6 months and can simply only contact the active volunteers. Since volunteers can now update their information, emails and texts sent by Gawad Kalinga are more likely to be received by updated email addresses or cellular phone numbers of the volunteers.
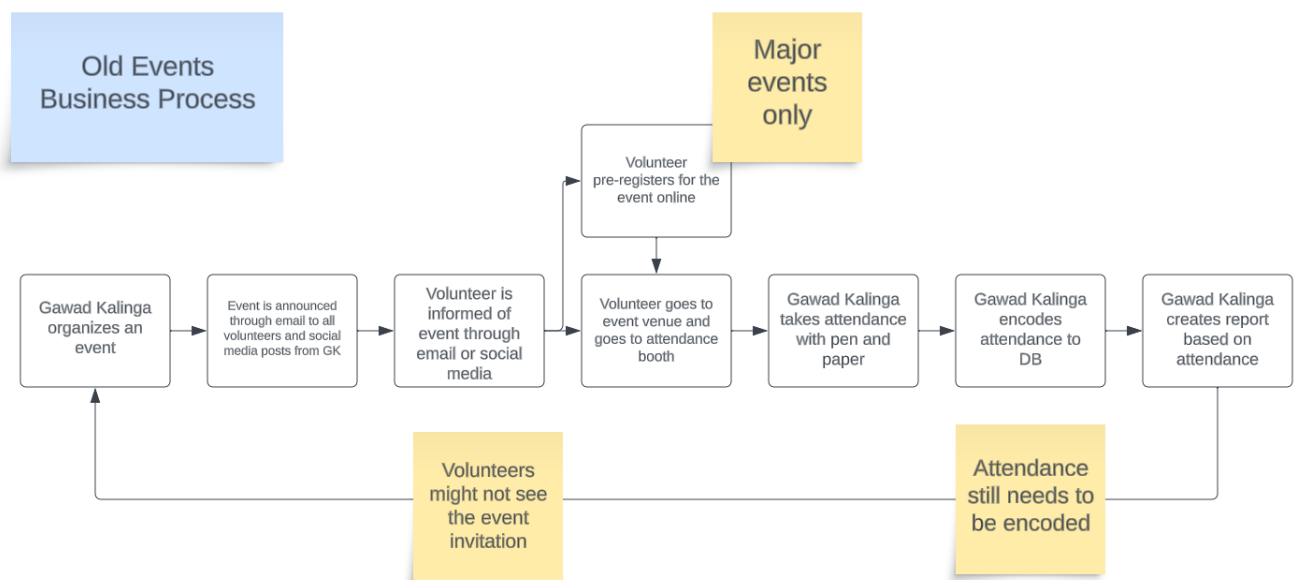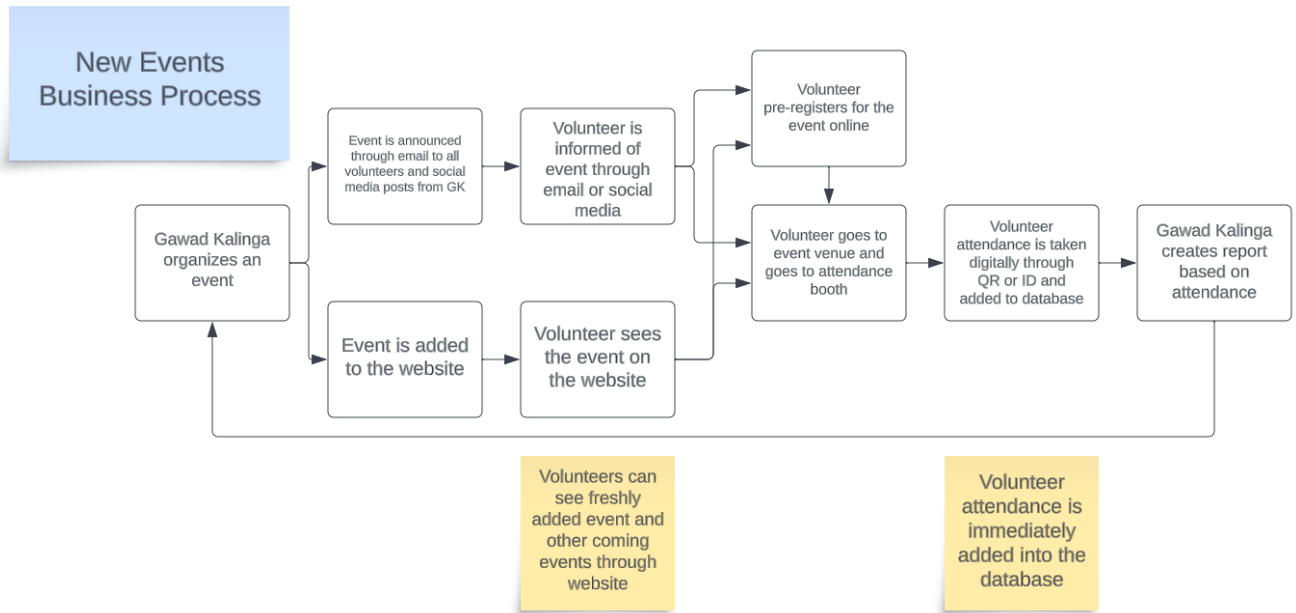
Furthermore, volunteers will now be able to easily find out more information about all upcoming events in one place. With the events view, they can easily find out about new events that they might be interested in. They can also find the corresponding contact person in order to find out more about certain events. With this, more volunteers will be able to attend more events, increasing the manpower of Gawad Kalinga.
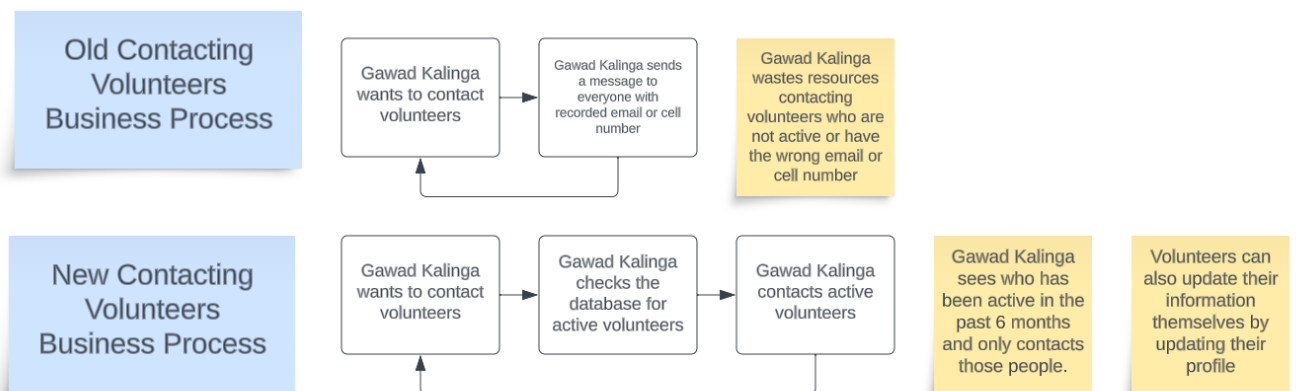
Appendix B – Sample Forms and Reports

Gawad Kalinga currently does not have specific forms to follow when recording volunteer data. All that is important is that the following information is collected during an event.

Volunteer Full Name:

Volunteer Address:

Volunteer Cellular Phone Number:

Volunteer Email Address:

Attendance is not recorded in individual forms for every single volunteer. Typically, attendance is just taken as a list of all the volunteers and their personal information.

Appendix C – References and Acknowledgement

Gawad Kalinga. (n.d.-a). *Gawad Kalinga*. Welcome to Gawad Kalinga. https://gk1world.com/home

Gawad Kalinga. (n.d.-b). *Gawad Kalinga - Our Work*. Welcome to Gawad Kalinga. https://gk1world.com/ourwork

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