

### YAVATAN: DIGITAL CHRISTIAN MISSION STRATEGIES SYSTEM

A System Documentation Created as a

Partial Fulfillment of the Requirements

for the Degree of

Bachelor of Science

in Information Technology

Ву

Balatbat, Cristian O.

SRG 7<sup>TH</sup> GENERATION

**DECEMBER 2018** 

### **Preface**

This system documentation is created to serve its purpose in terms of documenting and recording the project plan, the project progress, the system application overview, and the project outcome. Also, this documentation is based on the agile scrum software development method, meaning, the project plan and progress is tracked through product and sprint backlogs.

The Yavatan DCMS System project team has given and pushed their efforts in developing the system and producing this documentation. Any comments and suggestions in reading this documentation are always welcome.

# **Table of Contents**

Title Page		i
Preface		ii
Table of Co	ontents	iii
List of Figu	ures	v
List of Tab	les	vii
1. P	Project Background	
	.1 Project Overview	1
	1.1.1 Vision and Objectives	1
	1.1.2 Project Estimation	
	1.1.2.1 Size	3
	1.1.2.2 Complexity	3 3 3
	1.1.3 Scope and Limitation	3
	1.1.4 Project Organization	4
	1.1.5 Project Resources	5
	1.1.5.1 Human and Financial	5
	1.1.5.2 Communication and Technology	5
	1.1.6 Development Priorities	5
	1.1.7 Success Criteria	7
	1.1.8 Project Road Map	7
1	.2 Project Plan	8
2. P	Product Backlog	
2	.1 Product Backlog for User Stories	11
2	.2 Product Backlog for Information Security	16
2	.3 Product Backlog for Standards	18
	2.3.1 For User Interface and Messages	18
	2.3.2 For Database	19
2	.4 Product Backlog for Integration	20
2	.5 Product Backlog for Analytics	22
3. S	Sprint Backlog	
3	3.1 Sprint Backlog Table	25
	3.1.1 User Stories	25
	3.1.2 Information Security	35
	3.1.3 Standards	38

3.2 Sprint Backlog Burndown Charts 3.2.1 User Stories 3.2.2 Information Security 3.2.3 Standards 3.2.4 Integration 3.2.5 Analytics  4. System Application Overview 4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion		3.1.4 Integration	43
3.2.1 User Stories 3.2.2 Information Security 3.2.3 Standards 3.2.4 Integration 3.2.5 Analytics  4. System Application Overview 4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		3.1.5 Analytics	45
3.2.2 Information Security 3.2.3 Standards 3.2.4 Integration 3.2.5 Analytics  4. System Application Overview 4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		3.2 Sprint Backlog Burndown Charts	50
3.2.3 Standards 3.2.4 Integration 3.2.5 Analytics  4. System Application Overview 4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		3.2.1 User Stories	50
3.2.4 Integration 3.2.5 Analytics  4. System Application Overview 4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		3.2.2 Information Security	51
3.2.5 Analytics  4. System Application Overview 4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		3.2.3 Standards	52
4. System Application Overview  4.1 General Overview  4.1.1 General Description  4.1.2 User Access and Control  4.2 System Architecture  4.3 System Operations Manual  4.3.1 Getting Started  4.3.2 System Menu and Page Description  5. Project Outcome  5.1 Conclusion  5.2 Recommendation  7  Appendices  A. Database Dictionary  B. Test Scripts  C. Requirements Traceability Matrix  D. System Screenshots		3.2.4 Integration	53
4.1 General Overview 4.1.1 General Description 4.1.2 User Access and Control 4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		3.2.5 Analytics	54
4.1.1 General Description 4.1.2 User Access and Control 5.2 System Architecture 5.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7. Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots	4.	System Application Overview	
4.1.2 User Access and Control 4.2 System Architecture 5.4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.1 General Overview	55
4.2 System Architecture 4.3 System Operations Manual 4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.1.1 General Description	55
4.3 System Operations Manual 4.3.1 Getting Started 5. 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 5.2 Recommendation  7. Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.1.2 User Access and Control	55
4.3.1 Getting Started 4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 7. 5.2 Recommendation  7. Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.2 System Architecture	56
4.3.2 System Menu and Page Description  5. Project Outcome 5.1 Conclusion 7 5.2 Recommendation 7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.3 System Operations Manual	58
5. Project Outcome 5.1 Conclusion 7 5.2 Recommendation 7  Appendices A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.3.1 Getting Started	58
5.1 Conclusion 7 5.2 Recommendation 7  Appendices  A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots		4.3.2 System Menu and Page Description	60
5.2 Recommendation 7  Appendices  A. Database Dictionary B. Test Scripts C. Requirements Traceability Matrix D. System Screenshots	5.	Project Outcome	
Appendices  A. Database Dictionary  B. Test Scripts  C. Requirements Traceability Matrix  D. System Screenshots		5.1 Conclusion	77
<ul><li>A. Database Dictionary</li><li>B. Test Scripts</li><li>C. Requirements Traceability Matrix</li><li>D. System Screenshots</li></ul>		5.2 Recommendation	78
<ul><li>B. Test Scripts</li><li>C. Requirements Traceability Matrix</li><li>D. System Screenshots</li></ul>	Appendi	ces	
C. Requirements Traceability Matrix D. System Screenshots	A.	Database Dictionary	
D. System Screenshots		•	
	C.	Requirements Traceability Matrix	
E. Attachments	D.	System Screenshots	
	E.	Attachments	

# **List of Figures**

Figure #	Figure Name	Page #
1	Project Roadmap Progress Preface	7
2	Sprint 1 Burndown Chart for User Stories	50
3	Sprint 2 Burndown Chart for User Stories	50
4	Sprint 1 Burndown Chart for Information Security	51
5	Sprint 2 Burndown Chart for Information Security	51
6	Sprint 1 Burndown Chart for UI Design	52
7	Sprint 1 Burndown Chart for Database	52
8	Sprint 1 Burndown Chart for Integration	53
9	Sprint 2 Burndown Chart for Integration	53
10	Sprint 1 Burndown Chart for Analytics	54
11	Sprint 2 Burndown Chart for Analytics	54
12	Top-Level System Architecture of the Yavatan DCMS	56
13	Homepage	58
14	Login Page	59
15	Registration Page	59
16	Homepage	63
17	Login Page	63
18	Registration Page	64
19	Welcome Page	64
20	Homepage (Volunteer's Page)	65
21	Event Details (Volunteer's Page)	65
22	Group Details (Volunteer's Page)	66
23	All Incoming Events (Volunteer's Page)	66
24	All Groups (Volunteer's Page)	67
25	Events Management (Group-Leader's Page)	67
26	Event Activities Management (Group-Leader's Page)	68

27	View Event Activities (Group-Leader's Page)	68
28	Logistics Management (Group-Leader's Page)	69
29	Attendance Management (Group-Leader's Page)	69
30	View Attendance (Group-Leader's Page)	70
31	Group Information Management (Group-Leader's Page)	70
32	Group-Member Management (Group-Leader's Page)	71
33	Materials Management (Group-Leader's Page)	71
34	User Role Management (Admin's Page)	72
35	Account Management (Admin's Page)	72
36	Group/Organization Management (Admin's Page)	73
37	Group Leader Management (Admin's Page)	73
38	Regions Management (Admin's Page)	74
39	City Management (Admin's Page)	74
40	Religion Management (Admin's Page)	75
41	Church Management (Admin's Page)	75
42	Event Type Management (Admin's Page)	76
43	Event Audience Management (Admin's Page)	76

## **List of Tables**

Table #	Table Name	Page #
1	Project Organization	4
2	Yavatan Project Plan	8
3	Product Backlog for User Stories	11
4	Product Backlog for Information Security	16
5	Product Backlog for User Interface and Messages	18
6	Product Backlog for Database	19
7	Product Backlog for System Integration	20
8	Product Backlog for Analytics	22
9	Sprint Backlog for User Stories	25
10	Sprint Backlog for Information Security	35
11	Sprint Backlog for User Interface and Messages	38
12	Sprint Backlog for Database	40
13	Sprint Backlog for System Integration	43
14	Sprint Backlog for Analytics	45
15	User Access Rights	55
16	Administrator Menu and Its Description	60
17	Group-Leader Menu and Its Description	61
18	Volunteer Menu and Its Description	62

### 1. Project Background

### 1.1 Project Overview

Yavatan: Digital Christian Mission Strategies System (Yavatan DCMS System) is an events management application that will greatly benefit the people, particularly to those youth and religious groups in creating and managing events, and to their respective volunteers in accessing the details and joining the events created by a particular group.

Events management is more complicated than we thought – it contains all the entities that will satisfy the event information management; the event details itself, the attendees, the factors that will affect the event, and the logistics. Also, the group and volunteers' management may be difficult because of the manual and improper data management, thus, the collected data may not be consistent and accurate.

Yavatan basically provides ease of management of events and youth groups, through web application. The users of the system will be categorized into to, the group-leader, the one who manages the events and its group, while the volunteer, is the one that registers and access the events and can join groups through the web application.

#### 1.1.1 Vision and Objectives

The Yavatan Development team envisions to develop a system that can help the youth groups and volunteers to ease their management and access to events and group through the development of web application, the management events and groups will be done in less effort, giving them fast and reliable web services.

The objective of the project will be discussed in core functionality categorization. The following objectives are based on the project team's understanding of the business process, therefore, using it as a basis for creating a technical view of the objectives of the system.

#### 1. Registration

To create a system that will allow the volunteers to create their own account to the system, together with their personal information to be included, and will allow them to register for an event.

#### 2. Event Management

To create a system that will allow the group leaders to create and manage their own events.

#### 3. Group Management

To create a system that will allow the group leaders to manage the identity of the group and the details, application, and status of their volunteers.

#### 4. Attendance Management

To create a system that will allow the group leaders and volunteers to add and monitor event's attendance.

#### User Account Management

To create a system that will allow the system administrator to create the group leader's user account and manage the status of all user accounts.

#### 6. Data Mining

To create a system that will allow the system administrator to mine data from a source, particular the city and religion per regions data.

#### 7. Predictive Analysis

To create a system that will allow the group leader to create events based on the prescription acquired from the analysis.

#### 1.1.2 Project Estimation

#### 1.1.2.1 Size

The team estimated 1 month to finish the whole system.

### 1.1.2.2 Complexity

The development team estimated the complexity of project ranging between medium to highly complexity.

#### 1.1.3 Scope and Limitation

The following scope and limitation of the system will be discussed in core functionality categorization.

#### 1. Registration

The system only caters the registration of the volunteers, by creating an account and joining events.

#### 2. Event Management

The group leader of a certain group cannot access and manage the other events created by other group leaders; There is no interaction between group leaders in the system.

#### 3. Group Management

The group leader has the capability to change the details of the group set by the system administrator; The group leader can appraise and toggle the status of his/her group members.

#### 4. Attendance Management

The group leader who created the event and the volunteer who joined the event are the ones that can only add and monitor event's attendance.

#### 5. User Account Management

The system administrator is the one that only access the accounts created in the system and the only one who is allowed to change some details and toggle the status of a particular account.; the group leader and the volunteer user accounts can only change their password.

#### 6. Data Mining

The system administrator is the only person who's allowed to mine data. An internet connection is required.

#### 7. Predictive Analysis

The system accumulated its prescription based on the given datasets from the database, together with the programmed algorithm and conditional statements.

### 1.1.4 Project Organization

Project Organization

Table 1

Person-In-Charged	ROLE
Sarah Joy M. Lambino	Product Owner; Project Initiator; Business Analyst; Stakeholder; Document Analyst
Rosicar E. Escober	Project Adviser; Project Sponsor
Cristian O. Balatbat	Lead Programmer; Document Analyst

#### 1.1.5 Project Resources

#### 1.1.5.1 Human and Financial

**Ms. Sarah Joy M. Lambino**, as the project initiator and product owner, provides enough morale and financial support in developing the system;

**Prof. Rosicar E. Escober**, as the project sponsor and adviser, provides advises and financial assistance in developing the system;

*Mr. Cristian O. Balatbat*, as the Lead Programmer and Document Analyst, for developing the system and creating its documentation.

#### 1.1.5.2 Communication and Technology

Using sublime text for code text-editing; xampp as the localhost server; phpMyAdmin as the database management system; Google Chrome, Microsoft Edge and Mozilla Firefox as the browser for testing and presenting the system; using the messenger as the medium of communication between the project organization; and the Microsoft word and project in creating the documentation.

#### 1.1.6 Development Priorities

The priorities set on this project is divided into two term length of development, which is the short-term and the long-term.

The short-term development deliberates the feature that can be expected after a short period of time, from its starting point up to its working point, while the long-term development deliberates the finish or the whole core functionality of the module, from its working point up to its finish point.

The priorities are discussed on the following modules below:

#### Registration

Short Term: The system administrator can add the group leader's details; The volunteers can register for an account to the system. Long Term: The volunteers can join and unjoin an event.

#### 2. Event Management

Short Term: Can add and modify event details;

Long Term: Marking the event done; lay-outing of budget; application of predictive analysis.

#### 3. Group Management

Short Term: Can view and modify group details; Can view all the group members.

Long Term: The group leader can toggle the group member's status as contact and its youth group experience.

#### 4. Attendance Management

Short Term: The group leader created the event can add attendance. Long Term: The volunteers that is registered in the event can add attendance.

#### 5. User Account Management

Short Term: The system administrator can add the group leader's account; Can also view all registered accounts.

Long Term: The system administrator can modify and disable an account.

#### 6. Data Mining

Short Term: The system administrator can mine data in an off-line outsourced dataset.

Long Term: The system administrator can mine data in the internet.

#### 7. Predictive Analysis

Short Term: The prescription will be accumulated from the given datasets, applying the classification and inference method for analysis and multiple conditional statements.

Long Term: Applying the prescription to events management, group management and dashboard analytics.

#### 1.1.7 Success Criteria

In order for the system to be called a success, the system should:

- 1. The system should be working providing its core functionalities, so it can provide its core application services to satisfy the users.
- 2. The system should be integrated into its other sub-modules to provide real and reliable transaction scenarios in terms of using the information management system, by transferring data to one another.
- 3. The system's process flow must be aligned to the business process of the said organization in order to provide correct and reliable transactions.
- 4. The system must and should have a reliable security to in order to lessen or neglect vulnerabilities and must be compliant to the ISO 27001 and to the data privacy act of the Philippines, in terms of protecting personal information and other sensitive data.

### 1.1.8 Project Road Map

The project roadmap progress scope is only limited to 2 sprints (4 weeks), from  $1^{st}$  week of November up to the  $4^{th}$  week of November. The consumed efforts are measured and plotted in days, 4 weeks = 28 days.

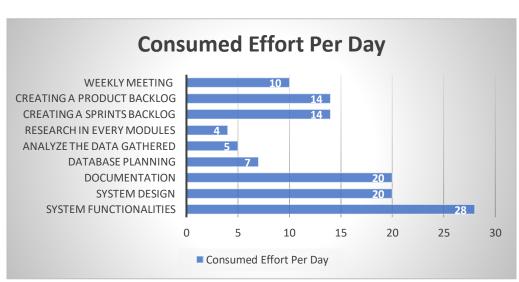


Figure 1. Project Roadmap Progress

## 1.2 Project Plan

The project plan is divided into priorities per task – the short term and long-term.

**Table 2**Yavatan Project Plan

TASK NAME	RESPONSIBLE MEMBER	START	END	DAYS	STATUS
	Registration	n			
Short Term: The system	Balatbat, Cristian	11/1	11/7	7	
administrator can add the					
group leader's details;					
The volunteers can					DONE
register for an account to					
the system.					
Long Term: The	Balatbat, Cristian	11/1	11/14	14	
volunteers can join and					DONE
unjoin an event.					
	Event Manager	ment			
Short Term: Can add and	Balatbat, Cristian	11/1	11/10	10	
modify event details;					DONE
Long Term: Marking the	Balatbat, Cristian	11/2	11/26	24	
event done; lay-outing of					DONE
budget; application of					DONE
predictive analysis.					
Group Management					
Short Term: Can view	Balatbat, Cristian	11/3	11/13	10	
and modify group details;					DONE
Can view all the group					DONE
members.					

	<del>,</del>			,	
Long Term: The group	Balatbat, Cristian	11/3	11/23	20	
leader can toggle the					
group member's status as					DONE
contact and its youth					
group experience.					
	Attendence Mene				
	Attendance Mana	gement			
Short Term: The group	Balatbat, Cristian	11/2	11/9	7	
leader created the event					DONE
can add attendance.					
Long Term: The	Balatbat, Cristian	11/2	11/17	15	
volunteers that is	,				
registered in the event					DONE
can add attendance.					
	User Account Man	agemen	t		
Short Term: The system	Balatbat, Cristian	11/3	11/9	6	
administrator can add the					
group leader's account;					DONE
Can also view all					
registered accounts.					
Long Term: The system	Balatbat, Cristian	11/3	11/20	17	
administrator can modify	Daidibat, Officiali	11,0	11/20		DONE
and disable an account.					DOINE
and diodbio an account.					
Data Mining					
Short Term: The system	Balatbat, Cristian	11/1	11/10	10	
administrator can mine					
data in an off-line					DONE
outsourced dataset.					DONE
•		•	•		

Long Term: The system administrator can mine data in the internet.	Balatbat, Cristian	11/10	11/20	10	DONE
	Predictive Ana	lysis			
Short Term: The prescription will be accumulated from the given datasets, applying the classification and inference method for analysis and multiple conditional statements.	Balatbat, Cristian	11/1	11/15	15	DONE
Long Term: Applying the prescription to events management, group management and dashboard analytics.	Balatbat, Cristian	11/10	11/25	15	DONE
	Other Tasks (Ge	neral)			
Documentation	Balatbat, Cristian, Lambino, Sarah Joy	11/1	11/29	29	DONE
Database Planning	Balatbat, Cristian, Lambino, Sarah Joy	11/1	11/7	7	DONE
Application of Information Security	Balatbat, Cristian	11/5	11/15	10	DONE
Module Integration	Balatbat, Cristian	11/15	11/25	10	DONE
System Dashboard Analytics	Balatbat, Cristian	11/10	11/25	15	DONE

# 2. Product Backlog

## 2.1 Product Backlog for User Stories

Table 3

Product Backlog for User Stories

USER STORY NO	USER STORIES	USER STORY PRIORITY	REVISED PRIORITY	STATUS
1	As a system administrator, I want to set up and manage the entities for user roles.	1	-	DONE
2	As a system administrator, I want to set up and manage the entities for cities.	1	-	DONE
3	As a system administrator, I want to set up and manage the entities for regions.	1	-	DONE
4	As a system administrator, I want to set up and manage the entities for religions.	1	-	DONE
5	As a system administrator, I want to set up and manage the entities for event types.	1	-	DONE

	1	T		
6	As a system administrator, I want to set up and manage the entities for event audience type.	1	-	DONE
7	As a system administrator, I want to set up and manage the entities for churches.	2	-	DONE
8	As a system administrator, I want to set up and manage the entities for the organization.	1	-	DONE
9	As a system administrator, I want to create and manage system user accounts.	1	2	DONE
10	As a system administrator, I want to mine and view the data for cities and religions per regions.	1	2	DONE
11	As a group leader, I want to create and manage my events.	1	-	DONE
12	As a group leader, I want to layout the budget and expenses of my events.	2	-	DONE
13	As a group leader, I want to mark my event as done.	2	-	DONE

14	As a group leader, I want to view all the pending events I created.	1	-	DONE
15	As a group leader, I want to have an event entry analysis based the system prescription before saving my entries in creating an event	2	-	DONE
16	As a group leader, I want to modify the details of the event even after I saved it.	1	2	DONE
17	As a group leader, I want to add and view the activities for the particular event I created.	1	-	DONE
18	As a group leader, I want to add and view the logistics for the particular event I created.	1	-	DONE
19	As a group leader, I want to add and view the attendance for the particular event I created.	1	2	DONE
20	As a group leader, I want to modify the details of the group I was assigned to.	1	2	DONE
21	As a group leader, I want to view and manage the member of my group.	1	2	DONE

	,			
22	As a group leader, I want to toggle the status of my volunteers and group members	1	2	DONE
23	As a group leader, I want change the status of my member if they are a contact or not.	1	2	DONE
24	As a group leader, I want to send an announcement via short message service.	2	-	PENDING
25	As a group leader, I want to add, view and manage the group's materials.	1	-	DONE
26	As a volunteer, I want to see the events near my location.	1	-	DONE
27	As a volunteer, I want to see the groups near me and related to my religion.	1	-	DONE
28	As a volunteer, I want to see the events I registered, highlighted in the calendar.	1	-	DONE
29	As a volunteer, I want to see the list of events I registered to.	1	-	DONE

30	As a volunteer, I want to see the list of groups I joined in.	1	-	DONE
31	As a volunteer, I want to see the details of the events I want to join.	1	-	DONE
32	As a volunteer, I want to see the details of the group I want to join.	1	-	DONE
33	As a volunteer, I want to see the activities of the event I want to join.	1	2	DONE
34	As a volunteer, I want to see the materials of the event I want to join.	1	2	DONE
35	As a volunteer, I want to see all the events available in the posting of the system.	2	-	DONE
36	As a volunteer, I want to see all the groups available for registration of membership.	2	-	DONE
37	As a volunteer, I can be able to add the attendance record of a particular event I joined in.	2	-	DONE

## 2.2 Product Backlog for Information Security

Table 4

Product Backlog for Information Security

USER STORY NO	USER STORIES	USER STORY PRIORITY	REVISED PRIORITY	STATUS
1	As a system administrator, I can change the details of the accounts, with permission from the user.	1	-	DONE
2	As a system administrator, I can change my account password.	2	-	DONE
3	As a group leader, I can change my account password.	2	1	DONE
4	As a volunteer, I can change my account password	2	-	DONE
5	As a product owner, I want to have a login page so that only the authorized individuals can access the system	1	-	DONE
6	As a product owner, I want that the usernames be unique for every user to avoid duplication of data	1	-	DONE

	A			
7	As a product owner, I want to restrict my users from accessing information beyond their role to avoid any disclosure of sensitive data	1	-	DONE
8	As a product, I want to verify that the user has an access only to the resources/page which they are authorized to use.	1	1	DONE
9	As a product owner, I want that the password of my users be masked to hide the actual password from intruders.	1	2	PENDING
10	As a product owner, I want to ensure that no sensitive information is exposed through error messages.	1	-	DONE
11	As a product owner, I want to verify inputs from the users to ensure that all information entered are valid.	1	2	DONE
12	As a product owner, I want my developers to ensure that the algorithm for encryption is not broken or risky.	1	2	PENDING

## 2.3 Product Backlog for Standards

### 2.3.1 For User Interface and Messages

Table 5

Product Backlog for User Interface and Messages Standards

USER STORY NO	USER STORIES	USER STORY PRIORITY	REVISED PRIORITY	STATUS
1	As a product owner, I want to see all the input controls to know if the sizes are the same.	1	-	DONE
2	As a product owner, I want to see have prompt and confirmation messages before proceeding to the process.	1	-	DONE
3	As a product owner, I want to see a well-defined color combination of the template that is appropriate to the eyes of the users.	1	-	DONE
4	As a product owner, I want to see the important data that may, and will be used in the system.	1	-	DONE
5	As a product owner, I want to see user-interface to be flexible and compatible to different browsers	1	-	DONE

### 2.3.2 For Database

Table 6
Product Backlog for Database

USER STORY NO	USER STORIES	USER STORY PRIORITY	REVISED PRIORITY	STATUS
1	As a product owner, I want to have a centralized database of the system.	1	1	DONE
2	As a system administrator, I want to have a consistent naming of data tables.	1		DONE
3	As a system administrator, I want to have a consistent naming of table attributes.	1	-	DONE
4	As a system administrator, I want the database to have consistent key relationships.	1	-	DONE
5	As a system administrator, I want to have a consistent data type.	1	-	DONE
6	As a system administrator, I want to have a consistent data format.	1	-	DONE

7	As a system administrator, I want not required fields to be nullable.	1	-	DONE
8	As a system administrator, I want required fields not to allow null values.	1	-	DONE
9	As a database administrator, I want to have a database model.	1	-	DONE
10	As a database administrator, I want to be able to model the database.	1	-	DONE

## 2.4 Product Backlog for System Integration

Table 7

Product Backlog for System Integration

USER STORY NO	USER STORIES	USER STORY PRIORITY	REVISED PRIORITY	STATUS
1	As a system administrator, I must ensure that the changes on the entities of the setups in the system reflects to the different user account types.	1	-	DONE

2	As a system administrator, the data I mine must reflect to the dashboard analytics of the group leader.	1	2	DONE
3	As a group leader, I want the events I created must reflect to the volunteer's user account module	1	-	DONE
4	As a group leader, the details I changed for the group must reflect to the volunteer's user account module.	1	2	DONE
5	As a group leader, the status I change for a particular volunteer must reflect to the volunteer's user account module.	1	-	DONE
6	As a group leader, the attendance I added to a particular event must match with the attendance added by the volunteer to that said event.	1	2	DONE
7	As a volunteer, I want my activities to the system to be reflected to the group leader's account.	1	2	DONE

## 2.5 Product Backlog for Analytics

Table 8

Product Backlog for Analytics

USER STORY NO	USER STORIES	USER STORY PRIORITY	REVISED PRIORITY	STATUS
1	As a system administrator, I want to see the number of different status of volunteers in dashboard.	1	-	DONE
2	As a system administrator, I want to see the predictive analysis for the collective attendance for the previous year, current year and the prediction for it.	2	-	DONE
3	As a system administrator, I want to see the events per group in the dashboard.	1	-	DONE
4	As a system administrator, I want to see the frequency of events per group in the dashboard.	1	-	DONE
5	As a system administrator, I want to see the volunteers and contacts per region in the dashboard.	1	-	DONE

6	As a system administrator, I want to see the highest percentage of religions per region in the dashboard.	1	-	DONE
7	As a system administrator, I want to see the highest percentage of religions in Mindanao in the dashboard	1	2	DONE
8	As a system administrator, I want to see the language per region in the dashboard.	1	-	DONE
9	As a group leader, I want to see the number of different status of volunteers the in dashboard.	1	-	DONE
10	As a group leader, I want to see the prediction for the weather the in dashboard.	1	-	DONE
11	As a group leader, I want to see the prediction for the event audience attendance in the dashboard.	1	2	DONE
12	As a group leader, I want to see the prediction based on the budget evaluation in the dashboard.	2	-	DONE

13	As a group leader, I want to see the predictive analysis for the collective attendance for the previous year, current year and the prediction for it.	2	,	DONE
14	As a group leader, I want to see the events per group in the dashboard.	2	-	DONE
15	As a group leader, I want to see the frequency of events per group in the dashboard.	1	-	DONE
16	As a group leader, I want to see the volunteers and contacts per region in the dashboard.	1	-	DONE
17	As a group leader, I want to see the highest percentage of religions per region in the dashboard.	1	-	DONE
18	As a group leader, I want to see the highest percentage of religions in Mindanao in the dashboard	1	2	DONE
19	As a group leader, I want to see the language per region in the dashboard.	1	-	DONE,
20	As a group leader, I want to see the plotted events across the Philippine map.	2	-	DONE

# 3. Sprint Backlog

## 3.1 Sprint Backlog Table

### 3.1.1 User Stories

Table 9
Sprint Backlog for User Stories

NO	USER STORIES	TASKS	REFERENCE REQUIREMENTS	P T S	TEAM MEMBER
1	As a system administrator, I want to set up and manage the entities for user roles.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality		30	Cristian Balatbat
2	As a system administrator, I want to set up and manage the entities for cities.	Create a table in database Design UI QA UI Design Create Functionality QA Functionality		30	Cristian Balatbat
3	As a system administrator, I want to set up and manage the entities for regions.	Create a table in database Design UI QA UI Design Create Functionality		30	Cristian Balatbat

		QA Functionality		
		Design UI for		
		homepage.		
4	As a system administrator, I want to set up and manage the entities for religions.	Create a table in		
		database		
		Design UI		Cristian
		QA UI Design	30	Balatbat
		Create		
		Functionality		
		QA Functionality		
	As a system	Create a table in		
	administrator, I	database	30	
5	want to set up and manage the entities for event types.	Design UI		Cristian
		QA UI Design		Balatbat
		Create		
		Functionality		
	As a system administrator, I want to set up and manage the entities for event audience type.	Create a table in		
		database		
		Design UI		Cristian
6		QA UI Design	30	
		Create		Balatbat
		Functionality		
		QA Functionality		
	As a system administrator, I want to set up and manage the entities for churches.	Create a table in		
7		database		
		Design UI		
		QA UI Design	30	Cristian
		Create		Balatbat
		Functionality		
		QA Functionality		
		a directioning		

8	As a system administrator, I want to set up and manage the entities for the organization.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
9	As a system administrator, I want to create and manage system user accounts.	Create a table in database  Design UI  QA UI Design  Create Functionality  QA Functionality	30	Cristian Balatbat
10	As a system administrator, I want to mine and view the data for cities and religions per regions.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
11	As a group leader, I want to create and manage my events.	Create a table in database  Design UI  QA UI Design  Create Functionality  QA Functionality	30	Cristian Balatbat

12		Create a table in		
	As a group	database		
	leader, I want to layout the budget and expenses of my events.	Design UI		Cristian
		QA UI Design	30	Balatbat
		Create		Dalaibai
		Functionality		
		QA Functionality		
		Create a table in		
		database		
	As a group	Design UI		Orietien
13	leader, I want to mark my event	QA UI Design	30	Cristian Balatbat
	as done.	Create		Dalatbat
		Functionality		
		QA Functionality		
		Create a table in		Cristian
	As a group	database		Balatbat
	leader, I want to	Design UI		
14	view all the	QA UI Design	30	
	pending events	Create		
	I created.	Functionality		
		QA Functionality		
	As a group	Create a table in		
15	leader, I want to	database		
	have an event	Design UI		
	entry analysis in	QA UI Design		Cristian
	prescription	Create	30	Balatbat
	before saving	Functionality		
	my entries in	1 dilodorianty		
	creating an event.	QA Functionality		

16	As a group leader, I want to modify the details of the event even after I saved it.	Create a table in database  Design UI  QA UI Design  Create Functionality  QA Functionality	30	Cristian Balatbat
17	As a group leader, I want to add and view the activities for the particular event I created.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality  QA functionality	30	Cristian Balatbat
18	As a group leader, I want to add and view the logistics for the particular event I created.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
19	As a group leader, I want to add and view the attendance for the particular event I created.	Create a table in database Design UI QA UI Design Create Functionality QA Functionality	30	Cristian Balatbat

20	As a group leader, I want to modify the details of the group I was assigned to.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
21	As a group leader, I want to view and manage the member of my group.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
22	As a group leader, I want to toggle the status of my volunteers and group members	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
23	As a group leader, I want change the status of my member if they are a contact or not.	Create a table in database  Design UI  QA UI Design  Create Functionality  QA Functionality	30	Cristian Balatbat

24	As a group leader, I want to send an announcement via short message	Create a table in database  Design UI  QA UI Design  Create  Functionality	30	Cristian Balatbat
	service.	QA Functionality		
25	As a group leader, I want to add, view and manage the group's materials.	Create a table in database  Design UI  QA UI Design  Create  Functionality	30	Cristian Balatbat
26	As a volunteer, I want to see the events near my location.	QA Functionality Create a table in database Design UI QA UI Design Create Functionality QA Functionality	30	Cristian Balatbat
27	As a volunteer, I want to see the groups near me and related to my religion.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat

28	As a volunteer, I want to see the events I registered, highlighted in the calendar.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
29	As a volunteer, I want to see the list of events I registered to.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
30	As a volunteer, I want to see the list of groups I joined in.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat
31	As a volunteer, I want to see the details of the events I want to join.	Create a table in database  Design UI  QA UI Design  Create  Functionality  QA Functionality	30	Cristian Balatbat

		Create a table in		
	As a volunteer, I	database		
	want to see the	Design UI		Criction
32	details of the	QA UI Design	30	Cristian Balatbat
	group I want to	Create		Dalatbat
	join.	Functionality		
		QA Functionality		
		Create a table in		
	As a volunteer, I	database		
	want to see the	Design UI		Cristian
33	activities of the	QA UI Design	30	
	event I want to	Create		Daiatbat
	join.	Functionality		
		QA Functionality		
		Create a table in		
	As a volunteer, I	database		
	want to see the	Design UI		Cristian
34	materials of the	QA UI Design	30	
	event I want to	Create		Dalatbat
	join.	Functionality		
		QA Functionality		
		Create a table in		
	As a volunteer, I	database		
	want to see all	Design UI		Cristian
35	the events available in the	QA UI Design	30	
	posting of the	Create		Daiatbat
	system.	Functionality		
	•	QA Functionality		

	As a volunteer, I	Create a table in database		
36	the groups	Design UI		Cristian
	available for registration of	QA UI Design	30	Balatbat
	membership.	Create		
	memberemp.	Functionality		
		QA Functionality		
	As a volunteer, I	Create a table in		
	can be able to	database		
	add the	Design UI		Cristian
37	attendance	QA UI Design	30	Balatbat
	record of a	Create	30	Dalatbat
	particular event	Functionality		
	I joined in.	QA Functionality		

# 3.1.2 Information Security

Table 10
Sprint Backlog for Information Security

NO	USER STORIES	TASKS	REFERENCE REQUIREMENTS	P T S	TEAM MEMBER
1	As a system administrator, I can change the details of the	Create Functionality		15	Cristian Balatbat
	accounts, with permission from the user.	QA Functionality			
	As a system	Create			
2	administrator, I can change my	Functionality		15	Cristian
	account	QA Functionality		13	Balatbat
	password.	QA I unclionality			
	As a group	Create			
	leader, I can	Functionality			Cristian
3	change my account password.	QA Functionality		15	Balatbat
	As a volunteer, I	Create			
4	can change my	Functionality		15	Cristian
	account password.	QA Functionality			Balatbat
5	As a product owner, I want to have a login page so that	Create Functionality		15	Cristian Balatbat

	only the authorized individuals can access the system	QA Functionality			
	As a product owner, I want that the	Create Functionality			
6	usernames be unique for every user to avoid duplication of data	QA Functionality		15	Cristian Balatbat
7	As a product owner, I want to restrict my users from accessing information	Create Functionality		- 15	Cristian Balatbat
7	beyond their role to avoid any disclosure of sensitive data	QA Functionality			
8	As a product, I want to verify that the user has an access only to the	Create Functionality		15	Cristian
	resources/page which they are authorized to use.	QA Functionality			Balatbat

9	As a product owner, I want that the password of my users be masked to hide the actual password from intruders.	Create Functionality  QA Functionality	15	Cristian Balatbat
10	As a product owner, I want to ensure that no sensitive information is exposed through error messages.	Create Functionality  QA Functionality	15	Cristian Balatbat
11	As a product owner, I want to verify inputs from the users to ensure that all information entered are valid.	Create Functionality  QA Functionality	15	Cristian Balatbat
12	As a product owner, I want my developers to ensure that the algorithm for encryption is not broken or risky.	Create Functionality  QA Functionality	15	Cristian Balatbat

### 3.1.3 Standards

# 3.1.3.1 For User Interface and Messages

Table 11
Sprint Backlog for User Interface and Messages

NO	USER STORIES	TASKS	REFERENCE REQUIREMENTS	P T S	TEAM MEMBER
1	As a product owner, I want to see all the input controls to know if the sizes are	Design UI  QA Design		20	Cristian Balatbat
	the same.	3			
2	As a product owner, I want to see have prompt and confirmation messages before proceeding to the process.	Design UI  QA Design		20	Cristian Balatbat
3	As a product owner, I want to see a well- defined color combination of the template that is appropriate to	Design UI  QA Design		20	Cristian Balatbat

	the eyes of the			
	users.			
	As a product			
	owner, I want to	Design UI		
	see the	_		Cristian
4	important data		20	
	that may, and			Balatbat
	will be used in	QA Design		
	the system.			
	As a product			
	owner, I want to	Design UI		
	see user-			
5	interface to be		20	Cristian
5	flexible and		20	Balatbat
	compatible to	QA Design		
	different	Q, ( 2 3 3 ig)		
	browsers			

### 3.1.3.2 For Database

Table 12
Sprint Backlog for Database

NO	USER STORIES	TASKS	REFERENCE REQUIREMENTS	P T S	TEAM MEMBER
1	As a product owner, I want to have a centralized database of the system.	Create Entities Create Relationships Create Constraints QA Structure		30	Cristian Balatbat
2	As a system administrator, I want to have a consistent naming of data tables.	Create Entities Create Relationships Create Constraints QA Structure		30	Cristian Balatbat
3	As a system administrator, I want to have a consistent naming of table attributes.	Create Entities  Create Relationships  Create Constraints  QA Structure		30	Cristian Balatbat

	As a system	Create Entities		
	administrator, I	Create		
	want the	Relationships	00	Cristian
4	database to	Create	30	Balatbat
	have consistent key	Constraints		
	relationships.	QA Structure		
		Create Entities		
	As a system	Create		
5	administrator, I want to have a	Relationships	30	Cristian
	consistent data	Create		Balatbat
	type.	Constraints		
	1,700.	QA Structure		
	As a system administrator, I want to have a consistent data format.	Create Entities		
		Create		
6		Relationships	30	Cristian
		Create		Balatbat
		Constraints		
		QA Structure		
		Create Entities		
	_	Create		
	As a system	Relationships		
7	administrator, I want not	'		Cristian
	required fields	Create		Balatbat
	to be nullable.	Constraints		
		QA Structure		

	As a system	Create Entities		
	administrator, I	Create		
8	want required	Relationships	30	Cristian
	fields not to	Create	30	Balatbat
	allow null	Constraints		
	values.	QA Structure	-	
		Create Entities		
	As a database	Create		
9	administrator, I want to have a	Relationships	30	Cristian
	database	Create		Balatbat
	model.	Constraints		
		QA Structure		
		Create Entities		
	As a database	Create		
10	administrator, I want to be able	Relationships	30	Cristian
	to model the	Create		Balatbat
	database.	Constraints		
		QA Structure		

# 3.1.4 Integration

Table 13
Sprint Backlog for Integration

NO	USER STORIES	TASKS	REFERENCE REQUIREMENTS	P T S	TEAM MEMBER
1	As a system administrator, I can change the details of the accounts, with permission from the user.	Design UI  QA UI Design  Create  Functionality  QA Functionality		40	Cristian Balatbat
2	As a system administrator, I can change my account password.	Design UI  QA UI Design  Create  Functionality  QA Functionality		40	Cristian Balatbat
3	As a group leader, I can change my account password.	Design UI  QA UI Design  Create  Functionality  QA Functionality		40	Cristian Balatbat
4	As a volunteer, I can change my account password.	Design UI  QA UI Design  Create  Functionality  QA Functionality		40	Cristian Balatbat

	As a product	Design UI		
	owner, I want to	0.4.111.5		
	have a login	QA UI Design		
	page so that			Cristian
5	only the	Create	40	Balatbat
	authorized	Functionality		
	individuals can			
	access the	QA Functionality		
	system			
	As a product owner, I want	Design UI		
	that the	QA UI Design	1	
	usernames be			Cristian
6	unique for every	Create	40	Balatbat
	user to avoid	Functionality		Dalatbat
	duplication of	OA Functionality		
	data	QA Functionality		
	As a product	Design UI		
	owner, I want to	2001g11 G1		
	restrict my users	QA UI Design		
7	from accessing	art or beergin		Cristian
	information	Create	40	Balatbat
	beyond their			
	role to avoid	Functionality		
	any disclosure of sensitive data	QA Functionality		

# 3.1.5 Analytics

Table 14
Sprint Backlog for Analytics

NO	USER STORIES	TASKS	REFERENCE REQUIREMENTS	P T S	TEAM MEMBER
	As a system	Design UI			
	administrator, I want to see the	QA Design			Cristian
1	number of different status of volunteers in dashboard.	Create Functionality  QA Functionality		50	Balatbat
	As a system administrator, I want to see the	Design UI			
2	predictive analysis for the	QA Design		50	Cristian
2	collective attendance for the previous year, current	Create Functionality		30	Balatbat
	year and the prediction for it.	QA Functionality			
	As a system	Design UI			
	administrator, I	QA Design			Ovietiese
3	want to see the events per group in the	Create Functionality		50	Cristian Balatbat
	dashboard.	QA Functionality			

	As a system administrator, I	Design UI		
	want to see the	QA Design		Cristian
4	frequency of	Create	50	Balatbat
	events per	Functionality		Daraibai
	group in the dashboard.	QA Functionality		
	As a system	Design UI		
	administrator, I want to see the	QA Design		Cristian
5	volunteers and	Create	50	Balatbat
	contacts per	Functionality		Daiatbat
	region in the dashboard.	QA Functionality		
	As a system administrator, I want to see the highest	Design UI		
		QA Design		Cristian
6	percentage of	Create	50	Balatbat
	religions per	Functionality		
	region in the dashboard.	QA Functionality		
	As a system administrator, I	Design UI		
7	want to see the highest percentage of	QA Design	50	Cristian Balatbat
	religions in	Create		
	Mindanao in the	Functionality		
	dashboard	QA Functionality		

8	As a system administrator, I want to see the language per region in the dashboard.	Design UI  QA Design  Create Functionality  QA Functionality	50	Cristian Balatbat
9	As a group leader, I want to see the number of different status of volunteers the in dashboard.	Design UI  QA Design  Create Functionality  QA Functionality	50	Cristian Balatbat
10	As a group leader, I want to see the prediction for the weather the in dashboard.	Design UI  QA Design  Create  Functionality  QA Functionality	50	Cristian Balatbat
11	As a group leader, I want to see the prediction for the event audience attendance in the dashboard.	Design UI  QA Design  Create Functionality  QA Functionality	50	Cristian Balatbat
12	As a group leader, I want to see the prediction based on the budget	Design UI  QA Design  Create Functionality  QA Functionality	50	Cristian Balatbat

	evaluation in the			
	dashboard.			
	As a group leader, I want to see the	Design UI		
	predictive analysis for the	QA Design		
13	collective attendance for the previous	Create Functionality	50	Cristian Balatbat
	year, current year and the prediction for it.	QA Functionality		
	As a group leader, I want to	Design UI QA Design		_
14	14 see the events	Create	50	Cristian Balatbat
	per group in the dashboard.	Functionality  QA Functionality		
	As a group	Design UI		
	leader, I want to see the	QA Design		Cristian
15	frequency of	Create	50	Balatbat
	events per	Functionality	30	Dalatbat
	group in the dashboard.	QA Functionality		
	As a group	Design UI		
	leader, I want to	QA Design		
	see the	Create		Cristian
16	volunteers and	Functionality	50	Balatbat
	contacts per region in the dashboard.	QA Functionality		Daiatbat

17	As a group leader, I want to see the highest percentage of religions per region in the dashboard.	Design UI  QA Design  Create  Functionality  QA Functionality	50	Cristian Balatbat
18	As a group leader, I want to see the highest percentage of religions in Mindanao in the dashboard	Design UI  QA Design  Create  Functionality  QA Functionality	50	Cristian Balatbat
19	As a group leader, I want to see the language per region in the dashboard.	Design UI  QA Design  Create  Functionality  QA Functionality	50	Cristian Balatbat
20	As a group leader, I want to see the plotted events across the Philippine map.	Design UI  QA Design  Create  Functionality  QA Functionality	50	Cristian Balatbat

# 3.2 Sprint Backlog Burndown Chart

#### 3.2.1 User Stories

Figure 2. Sprint 1 Burndown Chart for User Stories

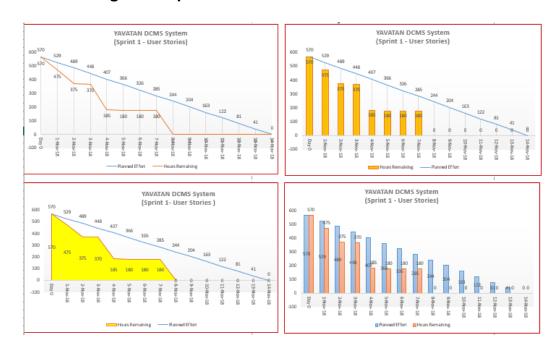
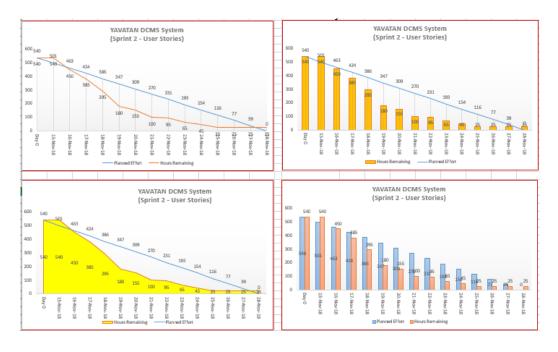


Figure 3. Sprint 2 Burndown Chart for User Stories



# 3.2.2 Information Security

Figure 4. Sprint Burndown Chart for Information Security

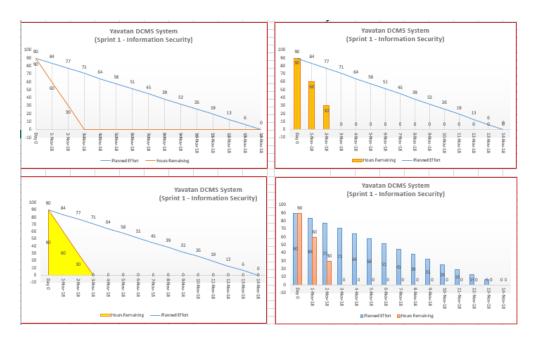
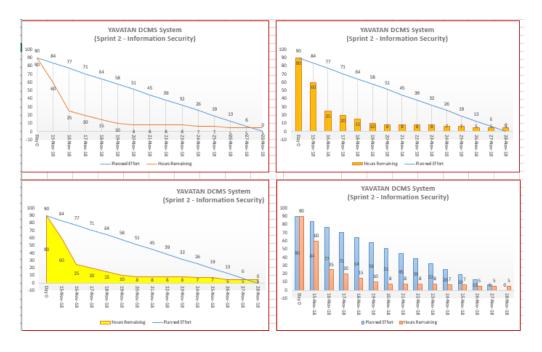


Figure 5. Sprint Burndown Chart for Information Security



#### 3.2.3 Standards

Figure 6. Sprint 1 Burndown Chart for UI Design

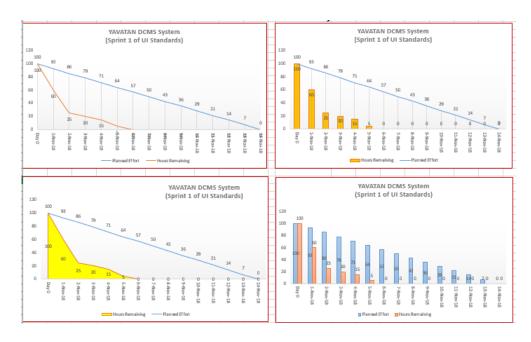
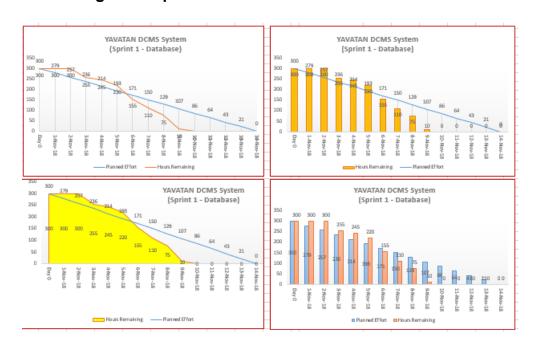


Figure 7. Sprint 1 Burndown Chart for Database



# 3.2.4 Integration

Figure 8. Sprint 1 Burndown Chart for Integration

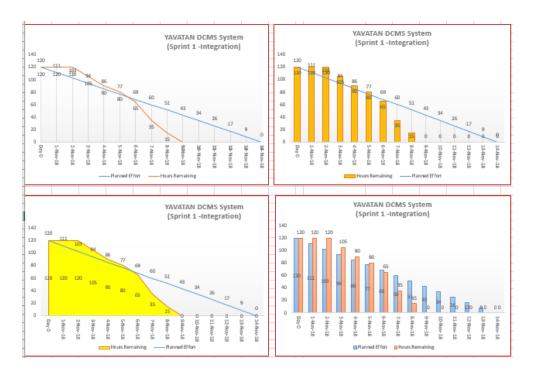
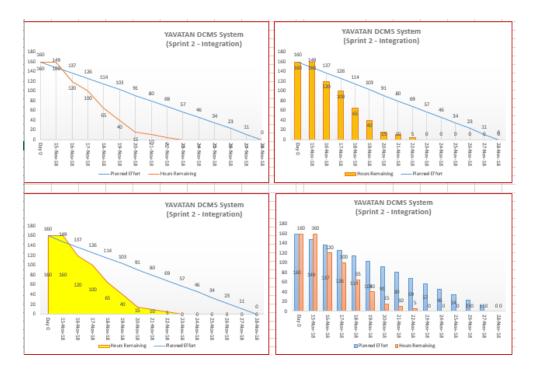


Figure 9. Sprint 2 Burndown Chart for Integration



# 3.2.5 Analytics

Figure 10. Sprint 1 Burndown Chart for Analytics

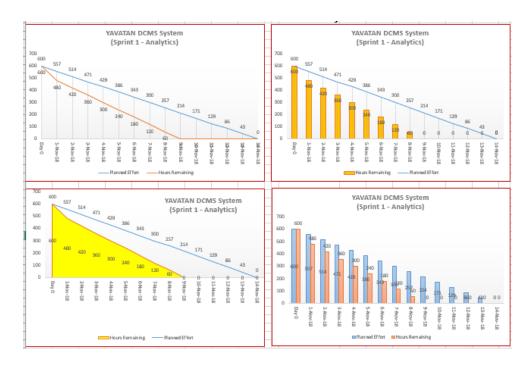
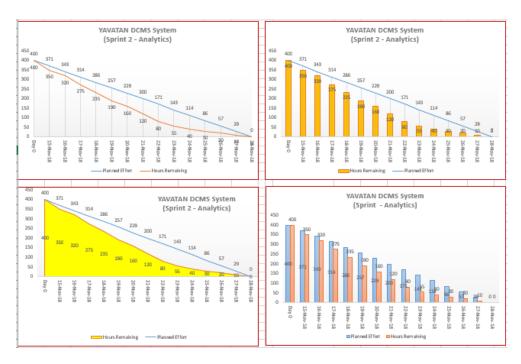


Figure 11. Sprint 2 Burndown Chart for Analytics



# 4. System Application Overview

#### 4.1 General Overview

#### 4.1.1 General Description

Yavatan System, is digital mission strategy system that manages the organization's events and its attributes and other components – activities, logistics and its attendance. It is a web-based system, so it can run on different web browsers and if its uploaded in the web, you will be needing an internet connection in order to access the system.

The system enables the volunteer can view available and related groups and events that the user can join or register. The group leader can create events, manage group members and other group and event configurations. The administrator can add, edit, delete, view and archive data and any other related entities into the system.

#### 4.1.2 User Access and Control

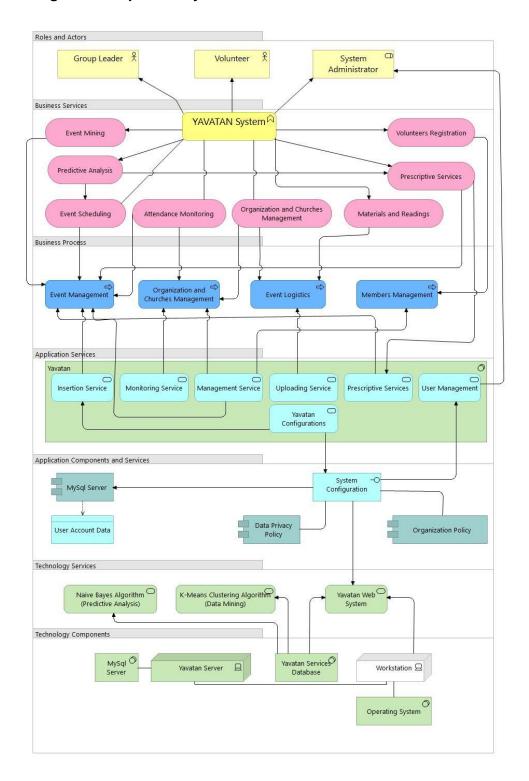
Yavatan has three (3) level of access that accompanies certain access rights. These are the following details:

Table 15
User Access Rights

USER	ACCESS RIGHTS
Volunteer	This user access has the ability to view available and related groups and events that the user can join or register.
Group Leader	This user access has the ability to events, manage group members and other group and event configurations
System Administrator	This user access has the ability to add, edit, delete, view and archive data and any other related entities into the system.

### 4.2 System Architecture

Figure 12. Top-Level System Architecture of the Yavatan DCMS



The figure shows the components of the Yavatan system – It has 7 classifications consist of the roles and actors, business services, business process, application services, application components and services, technology services and technology components. There are 3 roles and actors in the system, these are the group leaders, volunteers (members), and the system administrator. In the business services, Yavatan includes events mining, events scheduling, attendance monitoring, organization and churches management, volunteers' registration, the predictive analysis, the prescriptive services, and the uploading of materials and readings.

The business process of Yavatan System Architecture contains 4 activities such as event management, organization and churches management, event logistics, and members management. For the Application Services, it has 7 modules named as Insertion Service, Monitoring Services, Management Services, Prescriptive Services, Uploading Services, Yavatan Configurations, and the User Management. The system used MySQL Server for storing the data of the users and creates a system configuration to update the Data Privacy Act and the organization policies of the governing bodies the will use the Yavatan system.

The system used technology services such as Clustering Algorithm for Data Mining and Classification and Inference Method for predictive analysis, specifically the Naïve Bayes algorithm that is utilized in the Web system. There are 4 technology components involved in the system, these are MySQL Server, Yavatan Server, Yavatan Services Database and the Workstation for the operating system.

### 4.3 System Operations Manual

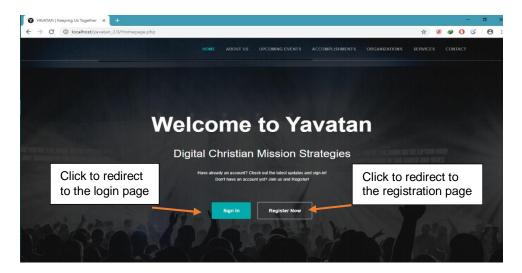
#### 4.3.1 Getting Started

This section provides a general walkthrough of the system from initiation through exit. It provides details on how to log in on the system.

#### Homepage

The system provides a homepage or portal to show a brief information about the Yavatan system.

Figure 13. Homepage



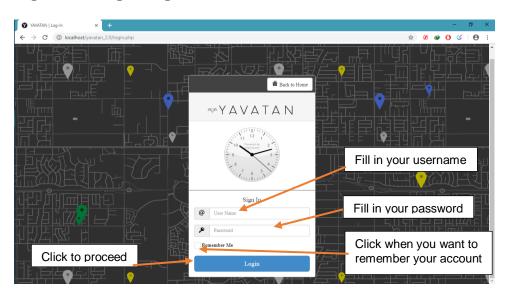
### **Logging On**

The system developer will provide the default username and password to the administrator, while the volunteer user will have to register in order to have a personal account to the system, and the group leader user will be created by the administrator.

- In the Volunteer user, The Main Home Page of the system will be displayed after logging in.
- If you are a new user, go to "Register Now". Fill up all the required information and follow the step by step process.

- In the Group Leader user, The Dashboard Page of the system will be displayed where you can see the summary or analytics of system.
- In the Administrator user, after logging in, you will be redirected to system's dashboard.

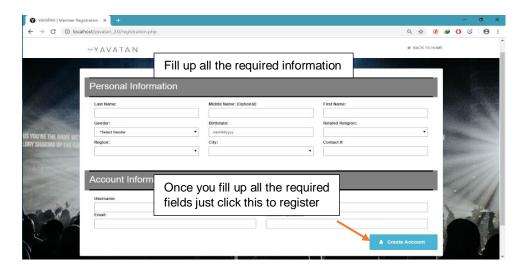
Figure 14. Login Page



### Registration

Registration page is provided in order to register new users and marked as volunteer users.

Figure 15. Registration Page



### 4.3.2 System Menu and Page Description

This section describes the menus and page navigations available on the system for the volunteer user access, group leader user access and administrator access.

### **Administrator Menu and Page Navigation**

The menus and pages available for the administrator are illustrated in the following:

Table 16

Administrator Menu and Its Description

SCREEN PAGE	DESCRIPTION		
Dashboard	Once you logged in, this page will		
	show where you can see the analytics		
	of the system.		
User Management	A part of a system that you can		
	manage User Roles, Account		
	Management, Group/Organization		
	Management, Group-Leader		
	Management.		
Demographics	This page is where you can manage		
	regions and cities.		
Yavatan	This is where the administrator		
Configurations	manages Religion, Church, Event Type		
	and Event Audience.		

# **Group-Leader Menu and Page Navigation**

The menus and pages available for the group-leader user are illustrated in the following:

**Table 17**Group-Leader Menu and Its Description

SCREEN PAGE	DESCRIPTION
Dashboard	This page will show where you can see
	the analytics for the group-leader
	account.
<b>Event Management</b>	A part of a system that you can
	manage events, add events, view
	event details, manage activities, add
	activities, view activity details, manage
	logistics and manage attendance.
Group Management	This page is where you can manage
	Group Information and also manages
	group-member.
Material Setup	Material Setup is used to add, update
	and archive materials.

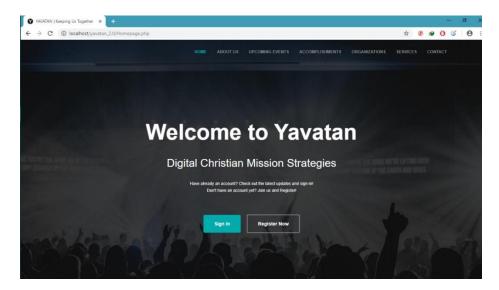
# **Volunteer Menu and Page Navigation**

The menus and pages available for the volunteer user are illustrated in the following:

Table 18
Volunteer Menu and Its Description

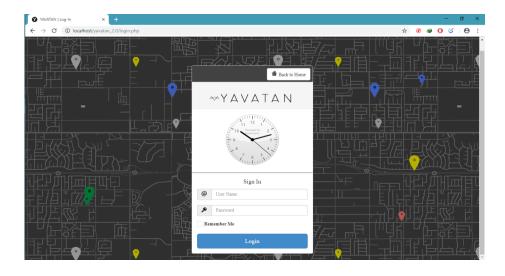
SCREEN PAGE	DESCRIPTION
Home	This page is show when the volunteer
	logs in, you can see the events near
	you or events that near in your
	location, you can view suggested
	groups and their details.
Enlisted Events	A part of a system that you see all the
	events that your group created or
	related to your group.
Joined Groups	This page is where you can see all the
	group that you have joined.
All Events	Part of the volunteer page where you
	can see all the events regardless of the
	religion of the volunteer.
All Groups/Orgs	Just like the All Events, you can see
	here all the groups/org regardless of
	the religion of the volunteer.

Figure 16. Homepage



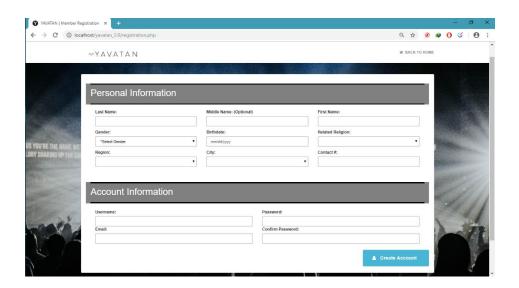
The figure above is shown before accessing the system's Login Form.

Figure 17. Login Page



The figure above is used to input user's essential information regardless of their user role to access the system.

Figure 18. Registration Page



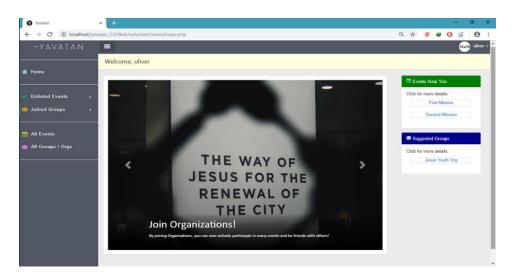
The figure above is used to register an account, once all the required field is filled the account will be created as volunteer account.

Figure 19. Welcome Page



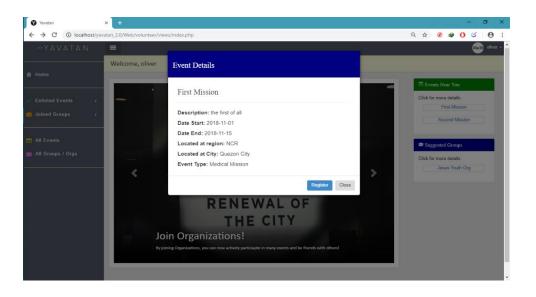
The figure above is shown after you fill-up all the required information in the registration page, you are redirected to the welcome page.

Figure 20. Homepage (Volunteer's Page)



The Figure above is used where the volunteer logs in, they can see the events near them and suggested group.

Figure 21. Event Details (Volunteer's Page)



The Figure above is used to view the details of the event you clicked.

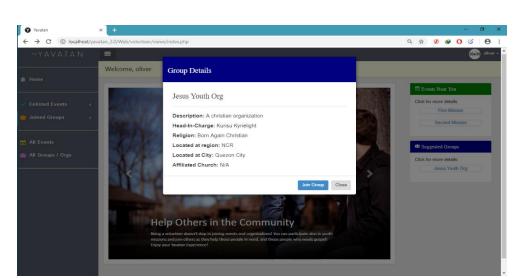
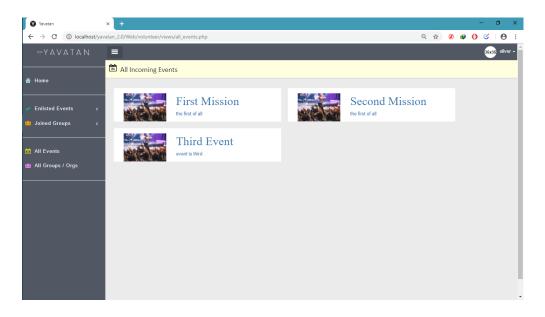


Figure 22. Group Details (Volunteer's Page)

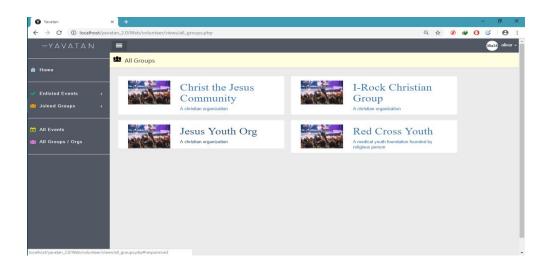
The Figure above is used to view the details of the group you want to see.





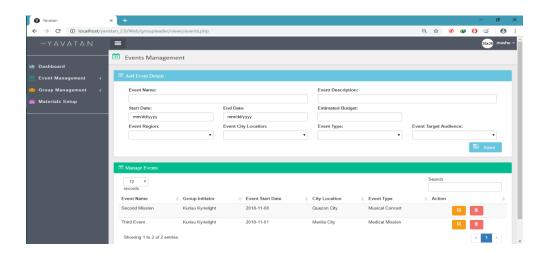
The Figure above is used where the volunteer can see all the events created by the group-leaders regardless of the volunteer's religion.

Figure 24. All Groups (Volunteer's Page)



The Figure above is used where the volunteer can see all the groups existing in the system, they can see all the groups regardless of the volunteer's religion.

Figure 25. Events Management (Group-Leader's Page)



The Figure above is used to create events, update events and also archive events.

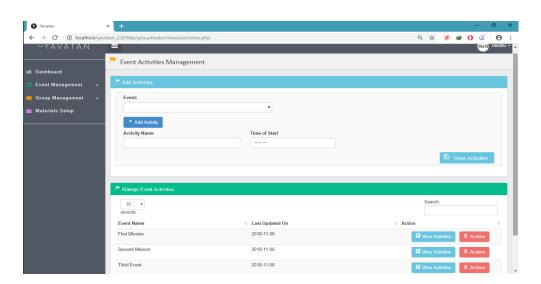
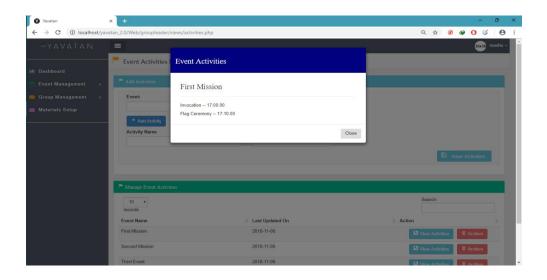


Figure 26. Event Activities Management (Group-Leader's Page)

The Figure above is used to add activities in the events, also you can edit and archive activities.

Figure 27. View Event Activities (Group-Leader's Page)

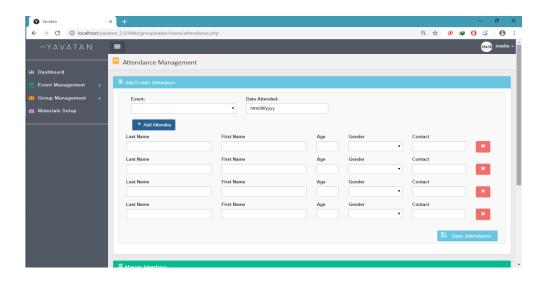


The Figure above is used when you want to view activity details in specific event.

Figure 28. Logistics Management (Group-Leader's Page)

The Figure above is used to add logistics in the selected events, edit is also provides and archive.

Figure 29. Attendance Management (Group-Leader's Page)



The Figure above is used to add attendee in the selected event.

Verotan

X

→ C

O localhost/yavatan\_2.0/Web/groupleader/views/attendance.php

Event Attendance

Last Name

Event Attendance

Third Event

A Medical Mission event for Millenials

Name of Attendee | Date Attended

Bryan Corteslano | 2018-11-09

John Patrick Loyals | 2018-11-09

John Patrick Loyals | 2018-11-09

John Patrick Loyals | 2018-11-09

Search:

First Mission

2018-11-06

Second Mission

2018-11-06

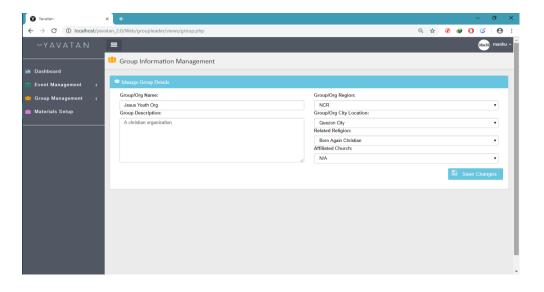
Showing 1 to 3 of 3 entries

Showing 1 to 3 of 3 entries

Figure 30. View Attendance (Group-Leader's Page)

The Figure above is used to view all the attendees in the selected events you want to see.

Figure 31. Group Information Management (Group-Leader's Page)

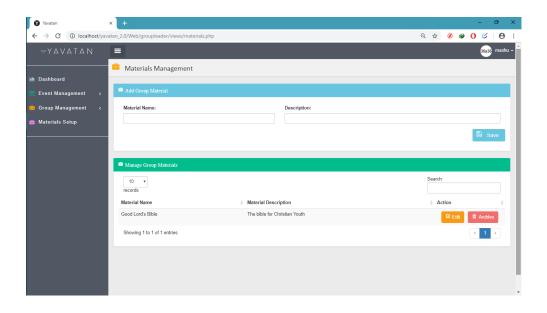


The Figure above is used to manage the group details of the group leader.

Figure 32. Group-Member Management (Group-Leader's Page)

The Figure above is used to manage all the listed members of the group.

Figure 33. Materials Management (Group-Leader's Page)

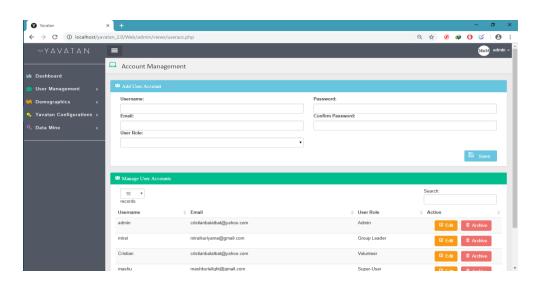


The Figure above is used where the group leader can manage all the materials used in the events or group.

Figure 34. User Role Management (Admin's Page)

The figure above is used to add, update and archive user roles.

Figure 35. Account Management (Admin's Page)



The figure above used to manage accounts in the system.

© \*vavstan ×

← → © © localhost/yavatan 2.0/Web/admin/views/Organization.php

© ☆ ② ◎ ○ ○ ○ ○ is

~YAVATAN

□ Group/Organization Management

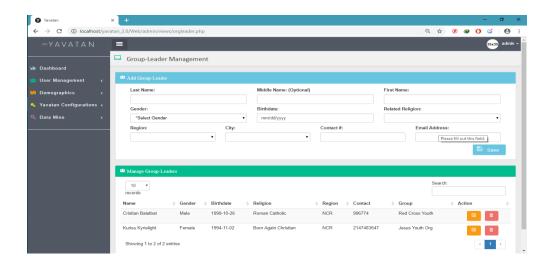
ish Dashboard

Figure 36. Group/Organization Management (Admin's Page)

The figure above shows all the group/organization created, you can view their details, add, edit and archive

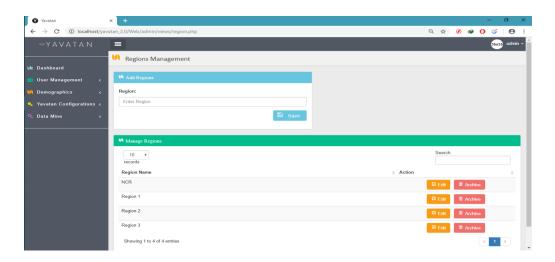
Figure 37. Group Leader Management (Admin's Page)

Kurisu Kyrielight NCR



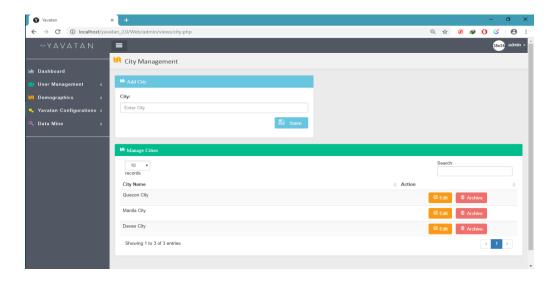
The figure above shows all the list of group leaders, you can add, edit and delete.

Figure 38. Regions Management (Admin's Page)



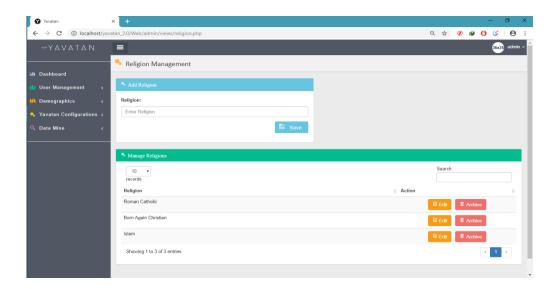
The figure above is used to manage regions, regions used to select where the volunteer address located.

Figure 39. City Management (Admin's Page)



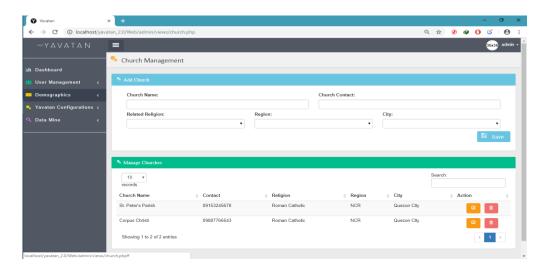
The figure above is used for the administrator where he/she can manage cities.

Figure 40. Religion Management (Admin's Page)



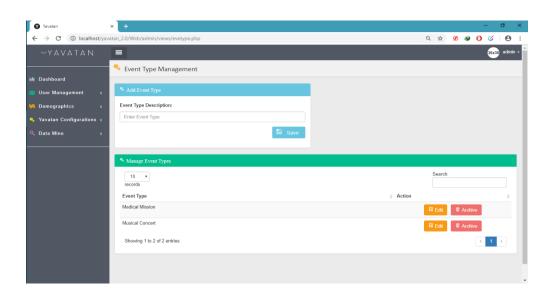
The figure above is used to manage religion that will used by the system.

Figure 41. Church Management (Admin's Page)



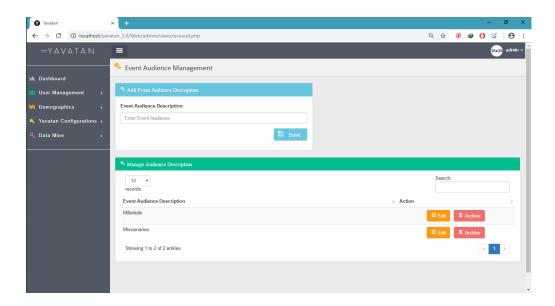
The figure above is used by the administrator to view, add, edit and archive churches.

Figure 42. Event Type Management (Admin's Page)



The Figured above is used to add, edit and archive event types.

Figure 43. Event Audience Management (Admin's Page)



The Figure above is used to view, add edit and archive events audience.

## 5. Project Outcome

## 5.1 Conclusion

Yavatan Digital Mission Christian Strategies System is an Event Management system application specifically made for religious youth groups. The system offers features that will greatly help the group leaders of a particular group to create and manage their events and group members. The greatest feature of the system, which is the predictive analysis, provides a prescriptive assistance for the group leaders in terms of creating events, as they can be given an analysis and to use it to create more effective and good events.

The Main 7 Core Functionalities of the system are as follows: Registration, Event Management, User Account Management, Group Management, Attendance Management, Data Mining, and the Predictive Analysis. These core functionalities are the main foundation of the system. The system is only built as a web application. User accesses to the said functionalities will depend on the 2 main users – the group leaders and the volunteers.

This project is planned and executed only in 2 sprints (4 weeks), from November 1, 2018 up to November 28, 2018. Working hours in weekends are also included. The development of the said system is divided into modules, and distributed into different sprints, categorized by priorities, and by that, the short-term and long-term development tasks are determined. The project team ensures that the deliverable will be a working system in terms of core functionality, but the team still considers further improvement that can be applied later on in the system.

## 5.2 Recommendation

The Yavatan project team recommends the following:

- 1. The first use of the system must be supervised by the project team to have its first-time users to be well-guided and oriented.
- 2. The documentation of the system must be reviewed by the quality assurance team and its users to be well-guided in using the system.
- The Yavatan can be recommended by its users to other colleagues or other youth groups, if the initial system testers, or the beta-testers is in favored of using the system as an event and group management system.
- If there are revisions, the quality assurance group must consult the project development team if there are necessary changes to be made.
- The team recommends suggestions and insights from its testers and users to use it as a basis for future improvement of the system, both to its business process and technology application.