 

FPT - UBD INNOVATION LAB

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| Project 3 |
| DY Emergency Response  Report 1 - Introduction |

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| **Project Code** | DYER |

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# Introduction

## Project information

* Project name : **DY Emergency Response**
* Project Code : **DYER**
* Product Type : **Mobile Application & Website Administrator**
* Start Date : **1st October 2018**
* End Date : **TBC**

## Introduction

This document introduces a solution that allows Discovery Year administrators, coordinators and students of Universiti Brunei Darussalam (UBD) to exchange information more efficiently. The main function of the system focuses on allowing the administrators and coordinators to send notifications to a student’s mobile device to either warn or ask for their status in cases of emergency. This system comes in the form of a Mobile Application, developed with Native App software in mind to further complement with current versions of Apple and Android Operating Systems and is designed to be very user friendly and minimalistic. This Mobile Application is intended for release to the administrators, coordinators and students of UBD.

1. Current situation

In the third years of UBD’s student, they will have a program call is Discovery Years (DY). In this year, student can register to go to continue learning in another university outside Brunei or go to internship in a company in Brunei or others country. Currently, there is 80% of their student will go out of country, and there is no program or system can help teacher of UBD can quickly know their student’s status. For now, in case of emergency like disaster, they using email or Whatsapp to text to their student and ask for their status. So they need an application can help them easy to make a notification and receive student’ answer status automatically not manually like now.

UBD’s undergraduate programme lasts for 4 years. On the third year, students of the programme will have to undergo the Discovery Year program. This program ensures that student are able to experience many different activities such as Student Exchange Programs, Community Outreach Programs, Incubations and Internships either inside the country or abroad.

The statistics given by the Assistant Vice-Chancellor (AVC) of Global Relations, Dr. Joyce Teo Siew Yean, stated that an estimated 80% of the students are expected to go abroad for at least one semester during their Discovery Year. Each student on their Discovery Year are supervised by their respective faculties’ Discovery Year Coordinator (DYC). There is only one Coordinator in the six faculties of UBD and they are responsible for handling any information that the students are required to know pertaining to their Discovery Year activity.

## Problem definition

The current problem with the system being currently implemented is regarded by the client as being too inefficient and time-consuming. Initially, when in cases of emergency such as an earthquake alert or tsunami warning, the AVC issues an order to every DY coordinators to ask if their students who are at the affected location to respond and report their well-being. This communication usually takes place on a messaging service such as WhatsApp or Facebook Messenger. The coordinators will then have to manually check who have responded and have not as well as the total count of those who are at the affected location. The AVC will then be given the answer from each coordinator separately. This process can be quite confusing and is dangerous when a student’s safety is concerned.

This problem is further aggravated by the sheer number of students a coordinator is responsible for. It is difficult for a coordinator to effectively map the responses of the students in the affected site due to the volume of students they have to check on.

Another concern of the current system comes from the Discovery Year students. When they are abroad, they are significantly harder to contact with due to new mobile numbers, irregular checking their school email or schedule and time zone differences. Hence, we must also ensure that the students are able to be notified in cases of emergencies.

## Proposed solution

The proposed solution is to build system consisting of two user-friendly mobile applications for students and staff, and an additional website that allows the staff to access the same functionalities on the browser. The person responsible for the website is regarded as the website administrator. Each staff (administrators and coordinators) are only able to view information that they have rights to access to.

The coordinators are able to send notifications limited to their students and view basic information of their students along with their responses to any notifications sent to them. They will also have access to the website with limited security access.

From the students’ perspective, they first need to log into the application at least once. Afterwards, they will be able to view basic information about themselves, their host organisation and host country. They can also send alerts to their Coordinators in emergency cases as well as respond to notifications from their coordinators.

The website administrator are mainly responsible for handling all the information of the student as well as interacting with the database. They will be able to create notifications for all the students as well. They can also generate a report from the website.

### Feature Functions

* Coordinators can only see information about their own faculties’ students.
* Coordinators can only send notifications to their own students.
* Coordinators are able to view responses to their notifications.
* Student can view information about themselves and their host organisation and country.
* Student can respond to notifications from their coordinators.
* Website administrator are able to view all information of the students.
* Website administrator are able to create notifications for all students.
* Website administrator can generate a report from the website.

## Functional requirements

Functional requirements for **Mobile Application**:

**Student :**

* Students that are going abroad for their Discovery Year are able to log into this mobile application.
* Prompted to log into the application once. Subsequent logins on the same device do not ask for authentication.
* The account expire at the end of their Discovery Year.
* See basic information of the organisation they are attached to.
* Give report to their Discovery Year coordinators in cases of emergency.
* Receive notification from their Coordinators or Administrators.
* Respond to notifications.
* Ability to update their new phone number while in host country.

**Coordinator :**

* Prompted to log into the application once. Subsequent logins on the same device do not ask for authentication.
* Able to view information about their own faculties’ students.
* Able to view list of their students by country.
* Create notification to one or more students at a time.
* View students’ responses to their notifications.
* View number of students who have or have not responded to their notifications as well as the information pertaining to those students.
* Receive notification from Administrator.

**Administrator :**

* Prompted to log into the application once. Subsequent logins on the same device do not ask for authentication.
* Create notification for both students and coordinators.
* View responses to their notifications.
* View number of students who have or have not responded to their notifications as well as the information pertaining to those students.
* Able to view list of all student by country.

Functional requirements for **Website**:

**Coordinators :**

* Log in to website.
* Able to view information about their own faculties’ students.
* Import excel file of students to database.
* Create notification to one or more students at a time.
* View students’ responses to their notifications.
* View number of students who have or have not responded to their notifications as well as the information pertaining to those students.

**Administrator :**

* Log in to website.
* Manage accounts of other administrators, coordinators and students.
* Manage every aspect of information in user-friendly database.
* Create notification to one or more students at a time.
* View students’ responses to their notifications.
* View number of students who have or have not responded to their notifications as well as the information pertaining to those students
* Generate report.

## Roles and responsibilities

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| **No** | **Full name** | **Role** | **Position** | **Contact** |
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Table 1. The roles and responsibilities of the developing team