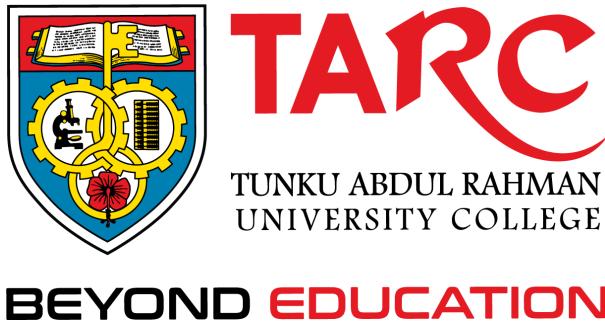


**Green the Environment**



Tunku Abdul Rahman University College

Bachelor of Information Technology (Honours) in Software Systems  
Development

**BAIT2113**

**Web Application Development**

Academic Year 2022/2023

Semester 1

Student Names	Student ID	Contribution (%)	Sign	Module(s)
Cheah Wen Xian	22PMR06011	30	<i>xian</i>	User and Role Base Management
Lee Ting Le	22PMR06024	35	<i>ting</i>	Product and Category
Mikael Koay	22PMR0627	35	<i>koay</i>	Donation and Report
<b>Total</b>		<b>100%</b>		

**Tutorial Group: Group 2**

## **Green the Environment**

**Date of Submission: 26 September 2022**

**Date received by Lecturer or Tutor:** \_\_\_\_\_

### **Coursework Declaration**

Semester: 1 Course Code & Title: BAIT2113 Web Application Development

#### **Declaration**

I/We confirm that I/we have read and shall comply with all the terms and condition of Tunku Abdul Rahman University College's plagiarism policy.

I/We declare that this assignment is free from all forms of plagiarism and for all intents and purposes is my/our own properly derived work.

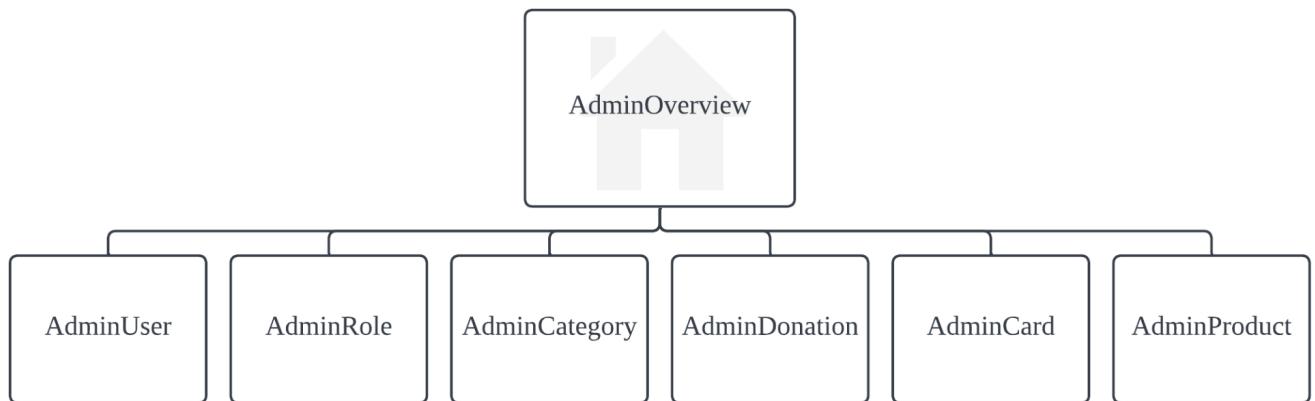
I/We further confirm that the same work, where appropriate, has been verified by anti-plagiarism software Google docs originality check

Signature(s): xian, ting, koay

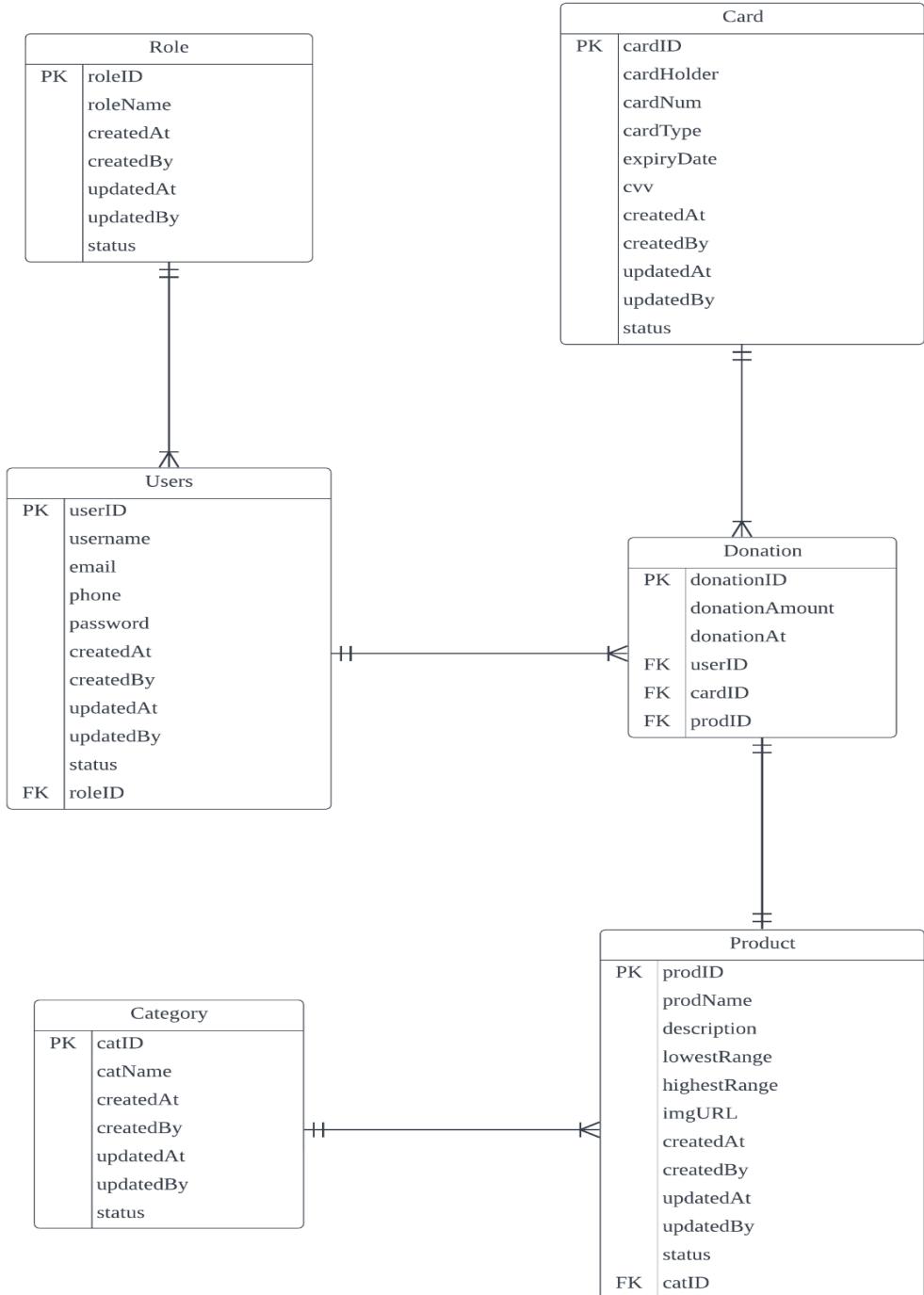
Name(s): Cheah Wen Xian, Lee Ting Le, Mikael Koay

Date: 26 September 2022

# Sitemap



# ERD Diagram



## Error Handling

Login Page Validation	
<p><b>Login Here</b></p> <p>Please fill out this form to log in to our website.</p> <p>Username <input type="text" value="Enter your email or username"/> Please enter an username or email</p> <p>Password <input type="password" value="Enter your password"/> Please enter a password !</p> <p>Don't have an account yet? Click <a href="#">here</a> to register Forgot your password? Click <a href="#">here</a> to reset password</p> <p><input type="button" value="Reset"/> <input type="button" value="Login"/></p>	<p><b>Login Here</b></p> <p>Please fill out this form to log in to our website. Wrong username or password.</p> <p>Username <input type="text" value="cheah"/></p> <p>Password <input type="password" value="Enter your password"/></p> <p>Don't have an account yet? Click <a href="#">here</a> to register Forgot your password? Click <a href="#">here</a> to reset password</p> <p><input type="button" value="Reset"/> <input type="button" value="Login"/></p>
<p>Login page validation will check if the input field is empty. It will also check that the credentials entered match the values stored in the database. If the user tries to enter a blank space, the system will not accept it.</p>	

Register Page Validation		
<h3>Register Here</h3> <p>Please fill out this form to register in to our website.</p> <p>Username <input type="text" value="Enter Your Username"/> Please enter an username !</p> <p>Email <input type="text" value="Enter Your Email"/> Please enter an email !</p> <p>Password <input type="text" value="Enter Your Password"/> Please enter a password !</p> <p>Confirm Password <input type="text" value="Confirm Your Password"/> Please enter a confirmed password !</p> <p>Already have an account? Click <a href="#">here</a> to login</p> <p><button>Reset</button> <button>Register</button></p>	<h3>Register Here</h3> <p>Please fill out this form to register in to our website.</p> <p>Username <input type="text" value="cheah"/> Username should contain at least one letter and one number.</p> <p>Email <input type="text" value="adaaaaaa"/> Wrong email format !</p> <p>Password <input type="text" value="Enter Your Password"/> Password should be at least 8 characters long.</p> <p>Confirm Password <input type="text" value="Confirm Your Password"/></p> <p>Already have an account? Click <a href="#">here</a> to login</p> <p><button>Reset</button> <button>Register</button></p>	<h3>Register Here</h3> <p>Please fill out this form to register in to our website.</p> <p>Username <input type="text" value="cust1"/> Username already exist.</p> <p>Email <input type="text" value="cust1@gmail.com"/> Email already exist.</p>
<p>Registration page validation will perform the null check, length check and format check on the entered data. Also, the validation will check if the username and email already exist in the database.</p> <p><u>Details information</u></p> <ol style="list-style-type: none"><li>1) For email checking, it follows Gmail's standard.</li><li>2) Username need to contain at least one number and one letter</li><li>3) The phone format follows the Malaysian mobile number format.</li><li>4) The Confirm Password input field value must match the Password field value.</li><li>5) Password must be 8 characters long.</li></ol>		

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Insert and Modify Validation (Admin Side)		
Add New User	Add New User	Username : Staff1  Username already exist.
Username :  Please enter an username !	Username : cheah  Username should contain at least one letter and one number.	Email : ceaaaa  Wrong email format !
Email :  Please enter an email !	Email : ceaaaa  Wrong email format !	Password : Cheah  Password should be at least 8 characters long.
Password :  Please enter a password !	Confirm Password : Che  Confirmed password must match password !	Confirm Password : Che  Confirmed password must match password !
Confirm Password :  Please enter a confirmed password !	Phone No : 13213213  Wrong phone format entered !	Phone No : 13213213  Wrong phone format entered !
Phone No :  Please enter a phone number !		
On the admin page, users with permissions are allowed to insert new users or modify existing user information. Null checks, length checks, and format checks are also performed on the input data. The validation format is similar to registration page validation. The system will also check the database for the existence of the username or email.		

**Donation Validation (Client Side)**

**Select A Donation Product**

Please select a donation product !

**1 Sapling**

**4 Saplings**

**Cacao Tree**

**Baobab Tree**

**Avocado Tree**

**Mango Tree**

Before entering the donation payment section, the system will check whether the customer has selected a donation product.

## Green the Environment

Payment Validation (Client Side)			
<p><b>Payment Details</b></p> <p>Name on card  Please enter a card holder name !</p> <p>Card Number <input type="text"/> Expiry <input type="text"/> CVV <input type="text"/></p> <p>Please enter a card number ! <input type="text"/> Enter an expiry! <input type="text"/> Enter a CVV!</p> <p><input checked="" type="radio"/>  <input type="radio"/> </p> <p>Please select a card type !</p> <p>Please verify your information above and click "Donate." Once you click "Donate," your donation will be processed.</p> <p>Are you sure to donate \$10.00</p> <p><b>Donate</b></p>	<p><b>Payment Details</b></p> <p>Name on card 213213213213</p> <p>Card Number <input type="text"/> Expiry <input type="text"/> CVV <input type="text"/></p> <p>1232 1321 3132 1313 <input type="text"/> 21 31 <input type="text"/> 12333333 Wrong card format ! Wrong format ! Wrong format !</p> <p><input checked="" type="radio"/>  <input type="radio"/> </p> <p>Please verify your information above and click "Donate." Once you click "Donate," your donation will be processed.</p> <p>Are you sure to donate \$10.00</p>		
<p><b>Payment Details</b></p> <p>Name on card Cheah Wen Xian</p> <p>Card Number <input type="text"/> Expiry <input type="text"/> CVV <input type="text"/></p> <p>4512 1245 6897 7986 <input type="text"/> 10 30 <input type="text"/> 456 Your card has expired <input type="text"/> Wrong CVV for this card number</p> <p><input checked="" type="radio"/>  <input type="radio"/> </p>	<p><b>Payment Details</b></p> <p>Name on card Cheah Wen Xian</p> <p>Card Number <input type="text"/> Expiry <input type="text"/> CVV <input type="text"/></p> <p>4512 1245 6897 7986 <input type="text"/> 10 30 <input type="text"/> 456 Wrong card format !</p> <p><input checked="" type="radio"/>  <input type="radio"/> </p> <p>Please verify your information above and click "Donate." Once you click "Donate," your donation will be processed.</p>		
<p>In the payment part, several types of validation have been applied, such as null check, format check, date check, existence check and prefix check. The following are the details of validation.</p> <ol style="list-style-type: none"><li>1) For cardholder name, the input field cannot be empty, is limited to a maximum of 50 characters in length and must have at least 1 character, and only accepts alpha values.</li><li>2) For the card number it cannot be empty and only accept numeric values. The format is fixed in which the total length is 16 digits, and there are spaces for every 4 digits. The prefix of the card number is followed by the card type. 4 is the prefix of the visa card, and 5 is the prefix of the master card.</li><li>3) For the due date, the date entered must be in the logical range of January to December. If the</li></ol>			

## **Green the Environment**

- same card is used, the system checks whether the date entered exceeds the stored expiry period.
- 4) For the CVV field, the format accepted is numeric only. If the same card is used, the system checks if the entered CVV number matches the stored CVV.

### **Error Page (Unauthorized access)**



**Oops!**  
Something went wrong.

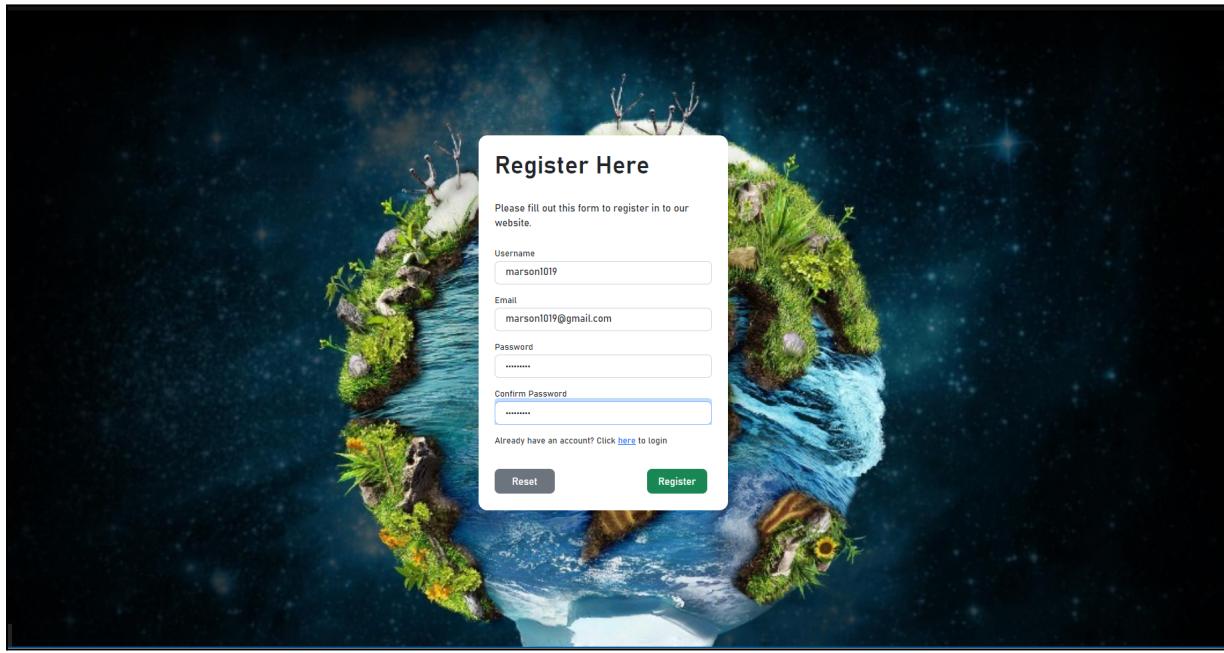
[Back to Login Page](#)

An error page appears if an unauthorized user attempts to access restricted page content. For example, an unauthorized user tries to access the admin page without any permission. Another situation that can cause an error page is when a banned user tries to access the page content.

# Web Application User Manual

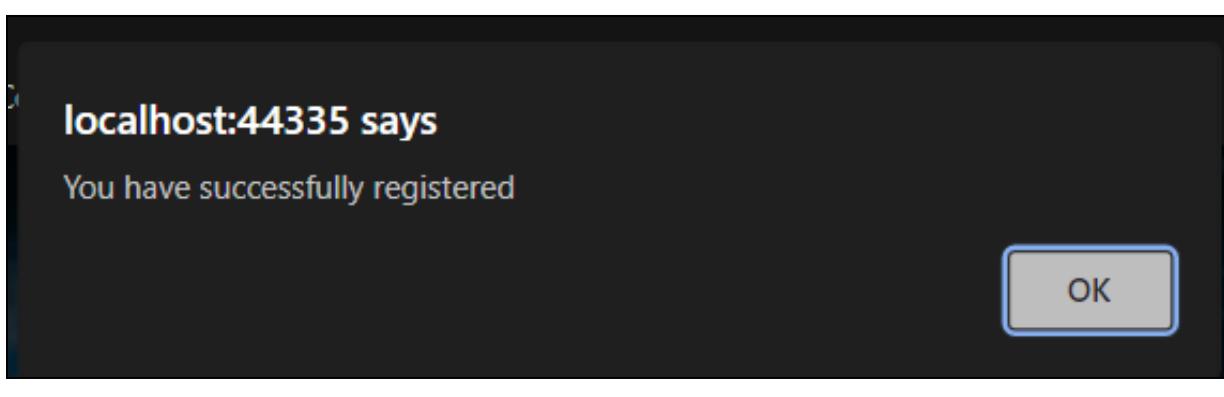
## Step 1:

In order to donate money to our website, users will need to register a user account.



## Step 2:

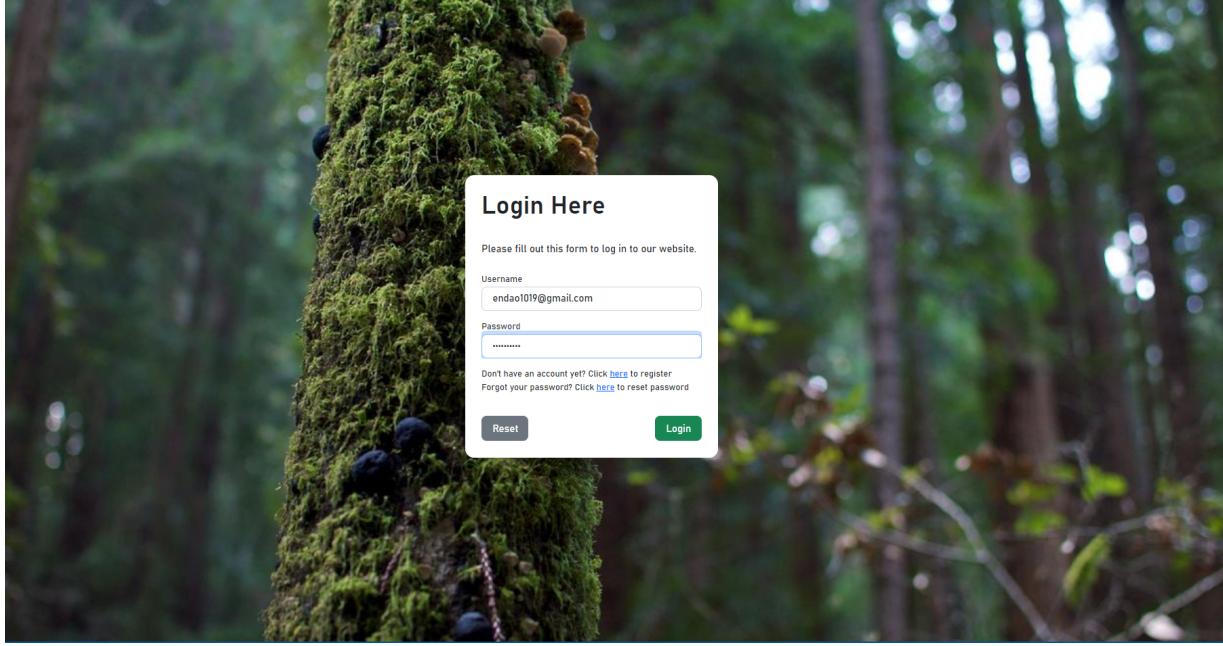
A successful message will show to the user. Users just need to click the “OK” button to navigate to the login page.



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### Step 3:

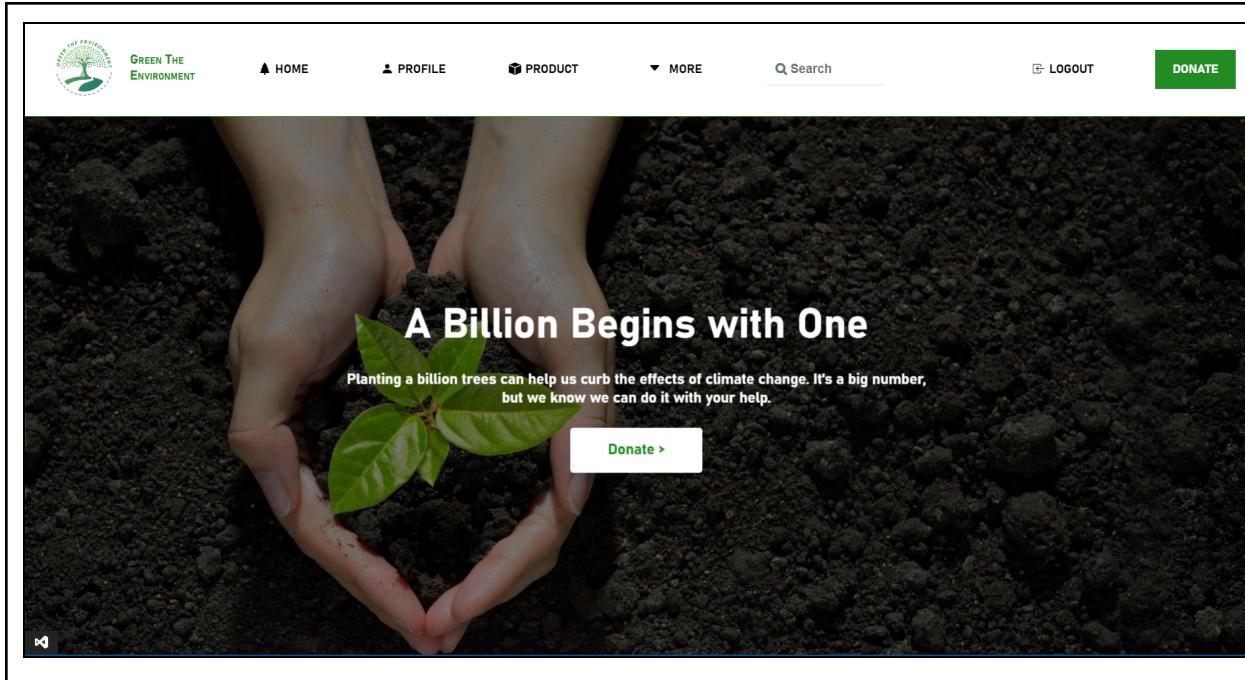
Users will need to login their account in the login page. They can choose to use either username or email to login.



### Step 4:

After login to the account, the home page will be shown to users. So, to donate to our website, users can click any of the “Donate” buttons provided in this page to proceed to the donation page.

## Green the Environment



### Step 5:

In the donation page, users can choose the amount of donation by clicking on the button or by entering the number at the textbox provided.

A screenshot of the "Plant a Billion Trees" donation page. The page features a title "Plant a Billion Trees" and a paragraph about the impact of donations. It includes a subtext "One Gift. One Tree. One Planet." and a photograph of a dense forest. A "Enter Your Donation Amount" input field is present. Below it are several donation buttons with amounts: \$10, \$25, \$50, \$100, \$250, \$500, and a custom input field showing "\$ 50". To the right, a green box displays the total amount to be paid as "\$50.00" and includes promotional text about perks and support.

## Green the Environment

### Step 6:

After selecting or entering the donation amount, users will need to choose the donation product and enter the bank card details.

(Please take note the product button in gray colour are not available)

The screenshot shows a user interface for selecting a donation product. At the top, a header reads "Select A Donation Product". Below it is a grid of six buttons, each representing a different tree type. The first three buttons are highlighted in green: "4 Saplings" (selected), "Cacao Tree", and "Mango Tree". The other three buttons are in gray: "1 Sapling", "Baobab Tree", and "Avocado Tree". Below the grid is a link "Know more about the donation product". Further down, a section titled "Payment Details" shows a form with fields for "Name on card" (Lee Ting Le), "Card Number" (4111 1111 1111 1111), "Expiry" (12 23), and "CVV" (232). At the bottom of the payment section are logos for VISA and Mastercard.

### Step 7:

Then, the donation details will be displayed at the bottom of the page. After users confirm all the details are correct and choose to donate, they just have to click the “Donate” button provided.

The screenshot shows a confirmation step where the user's donation details are summarized. It includes a message asking the user to verify their information and click "Donate" to process the donation. Below this, a question asks if the user is sure to donate \$25.00 as 1 Sapling. A large green "Donate" button is prominently displayed. At the bottom of the page, there are links for "Home", "Login", and "Donation". A copyright notice at the very bottom states "© 2022 Cookies by GTE | All rights reserved".

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### Step 8:

Users will be able to see the successful donation message display. After clicking the “OK” button, they will be redirected to the home page.

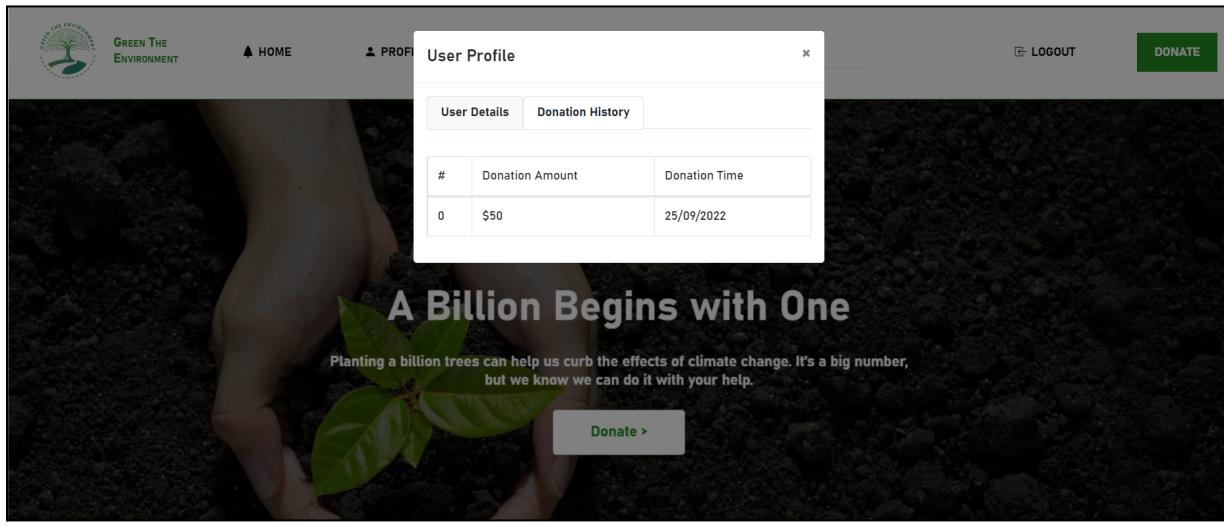
localhost:44335 says

Successfully donate, Thank You So Much !

OK

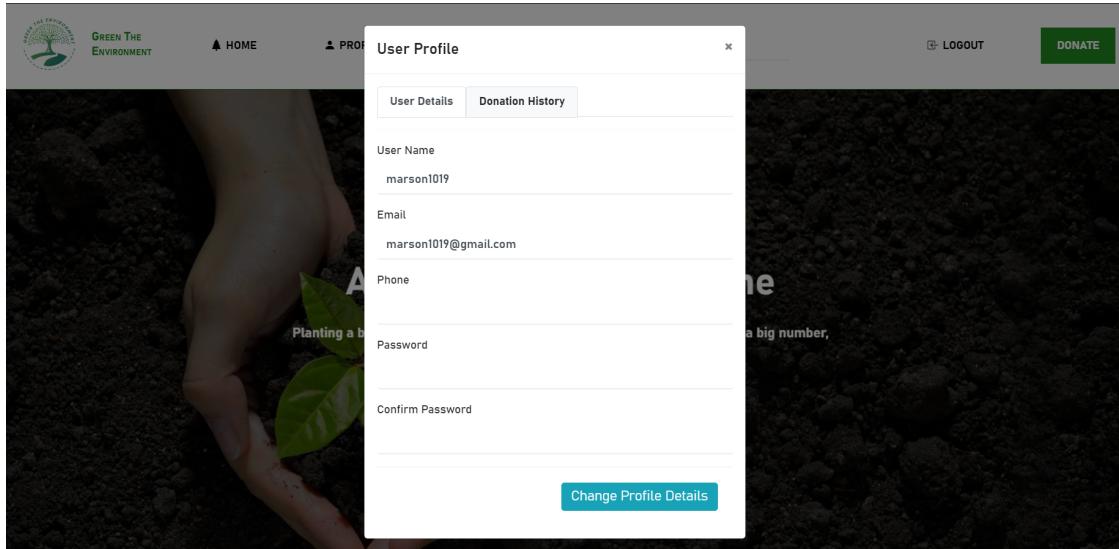
### Step 9:

Users can click the “PROFILE” text, and a pop up modal will appear. Then, they just have to click the Donation History tab to view their donation history.

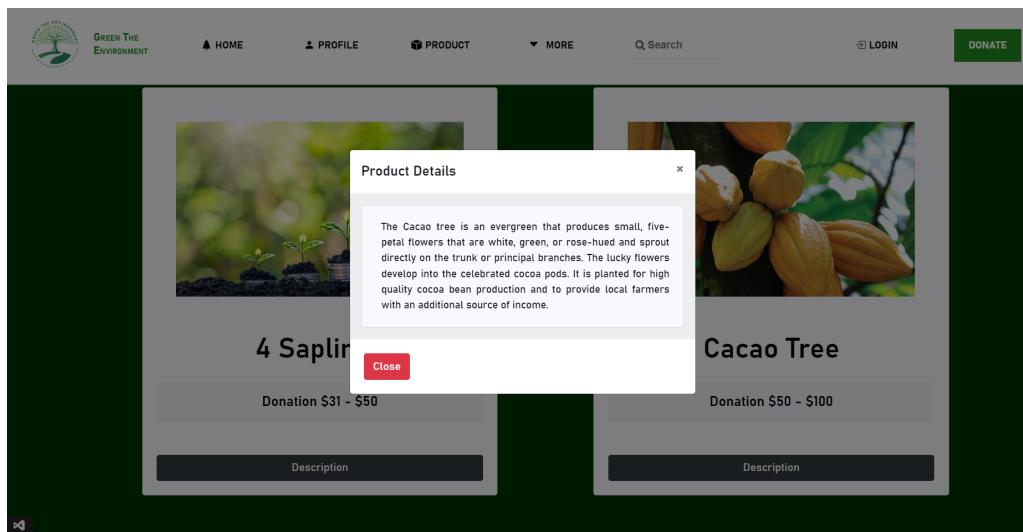


## Green the Environment

### Other functionalities

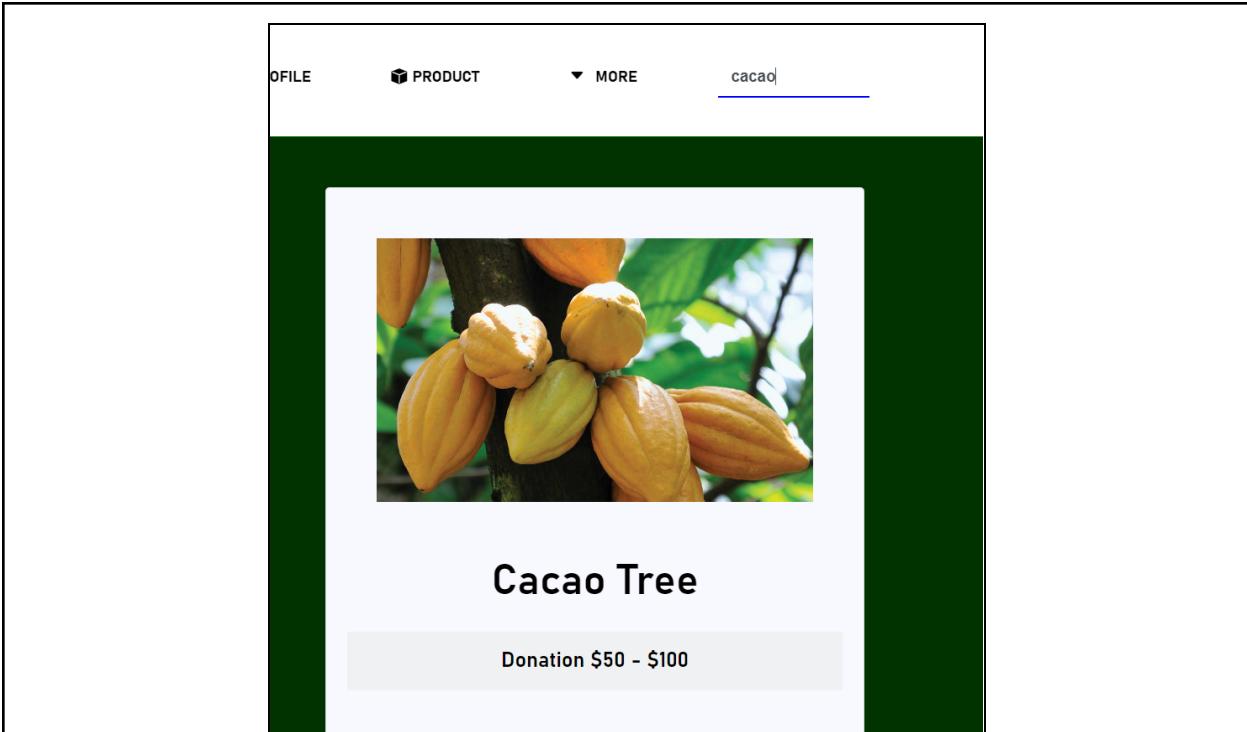


Users can also view and modify their account details in the User Details tab.



Users can also navigate to the PRODUCT page to view all donation products on our website and also check their descriptions.

## Green the Environment



*Users can also search for our products by entering their names in the search bar provided at the top navigation bar.*

About Green The Environment

A YouTube thumbnail for a short film titled 'One Earth - Environmental Short Film'. The thumbnail shows a dense forest with autumn-colored leaves. Overlaid on the image is the text 'One Earth' in large white letters, with a red YouTube play button icon integrated into the letter 'o'. In the top left corner, there is a small profile picture of a person. In the top right corner, there are two buttons: 'Watch later' and 'Share'. At the bottom left, it says 'Watch on YouTube'.

The term "*green environment*" refers to all statements related to and contributing to the improvement of environmental health. The purpose of the term is to ensure adequate environmental resources by protecting and maintaining the number of environmental resources.

## Green the Environment

Tunku Abdul Rahman University College Penang Branch

Tunku Abdul Rahman University College (Penang Branch), Penang, Malaysia is the main planting area of our company. Malaysia is located on the equator and is a suitable place to grow tree. Sufficient sunlight and high rainfall are to breed most of the world's trees. Students and staff at the Academy will also help nurture the tree with adequate resources.

*Users can also watch the youtube video and check out our location at the home page.*

[!\[\]\(e97f03754b73b3b747fa10bc35a339e0\_img.jpg\) LOGOUT](#)[!\[\]\(3b10bc7b7e66ba7dde2e8b14bda8bd0f\_img.jpg\) DONATE](#)

*Last but not least, users can log out their account by clicking the “LOGOUT” text provided at the top navigation bar.*

## Green the Environment

### Group Assignment: Marking Rubric

<b>Student Name:</b>	Cheah Wen Xian, Lee Ting Le, Mikael Koay	<b>Total Mark:</b> <b>100%</b>	
<b>Programme / Group</b>	RSDG2		

### Part 1 Prototype and Database

NO	CRITERIA	TOTAL MARK	Poor	Average	Good	Excellent	MARK
1.	Web design, System Prototype and ASP.NET Form Controls	30	<b>0 – 7 marks</b> Poor design website, not related to the society and event, difficult to view the information. Poor web prototype shows minimal part of the usability and functional of the system. ASP.NET web form controls are used	<b>8 – 16 marks</b> Poor design website, but easy to view the information. Average web prototype shows some of the usability and the functioning of the system Few of the right ASP.NET web form controls are used correctly. Able to	<b>17 - 25 marks</b> A good and consistent website. Easy to view the information. Good and detailed web prototype shows the complete usability and the functioning of the system Most of ASP.NET web form controls are used correctly.	<b>26 – 30 marks</b> Excellent, consistent, and attractive website. Excellent and detailed System prototype shows the complete usability and the functioning of the system. All ASP.NET web form controls are well	

## Green the Environment

			inappropriately. Fail to minimize input errors.	minimize some of the input errors.	Able to minimize most of the input errors.	structured, and the form controls are used correctly to minimize most of the input errors.	
2.	Database	10	<b>0 – 2 marks</b> Poor database design.	<b>3 – 5 marks</b> Average database design	<b>6 – 8 marks</b> Good database design	<b>9 – 10 marks</b> Good database design	

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**AMIT2043 Web Systems and Technologies Assignment: Marking Rubric**

NO	CRITERIA	TOTAL MARK	Poor	Average	Good	Excellent	MARK
			Some fields are missing. Field properties are not set (i.e. left to default).	with all fields. Some field properties are not set accordingly.	with all fields and appropriate properties (field size, data type, etc).	with correct relationship defined.	
		40	<b>TOTAL MARK:</b>				

## Part 2 - System

NO	CRITERIA	TOTAL MARK	Poor	Average	Good	Excellent	MARK

## Green the Environment

2.	Core Business Processes	20	<b>0 – 5 marks</b> Many requirements are not achieved. Module does not work as expected or contains a lot of flaws.	<b>6 – 10 marks</b> Few requirements are not achieved. Module still works with little or some acceptable flaws.	<b>11 – 15 marks</b> All requirements are achieved. Module works as expected. But no enhancement added.	<b>16 – 20 marks</b> All requirements are achieved. Module works perfectly. Enhancements are added.	
3.	Data Maintenance Modules	10	<b>0 – 2 marks</b> Many requirements are not achieved. Module does not work as expected or contains a lot of flaws.	<b>3 – 5 marks</b> Few requirements are not achieved. Module still works with little or some acceptable flaws.	<b>6 – 8 marks</b> All requirements are achieved. Module works as expected. But no enhancement added.	<b>9 – 10 marks</b> All requirements are achieved. Module works perfectly. Enhancements are added.	
4.	Web Application Security	10	<b>0 – 2 marks</b> Not implemented, not work at all, or only UI is created (without functionality).	<b>3 – 5 marks</b> Primitive and very basic implementation without enhancements. Certain parts do not work as required.	<b>6 – 8 marks</b> Added with simple enhancements e.g., secret question and answer, password recovery, etc.	<b>9 – 10 marks</b> Further added with advanced enhancements e.g., hashing, account locking and activation, etc.	
	Error handling and Input	10	<b>0 – 2 marks</b> The whole or major parts	<b>3 – 5 marks</b> System can run with	<b>6 – 8 marks</b> System can run with only	<b>9 – 10 marks</b> Perfectly run with no	

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AMIT2043 Web Systems and Technologies Assignment: Marking Rubric

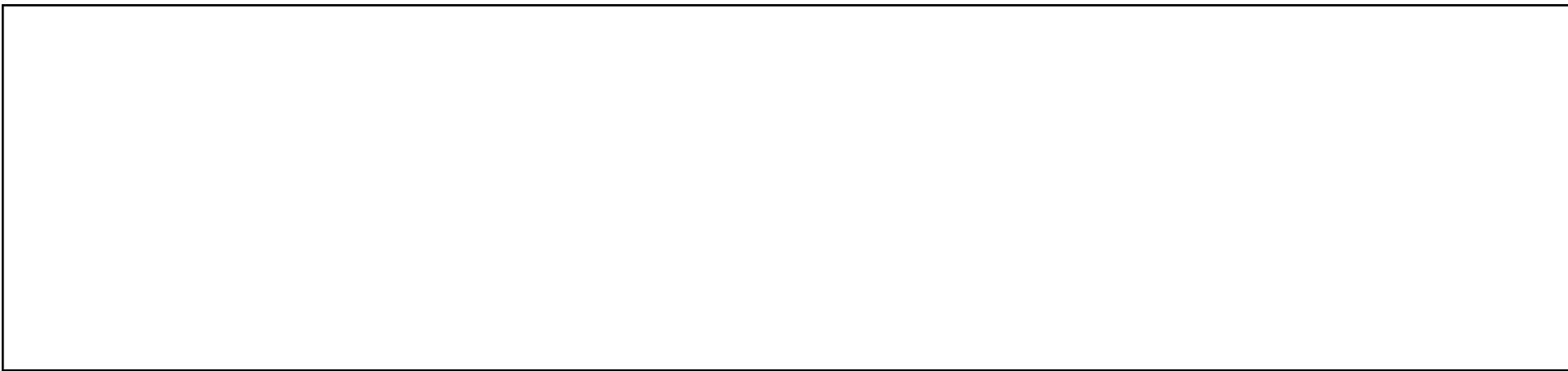
NO	CRITERIA	TOTAL	Poor	Average	Good	Excellent	MARK

## Green the Environment

		<b>MARK</b>					
	Validations		of the system cannot run + exceptions are not handled properly. No or faulty input validations are implemented. No or inappropriate error message is displayed.	some bugs + Some exceptions are not handled properly. Detect basic input error. Simple input validations are implemented. Error message is displayed.	minor bugs + exceptions are handled properly. Detect most of the input errors. Include some use of complex input validations. Meaningful error message is displayed.	bugs + Exceptions are handled well. Detect all or most of the input errors. Intensive use of complex input validations. Meaningful error message is displayed.	
5.	Additional Features	10	<b>0 – 2 marks</b> No or very primitive features are added, which require no or only a little coding effort.	<b>3 – 5 marks</b> Simple features are added, which are easy to implement, and work well.	<b>6 – 8 marks</b> Features added are useful, required some coding efforts, and are implemented correctly.	<b>9 – 10 marks</b> Features added are very useful, required a lot of coding efforts, and are implemented perfectly.	
		<b>60</b>	<b>TOTAL MARK:</b>				

**Additional Feedback (if any):**

## **Green the Environment**



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