The University of the West Indies

Department of Computing and Information Technology

Undergraduate Project Course

PROJECT PROPOSAL

Project Name: Save Planet Earth

Group Members (ACA Engineers):

- Anissa Harricharan: 816008114
- Celine Ganar: 816008305
- Aakil Ramlogan: 816007871

Table of Contents:

INTRODUCTION

Trinidad and Tobago has a significant garbage problem in which litter is widespread on this island. Disposables and other waste can be found along roadsides, in drains and even on beaches. As such, Save Planet Earth aims to promote awareness to the citizens of T&T about the impact they have on the environment in a fun and creative way. It aims to promote an eco-friendlier lifestyle with the use of incentives and rewards to users of the application and overall, a cleaner environment for citizens to live in.

POSITIONING

Problem Statement

The problem of	Garbage is widespread in Trinidad where waste and other disposables can be found along roadways, in drains and on beaches.
Affects	Citizens of the country.
The impact of which is	Environment and health issues which come along with the improper disposal of waste.
A successful solution would be	To allow users to live a healthier eco-friendly lifestyle and a platform to post events such as beach cleanups, monitor users' daily carbon emission levels in which they can carpool with other users, calculate their daily amount of footsteps. Daily tasks and challenges can also be given to users via the application and incentives and rewards such as vouchers and gift certificates can be distributed for encouragement.

Product Position Statement

For	Citizens of Trinidad.
Who	Wish to live a more eco-friendly lifestyle.
The Product	Website
That	Allows users the opportunity to live a healthier, more eco-friendly lifestyle by attending events such as beach cleanups, monitor daily carbon emissions, calculate their daily amount of footsteps.
Unlike	Other individual pages allocated for one specific cleanup group, this application can host a variety and all groups which enables a larger platform

	that can be reached out to easily.
Our Product	Will be free to use and a non-profit organisation for anyone in Trinidad to use by ensuring a valid email address and contact number is used to provide safety and reliability. It will be available over any smartphone device.

STAKEHOLDER DESCRIPTIONS

Stakeholder Summary

User Stakeholders

These individuals are persons from Trinidad interested in living a healthier and more eco-friendly lifestyle. Understanding their interests are vital since it could mean the wrong solution is built.

Non-User Stakeholders

Our project team stands to lose if the wrong solution is built. Tasks will be split amongst the team. Communication must be utilized extensively to ensure all members are on the same page. All the major decisions in this project will ultimately be decided by the project team.

User Environment

New frameworks are being developed which allow cross platform development to be much less timely and more streamlined. Materialize is one such framework. The application will be able to run on both iOS and Android and will be accessible to any person from Trinidad with a smart device and internet connection.

PRODUCT OVERVIEW

Product Perspective

This application will be a platform using Materialize. This is a modern responsive CSS framework based on Material Design by Google. Materialize will assist in ensuring that the interface has a similar touch to other android applications which would make the application easier for new users to handle.

Needs and Features

Need	Priority	Feature
The system shall allow the user to register, then login using their credentials that were used when signing up.	High	Registration and Login
The system shall allow the user to post events such as beach cleanups, planting of trees.	High	Feed
Allow users to indicate their attendance to the events posted.	Medium	Attendance
Users shall be able to monitor and calculate their footsteps throughout the day and be self-rewarded if satisfied.	High	Monitor Footsteps
The application shall be able to calculate the amount of carbon emissions produced each day by the user and therefore, encourage users to carpool with those in their community whose destinations are close.	High	Calculate Carbon Emissions
The system shall provide users with useful tasks for a cleaner eco-lifestyle and allow each user to track their progress via a chart when they complete certain eco-friendly tasks.	High	Progress Chart
Allow users to take part in challenges and earn a badge on the website as well as physical rewards such as vouchers, gift certificates.	Medium	Eco-Friendly Tasks/Challenges

The system shall display business' advertisements as these businesses would sponsor rewards for the users of the application.	Medium	Advertisements
The system shall provide information about environmental protection and conservation.	Low	Useful Information

Alternatives and Competition

The alternatives that currently exist are environmental groups who have created their own Facebook group, website or Whatsapp group. However, our solution is a lot more unique as it will be a larger platform for any group to post their events (beach cleanups, forestation) for all members to view and attend. Also, our solution encourages users to be more active daily, produce less and calculate their carbon emissions, complete daily eco-friendly tasks in which they gain points (that can viewed on the progress chart) and these points accumulated can be used to provide them with vouchers and gift certificates from sponsors, who in return, gain advertisement,

Other Product Requirements

Browser Compatibility
The application will be made cross-platform so that it would be compatible with Android and IOS Mobile Devices.

Usability
The application would be designed in a user-friendly way which makes it simple and easy to use. Therefore, there would be an easy flow from one page to another.

Responsiveness
This application should respond effectively to the user's request in an appropriate amount of time. The application must display the expected page and load all necessary widgets and images within seconds and all events would be handled in a quick time frame.

Visual Design
The application must be aesthetically pleasing to a user while displaying all necessary information in a simple and easy to understand format. Thus, HCI (Human Computer Interaction) Principles would be incorporated.

Long Term Scalability

Able to host at least 10000 (expandable with app and user growth) user profiles in database system storage.