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**The University of the West Indies**

**Department of Computing and Information Technology**

**Undergraduate Project Course**

**Project Scope Guidelines**

**Project Scope Statement**

The project scope is a short document prepared primarily for the client. The scope statement clearly describes what the project will deliver and outlines generally at a high level all the work required for completing the project.

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**Project Name:** Save Planet Earth

**Group Members:** Anissa Harricharan: 816008114

Aakil Ramlogan: 816007871

Celine Ganar: 816008305

**Project Scope Statement:**

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. In 2018, over a half-a-ton of garbage was removed from Invaders Bay, Port-of-Spain. Littering reveals the lack of environmental consciousness the society has. 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.

**General Project Information**

**Problem/Opportunity Statement:**

Trinidad and Tobago generates the most garbage per capita. World Bank statistics show that the nation generates 14.4 kilogrammes of municipal solid waste per capita per day – 12 times the world average of 1.2 kg. As such littering is a very serious problem, as citizens of this small island, it is our duty to keep the nation as clean as possible. This application intends to educate the public about the effects they have on the environment and ways in which they can sustain it as well.

**Project Objectives:**

The project aims to consist of the following features:

* A platform where users can post events such as beach cleanups, planting of trees, and indicate their attendance to the event.
* The users would be able to monitor and calculate their footsteps throughout the day and be self-rewarded if satisfied.
* The application would be able to calculate the amount of carbon emissions produced each day and therefore, be a means of car-pooling and encourage users to carpool with those in their community whose destinations are close.
* The application will 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. These tasks would include carrying a reusable shopping bag to the grocery or picking up ten pieces of litter for the day as well as posting before and after pictures of an area they cleaned up.
* Users can take part in challenges and earn a badge on the website as well as physical rewards such as vouchers, gift certificates etc.
* The application works as a platform for businesses to display their advertisements and in return, they sponsor some of the rewards which will be given to users.
* The application will provide information about environmental protection and conservation.
* Users can enter a location and be directed to the nearest iCareTT recycle bins closest to that location.

**Project Description:**

Save Planet Earth will be a platform where users can host and be informed of eco-events such as Beach Clean Ups, Planting Trees Events etc. There would be an informative section where users can learn more about the impact they have on the environment, recycling and reducing the amount of waste they produce. The application would encourage users to carpool with those in their community and monitor their carbon emissions daily. In addition, it will allow users to track the number of footsteps they make where they can be self-rewarded as well as gain points on the application. This will be a challenge feature where users can participate in green missions where they are rewarded with points. This will be displayed on a chart where users would be able to track the progress of their eco-friendly lifestyle. At the end of the month, the user with the highest number of points would be given a badge to display on their profile. They would also be rewarded vouchers and gift certificates from companies and which in return, will gain advertisement on the application. Lastly, there will also be a page dedicated to contact information of various recycling facilities such as iCareTT and garbage collectors.

**Business Benefits:**

* To bring awareness to a detrimental problem facing the country.
* To promote an eco-friendlier lifestyle with the use of incentives and rewards.
* A cleaner environment to live in by encouraging citizens to reduce the amount of carbon emissions produced daily.
* A more organized and efficient way of creating and viewing eco-events.

**Project Beneficiaries:**

* Citizens of Trinidad and Tobago.
* The companies which gain advertisement and give sponsors.

**Project Deliverables:**

1. System Requirements, Elicitation & Specification
2. Context Diagram
3. High Fidelity Prototype
4. Build User Interface.
5. Set up Sign up, Login pages and database.
6. Integrate EventBrite API into our application.
7. Set up Challenges and Rewards pages.
8. Build footsteps tracker page and Carbon Emission reduced page.
9. Testing and Refactoring

**Estimated Project Duration:** 4 months