

## Proposal

### Beach Quality Report

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**I. Name, Place and Date:**

- A. **Name:** Beach Quality Report
- B. **Place:** Beaches of Puerto Rico that receive water quality reports from the Department of Natural Resources (DRNA) and the Blue Water Task Force (BWTF).
- C. **Estimated Date:** May 4, 2020

**II. Listing of Partners**

- A. **Client:**
  - a. In this case the clients would be us, the Team 2 Students. This is because we came up with this problem, in order to develop a solution.
  - b. If the clients would be chosen by us, it would be targeted towards people who attend the beach (beachgoers).
- B. **Developers:** Team 2 Students

**III. Current Situation**

- The current situation is that a large number of people attend beaches while being uninformed about the state of water quality.
- In order to obtain a water quality report, beachgoers must pay attention to local news, listen to the radio, or look up different websites containing water quality reports.
- Obtaining a trustworthy and reliable water quality report is cumbersome and not straightforward. Beachgoers have to navigate and dig through clunky UIs in order to obtain a report.

**IV. Needs**

- There is a need to obtain up to date information regarding the local beaches' water quality.

- There is a need to improve the delivery and presentation of water quality reports to beachgoers.

## **V. Ideas**

- Provide users with a clean and straightforward report of the water quality of beaches close to them by creating an application.
- Simplify the presentation of the water quality data so that users can quickly verify if it is safe to take a dip in the beach or beaches of their choice.
- Promote the importance of water quality testing and how this can directly impact beachgoers.
- Stimulate the use of more convenient and attractive tools such as this application.

## **VI. Concepts and Facilities**

### **A. Concepts**

- Provide a friendly UI in which the user will have the option to select the beach of their liking.
- Users are then presented with an attractive and straightforward water quality report of their selected beach.

### **B. Facilities**

- For the front-end Scala.js is the language of choice.
- For the back-end Scala is the language of choice.

## **VII. Scope**

- The Scope of this project is limited to the beaches in Puerto Rico that get tested regularly for their water quality parameters.

## **VIII. Span**

- The span of this project is to facilitate beachgoers' lives by providing the Beach Quality information in an ordered manner. This domain will need access to GPS in order to work correctly. Also, the water quality reports must be available for the application to work correctly.

## **IX. Synopsis**

- This project came to be because we believed the lack of water quality awareness to be a real issue. This project will consist of a network of users within the area of Puerto Rico. We will provide on demand information to anyone that downloads our app. This allows people to make better informed decisions when deciding where to go when they feel the need to go to a beach. The application will gather all the latest information available from the government studies and present it in a neat and easily digestible manner by the average person.

## **X. Assumptions and dependencies**

- The application heavily depends on the availability of the water quality reports provided by third parties such as the Department of Natural Resources and the Blue Water Task Force. It is assumed that we will have access to this information.

## **XI. Implicit/derivative goals**

- Deployment of the Beach Quality Report should result in less diseases spread.
- Deployment of the Beach Quality Report should result in the cleaning of the beaches that are contaminated.
- Deployment of the Beach Quality Report should result in better informed beachgoers in the future.

## **XII. Standards**

- IEEE Standard for Software Maintenance
- IEEE Standard for Software Project Management Plan
- IEEE Guide for Developing System Requirements Specifications
- IEEE Guide for Developing Software Life Cycle Processes

## **XIII. Contract**

### **A. User Agreement/Terms of Service**

- A set of rules must be followed by the user.

### **B. User access info**

- Location

## **XIV. Design Brief**

- Users must accept the Beach Quality Report application Terms of Services and comply with these in order to use this application.
- Users also have to accept the Beach Quality Report application “User access info” in order for the application to work correctly. This is purely due to the use of the user’s location data in order to provide a relevant local Beach Quality report.

## **XV. LogBook**

- 11 Feb. 2020: Initial meeting between partners
- 18 Feb. 2020: Organization of proposal.