Unstable Bluff Detection System Requirement Specification

Prepared by: Janelle Kwofie

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1 Introduction and Overview

The Unstable Bluff Detection System is used to detect unstable bluffs in the Del Mar Area. The main purpose of this system is to help with the safety of the area in and around the bluffs. This will be done by tracking the tourists within the 300 feet stretch of land and altering the authorities if an unstable bluff is detected. Ultimately, this system is meant to blend into the area and will not disturb the tourists or tracks in the area of the bluff.

2 User Requirements

The system will work by tacking tourists and the bluffs. When the system records a level 4 or 5 at the bluffs the authorities will be notified of an unstable bluff in the area. The cameras will scan a 50 by 50-foot plane and stand on metal poles throughout the area. 32 bit and time stamps will be sent from the cameras to an off-sight local facility hourly to record what is happening at the sights.

3 System Requirements

3.1 Functional Requirements

Takes pictures of bluff/edge area

Sends photos to a local facility

Alerts authorities

Stores the image and information

Allos information to be accessed

Tracks the levels at the bluff
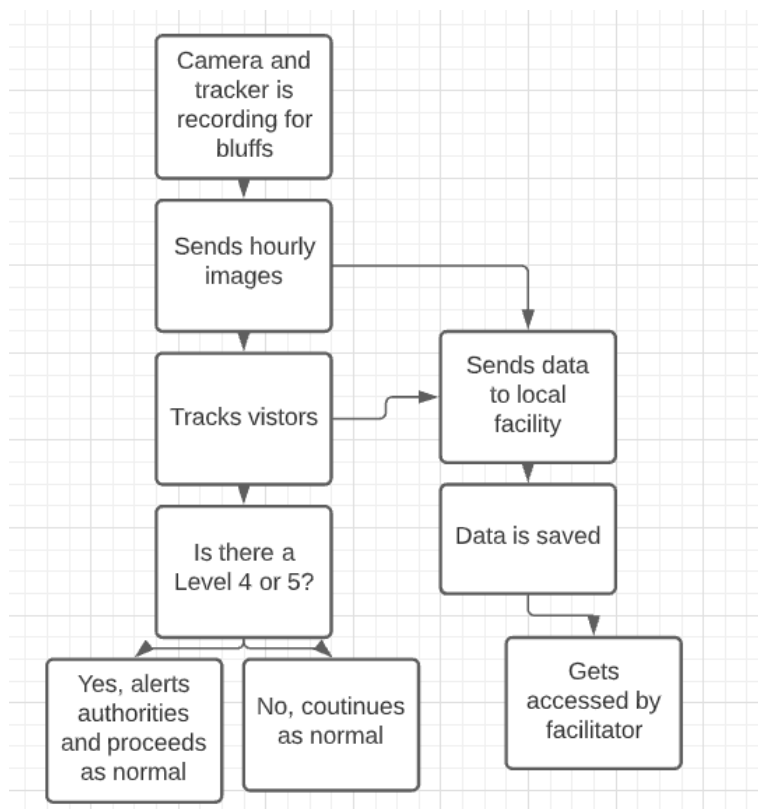
Use Cases:

In a normal use case, the cameras and trackers record 24/7. If an unstable bluff of Level 4 or 5 occurs it will offset the alert and alert the authorities. Or in the case of no bluffs, no response will be given if it never hits level 4. If in the case the alarm goes off when it is unnecessary the authorities will confirm a false alarm and the system will be revised for the magnitude that alerts a level 4. In the cases, the camera fails the local facility will be alerted. Overall, in the case of false alarms, it is more important to be overly safe than sorry, and have the authorities confirm the safety of the bluff first.

3.2 Non-functional Requirements

The Cameras:

The Cameras need to be 24/7 and hourly move 32 bit and time stamps will be sent from the cameras to an off-sight local facility.

Cameras will sit on polls.

These images need to be 4000 pixels per square bit and 8 bits per pixel. The images should be available in color and greyscale. Additionally, the bluff along with the edge and 300 ft of the surrounding area should be pictured.

Off Sight Facility:

Needs to be an off-sight facility with lots of memory on hand to save all the information.

Alert:

Should send fast and correct alerts.

Needs to be 24/7.

4 Other

This section (or following subsections) contains any relevant information not covered in any previous section. Examples include risks, constraints, assumptions (not already identified), and potential future changes.

Alerts need to be correct

Needs to not disturb visitors, tracks, or safety measures.

Should ensure that alerts have the right information to set off for each level.