The latest version of this document can be found at https://github.com/ashawnbandy/cecs491/tree/master/docs

9/25/2012

Requirements Analysis

*Preliminary*

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# Introduction

## Purpose of the System

The CSULB Marine Biology department collects data from marine life that have been tagged with an acoustic transmitter. Data will be collected by a receiver located off of Manhattan Beach Pier (MHB), which will record the ID number of tags, associated sensor data, date, and time of detection. The receiver in turn will be connected to a computer through a serial port connection. The purpose of the system will be to interface with this computer remotely in order to control the receiver and receive data from it.

## Objectives

1. Ability to connect remotely to the computer managing the receiver
2. Ability to control the receiver remotely through that connection.
3. Ability to optionally stream real-time data from the receiver.
4. Sending an email alert when a detection is recorded.
5. Archive recorded data and recording metadata.
6. Website with public access with detection records and streaming data.

## Definitions

1. “The system” will refer to the software being created by this project, and not the firmware already installed.
2. Software at the remote site (e.g. Manhattan Beach Pier) will be referred to the “server” or “backend”.
3. Software running locally by an end-user will be referred to as the “client” or “front-end”
4. In general, a collection of server and clients will be referred to as the “application network” with each site as “nodes”.
5. “Phase I” refers generically to the software previous defined.

## References

1. “VR2C wired acoustic receiver”, submitted on 2012-09-17

## Functional Requirements

## Non-Functional Requirements

### Usability

Reliability