**User Documentation**

**General Information**

Welcome to Ocean Observation System, which is a  web-based database application system**.**

Ocean Observation System (OOS) is a computer information system that stores and processes different types of data for an ocean observatory. Those data are produced by a wide range of different sensors, placed at different locations. In this system, users are able to upload, search , download and get access to analysis of data provided by sensors.

Sign up a new account and explore a new field now !

**Installation Guideline**

1. Download package and extract files to the path ~/catalina/webapps/Ocean
2. Open terminal and execute commands in order:
   1. cd ~/catalina/webapps/Ocean
   2. javac WEB-INF/classes/\*.java
   3. sqlplus ( enter < username>, < password> to start your sql)
   4. @setup.sql
   5. starttomcat
3. Open a brower, enter [http://u\*\*\*.cs.ualberta.ca:<your-port-number>/Ocean/login.jsp](http://u***.cs.ualberta.ca:%3cyour-port-number%3e/Ocean/login.jsp)

**User Manual**

1. **Login Module**

Users:

Function:

How to use:

1. **Sensor management Module**

Users: Only administrators

Function: This module enables administrators to create and remove sensors. Open a brower, enter [http://u\*\*\*.cs.ualberta.ca:<your-port-number>/Ocean/login.jsp](http://u***.cs.ualberta.ca:%3cyour-port-number%3e/Ocean/login.jsp)

How to use:

Go to administrator page and press "edit sensor table" button. System will list sensor tables that stores all information about sensors and promts you to manage sensors.

To create a new sensor, you should enter correct information about sensor id, location, type and description and then press “create” button. Particularly, the sensor id you entered should be un-used, and the type you entered should be “a” or “I” or “s”, otherwise, there will be an error message.

To remove a sensor, you should enter sensor id of the sensor that you want to remove and press “remove” button. Also,make sure that the sensor you want to remove is within the sensor table. To be noticed of , once you remove a sensor, all date of this sensor will be removed as well.

1. **User management Module**

Users: Only administrators

Function: This module enables administrators to create, remove and update users.

How to use:

Go to administrator page and press "edit user table" button. System will list persons table that stores all information about users and promts you to manage users.

To create a new user, you should enter correct information about person id, first name, last name ,address , email and phone number, and then press “create” button. Particularly, the person id and email you entered should be un-used, otherwise, there will be an error message.

To remove a user, you should enter person id of the user that you want to remove and press “remove” button. Also,make sure that the user you want to remove is within the person table. To be noticed of , once you remove a user, all date of this user will be removed as well.

1. **Subscribe Module**

Users:

Function:

How to use:

1. **Uploading Module**

Users:

Function:

How to use:

1. **Search Module**

Users : Only scientists

Function:

This module enables scientists to search and download data of sensors according to search conditions specified by users.

How to use:

Go to scientist page and press "search" button. System will promt you to enter information about keywords of description , location of sensors, type of sensors and time period of data. You could leave location and type empty, but make sure that you correctly enter information about keywords and time period.

After submiting your search conditions, system will list images, audio recordings and scalar data of sensors which qualifies search condition. Also , you can only see data of sensors that you have subscribed to . If you want to save data, you can download full size image , audio file and scalar data in csv file by pressing "download" button.

1. **Data Analysis Module**

Users:

Function:

How to use: