Water Weather Station
Vision and Scope

(pre-existing project)

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1. Project

The Salish Sea Water Weather Station project was created to introduce middle schoolers to cyber security concepts, as well as collect environmental data for public use. The project consists of a waterproof device with a variety of environmental sensors, a mobile app to retrieve data from the devices, and a website to view collected data. Each year, WWU and the SEA Discovery Center together host a cyber security summer camp for about 60 middle schoolers. Each student is given a device to place in the Salish Sea, from which they use the mobile app to collect data from them. The app then transfers the data to the database where it can be viewed on the website by students, scientists, and the public.

2. Vision

The vision for the Salish Sea Water Weather Station project is to integrate the fields of environmental sea research and computer security into a singular cohesive unit for middle school students. Attendees of the SEA Discovery Summer Camp at Western's satellite campus in Poulsbo, WA will work towards collecting environmental data from the system while also being introduced to critical components and concepts of computer security often unseen. Our team will continue to iterate upon the previous group's work to improve the app and website.

3. Scope

3.1. Goals

This project is on-going and has already been worked on by multiple teams. Our team will implement a more appealing and responsive web design which will provide a better user experience and comprehension of collected data. We will also add a display feature on the app to show the data retrieved from the buoy. This will allow users to view and analyze data at the location. The app design will be cohesive with the website.

3.2 Stretch Goals

As an ongoing project, subsequent releases will likely include features for ease of use and access. Other refinements like improving power consumption of the device, efficiency of the apps, and stronger data security measures.