Concept

All the details present in this document are based on the user's point of view.

Definition

The product is a Remote Water quality monitoring for fish cages by using Temperature, Turbidity and pH sensors connected to the Internet. The users of this product can perform relevant actions through a water pump as an actuator in case of water pollution, impurity and high temperature. Hence, a Red LED as an actuator will turn on in case of high temperature. A buzzer will turn on in case of water pollution and impurity.

Objective

The project goal is to develop a web-application, which users can interact with the environment using some simple On-Off buttons to stop or start the water pump. In addition, the important water parameters like temperature, turbidity and pH can be measured in IoT device level of the product. These data from a fish cage will be displayed in different ways in web application for the users.

Storyboards

Two possible storyboards of this product presented in the following.

Personas, Scenarios, Missions

The following Personas, Scenarios and Missions are related to our product, Water quality monitoring of Fish Cage.

Personas:

- Disabled – A disabled man as Fish farming operator
- Elderly – An old man as Fish farming operator

Scenarios:

- Clean water and sanitation
- Industry, innovation and Infrastructure

Missions:

- Teleportation
- Sixth Sense

Concept

1th Storyboard

Persona: ***Disabled Man as Fish Farming Operator***

Scenario: ***Clean Water***

Mission: ***Teleportation / A web-application shows operator three important water parameters of different fish cages in different places***

2nd Storyboard

Persona: ***Old Man as Fish Farming Operator***

Scenario: ***Clean Water***

Mission: ***Sixth Sense /A web-application notifies operators by alarms based on some crucial events***

In order to have a clean water for fish cages all the time, to guarantee the fish growth and prevent fish death, we can consider "Disabled" or "Old" staff who work as fish farming operators. Our mission is having a web application, which they can monitor and control everything remotely. The web application is able to notify the operators for unusual events happens in the Fish cage like water pollution and increasing water temperature. For these two kinds of personas, it is very essential to work remotely; therefore, this product can be appropriate for them. They can perform stop-start actions through a water pump in case of water pollution, impurity and high temperature. Hence, a Red LED as an actuator will turn on in case of high temperature. A buzzer will turn on in case of water pollution and impurity. **Everything is under control!**

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