Apr 9th, 12:30 PM - 2:30 PM

De La Salle Sensor

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PROBLEM/OPPORTUNITY

There is a huge amount of water being wasted and with climate change causing widespread water shortages, it is important that the people of Portland become more water conscious. With the our product, it will help you become aware of your water bill and the amount of water you use with a built in calculator.

Figure 1: Website apperance

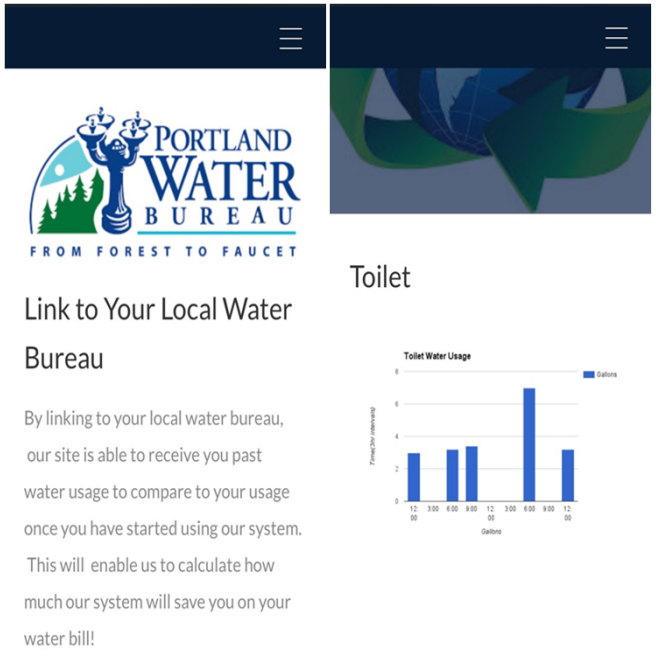
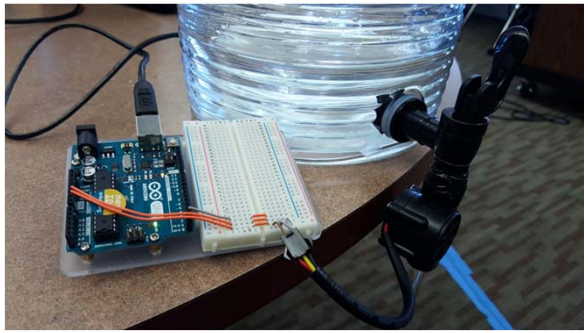


Figure 2: Model



KEY OBSERVATIONS

The basis of our project is to use a sensor to calculate domestic water usage. Our sensor and application have been developed to allow the user to see how their water usage has a direct connection to their water bill. As discussed with the Portland Water Bureau this application and sensor have been deemed practical.

RESULTS

With our system we will educate and conserve water. Hopefully, this will result in the reduction of our water bills of Oregon. Also, make people very much aware of the importance of water conservation.

CONCLUSIONS

Our revolutionary system will assist the people of Portland in lessening their environmental footprint and also help them to lower their water bills. Not only will our system be able to reduce the amount of water wasted, but it will also educate people on the proper amount of water they should be using and how their individual water conservation will make a difference. As the public become more aware of how dire the situation could become if water usage is not significantly decreased, people will take better care of the Earth's non-renewable resources and see their environmentally conscious actions reflected in their wallets.

Figure 3: Data

```
Flow rate: 0.0L/min  Current Liquid Flowing: 0mL/Sec  Output Liquid Quantity: 0mL
Flow rate: 0.3L/min  Current Liquid Flowing: 6mL/Sec  Output Liquid Quantity: 6mL
Flow rate: 0.7L/min  Current Liquid Flowing: 13mL/Sec  Output Liquid Quantity: 19mL
Flow rate: 0.7L/min  Current Liquid Flowing: 13mL/Sec  Output Liquid Quantity: 32mL
Flow rate: 0.7L/min  Current Liquid Flowing: 13mL/Sec  Output Liquid Quantity: 45mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 60mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 75mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 90mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 105mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 120mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 135mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 150mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 165mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 180mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 195mL
Flow rate: 0.7L/min  Current Liquid Flowing: 13mL/Sec  Output Liquid Quantity: 208mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 223mL
Flow rate: 0.9L/min  Current Liquid Flowing: 15mL/Sec  Output Liquid Quantity: 238mL
Flow rate: 1.0L/min  Current Liquid Flowing: 17mL/Sec  Output Liquid Quantity: 255mL
```