Team SmartGrass - Status Report 9/26/2014

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9/22/2014 – Initial Meeting w/ Sponsor

- Presented an overview of SmartGrass
- Discussed the process that we will take in regards to requirements analysis and product design
- Agreed to meet with our team as frequently as needed throughout the next two semesters

Initial Meeting w/ Sponsor cont'd

- Feedback: Unique idea, Definitely a market for SmartGrass (especially in the southern and western regions), consider putting an emphasis on user scheduling over automation based watering
- Put us in contact with the City of Arlington's Water Conservation Coordinator
  - Has began to provide us with valuable insight into local laws and watering restrictions

9/24/2014 – Team Meeting

- Went over the high level design of SmartGrass based on the sponsor's input
- Started feasibility analysis on different components of the project
- Began to define a set of requirements that we can present to our sponsor during our next meeting

9/25/2014 – Resource Contact

- Started communications with Dustan Compton, Conservation Program Coordinator for the City of Arlington
- He has agreed to aid us in our project and lend us his insight and knowledge on water conservation
- He has already provided us with detailed information about Arlington's drought conditions, irrigation chapter of their code of ordinances, and a list of all the cities water regulations

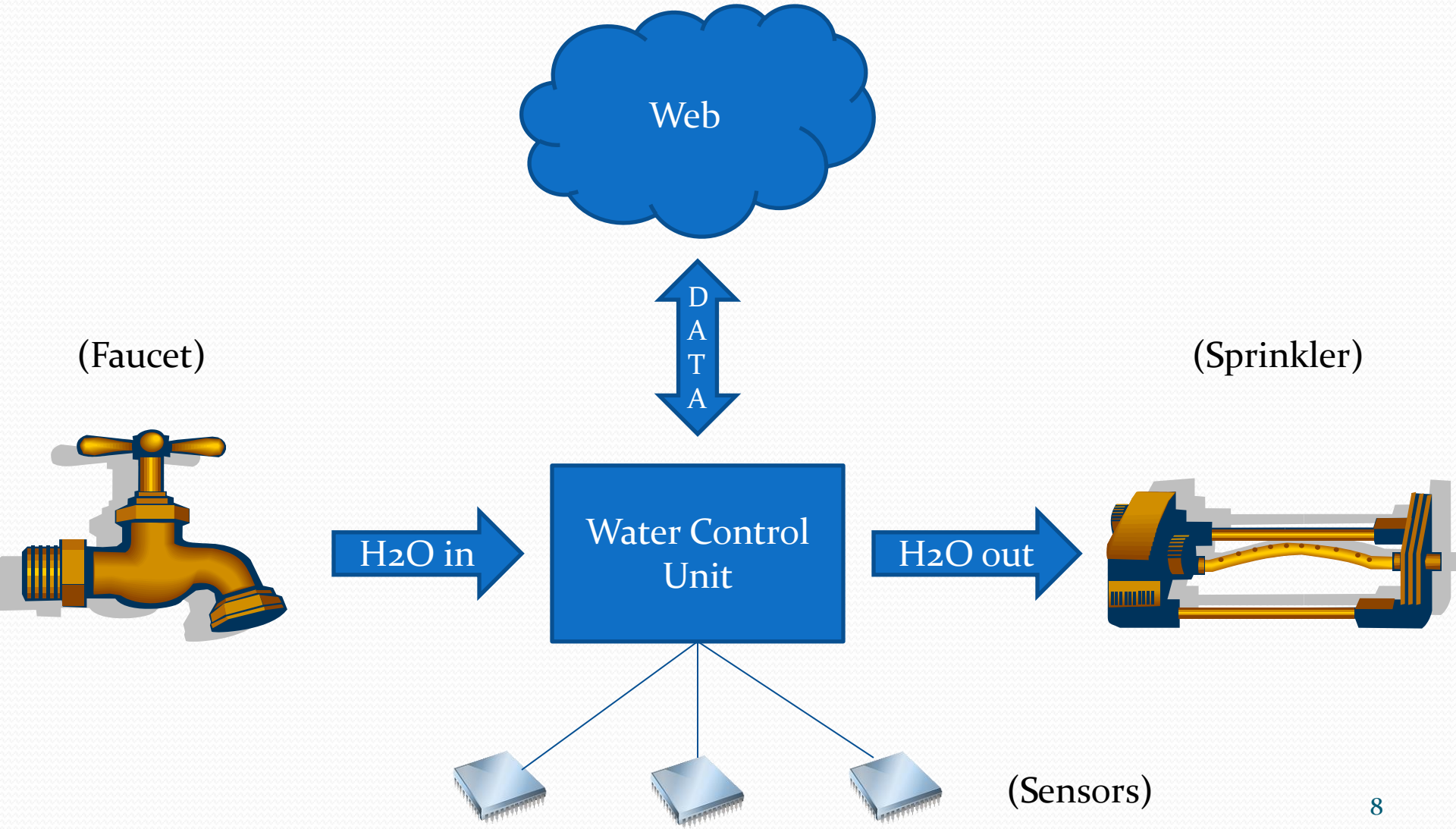
Snapshot of Requirements

- Hardware will include a microcontroller to interact with the sensors, send and receive data to/from the web, and open/close the irrigation valve as necessary
- Dashboard will be a web application with scalable mobile interface that will act as the mobile app
- Dashboard will show environmental information from sensors and/or local forecast

Prototype Concept

- Water will flow into our water control unit and out to a separate sprinkler system
- Various sensors will be attached to the control unit to provide the system and users with environmental information
- These readings will be sent to a web layer which will record, analyze, and relay that data to our web/mobile interface
- This web interface will be able to send commands to the water control unit (turn on/off, duration)

The Big Picture



Any Questions?