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Midterm 2

Smart House Watering System

midterm_2

Project repository: <https://github.com/a7madmusle7/>

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I. Project

I designed and put together a simple, automated house plant watering system. I am using the system to show how an *accessibility-first* approach can be implemented. The end result should be simple features that serve the original goal of making the watering system engaging for as many people as possible.

II. What does *accessibility-first* mean?

As the name suggests, AF means that accessibility is part of the design process from the beginning. In contrast, other approaches treat accessibility features as a retrofit.

III. My guidelines for catering to different limitations and needs:

1. Deafness or hearing impairments
 - Make up for with visuals, touch and smell.
2. Motor impairments
 - The plant is situated in an easy to reach are.
 - The audience can easily interact with it.
3. Blindness or visual impairment
 - Use braille - can be 3D-printed.
 - Engage the audience with other senses.
 - Limit or forgo sound, because it can sometimes be the equivalent of shining a flashlight into a seeing person's eyes.
4. Cognitive impairments or developmental delays or age, ie very young or very old.
 - The material can be engaged with or enjoyed simply by being present around it.
 - The appearance of a feature indicates its function.
 - The material can be made endlessly more complicated or profound to an

audience that is capable of processing it, and at the same time can still be enjoyed on the basic level.

IV. Why accessibility-features are relevant to all of us?

- What is considered a disability can vary in terms of legal verbiage and societal acknowledgment.
- Disabilities can be transient. For example, a sports injury, a side-effect of a treatment, or during or pregnancy.
- Making things accessible is a net-positive for everyone, because the access features make engagement easier for everyone, not just the person with the disability.