|  |  |
| --- | --- |
| Plant | Animal |
| * Easy growing/wilting animation * Harder to incorporate emotional expression * Less out of place/distracting | * Easier to incorporate emotional expression * Animals have pre-existing noises * May be distracting * Out of place on a desk |

|  |  |
| --- | --- |
| Inputs | Outputs |
| * Motion sensor * Camera * Touch sensor * Time adjusted sanction * Knob/dial to set time | * LEDs (RGB?) * Colour changing * Movement * Bluetooth compatibility? * Vibration/haptic feedback |

Questions:

**What is the project?**

A desktop assistance Enhancing Productivity. It has a plant-based and has the ability to “grow” or “wilt” in response to the user’s behaviour. It will use this to encourage the user to focus on their work for a pre-determined time.

**Who will use it/where/when?**

It will be used at a desk to help retain focus and continue working. It is meant to prevent distractions or encourage you to continue working if you get distracted. The user would start it up when they sit down, by setting the knob to the desired time frame.

**How will they use it?**

It will be placed next to the user's computer to accompany the user to study or work, and the user can use the knob to set the concentration time.

They may be used to help them focus on their work

**How will it work?**

The reward mechanism:

As users work, the plant gradually brightens (from root to tip) to symbolize their progress, fostering a sense of responsibility like caring for a living plant. Interruptions (such as leaving your desk) trigger gentle reminders through a pause in growth and a soft auditory cue.

It can light up or grow or expand or bloom while working

It has sensors in order to detect when you are working and when you stop

If you stop working for a while it starts to droop/wilt. Perhaps make a sad sound?

If you complete the allotted time, it could play a happy song and distribute food?

We start with a basic concept of focus, then improve:

Is a person there?

Are they moving?

Components/mechanisms:

* Processor, raspberry pi?
* Microphone
* Infrared camera
* Motion sensor
* LEDs
* LED/LCD screen
* E-ink screen?
* Actuators/servos
* Button knob
* Arduino
* Maybe a rechargeable battery?

Inputs

* Microphone
* Infrared camera
* Motion sensor
* Knob/Dials/Buttons
* AI face recognition

Outputs

* Screen (eink?)
* Bluetooth
* LEDs strips

Controllers

* Raspberry pi
* Maybe an Arduino as well

Movement

Air

* Peristaltic motor
* Tubes
* Molds (3D printed)
* Silicon for molds

Spine

* String/wire
* Motor/servos