

# **Physical characteristics of a desk fan**

## **Controls**

This desk fan has 5 difference controls. There are 4 buttons on the base, controlling the speed at which the fan rotates. Located on the top of the fan there is the other control, a toggle that can controls whether the fan should rotate or not.

## **Affordances**

The fan has a large, heavy base, meaning it is sturdy on most surfaces, it is very unlikely to tip over at any time. In addition to this, it has small rubber pads on the bottom of the base, creating a greater friction, resulting in a larger number of materials it can comfortably sit on, without sliding.

It also contains a hinge above the base, allowing the fan to be tilted up, allowing the user to angle the fan to their liking within the permitted range.



Figure 1: Desk fan





## Mappings

The four buttons on the base are in a line, with no diagram or images on suggesting what they do. It could be argued that the method of this mapping is a cultural constraint, given that the fan gets more powerful moving from left

to right, the same direction in which many parts of the world read. To another culture, reading right to left, or vertically, this system might make no sense at all.

Once again, the toggle on top has no indication on what it achieves. An image dictating what the switch did would be very useful, as without experimentation it is not obvious at all what the switch does.

## Constraints

The two hinges are in my opinion the largest constraints on the fan. They don't permit the fan to either rotate the full 360 degrees, or a 180 degree rotation from pointing directly down to directly up. Although situations would rarely dictate such affordances to be required, they are still limits of the fan.

Since the speed of the fan is dictated by a multiple choice of buttons, the fan can only be set to 4 set speeds. The fan is not capable of spinning at exactly the speed the user once. This could be solved with a slider instead, which with proper diagrams, would be far more logical.

## Conventions

The conventions of the fan have already been touched upon, such as the line of buttons, and the toggle switch, being difficult to associate with any function unless the user has come across it before.