

## Computer technology: robotic milking and interactive mirrors Creating the prototype

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When I first thought of the wooden mirror, I had an idea that it could work. There were a few aspects of it that I weren't certain. One of them was that actually the wooden chips would reflect the light differently, and would then create the bright and dark pixels. So what I did first was create this prototype. It's a crude grid of pixels roughly the size of the wooden pixels I eventually used. And I just handed them, by using these rods, which made it so that I could then rotate them up and down. And you can see even in this lighting that the ones that are tilting down become darker than the ones that are tilted upwards. So that gave me a good sense of security. I felt that the whole idea could perhaps work.

Once I was done with that, I then needed to manufacture close to a thousand little wooden tiles that would hinge and would connect to the server motors. And I came up with a design that would be simple enough for me to manufacture. And they're made out of pine. Which I found reflects the light nicely. And you can see that I had to insert in them a few plastic tubes, to be the hinge. But remember this thing needs to hinge up and down. And another plastic tube here, that then connects to the motor with the rod.

From the moment I finalised the design, so the fabrication of the pixels and of the frame and putting all the things together and wiring and programming and everything. So it was about nine months of my life dedicated to this one piece.