

Hello. My name is Tahsin Bin Sohail and I'll be presenting the next part of our project, the Designing Process.

So, as my co-Presenter Peter hinted earlier, we had to find a creative solution to our client's problems. So, we used brainstorming to generate various ideas from which we selected various elements that we are going to incorporate into our Machine.

When we finally decide on our topic, we moved on to the conceptual design based on the Problem Definition. After some brainstorming sessions, we came up with an idea of how our project will actually work. We decided to release an egg from the fridge which will trigger various actions as it falls on top of a spatula which will cause the egg to break in the pan where it will be cooked.

After that, for our Preliminary Design, we went to the drawing board and started designing the individual actions and the project as a whole. As you'll see in the slides, each of our members came up with their version of the design, which we collectively reviewed and build the final design taking the best parts from our individual designs.

But before we discuss our detailed design, I want to add that although our designing phase is complete, we are still continuously running various tests which may cause the actual machine to look slightly different from what is shown in the picture.

Now, during our detailed design process, we explained everything including measurements to refine and combine our individual designs. So, like our conceptual design, we start by releasing the egg along a track. The egg will land on a spatula which breaks the egg on the pan which will be on wheels. While on the track, the egg will trigger two domino systems. One will turn the fan on which will make the pan along with the portable stove move. Another one, as shown here, will ultimately trigger a pulley that will pour us juice.

In the next phase, the pan will hit the lever in here which will initialize a pulley system that will cause the cheese grater to come up and interact with the cheese making the cheese fall on our pan. The grater will also push some dominoes in here, triggering a lever that pushes the pan forward.

Next, the pan will hit another lever here which will activate a domino system along a staircase-like path, and will finally hit a hacky sack which will turn the toaster on. This will simultaneously trigger another lever here which pushes the herbs and spice to fall on top of the egg.

Finally, the pan will hit the lever here which will simultaneously interact with the pipe here causing oil to fall on top of the egg and the dominoes in here which will push a car that spreads butter on the toast from the previous part. This will finish our breakfast-making process and stop the machine. The student then turns the stove on and after 5 mins will enjoy their breakfast.

Now to talk about the tests, risks, and reflection, here's Lewis.