

CupcakeTime

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Concept

CupcakeTime is a time management baking game for adults.

The player learn the banking procedures by interacting with projected graphics on a surface. The main steps are preparing and adding ingredients, mixing up the ingredients with blender, pouring the mixture into individual cupcake cases, and baking cupcakes in the oven.

The player will complete the baking process on a stopwatch.

A ranking chart will be displayed at the end of the game to compare with previous players.

Players can play again if they wish to beat the highest score of the game.

Description

For our final project, we shift the direction of the game from our midterm.

We will no longer use different sensors to play the game (weight, FSR, tilt and potentiometer). Instead, we will be using computer vision into the project, including color detection and tracking fiducials, to capture the player's hands

We will project a screen from above onto a table to display player's interaction with the graphics in real-time

WHAT'S YOUR NAME?

Enter Here



Hi Margarita,

Baking Cupcakes is
simply easy !

See instruction

Instruction :

- Always have your stickers facing upwards
- Hover over to make selection
- Choose your task now

START

00:01 (L)



prepare
ingredients



pre heat
oven



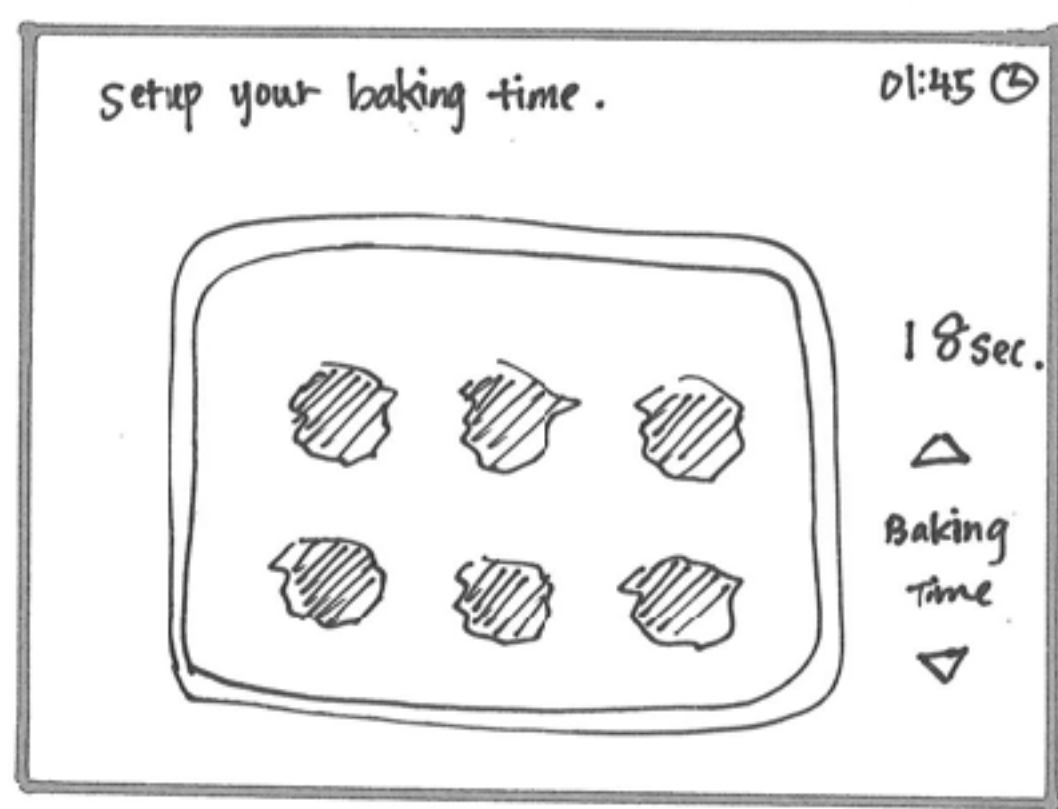
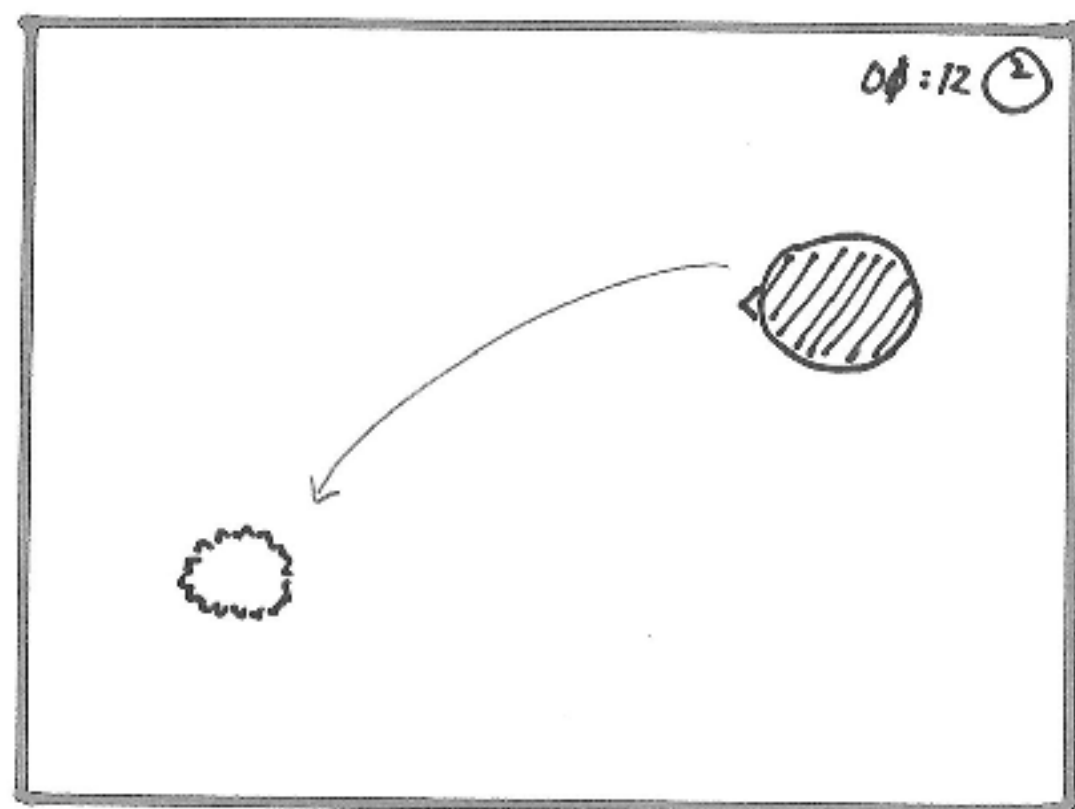
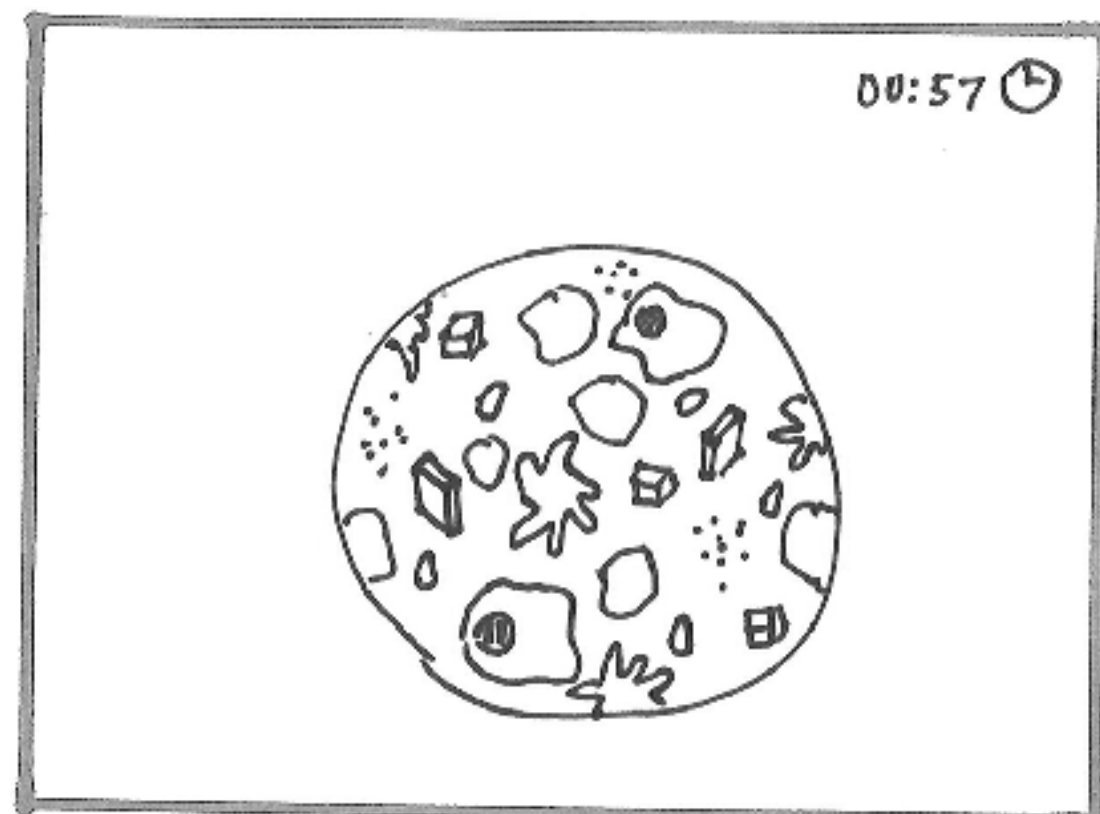
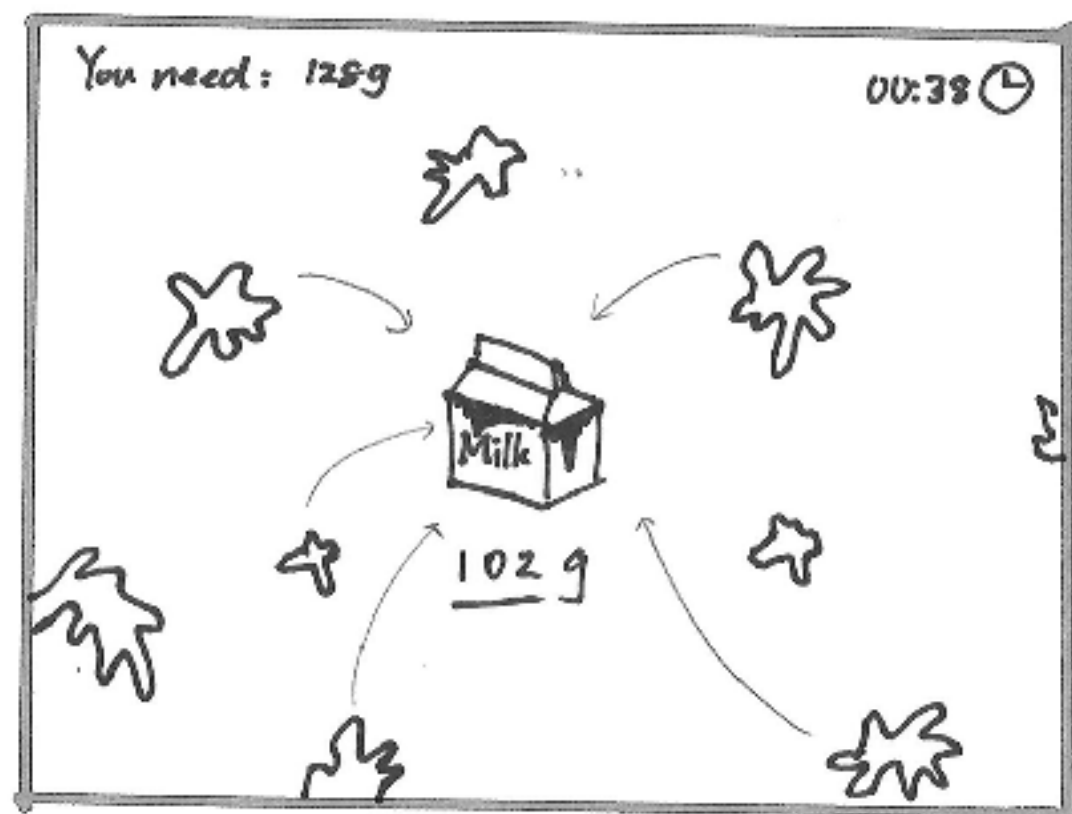
Bake
it



pour it



Mix it
up



Time



Ke Hu

02:01



~~Non~~ Rachel

02:15

You Are Here



Abi

02:32

Technology

Hardware: RGB camera, Projector, Laptop

Software: p5, React

Scale: 24 x 36 in



Fabrication

Before the game starts, the player will be given stickers to put on top of both hands. This helps us to track the hand positions and movements when completing the tasks.

For example, in action 1, player's task is to drag floating ingredients in the bowl in the middle (bird's-eye view). Camera will detect the position of the hands by detecting the color/pattern of the sticker to figure out whether the ingredients have been placed into the bowl successfully or not.

Video: <https://www.youtube.com/watch?v=X4yjaHtfBk8>



Video: <https://www.youtube.com/watch?v=MDRe-5V0cEY>

Thank You

