

## Premise

This project consist of an incomplete game loop for a potential cooking game. The cooking system is versatile enough that it could be included in other games of differing genres.

## How To Play

1. The "Request Monitor" presents you with an order.
2. Click the "Food Storage" to place ingredients on the cooker.
3. Click the "Cooker" to cook a meal.
4. Click the "Deliver And Request" to deliver your meal and receive your next order.

You have no goal.

To exit the game, please press "alt + f4".

## The Unity Editor

Within the Unity Editor, you can add more ingredients, recipes and effects.  
(The game doesn't currently make use of effects.)

There is a Unity Unit Test you can run to make sure all ingredients have a corresponding single-ingredient recipe. By design, every ingredient requires a recipe that accept only itself.

## Process

### A. Designing

I was inspired by the cooking mechanics in *Breath of The Wild* and *Tears of the Kingdom*. I didn't have a lot of time to think creatively and critically about my cooking system; reproducing an existing system would allow me to focus on writing better code.

### B. Mixing System

My biggest hurdle was deciding how to mix ingredients: imagine having a recipe that holds a single ingredient and another that holds two ingredients:

1. steamed meat requires meat,
2. grilled meat requires meat and pepper.

When you search through the query, while holding meat and pepper, you will receive both of these recipes as an equally valid recipe. I ordered the recipes by looking at how many ingredient they met the requirements for.

### C. Unit Testing

I added a Unity Unit Test to verify ingredients that didn't have an associated recipe. To do this, I require the user to have at least one recipe that uses only the provided ingredient. Remember that in *Breath of the Wild*, any ingredient can yield a result.

### D. Quality of Life

Lastly I add some quality of life improvements, such as increasing cursor size when you can select an object, add text over the elements of the game, such as orders, ingredients inside the cooker, labelling the food storage, and warning player of mistakes. I also added sound to help player better perceive their actions within the game.