

Idea Development

Initial Ideas

The Outer Wilds
Baba is You
Unpacking
Bartending VR Simulator
Bartender Hustle
Potion Craft

Make a technical game portfolio
Fantasy Mixology game
Overcooked and Potion Craft

Mixology System

Player has to make orders, randomly generated by Customers

Player has to prepare, measure and combine ingredients to make drinks

Template for many games
i.e. overcooked/bartender etc.

Overcooked/Bartending Simulator Template OR
Cooking Management Template (Chosen Concept)

Presets of Cooking Management Template

Essential Features

- Order Timer
- Player Movement
- Player Action Gradients
- Combining Ingredients
- Object Placing Logic
- Customer Orders
- Customer Patience
- Preparation Timers
- Preparation Failstates
- Corrects Order Check
- Performance rating/Stars
- Ingredient/Product Disposal, Bin
- Failstate Correction, Fire Extinguisher
- Level Completion States

Possible Features

- Game Timer
- Score/Income
- Level Fail States

Definition of Cooking Management Games

My definition of Cooking Management Games-

- Management Oriented Gameplay (Tasks, Time, Space)
- Co-op
- Heavy reliance on inter-player commination
- Asymmetrical Design in player roles
- Consequence heavy, very punishing for players mistakes
- Large margin of error
- Excess number of tasks, lack of manpower, too many tasks for too little people
- Encourages proactive gameplay
- Can be completed at different levels of proficiency, players are encouraged to complete it at the highest level
- Score based feedback
- Time based Scoring System
- Progression is not strictly constrained by proficiency
- Level-based progression
- Constantly evolving mechanics

Games like Overcooked, Overcooked 2, PlateUp

Other Definitions-

- Wacky physics-based gameplay
- Time management objectives
- Arcade simulation of a real job
- Co-op focus but still playable single player
- Level designs with obstacles, switches, puzzles, etc..
- Cartoonish graphics

Games Like Games like Overcooked, Overcooked 2, PlateUp, Tools Up, Embr, Moving Out, Get Packed, Stretchers, Totally Reliable Delivery Service

Finalised Idea

Cooking Management template for UE5

Allows users to create cooking management games quickly by utilising the customizable presets in the template

Presets include all the basic necessities of a cooking management game, these include character movement, Order Timers, Ingredient Combination, Cooking, Customer Orders, Customer Patience etc.

I might create presets for other common but not essential features of cooking management games, dependant on time constraints, will prioritise essential presets

Core Gameplay Loop of Cooking Management Games

Order
Prepare
Combine
Serve
Clean/Reset

Core Features of Cooking Management Games

Game Timer
Order Timer Req
Player Movement Req
Player Action Gradients Req
Combining Ingredients Req
Object Placing Logic Req
Customer Orders Req
Customer Patience Req
Preparation Timers Req
Preparation Failstates Req
Corrects Order Check Req
Score/Income
Performance rating/Stars Req
Ingredient/Product Disposal, Bin Req
Failstate Correction, Fire Extinguisher Req
Level Completion States Req
Level Fail States

Feature Checklist

Features	Top Down Camera	Level Timer	Pick Up/Place Items	Customer Patience	Task Failstates	Score System	Star Rating System	Customer Orders	Co-op
Overcooked/Overcooked 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PlateUp!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moving Out	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diner Dash Adventures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Embr	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Literature Review

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Articles

Estelle Jiang, Medium-

Key mechanics and systems of Overcooked fun

Jiang, E. (2020). *The success of Overcooked makes me think about what makes a game "addictive"*. Medium. <https://medium.com/@Chengccc/the-success-of-overcooked-makes-me-think-about-what-makes-a-game-addictive-ae0dc9b883f0>
Cecilia D'Anastasio, Kotaku-<https://kotaku.com/i-cant-convince-my-friends-that-overcooked-2-is-fun-no-1837838614>

Aron Garst, WIRED-

Justification of key mechanics/systems in Overcooked Highlights what the key mechanics and systems of the cooking management genre are

Garst, A. (2018). *The Overcooked 2 devs reveal how they made the game so addictive*. WIRED. <https://www.wired.co.uk/article/overcooked-2-review>

Sarah Mullins, CBR-

Differences in Mechanics and Systems between Overcooked and Moving Out Helps define the key mechanics and systems of Cooking Management genre

Mullins, S. (2022). *Players Want Overcooked 3 More Than Moving Out 2 - Here's Why*. CBR. <https://www.cbr.com/overcooked-3-moving-out-2-players-want-indie/>

Riley Williamson, CBR

Highlights Key Mechanics and Systems of PlateUp! Highlights key Mechanics and Systems of the Cooking Management genre

Williamson, R. (2022). *How PlateUp! Puts a Roguelite Spin on Overcooked*. CBR. <https://www.cbr.com/plate-up-roguelike-overcooked-indie-game/>

Flyingorion, 2020

Lists features of games in the same genre as Overcooked and PlateUp! Lists games in the same genre as Overcooked and PlateUp! Provides User's definition of a genre that includes games like Overcooked and PlateUp!

flyingorion. (2020, September 17). *Overcooked and like games need a proper new genre label. Potential evidence included*. [Reddit Post]. R/Truegaming. www.reddit.com/r/truegaming/comments/iulny2/overcooked_and_like_games_need_a_proper_new_genre/

Zack Zwiezen, 2020

Highlights Mechanics and Systems of Cook, Serve, Delicious

Cook, Serve, Delicious 3 Is A Chaotic Cooking Game Set In The Back Of A Food Truck Driven By Cyborgs. (2020, February 1). Kotaku. <https://kotaku.com/cook-serve-delicious-3-is-a-chaotic-cooking-game-set-1841364111>

Videos

Overcooked 2-

Key Features Identified-

- Game Timer
- Order Timer
- Player Movement
- Player Action Gradients
- Combining Ingredients
- Object Placing Logic
- Customer Orders
- Customer Patience
- Appliance Timers
- Appliance Failstates
- Corrects Order Check
- Score/Income
- Ingredient/Product Disposal, Bin
- Item Wear
- Item Cleaning
- Failstate Correction, Fire Extinguisher
- Level Completion States
- Level Fail States

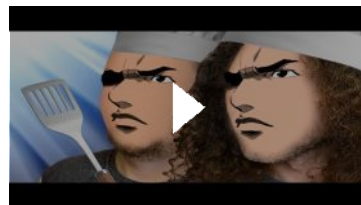
Game Grumps. (2018, November 22). *Overcooked 2: Kitchen Mayhem - PART 1 - Game Grumps* [Video]. YouTube. <https://www.youtube.com/watch?v=4wPhuiqgLO8>

PlateUp!

Key Features Identified-

- Order Timer
- Player Movement
- Player Action Gradients
- Combining Ingredients
- Object Placing Logic
- Object Picking Up Logic
- Customer Orders
- Customer Patience
- Preparation Timers
- Preparation Failstates
- Corrects Order Check
- Score/Income
- Ingredient/Product Disposal, Bin
- Item Wear
- Item Cleaning
- Failstate Correction, Fire Extinguisher
- Level Completion States
- Level Fail States

Game Grumps. (2022, September 30). *Plate Up! makes us get VERY SERIOUS*. [Video]. YouTube. <https://www.youtube.com/watch?v=ix8App8MpA0&t=939s>








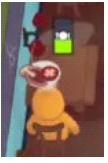










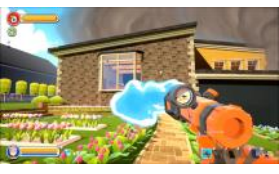



Diner Dash Advnetures

Key Features Identified-

- Order Timer
- Player Movement
- Object Placing Logic
- Object Picking Up Logic
- Customer Orders
- Customer Patience
- Preparation Timers
- Correct Order Check
- Score/Income
- Ingredient/Product Disposal, Bin
- Level Completion States
- Level Fail States

Lets Play Mobile. (2017, May 27). *Diner DASH Adventures Walkthrough Gameplay - Part 1* [Video]. YouTube. <https://www.youtube.com/watch?v=ix8App8MpA0&t=939s>

Feature Checklist

Features	Top Down Camera	Level Timer	Pick Up/Place Items	Customer Patience	Task Failstates	Score System	Star Rating System	Customer Orders	Co-op
Overcooked!/ Overcooked 2									
PlateUp!									
Moving Out									
Diner Dash Adventures									
Embr									

Feature Investigation

Features	Win Conditions	Move Objects	Making Meals	Combining Item/ingredient logic	Action timers	Cooking/Preparation Timers	Customer Orders	Feedback Systems	Disposal System
Overcooked!/ Overcooked 2	Timer until the level ends	Pick up and place items/ingredients	Combining ingredients to make complete meals	Combining item/ingredient logic, some items/ingredients can't be combined with one other	Action timers (timer for how long each action takes to perform)	Cooking/Preparation Timer (timer for how long it takes for an ingredient(s) to cook/prepare)	Customer Orders, Preset Orders in a Preset or Random Order	Score System, Point and Star Rating system based on speed of delivery, complexity and quality of order	Disposing of Meals, object that when ingredients are put in it, they are destroyed
PlateUp!	Level ends after certain number of orders are completed	Pick up and place items/ingredients	Combining ingredients to make complete meals	Combining item/ingredient logic, some items/ingredients can't be combined with one other	Action timers (timer for how long each action takes to perform)	Cooking/Preparation Timer (timer for how long it takes for an ingredient(s) to cook/prepare)	Customer Orders, Preset Orders in a Preset or Random Order	Currency System, player gets money for each order they complete, amount is based on speed of delivery and complexity of order	Disposing of Meals and Items, object that when ingredients are put in it, they are destroyed
Diner Dash Adventures	Level ends after certain number of orders are completed	Pick up and place items	Meals are already premade, few products need to be prepared Anomaly: Meals are already premade because game is about serving meals rather than preparing them	No ingredients can be prepared, all meals are automatically prepared Anomaly: Meals are already premade because game is about serving meals rather than preparing them	No action timers (timer for how long each action takes to perform) Anomaly: all actions are done instantly	No Cooking/Preparation Timer (timer for how long it takes for an ingredient(s) to cook/prepare) Anomaly: Meals are already premade because game is about serving meals rather than preparing them	Customer Orders, Preset Orders in a Preset or Random Order	Currency System, player gets money for each order they complete, amount is based on speed of delivery and complexity of order	Disposing of Meals, object that when ingredients are put in it, they are destroyed
Cook, Serve Delicious 3	Level finishes when the objective is completed	Cannot pick up and place items Anomaly: player cannot pick up and place items because it is done automatically for players	Combining ingredients to make complete meals	Combining item/ingredient logic, some items/ingredients can't be combined with one other	No action timers (timer for how long each action takes to perform) Anomaly: all actions are done instantly	Cooking/Preparation Timer (timer for how long it takes for an ingredient(s) to cook/prepare)	Customer Orders, Preset Orders in a Preset or Random Order	Star Rating system based on speed of delivery, complexity and quality of order and Currency System, player gets money for each order they complete, amount is based on speed of delivery and complexity of order	Cannot Dispose of Meals Anomaly: meals and ingredients cannot be disposed, the meal is automatically scrapped when the order is failed

User Requirements

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User Requirement Plan-

Data collection is essential
What format should I use to collect data? (survey, focus group etc.)
What do people want
What questions will I ask
Must keep questions unbiased and not leading
How do they define a Cooking Management Game
Do they agree with my definition
What features do they want
Reflect on how effective the format was

Questionnaire-

In my Questionnaire as of week 5 I had 9 responses

More responses would be ideal, will consider using another format, focus group maybe

I asked 8 questions, 4 questions were required the rest were optional

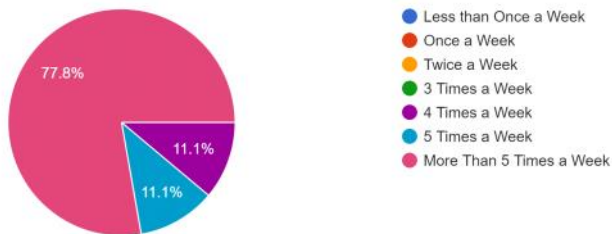
Analysis of results

Question 1

Purpose- to determine how frequently candidates play video games, how familiar they would be with the cooking game genre they would be

How frequently would you say you play Video Games on a Weekly Basis?

9 responses



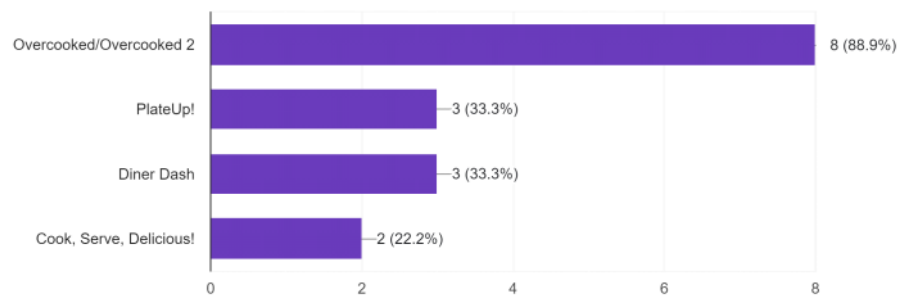
Over 80% of candidates play video games 4 times a week or more and are therefore experienced in playing video games, only one candidate has limited experience with video games, they will provide a different perspective with their responses

Question 2

Purpose- to see if candidates are familiar with video games I would class under the cooking Game Genre, helps determine if they are familiar with the Cooking Genre and mechanics games in the genre may have

Please select all of the following Video Games you have heard of below (Please leave blank if you have not heard of the Game)

9 responses



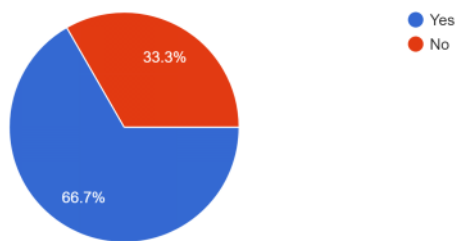
Each candidate has heard of at least one of the following games, Overcooked/Overcooked 2 was overwhelmingly the most heard of game, candidates will therefore have at least some knowledge of the mechanics and features of the game, giving them some insight and understanding of the Cooking Management Genre

Question 3

Purpose- to get an insight into if candidates have physically played any of the games I would class under the Cooking Game Genre, to see if they have personally utilised some of the mechanics and features of games in the genre, giving them a better level of understanding of said mechanics and features if they have played one of these games

Have you played any of the Video Games mentioned in Question 2? (Overcooked/Overcooked 2, PlateUp!, Diner Dash, Cook, Serve, Delicious!)

9 responses



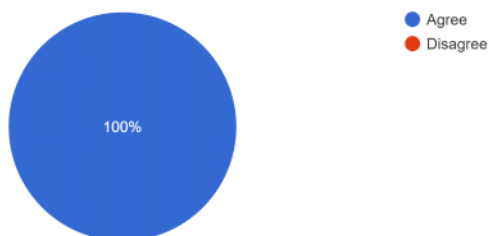
2/3rd of candidates have played at least one of the games, therefore the majority will have personally utilised some of the mechanics and features of games in this genre, presumably giving them a better understanding of some of the mechanics and features common in games I consider to be part of the genre

Question 4

Purpose- to give candidates a description of the Cooking Management Genre if they had no experience into what the genre was, to see they agree with my definition of the genre

I would define the Cooking Management Genre as 'Games where the Primary Objective is to 'Take Customer Orders, Prepare Meals and Serve Customers...raints" How do you feel about this definition?

9 responses



All of the candidates agree with my definition, this may however be somewhat unreliable as I gave them a preconception of what the genre is without letting them form their own definition first, thus tainting their definition of the genre, additionally I made a spelling error in the question, effecting the clarity of the question, perhaps giving them bias into agreeing with my definition due to it being somewhat interpretable due its lack of clarity

Question 5

Purpose- to give candidates an opportunity to give what tthey feel the Cooking Management Genre is in Video Games

Could you provide your definition of the Cooking/Management Genre in Video Games? (Optional)

1 response

Same as stated above.

Only one candidate answered and their response was that they agreed with my definition. Whilst this shows that candidates accept my definition as being accurate in their belief, due to the order in which I asked these questions, I may have given candidates some level of bias. Candidates may have been predisposed to agreeing with my definition as I gave my definition before allowing them to provide their own, thereby possibly altering their definition in turn, or feeling inclined to agree with my own for a variety of reasons.

Question 6

Purpose- to gain an insight into what video games candidates consider to be part of the Cooking Management genre. This also helped me gain awareness of any games in the genre I had not heard of, allowing me to evolve my definition of the genre around these newly considered games

Could you please list some Video Games that you feel would be classified under the Cooking Management Genre

8 responses

- Overcooked series.
- Cooking Mama, Cooking Simulator, Overcooked
- Only the ones mentioned come to mind
- Cook Burger (Roblox)
- epic chef, penguin diner, any of the papas pizzeria games
- cooking dash, penguin diner, cooking mama, papas pizzeria
- Cooking Simulator
- I'm afraid I don't know any!

Candidates gave me a variety of examples of games in the cooking management genre that I had not previously heard of. I will now analyse the features these newly considered games and reevaluate which are essential and which are optional to my template, taking these new entries into the genre into account.

Question 7

Purpose- to give candidates the opportunity to list features they feel are essential to Cooking Management games

Could you list some features you feel most Cooking Management games would have (e.g Serving Meals, Washing Plates)

9 responses

- Preparing and making different dishes, serving dishes, cleaning kitchenware.
- using the correct ingredients to make certain orders. Time constraints.
- All of the above
- Cooking food with a timer, pans, ovens, mixing ingredients, fetching them
- Cooking Meals
Serving Meals
Getting Paid
Progression in some way
- cooking food, seating people, clearing tables, getting orders correct, coffee to keep customers satisfied
- making meals! serving meals.

A points system, a variety of maps, the ability to move furniture, a time system, preparing meals, a customer priority system

Preparing food like cutting up veg and cleaning surfaces, as well as cooking food. I imagine you would occasionally get orders to leave out certain ingredients or cooked a certain way.

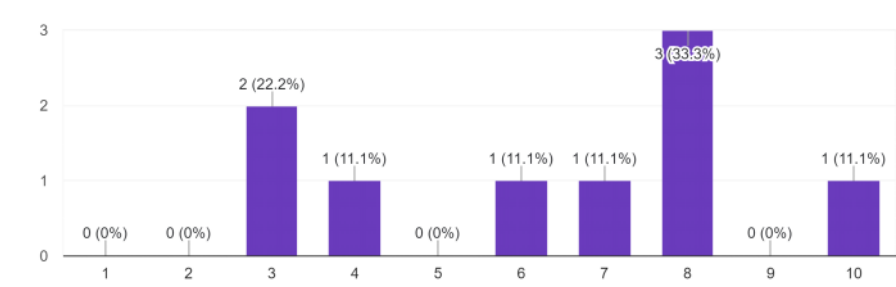
Candidates listed a number of features they feel re essential in Cooking Management games. Most of I had identified before, but some I had not considered to include in my template. Whilst I feel these features that I had not identified before are not essential, features like 'coffee to keep customers satisfied, variety of maps, the ability to move furniture etc. Are features that I will consider developing in my prototype depending on time constraints and user responses from testing.

Question 8

Purpose- to see how effective my candidates thought the questionnaire was

Product specification
Instructions for how to build product

How would you Rate the Quality of this Questionnaire (1 being Awful, 10 being Excellent)
9 responses



Overall candidates generally considered the questionnaire to be high quality. I did not provide a section for additional comments justifying their rating which was an oversight on my part as I now do not know why candidates gave the rating they provided

Product Specification

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Specification

Synopsis

A template for Cooking Management Games, allowing users to create Cooking Management video games using preset features that are prebuilt for users, that can be customised and edited at their will

Product Justification

I am developing this idea due to recent popularity of video games in this genre e.g. PlateUp (2022) and Cook, Serve, Delicious (2020). This combined with a gap in the market for engine templates for Cooking Management Games give the product its motivation to be developed.

Expected Result

I expect this product to provide users with a fast and efficient method of creating Cooking Management games. Success will be determined if users can both use existing blueprints (by manipulating values and variables), and their own original code in tandem to create simple prototypes for their own Cooking Management games.

This success will be tested via a series of user research and feedback to gain an accurate insight on the target audience views the value and usability of the product.

Target Audience

My target audience for the product will be game developers, student, professional and hobbyist. This is because the entry requirement for utilising the product requires a basic understanding of Unreal Engine and its Blueprints. The **Product Justification** highlights the value of the product to this particular audience, as they are the primary group that utilise these templates and with the growing popularity of Cooking Management games, they have a clear Incentive-based demand for the product.

Finance and Goals

I am releasing this product as a free template on the unreal Engine marketplace as I have no intentions of selling the product for a profit. Its sole purpose is to satisfy the needs of the target audience providing them a template to make their own Cooking Management games from.

If the product is successful I intend to add additional functionality and features to the product but still have no intention of selling the product for a profit and it will remain free on the Unreal Marketplace.

SWOT Analysis

Strengths- Allows users to create their own Cooking Management games, requires only a basic understanding of Unreal Engine to operate, allows to rapid prototyping of ideas

Weaknesses- Offers only the core feature, not any non-essential features

Opportunities- Currently no existing template for Cooking Management games making this the only option on the market for users, could add additional features there is time left towards the end of development

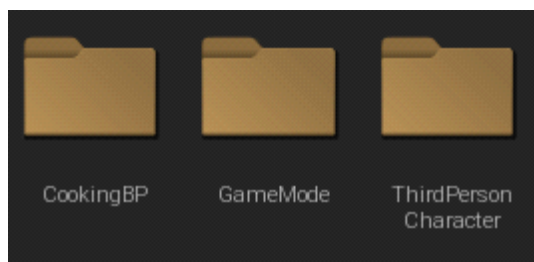
Threats- long development time, could exceed development time, requires extensive bug testing

Formatting and User Experience

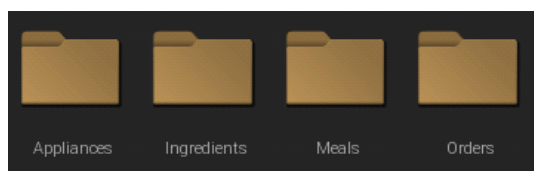
Users will be able to go into folders and add, remove or edit premade features via the blueprints for each feature

All core features will be into folders, with the blueprints of each sorted into their according folders and subfolders

Example- Folders



Example- Sub-Folders



Each feature will have their own individual folder containing their corresponding blueprints

All Code will be commented, Blueprints and Variables will be named using appropriate conventions and all nodes will be presented clearly

Example- Commenting Blueprints

For your product specification, make sure it meets the criteria below:

Product Specification

- States the most important requirements for developing a new product or a feature/functionality e

- Acts like a blueprint for the key information related to the product

- Guide for the development team when building the product (MoSCoW)

- Information such as target users, a summary of the core concept, business needs and goals[^1], and other necessary details are given in the product spec

- Concise in nature and tell the ones working on it what is being built and why

- What the product is expected to achieve and how this achievement is to be measured

- A product spec also sometimes contains information about the business-related needs

- e.g how much revenue is expected, if the audience will be expanded and the target markets etc

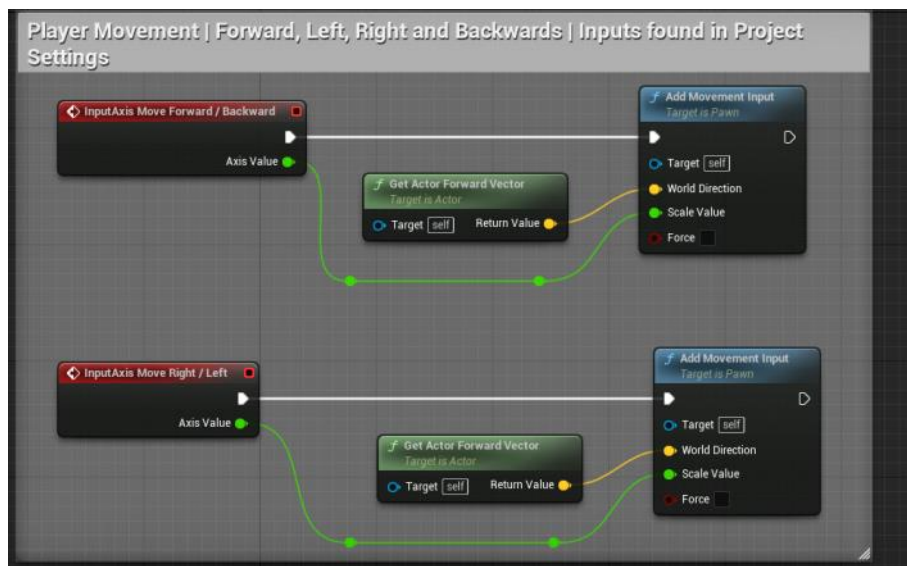
- User personas/stories explain the typical audience behaviour (sometimes based on audience research or user requirements analysis)

- Wireframes or sketches used to give a clearer idea of the product

- Technical specifications (file formats, inputs and outputs and myriad others)

- Potential obstacles to be overcome (SWOT is an option here)

[^1]: Not always the case in the games context, typical of larger "products" than the typical games feature or tool that we're developing



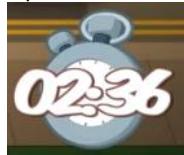
Example- Variable Naming Conventions

VARIABLES		
allowJump?	Boolean	
canMove?	Boolean	
isSprinting?	Boolean	
canSprint?	Boolean	

Feature Checklist, Description and Implementation-

Game Timer- a count up or count down timer ot record how long the level has been going on for or how long is left until the level ends

Implementation- users can change the type of timer and each's duration



Order Failure- the result of a player failing an order, this could be a decrease in score, time, having o restart the level etc.

Implementation-users can customize the result of failing an order choosing from, time punishment (duration), Score decrease (amount) and Level Failure



Player Movement- the movement of the player character around the level

Implementation- premade movement features (basic wasd movement, jumping, sprinting), users can toggle on and off individual movement features, users can remap and rebind controls for movement



Player Actions- player can perform an action under certain circumstances which takes a set amount of time with a result at the end

Implementation- premade actions, users can customize the product/result of each action and how long each action takes



Combing Ingredients- players can combine ingredients on a plate or in/on an appliance
Implementation- users can customize the product of combined items and can choose which appliances players can combine ingredients in/on



Object Placing Logic- logic behind where an object can be placed, whether it can be placed on top of another object, whether it can be combined with an ingredient etc.
Implementation- premade item placement logic



Customer Orders- meal/meals that customers order in premade sequence or a random sequence, players must complete with a result for failure and success, there are a set amount of orders each level
Implementation- users can customize each customer order, how many orders are given each level, the result of failing and succeeding each order, the sequence in which orders come out and the choice for the sequence of orders to be user presets or random



Customer Patience- the amount of time the player has to serve that customer their order before it is failed, the amount of time is based on what that customer ordered
Implementation- users can choose the amount of time that each food item will have when a customer orders it



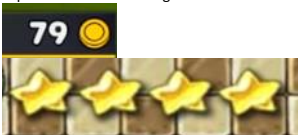
Appliance Timers- the amount of time it takes to prepare an ingredients in an appliance, the amount of time depends on the appliance
Implementation- users can choose how long each appliance takes to prepare an ingredient



Appliance Failstates- a state that checks if an ingredient has been in an appliance for too long, if it has been in too long it can burn the ingredient depending on what appliance it is put into
Implementation- users can choose which appliances cause ingredients to burn if they are left in too long



Score/Income- each time the player completes an order they get an increase in their score or income, amount of score/income ach order gives is based on what meals are included in the order
Implementation- users can customize how much score/income each meal will give when it is completed as an order, users can choose whether the game uses a scoring system, an income system or a performance star rating or a mixture of each



Bin- players can choose to dispose of an ingredient or meal by interacting with a bin

Implementation- premade feature of bin that destroys ingredients and meals when they are put into them



Fire Extinguisher- used to put out fires on surfaces and appliances

Implementation- premade feature of fire extinguisher that must be picked up and used to put out fires



Level Completion States- the triggers of what causes the level to be completed or failed and what happens in each of the states

Implementation- users can set whether the level can be failed or not, failed if they fail a certain number of orders, users can choose the number of orders that will cause the level to fail, users can set what causes the level to be completed, if the timer runs out, if they complete a certain number of orders or if they reach a certain score



MOSCOW Analysis

I decided to organise these features into a MOSCOW table in order to determine what features are essential in a Cooking Management Template and what are optional and perhaps not required.

The organisation of the table below is based off my finding and research in my literature review, technical investigation and the results of my questionnaire

Features	Must Have	Should Have	Could Have
Game Timer	<input checked="" type="checkbox"/> Literature Review (Web view)		
Order Failure	<input checked="" type="checkbox"/> User Requirements Analysis (Web view)		
Player Movement		<input checked="" type="checkbox"/> Literature Review (Web view)	
Player Actions	<input checked="" type="checkbox"/> User Requirements Analysis (Web view)		
Combining Ingredients	<input checked="" type="checkbox"/> User Requirements Analysis (Web view)		
Object Placing Logic		<input checked="" type="checkbox"/> Technical Investigation (Web view)	
Customer Orders	<input checked="" type="checkbox"/> Technical Investigation (Web view)		
Customer Patience		<input checked="" type="checkbox"/> Technical Investigation (Web view)	
Appliance Timers		<input checked="" type="checkbox"/> Literature Review (Web view)	
Appliance Failstates			<input checked="" type="checkbox"/> Literature Review (Web view)
Score/Income		<input checked="" type="checkbox"/> User Requirements Analysis (Web view)	
Bin			<input checked="" type="checkbox"/> Technical Investigation (Web view)

Fire Extinguisher			<input checked="" type="checkbox"/> Literature Review (Web view)
Level Completion States	<input checked="" type="checkbox"/> Literature Review (Web view)		

Challenges and Solutions

Monday, April 18, 2022 12:29 PM

Challenge- What Idea to do?

Solution- I decided to do a UE5 Template for Cooking Management games (e.g Overcooked, PlateUp!)

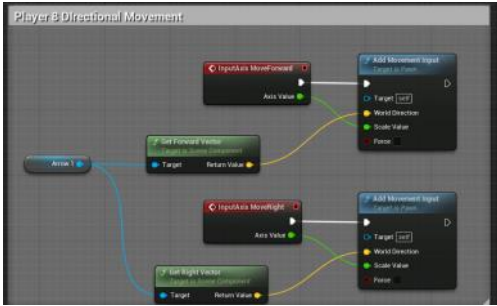
I started my idea generation [Idea Generation](#) ([Web view](#)) based on existing games that I enjoyed. I looked at finding potential systems to innovate and improve on in these games. I then got inspiration to create my own game, inspired by bartending simulator but with a fantasy setting. After getting feedback however, I reevaluated this project considering it now to be a large over scope. Based on feedback I received from peers, I was suggested the idea to do a template for games like this bartending simulator game I was considering. This in turn seemed a more feasible idea to do in the timeframe given and based on my research in my Literature Review [Literature Review](#) ([Web view](#)) and Technical Investigation [Technical Investigation](#) ([Web view](#)), there were no existing templates in Unreal for games of this genre, therefore presenting a clear and opportune gap in the market.

Challenge- Identifying the Core Features and Non-Essential Features

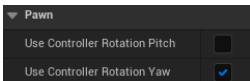
Solution - I first made a list of games I was interested at the time this included games such as The Outer Wilds, Baba is You and Unpacking. [Idea Generation](#) [\(Web view\)](#) This later led me down a path of looking at games with systems I found fascinating. The specific system that captivated me at the time was the combining/ingredient system that many cooking/mixology games like Bartender Simulator, Potion Craft and Bartender Hustle used. I concept the idea of my product being a Fantasy Mixology game that utilised this Cooking/mixology system that I researched in the games I previously mentioned. I then pitched this idea to many of my peers, which I met with positive reception on. When I pitched this to my tutor however he stated that it could be overscoping and proposed that instead of his concept for my product, I instead make a UES template based on this system. This culminated in me pivoting my idea for my product to be a template for Cooking Management games such as Overcooked and PlateUp as I was far more familiar with games of this genre and the system within them.

Challenge- Setting up Basic Controls/Features (Movement, Pickup, Drop, Use, Camera Setup and Control)

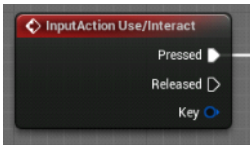
Solution-



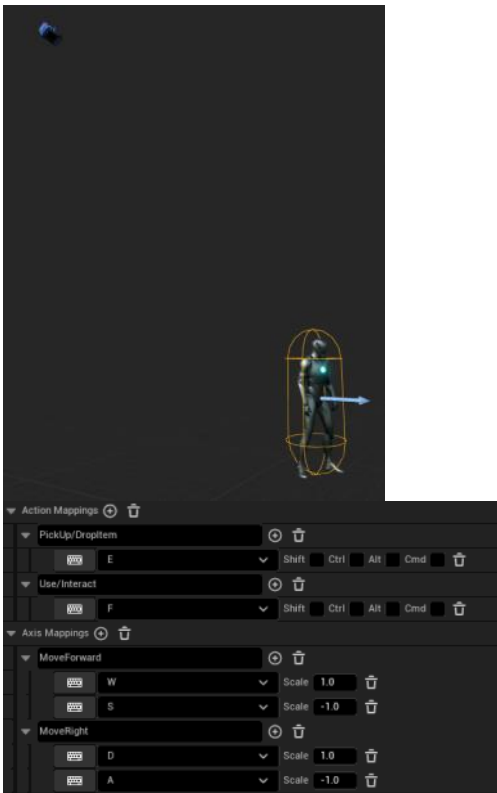
Basic controls- Move forward and right



8 Directional Movement, locks Player's rotation



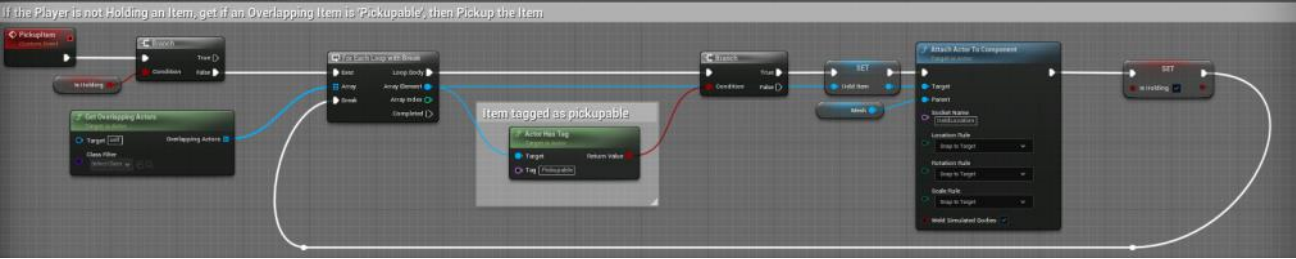
Use/Interact Input



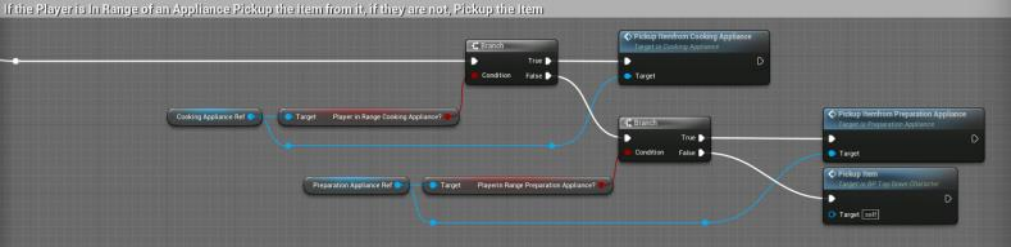
Custom input and axis mapping

Challenge- Picking up and Placing items

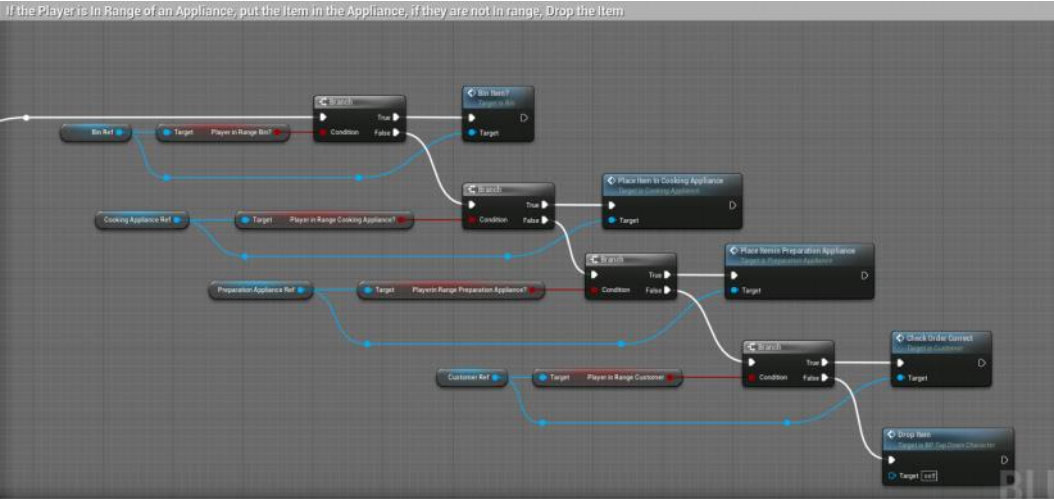
Solution-



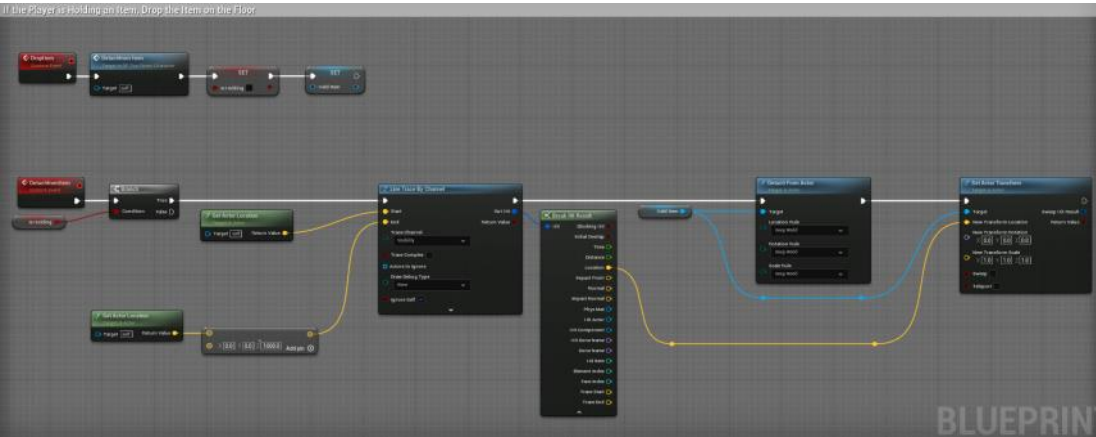
Basic pickup of an item, checks if the player is holding an item and whether the item is pickupable



Checks if the player is in range of an appliance, if so pickup the item from the appliance, if not pickup the item from the floor



Checks whether the player is near an appliance, if they are, place the item in the appliance if not the player the item on the floor



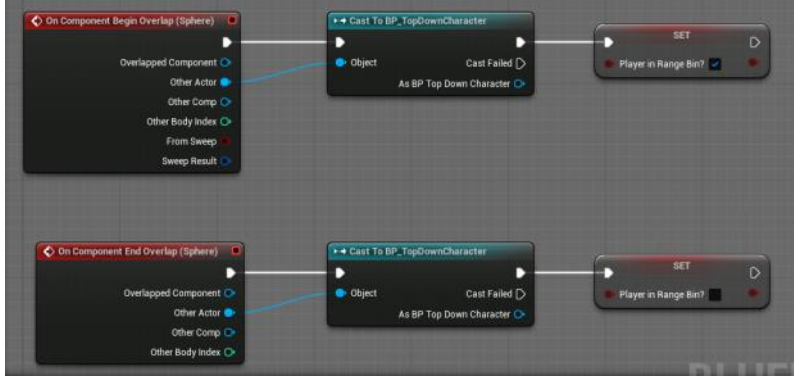
Drop the item the player is holding, line trace to check where the floor is

Challenge- Creating Appliances (Preparation and Cooking and Bin Appliances)

Solution-

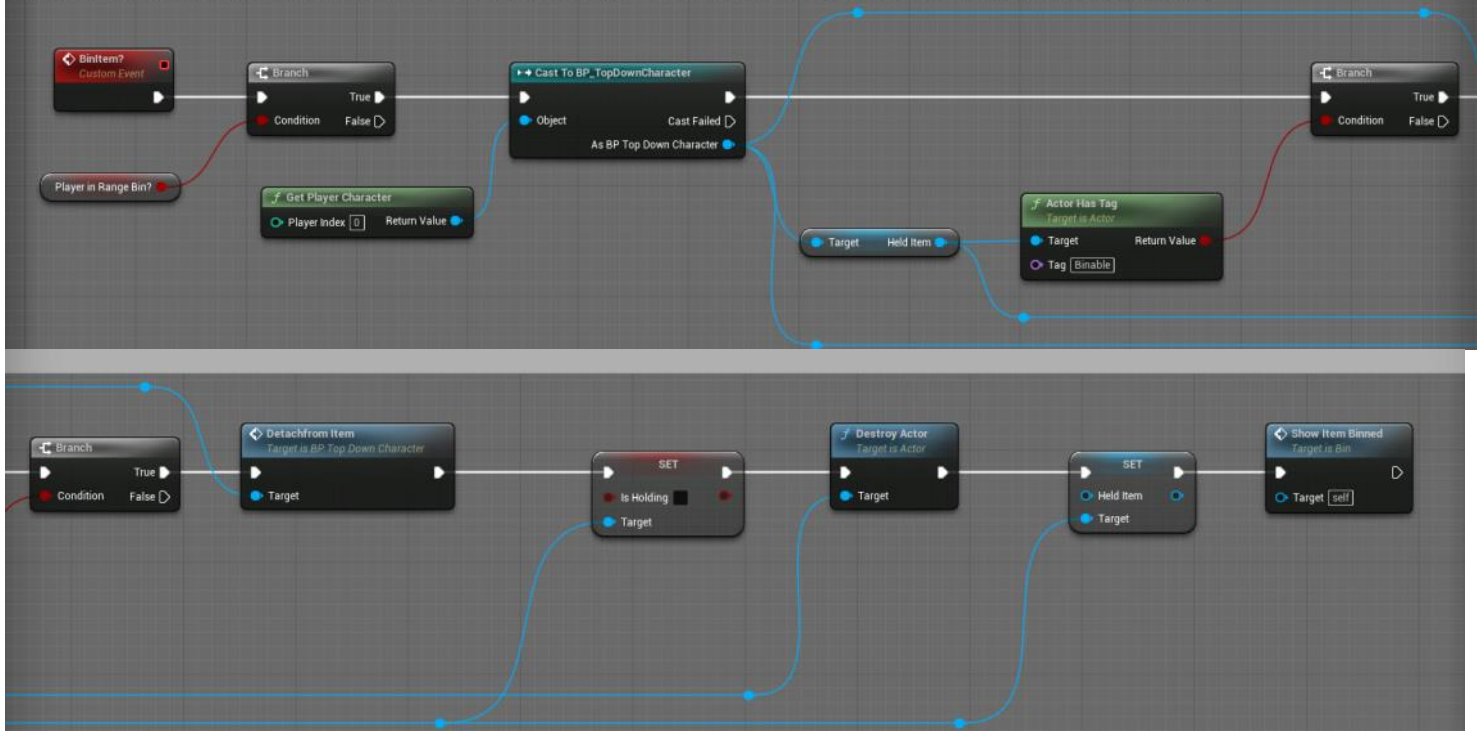
Bin

Checks if Player is In Range of Bin



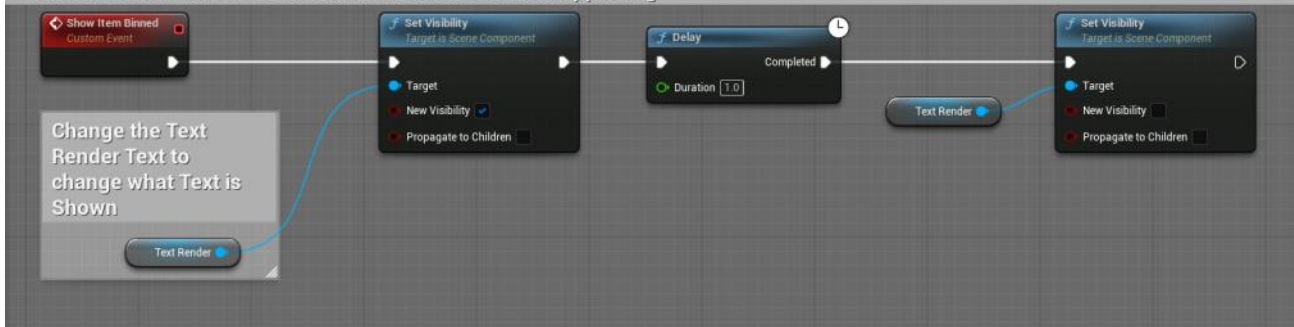
Checks if the player is in range of the bin

If Player is In Range of the Bin and Item has the Tag 'Binable', Bin the Item and Show Text above for a period before Disappearing



Bins the item if the player is near the bin

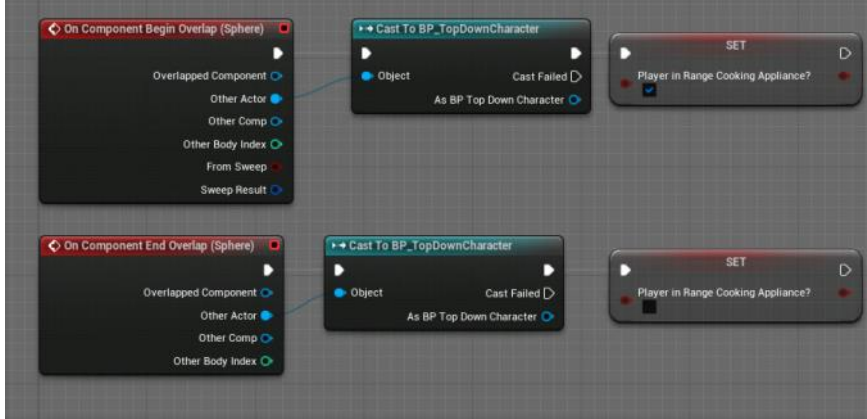
Show Text when the Item is Binned for a Period before Disappearing



Shows the Item is Binned text

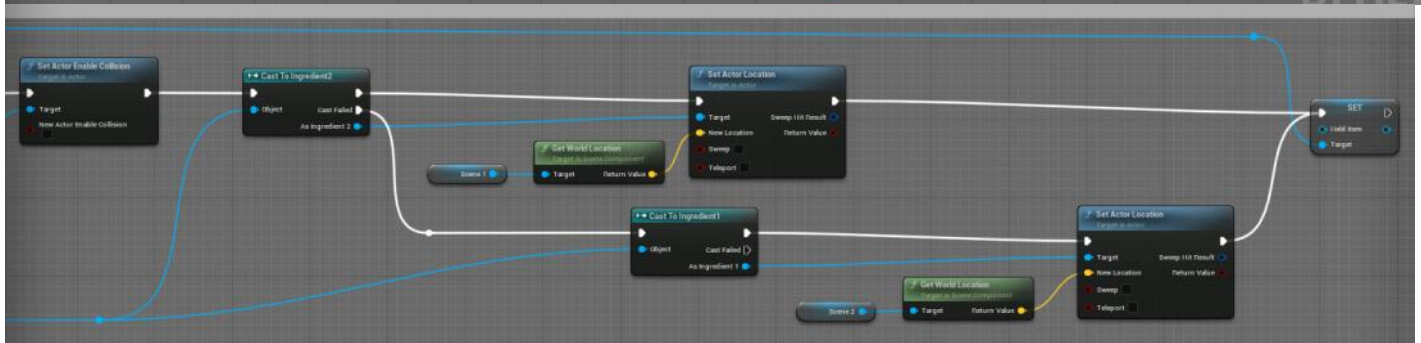
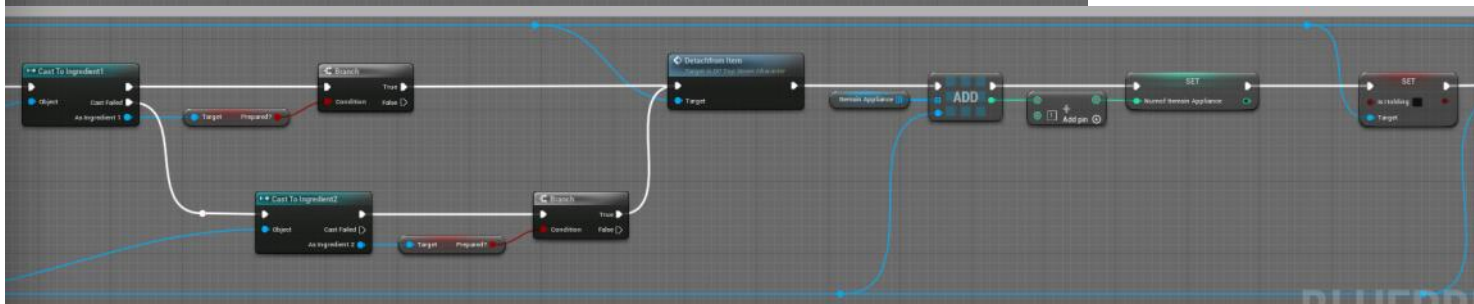
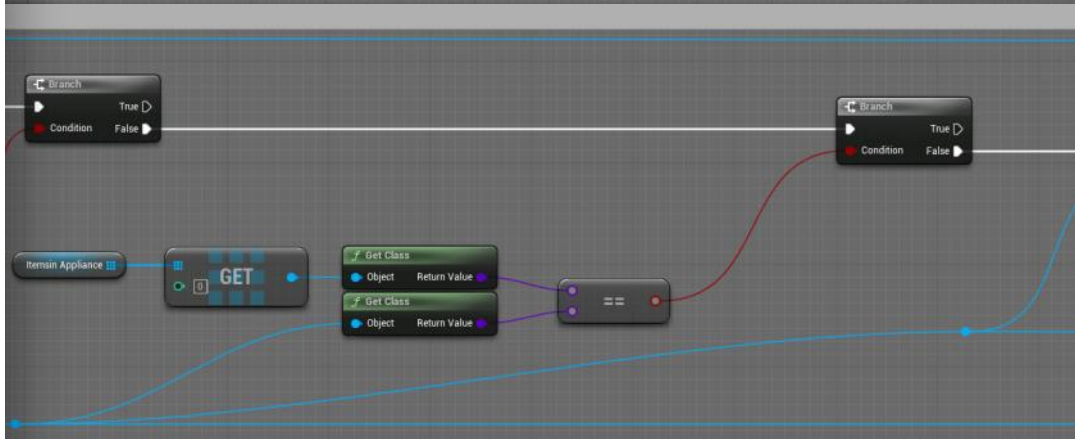
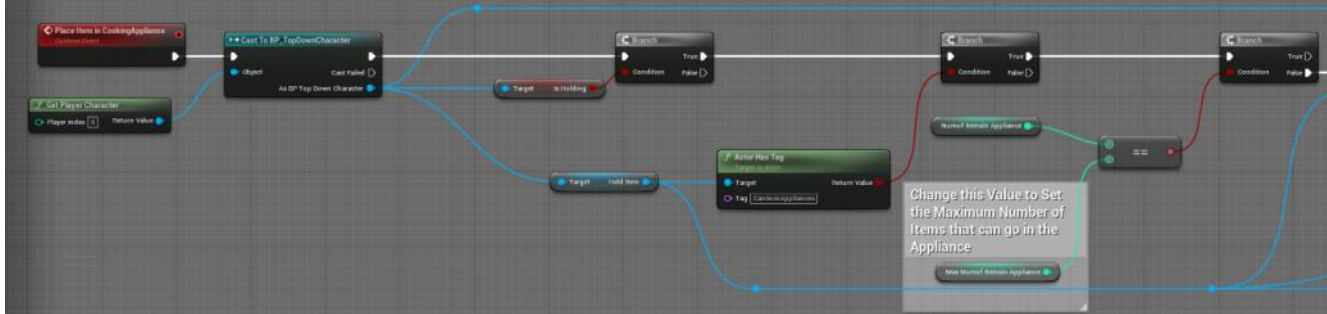
[Cooking Appliance](#)

Checks if Player is In Range of Appliance



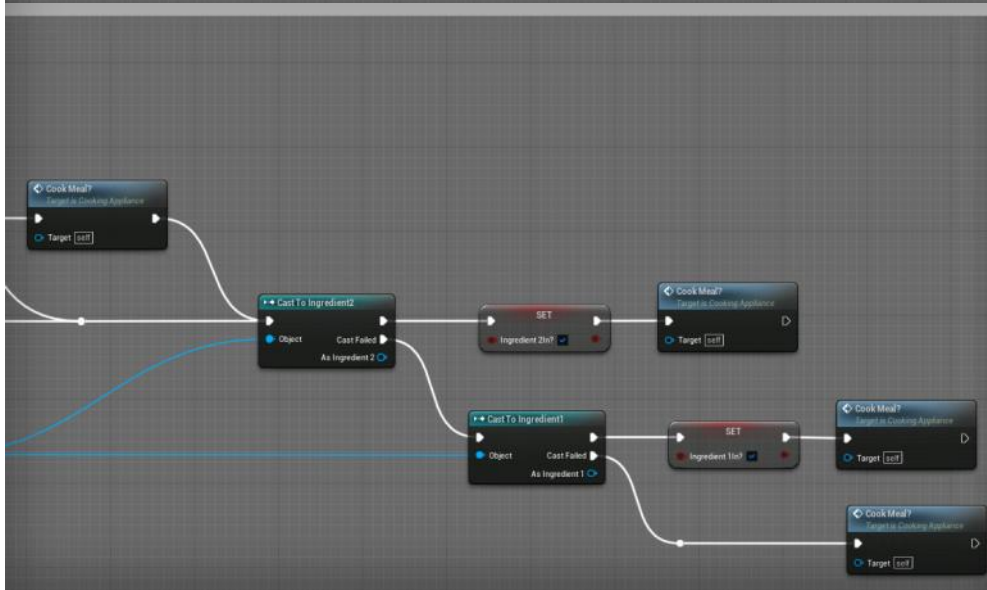
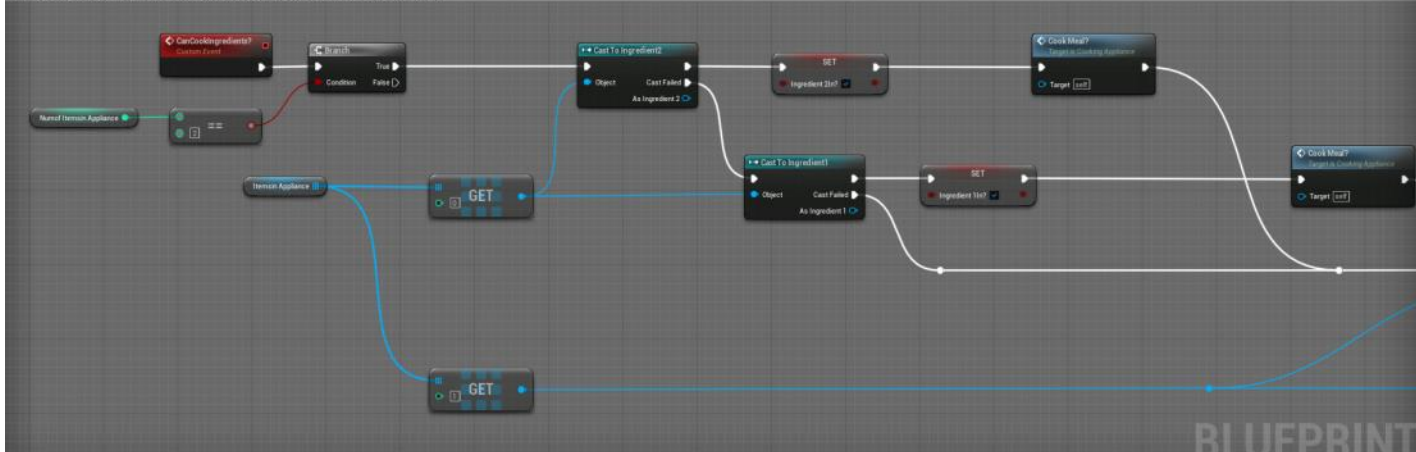
Checks if the player is in range of the Cooking Appliance

If the Player is Holding an Item, the Item has the tag 'Can Go In Appliances' and the Ingredient is Prepared, Put the Item in the Appliance



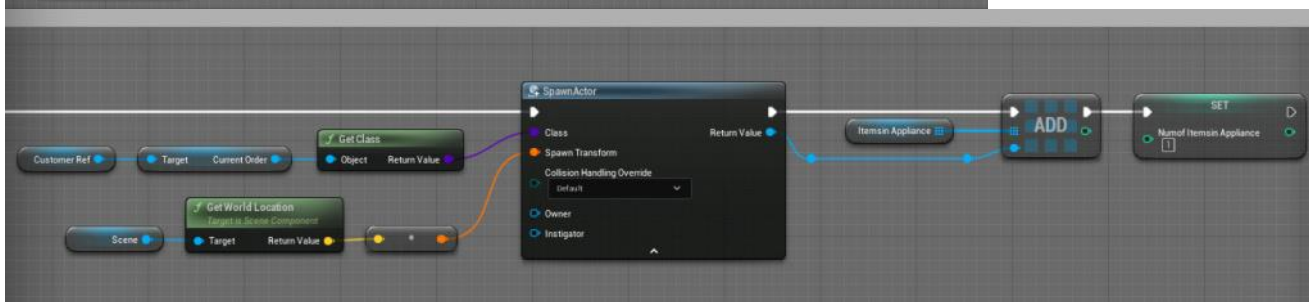
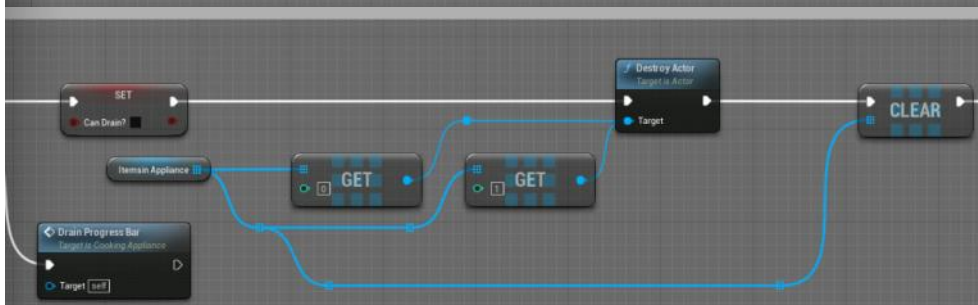
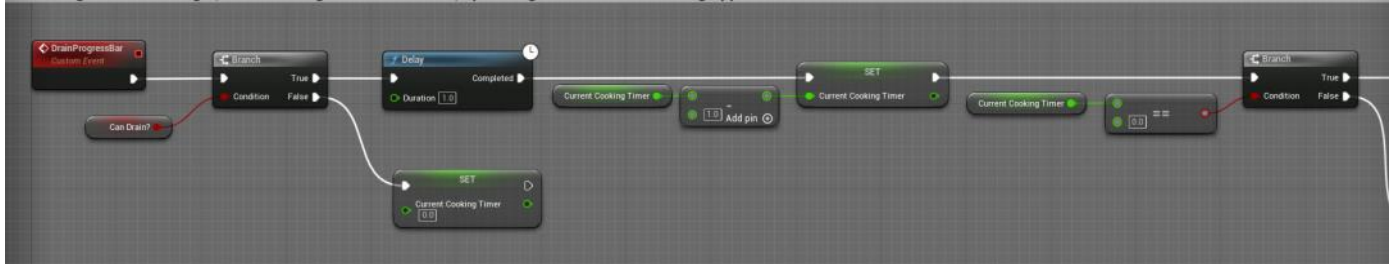
Places the ingredient in the cooking appliance, checks if it can go in the appliance, if the same kind of ingredient is already in there it won't be placed in the appliance

If there are 2 Ingredients in the Appliance, Check if it can Cook the Meal



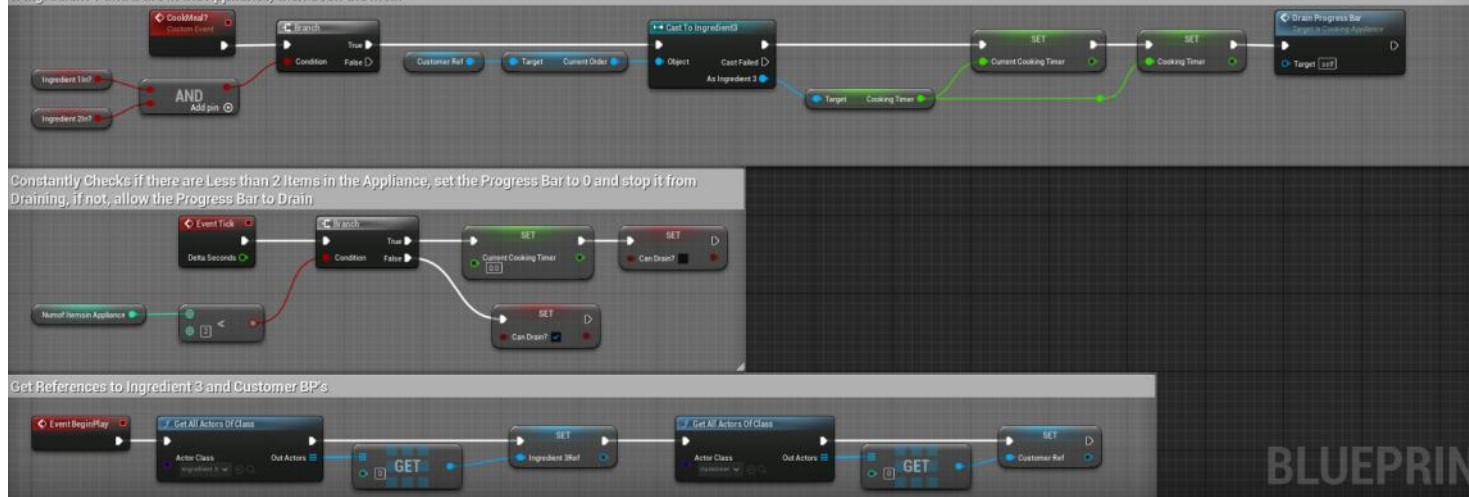
Starts to cook the ingredients, checks if the correct ingredients and number of them are in the oven first

Drain Progress Bar of Widget, when the Progress Bar reaches 0, Spawn Ingredient 3 in the Cooking Appliance



Starts to cook the ingredients, after a certain amount of time depending on how long the meal takes to cook, the meal is cooked,

If Ingredient 1 and 2 are in the Appliance, then Cook the Meal



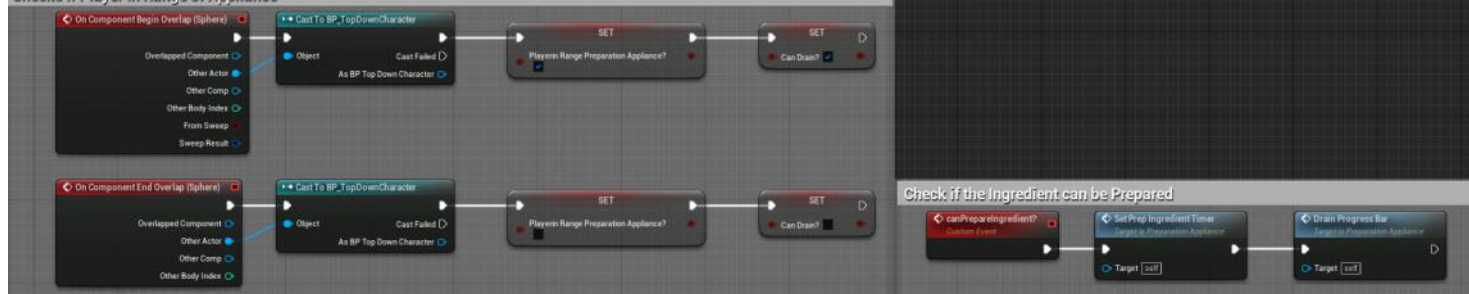
Checks if the meal can start to cook

Checks If the ingredient is taken out before the meal is cooked, it must be cooked again for the full duration for the meal to be created

References the Ingredient 3 and Customer Blueprints

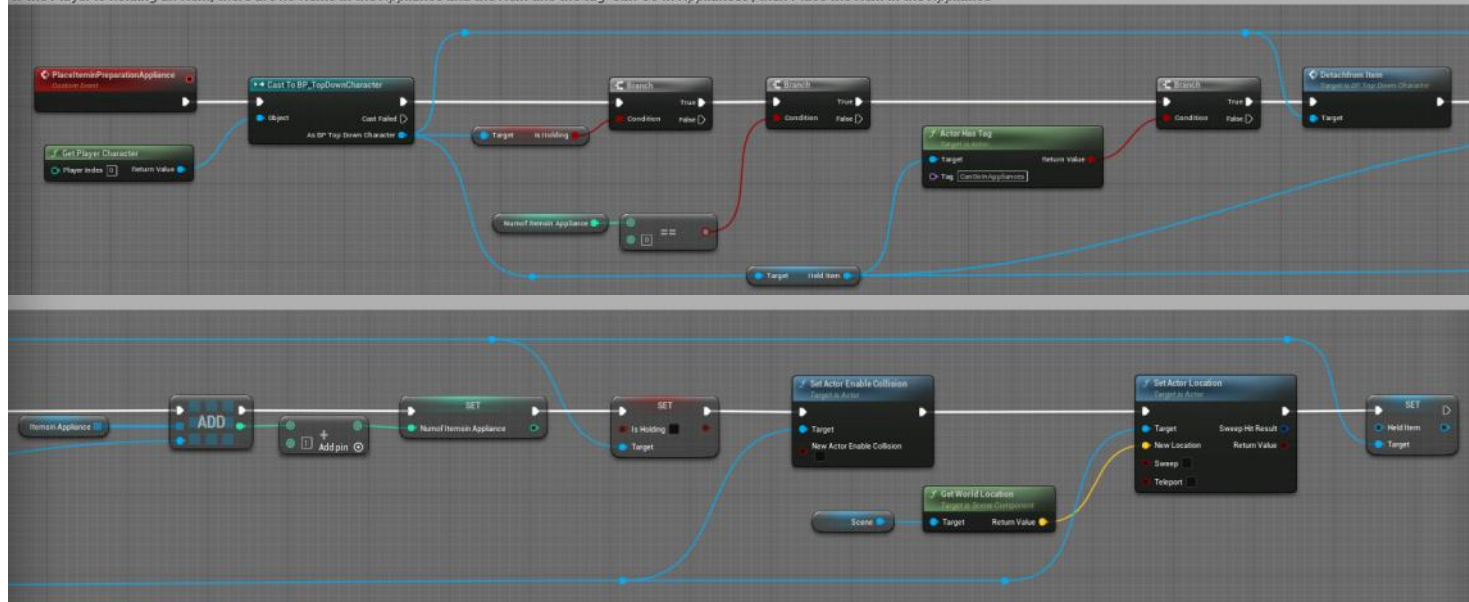
Preparation Appliance

Checks if Player In Range of Appliance



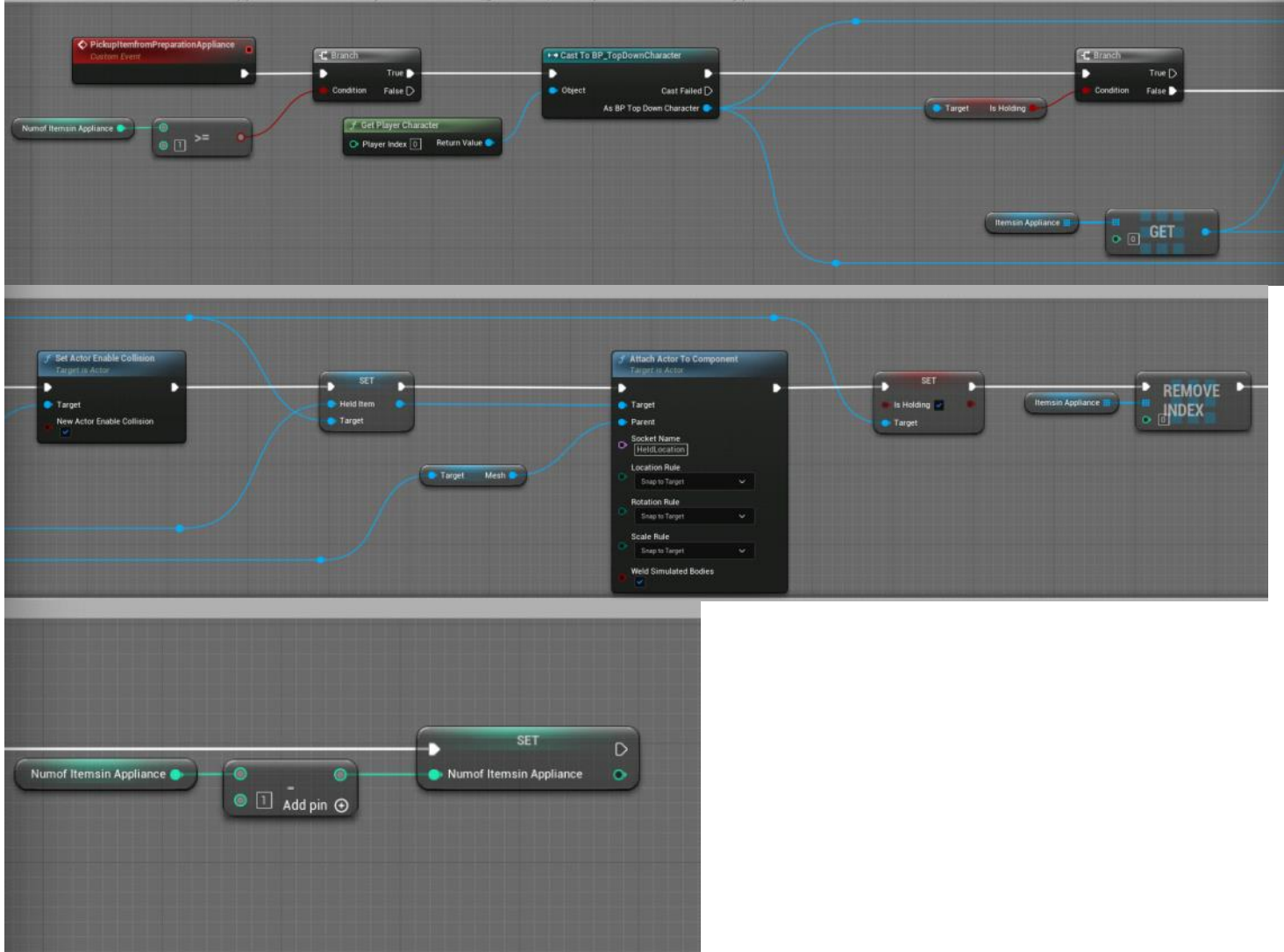
Checks if the player is in range of the preparation appliance

If the Player is holding an Item, there are no Items in the Appliance and the Item has the tag 'Can Go In Appliances', then Place the Item in the Appliance



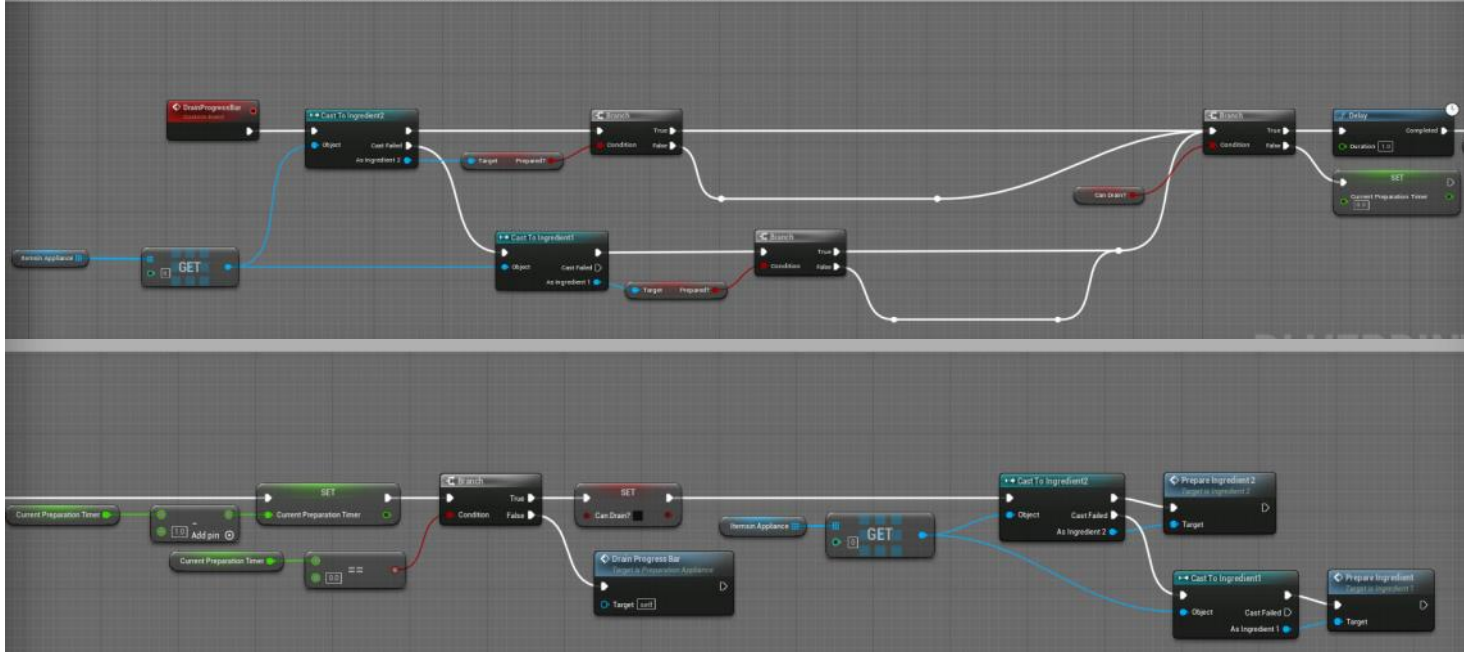
Places the ingredient in the appliance, checks if there is already an ingredient in the appliance first and whether the ingredient can go in appliances first

If there is 1 or more Items in the Appliance and the Player is not Holding an Item, Pickup the Item from the Appliance



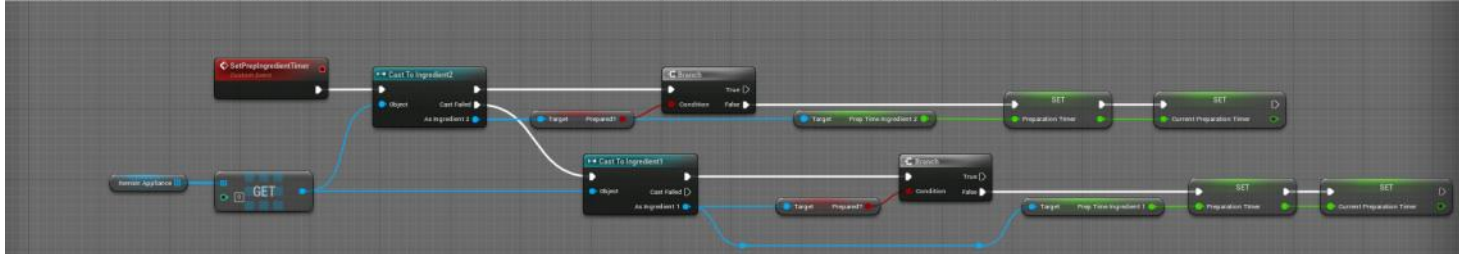
The player picks up the ingredient from the appliance, checks whether they are holding an item first

If the Item in the Appliance is Prepared do nothing, if it isn't, Drain the Progress Bar of the Widget and Prepare the Ingredient



Starts preparing the ingredient, checks if it has already been prepared before

If the Ingredient is Prepared, do nothing, if it isn't Prepared set the Values for the Ingredient Prep Timer and Progress Bar Values depending on what Ingredient is in the Appliance.



Constantly Check if the Player is In Range of the Appliance, if they are and they are holding an Item, Set the Progress Bar to 0 and stop it from Draining, if not allow the Progress Bar to drain, If they re not In Range, Set the Progress Bar to 0 and stop it from Draining



Checks if the ingredient can be prepared or not, then starts preparing the ingredient

Checks If the ingredient is taken out if the player goes out of range of the appliance before the ingredient is prepared, if either happens the ingredient must be prepared again for the full duration for it to be prepared,

Challenge- Setting up Customer Orders

Solution-

Checks if Player is In Range of Customer

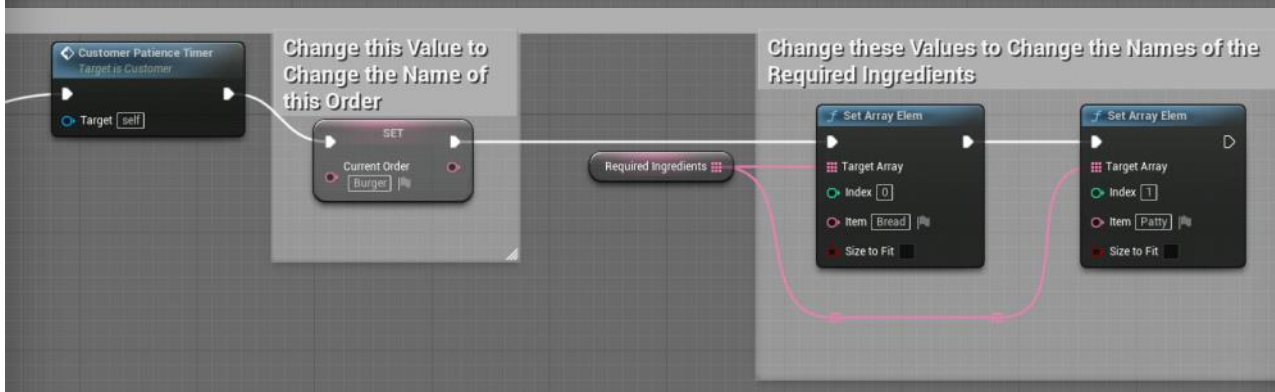
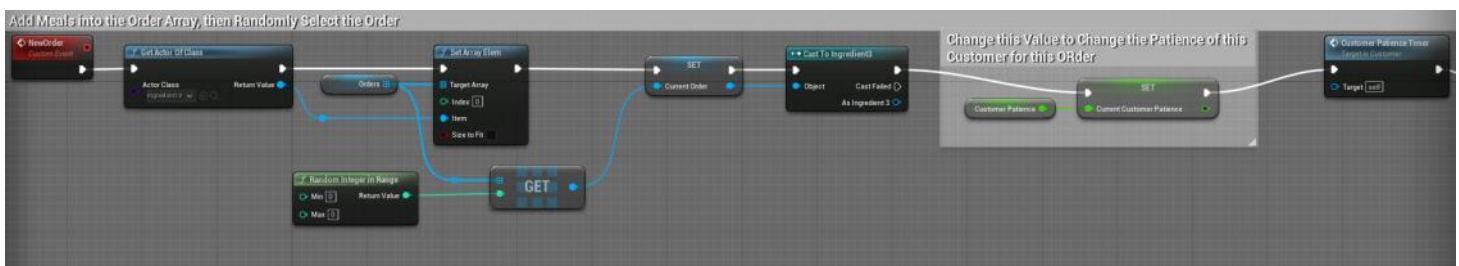


Get References to the Ingredient 3 and Cooking Appliance BP's



Checks if the player is in range of the Customer

Gets references to the ingredient 1 and 2 blueprints



Generates a new Customer order based on the number of values in the Orders array

If the order is a burger it sets the current order text to be burger and makes said text visible

Start the Count Down Timer for the Customer Patience, when it reaches 0 the Order is Failed

```

graph LR
    Start[CustomerPatienceTimer  
Custom Event] --> Delay[Delay  
Duration: 3.0]
    Delay -- Completed --> Set[SET  
Current Customer Patience]
    Set --> Cond1{Condition}
    Cond1 -- True --> Branch1[Branch]
    Cond1 -- False --> Branch2[Branch]
    Branch1 --> Branch3[Branch]
    Branch2 --> Branch4[Branch]
    Branch3 --> Target1[Order Failed  
Target is Customer]
    Branch4 --> Target2[Customer Patience Timer  
Target is Customer]
    
```

If the Player is not Holding an Ingredient do nothing, if they are, Serve the Meal, if it has been completed in Time and is the Correct Meal then the Order is Successful, if not the Order is Failed

Checks if the order is correct, if it is the order is complete, if not the order is failed

When the Order is Complete, Show Order Complete, Remove the Required Ingredients in the OrderUI Widget and Set the Current Order to Nothing, then after a Period Remove Order Comp

When the Order is Failed, Show Order Failed, Remove the Required Ingredients in the OrderUI Widget and Set the Current Order to Nothing, then after a Period Remove Order Failed and S

Period Remove Order Complete and Show the New Order

Diagram illustrating the process flow for removing an order and showing a new one:

- Calculate Score** (Target is Customer): Target is self.
- Delay** (Duration 3.0): Completed.
- SET** (Order Complete): Set to false.
- SET** (Order Complete/ Failed Text): Set to empty.
- New Order** (Target is Customer): Target is self.

Remove Order Failed and Show the New Order

Diagram illustrating the process flow for removing an order and showing a new one:

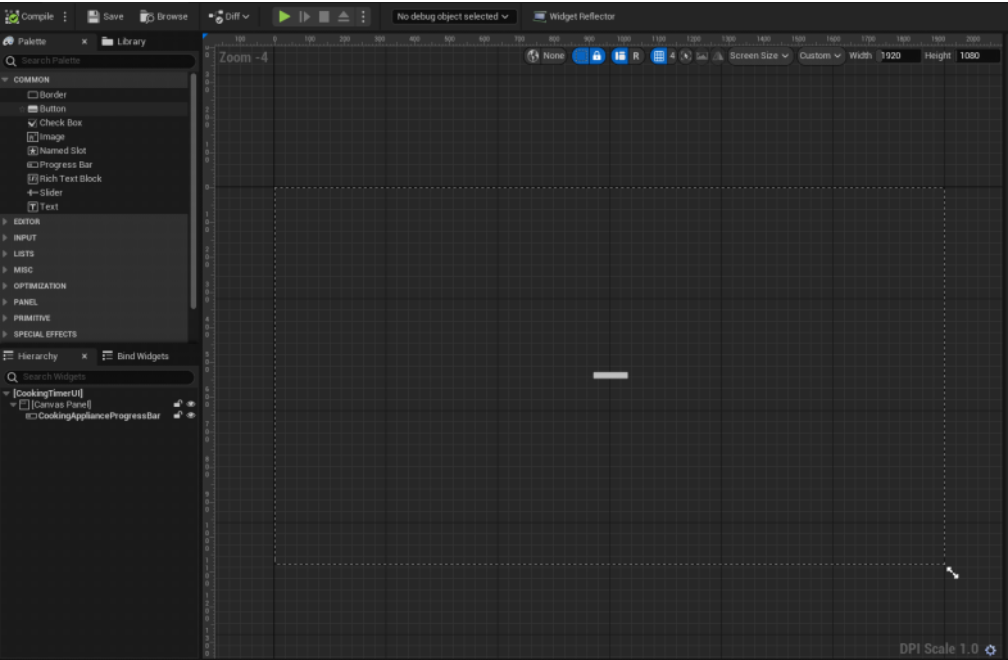
- Calculate Score** (Target is Customer): Target is self.
- Delay** (Duration 3.0): Completed.
- SET** (Order Failed): Set to true.
- SET** (Order Complete/ Failed Text): Set to empty.
- New Order** (Target is Customer): Target is self.

Shows the order is complete in the UI then generates a new order

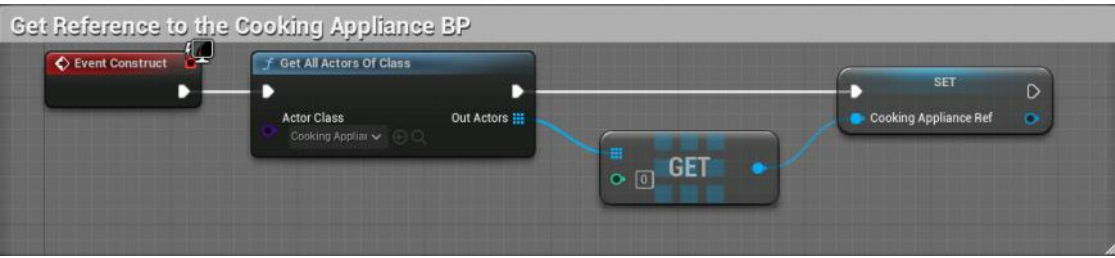
Shows the order is failed in the UI then generates a new order

Challenge- Setting up UI Elements

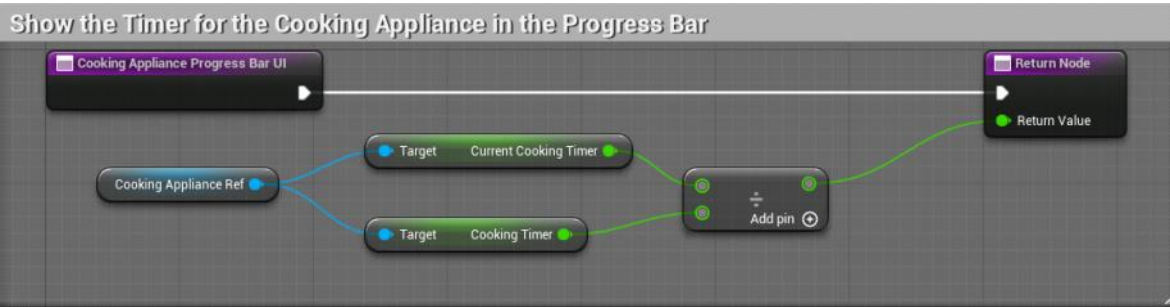
Solution-



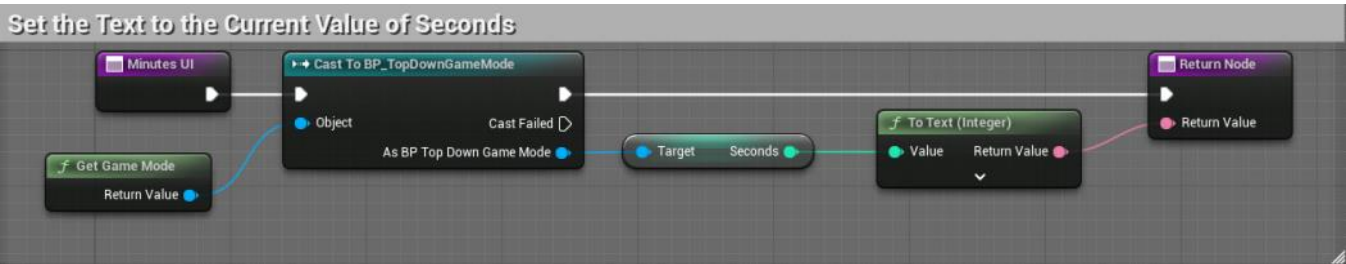
The layout of the UI for the Cooking Timer



Gets a reference to the Cooking Appliance Blueprint

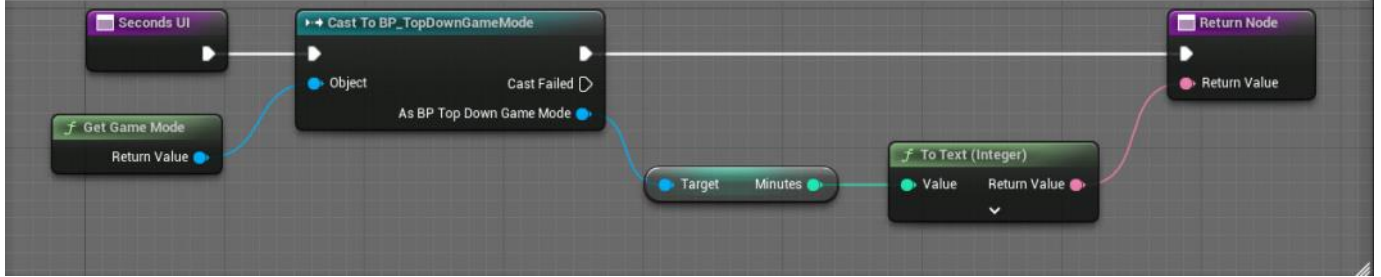


Calculates the percentage of the Cooking Timer and applies it to the Progress Bar

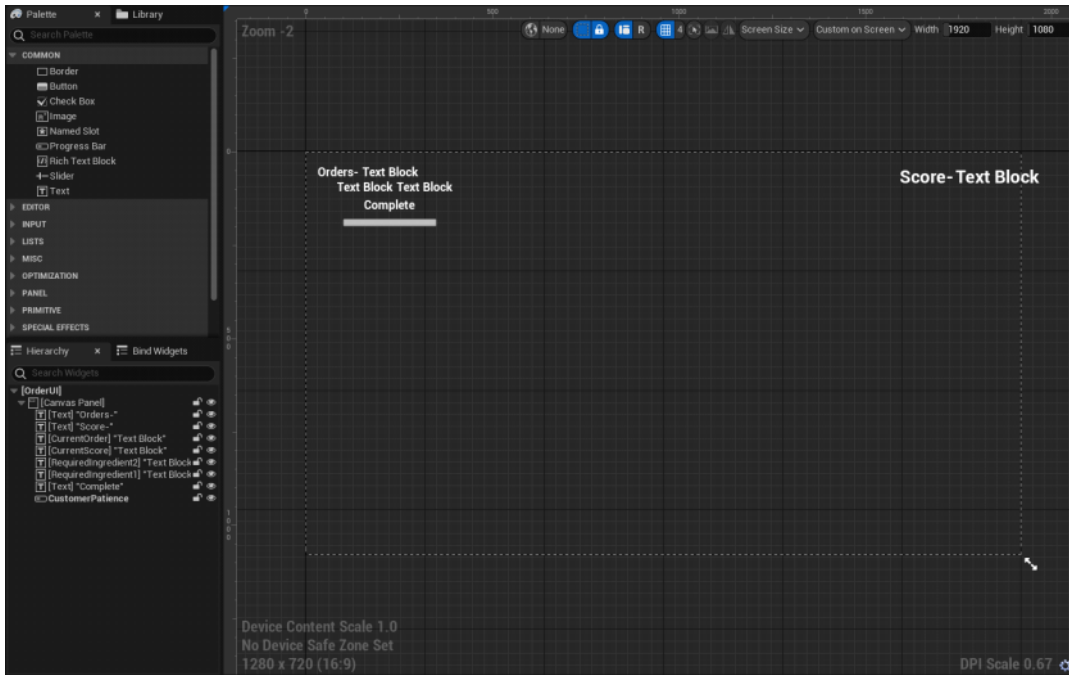


Shows seconds on screen

Set the Text to the Current Value of Minutes

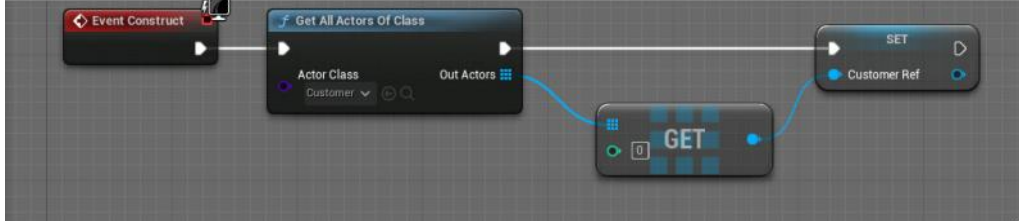


Shows minutes on screen



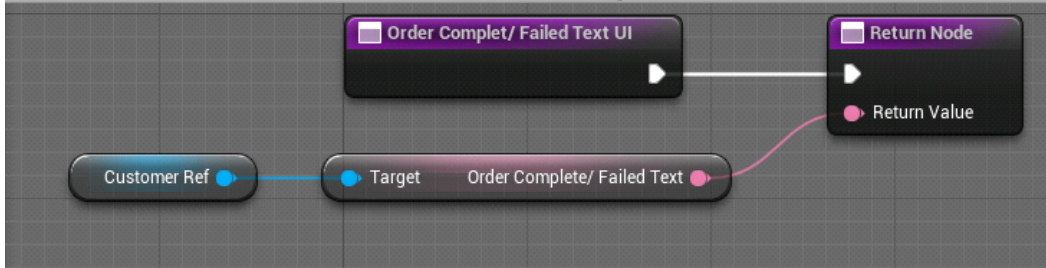
The UI for Order, Customer Patience and the Score

Get a Reference to the Customer BP



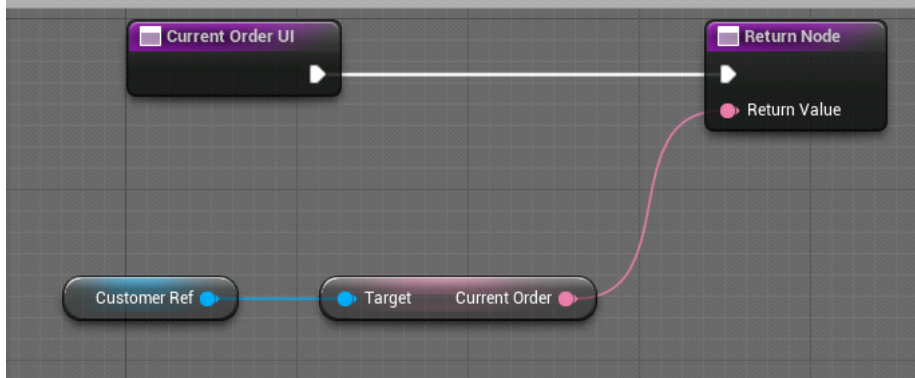
Gets reference to the Customer Blueprint

Set the Text to either Show Order Complete or Order Failed



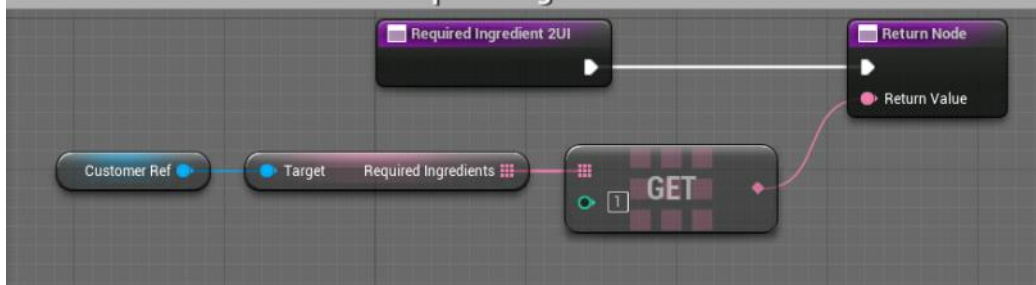
Shows Order Complete or Order Failed on screen when an order is either Completed or Failed

Set the Text to Show the Current Order



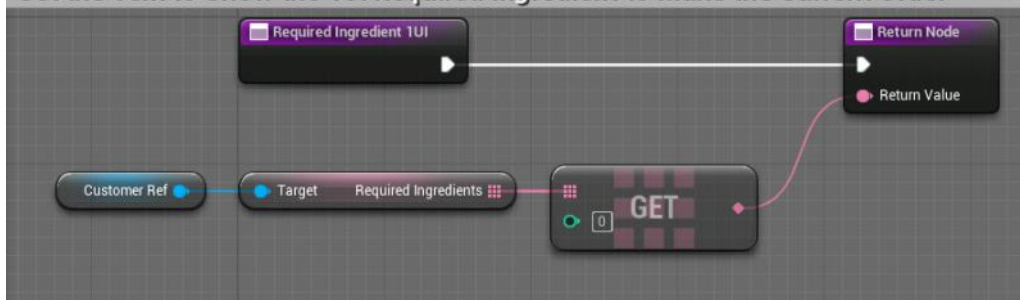
Shows the current order on screen

Set the Text to Show the 2nd Required Ingredient to Make the Current Order



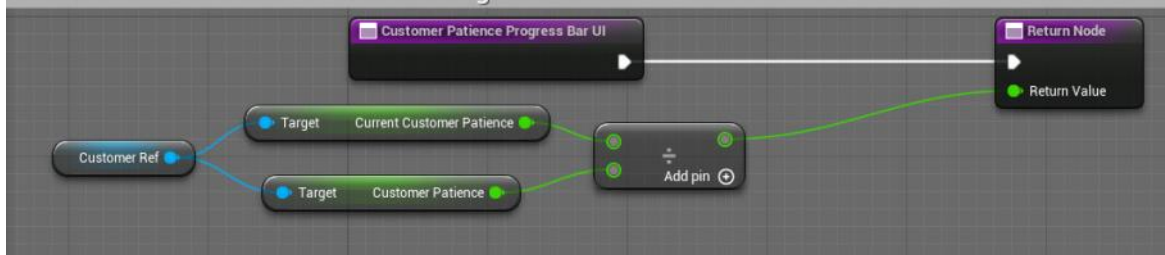
Show the required ingredient with index 1 from the Required Ingredients array on screen

Set the Text to Show the 1st Required Ingredient to Make the Current Order



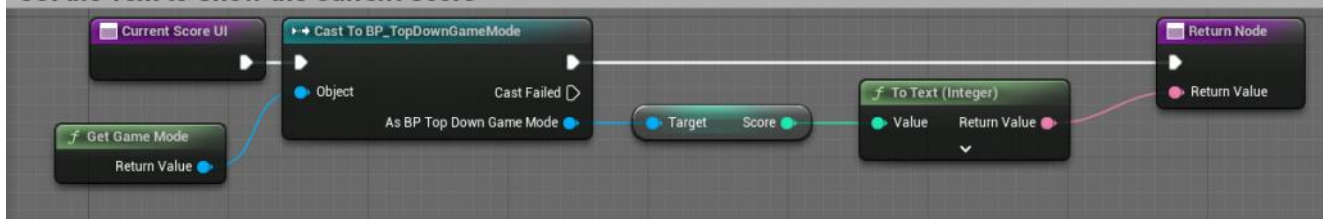
Show the required ingredient with index 0 from the Required Ingredients array on screen

Show the Customer Patience in the Progress Bar

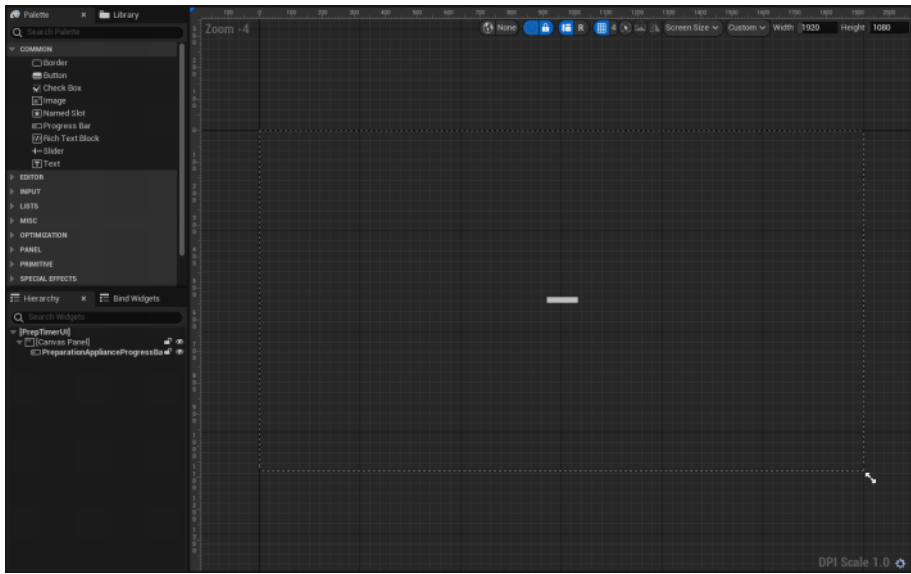


Calculates the percentage of the Customer's Patience and applies it to the Progress Bar

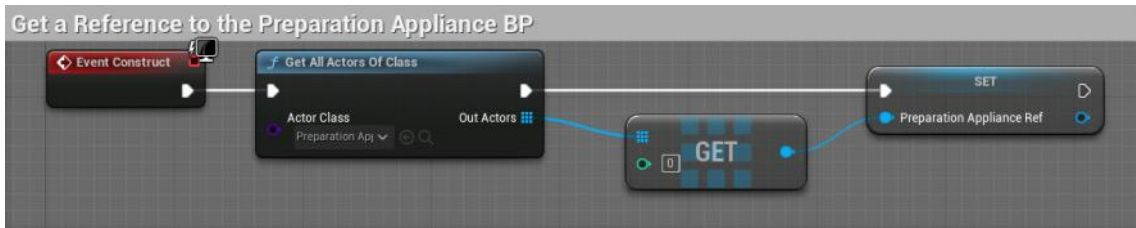
Set the Text to Show the Current Score



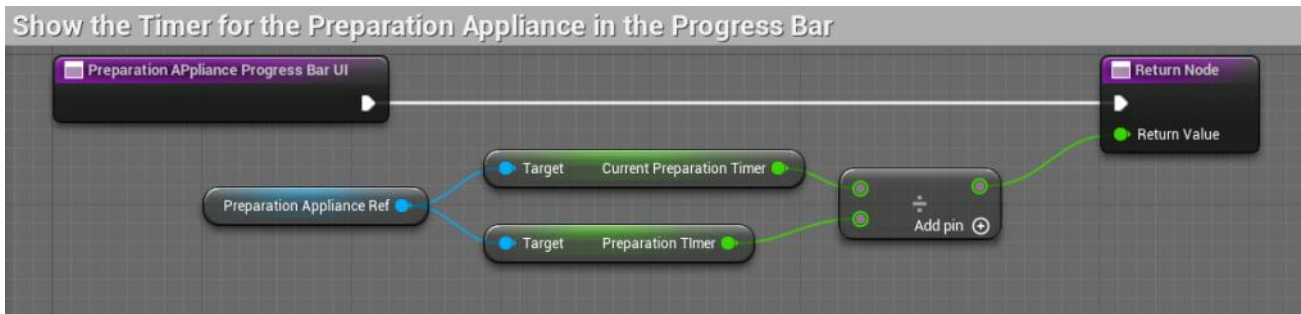
Shows the Score on screen



The UI for the Preparation Appliance



Gets a Reference to the Preparation appliance Blueprint

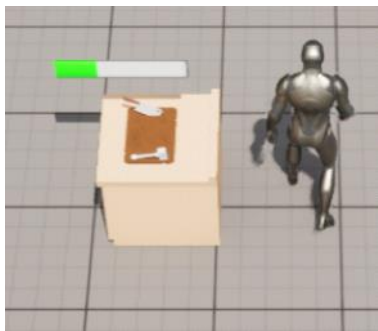
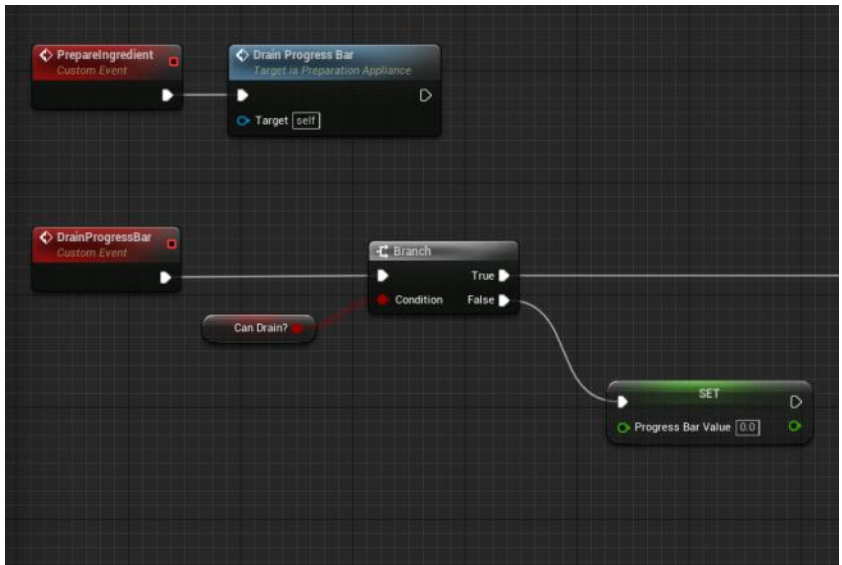


Calculates the percentage of the Preparation Timer and applies it to the Progress Bar

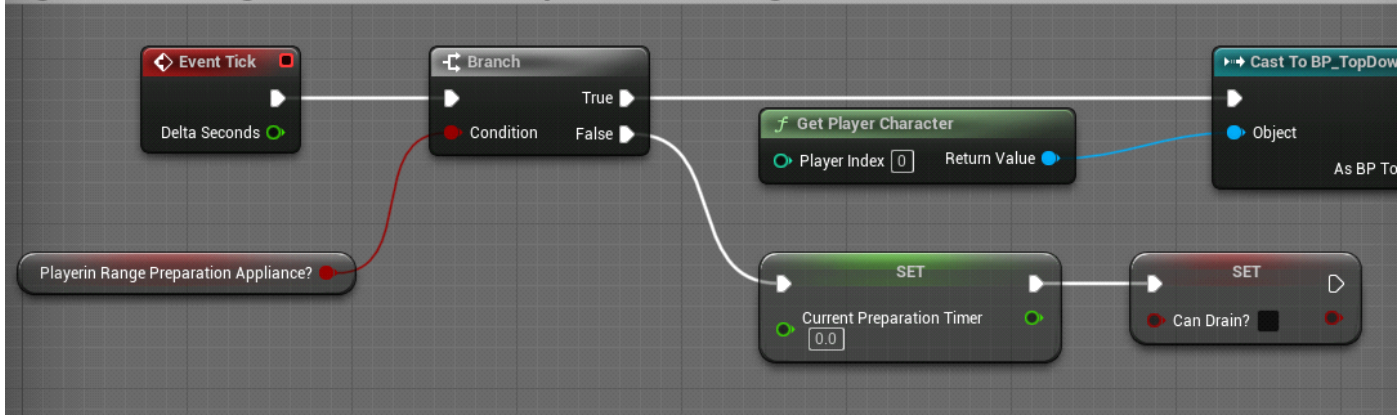
Challenge- Identifying and fixing bugs

Solution-





Constantly Check if the Player is In Range of the Appliance, if they are and they are holding an Item, Set the Progress Bar to 0 and stop it from Draining

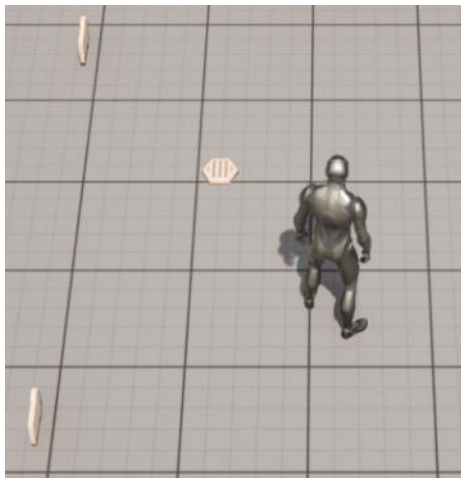




Challenge- Iterative Development based on User Feedback

Solution-

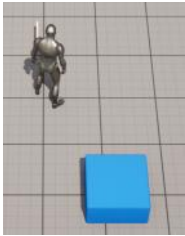
Users were finding it difficult to see the ingredients when they were picked up, additionally they couldn't tell when they were prepared.



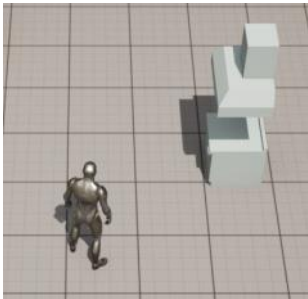
To solve this I not only changed the scaling and the angle of which ingredients were held, but I also changed their meshes and textures to more accurately what each ingredient was and if it had been prepared or not



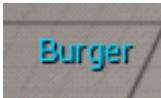
Users also found it difficult distinguishing were to serve their orders when they had created the order



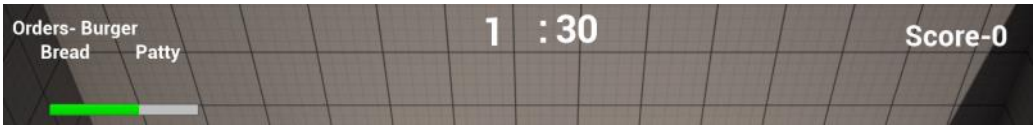
I changed the mesh of the Customer to be a serving hatch in order to make it clear to users that here is where they should serve their order when they have made the corresponding meal



Users wanted more clarity on what they need to make, how to make it and how long left they have before the customer runs out of patience



I created UI for the current order showing what they needed to make, what the required ingredients were needed to make the order and a progress bar showing the customer patience



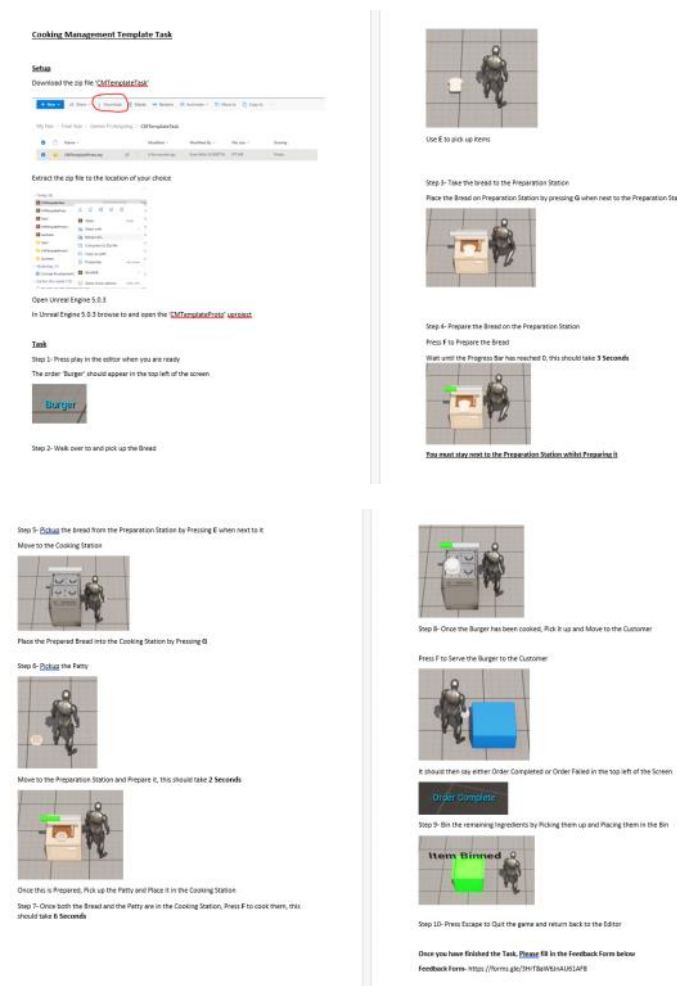
Iterative Testing

Monday, April 18, 2022 12:29 PM

Iterative Testing 1

Task 1-

To compliment the questionnaire I created a task for users to do. This was to ensure that they utilised all the key aspects of the template during testing and would thereby be able to give a more detailed insight into the product, allowing them to comment on all areas of the product as they would have experienced them all.



Defend the rationale
Defend why you did it

Questionnaire
Questionnaire forms focus group
Select candidates from questionnaire for my focus my group

Focus Group

Based on feedback given in the questionnaire, this task proved to be a successful method in giving users a somewhat guided tour around the product. Results showed that 100% of candidates completed the task fully, thereby giving credence to the responses given as all candidates would have experience all critical aspects of the product before commenting on it. The one major issues I found with this issues is that I made it optional for candidates to utilise the template to make their own Cooking Management games. As a result I got no feedback from candidates on using the product to do this. I consider this to be a large oversight on my part and this made it extremely difficult to make changes in my first cycle of iterative development as I could not address any issues regarding using the product to do this as no issues had been highlighted. In later testing I amended this issue however this in no doubt had an extremely detrimental effect on my product and whilst e consider the usage of this task to be a success in ensuring users experienced all key areas of the product, I believe the quality of my testing could have greatly been improved by avoiding this simple mistake.

Questionnaire 1

I chose to do a questionnaire as for my first cycle of iterative development I wanted to get a large sample size to extrapolate from. Whilst the responses wouldn't be as detailed as say a focus group, it would provide a general insight into what a large scale of my users feel about my product. This proved to be extremely useful for getting users grievances on a variety of areas of my product, with the UI being a common complaint I received amongst participants. This directly led to me making direct changes to address this outspoken issue in the first round of iterative development. Another area where this method proved invaluable was bug reporting as users listed a variety of bugs and issues that I had not found prior, which I later went on to fix.

Cooking Management Template Feedback

Please Complete after finishing the Task- If you have any additional questions please contact me via Discord
Discord- Techno)#0188

 justgameplay14@gmail.com (not shared) [Switch account](#) 

* Required

Did you Complete the given Task? *

- ☐ Yes
☐ No

If No, why?

Your answer

Did the Controls Make Sense to you (Moving, Pickup, Drop, Use)? *

- ☐ Yes
☐ No

Did the Controls Make Sense to you (Moving, Pickup, Drop, Use)? *

- ☐ Yes
☐ No

if No, Why?

Your answer

Do you feel any Features are missing from the Template? *

- ☐ Yes
☐ No

If Yes, what Features?

Your answer

Did you Encounter any Bugs in the Template? *

- ☐ Yes
☐ No

if Yes, what were they?

Your answer

Did the Preparation, Cooking, Serving Systems Make Sense to you? *

☐ Yes

☐ No

If No, Why?

Your answer

Please feel free to give any other Feedback on the Template?

Your answer

Responses-

7 responses



Accepting responses ☒

Summary

Question

Individual

Did you Complete the given Task?

Copy

7 responses



If No, why?

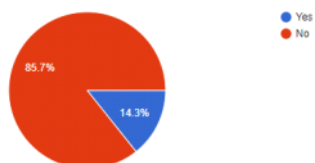
0 responses

No responses yet for this question.

Did the Controls Make Sense to you (Moving, Pickup, Drop, Use)?

Copy

7 responses



If No, Why?

6 responses

Option 1

Very fiddly when using F and G

Maybe do E pickps up and palces and instead of using F

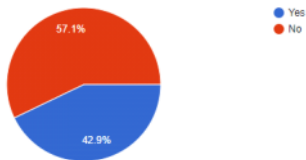
EReally annoying controls, need changing around

Controls were very annoying to use, maybe just have E do everything instead of having different buttons do each thing

Do you feel any Features are missing from the Template?

 Copy

7 responses



If Yes, what Features?

3 responses

Simple UI showing what the player is holding, and maybe some control hints

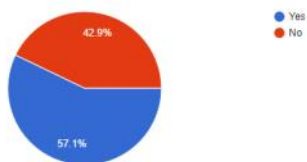
UI saying whats being cooked, what the order is, if the order is failed or succeeded etc.

dynamics when cooking such as smoke or some particle effect (this would more be for showing a player something is happening rather than just from an art side)

Did you Encounter any Bugs in the Template?

 Copy

7 responses



if Yes, what were they?

4 responses

Burger stayed on stove even though it was picked up and dropped at order station.

Bug with project not loading the first time

Burger was on stove even though I picked it up still???

After completing the task anytime I pressed "G" the order that was placed on the blue area would teleport to me instead

Did the Preparation, Cooking, Serving Systems Make Sense to you?

 Copy

7 responses



If No, Why?

1 response

The cooking made sense and I understand what the system is doing

Please feel free to give any other Feedback on the Template?

6 responses

Some form of UI showing what the player is holding. As for the controls I thumbed between F key and G key maybe left mouse click on stove/workstation activates it.

Needs more UI and change controls around

Needs more UI just a bit confusing at the moment!

More UI

Really confusing with just the print strings so I'd suggest more UI

Its not clear when you are holding something as it takes up a lot of screen space in games such as overcooked which have a similar idea the food items are majorly exaggerated taking up nearly as much space as a character even when being held by a character, this and the colour coding make them easily distinguishable in time sensitive situations which I feel would help in this template as it does seem like time would be a time based order game.

Overall whilst this methodology didn't provide extensive insight into how my target audience felt about my product, it did highlight some of the major grievances users had with the product in its current state. This led the direction of my iterative development and helped make several great improvements to my product in my opinion. In my opinion this justifies my use of a questionnaire in my testing process and would consider the decision to use it be a just and fruitful one.

Iterative Testing 2

Task 2- For the most part I kept the Task the same as the first one I sent out. The major changes however included the emphasis on users making their own games using the template and drawing attention to the addition of the newly added UI and what it meant.

Cooking Management Template Task

Setup

Download the zip file "CMTTemplateTask2"

Extract the zip file to the location of your choice

Open Unreal Engine 5.0.3

In Unreal Engine 5.0.3 browse to and open the "CMTTemplateTask2" project

Task

Step 1- Press Play in the editor when you are ready

The order "Burger" should appear in the top left of the screen

Step 2- Walk over to and pick up the Bread

Use E to pick up Items

Step 3- Take the Bread to the Preparation Station

Place the Bread on Preparation Station by pressing E when next to the Preparation Station

Step 4- Prepare the Bread on the Preparation Station

Press E to Prepare the Bread

Wait until the Progress Bar has reached 10, this should take 3 Seconds

You must stay next to the Preparation Station whilst Preparing it

Step 5- Pick up the Bread from the Preparation Station by Pressing E when next to it

Move to the Cooking Station

Place the Prepared Bread into the Cooking Station by Pressing G

Step 6- Pick up the Meat

Move to the Preparation Station and Prepare it, this should take 2 Seconds

Once this is Prepared, Pick up the Patty and Place it in the Cooking Station

Step 7- Once both the Bread and the Patty are in the Cooking Station, Press F to cook them, this should take 6 Seconds

Continue this until you reach a Score of 200

Step 8- Bin the remaining ingredients by Picking them up and Placing them in the Bin

Step 10- Press Escape to Quit the game and return back to the Editor

Step 11- Create your own Cooking Management Game by editing the Blueprints and Assets within the Template

Step 8- Once the Burger has been cooked, Pick it up and Move to the Customer

Press F to Serve the Burger to the Customer

It should then say either Order Completed or Order Failed in the top left of the Screen

This should increase your Score based on how quickly you Sell it

Once you have Finished the Task, Please fill in the Feedback Form below

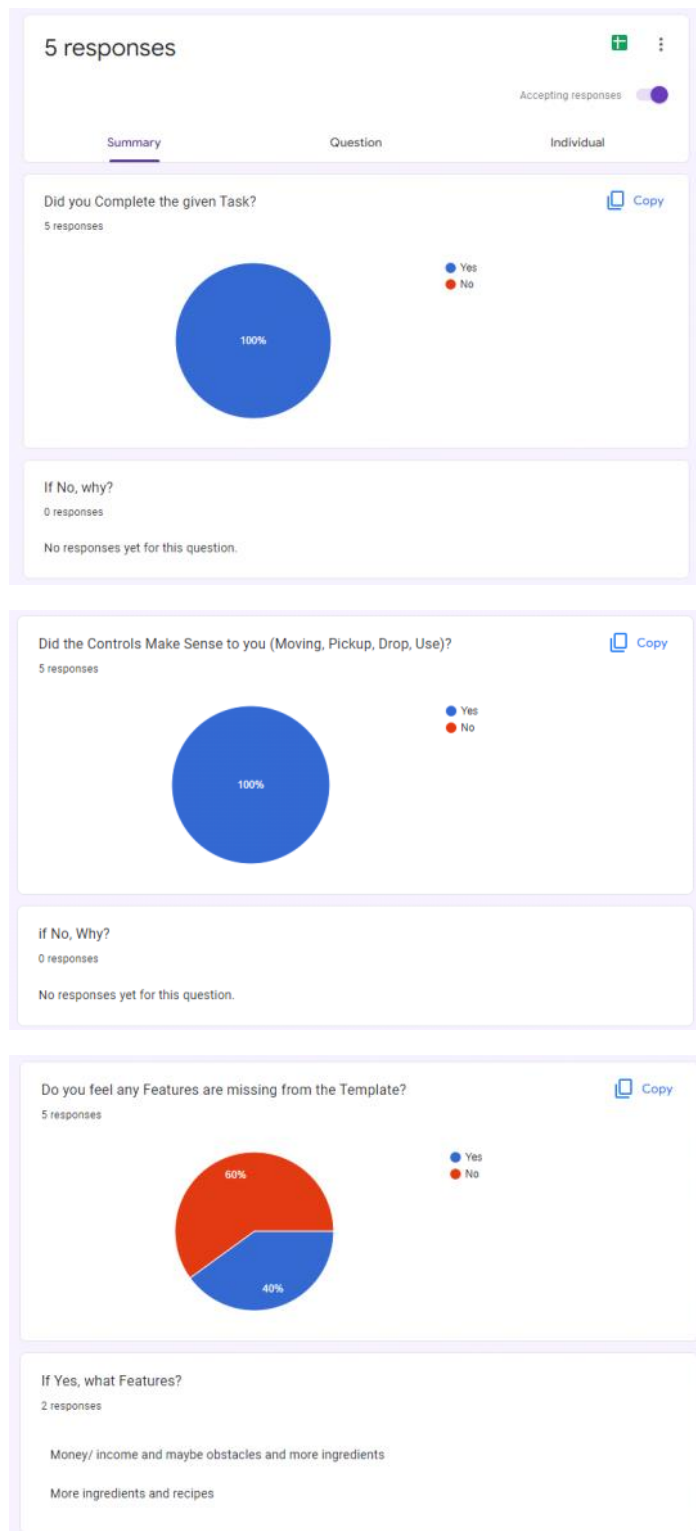
Feedback Form: <https://forms.gle/1998w3d79GvC3jd>

For any additional requests please Contact Me on Discord "Techno300388"

The effects of these changes were immediately noticeable with all candidates viewing the code, evaluating how clear it was to understand and use. In addition, I added a question asking whether about the UI in order to gauge my audience's insight into the clarity and effectiveness of the product's UI. I made this question required to complete and as a result, all 100% of candidates answered the question, granting me a far better understanding of how my target audience felt about the quality and clarity of the product's UI. On the other hand, this did not directly ask candidates if they used the template to make a cooking management game and nor did I ask how easy or effective the product was to use to make to do so. Whilst I made a multitude of improvements in the 2nd task, yielding more invaluable information that once again led my iterative development, I believe that I should have been more direct in instructing candidates to use the product to make cooking management games. Whilst there is clear indication that candidates did indeed do this, there is no concrete evidence that they did so due to a lack of an explicit question querying so and more importantly how easy and effective the product was at doing so.

Questionnaire 2-

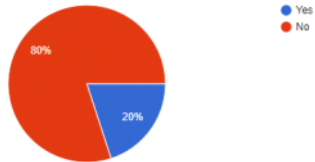
Just like the second task, whilst I kept much of the 2nd questionnaire the same as the first, I made key changes to specifically address the issues that plagued the first. This included lack of questions regarding the UI, Folder Structure and ease of use and effectiveness of the product. I also corrected the numerous spelling mistakes throughout in order to ensure clarity in the questions asked. The results of these changes had great effect with candidates now able to give their feedback on these elements of the product previously unmentioned in the questionnaire.



Did you Encounter any Bugs in the Template?

 Copy

5 responses



If Yes, what were they?

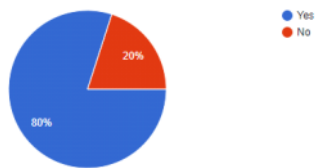
1 response

File didn't open at the start

Do you feel the UI was Clear in Presenting
Key Information about the Game State (Customer Patience, Game Timer, Appliance
Timers etc.)?

 Copy

5 responses



If No, Why?

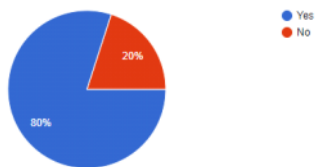
1 response

Don't realise thje green bar was customer patience

Did the Preparation, Cooking, Serving Systems Make Sense to you?

 Copy

5 responses



If No, Why?

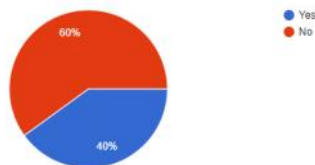
1 response

SHouldndt need to cook teh bread

Did Folder and Asset Structures Make Sense to you (Easy to Navigate, Appropriate
Naming Conventions)?

 Copy

5 responses



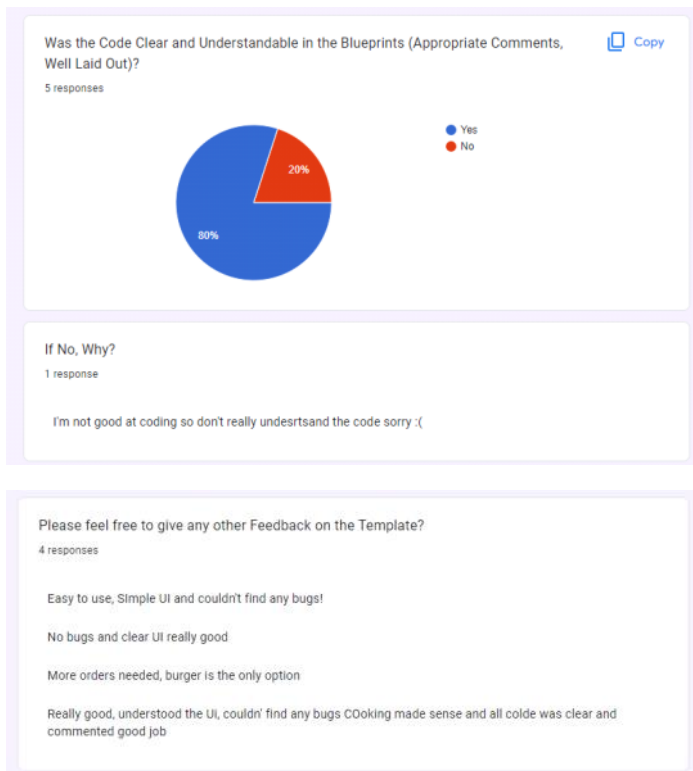
If No, Why?

3 responses

ibt confusing

Folder names were bit confusing

Folder names could be clearer



The results from the questionnaire showed that candidates found that the majority of changes I made in the previous cycle of iterative development were positive additions with 100% of candidates said that the controls now made sense, 80% found no bugs in the and that the core gameplay systems (Preparing, Cooking and Serving) made sense. Comments highlighted user's satisfaction with the product and more specifically the significantly clearer UI and fewer bugs within the template. Despite there being no mentions of questions regarding how easy users found the product to use and its effectiveness at making Cooking Management games which was another oversight on my part, I consider this questionnaire to be successful in providing evidence the changes I made to the product were positive and effective and the only key areas I need to change were the naming conventions used in assets and folder structures and making the comments for clearer. The changes I made specifically addressed these issues, reaffirming a more consistent naming conventions of folders, assets and code, rewriting comments making it clearer what each section of code did and further bug testing and fixing of all systems of the template.

Focus Group-

After receiving the feedback from my 2nd questionnaire, I handpicked a few candidates from said questionnaire that I felt gave the most interesting responses and organised a focus group in Sparck Jones. I decided to do this in order to get a more detailed insight into how my target audience felt about my product. I believe my questionnaires provided brief insight from a wide range of candidates on a variety of areas of my product. After receiving the results of which, I decided to do a focus group in order to get more detailed responses from a smaller sample size of my target audience in order to understand what specific areas of the product they liked, disliked, found easy to use, found too complex, feel need improving etc.

Cooking Management Task Focus Group

Ewan- Hi everyone, did you all complete the task?

All- Yes

Ewan- Nice, first of all did the controls make sense to you RED

RED- Yes, it has the same controls as Overcooked I think and yeah it just made sense really

Ewan- That's good, what about you GREEN

GREEN - Yeah made sense to me, maybe you could make E use the oven as well because it does everything apart from that's it's just a bit confusing that that's the one thing it doesn't do

Ewan- That's fair, what about you BLUE?

BLUE- Yeah made sense to me, I liked that 'E' both picked up and put down objects, I know some games do that differently but I like it this way

Ewan- Thanks everyone, now did anyone encounter any bugs in the template?

RED- No

GREEN- Not me sorry

BLUE- I found one if you took out the in Ingredient whilst it was being chopped, when you took out that ingredient and put it in after a few seconds it would be prepared instantly

Ewan- Yes I'm aware of that one, I'll fix it after this but thank you anyway. Did anyone use the template to make their own Cooking Management game.

RED- No

GREEN- I did yes

BLUE- Me too

Ewan- Alright GREEN and BLUE was it difficult to use? Did you understand what the code did?

GREEN- I understand it yeah, the comments really helped make each bit clear

BLUE- I understood most of it but some bits I didn't understand and the comments for it weren't clear enough I thought

Ewan- Thanks, I'll take note of that, finally does anyone have any other comments or feedback about the Template they'd like to add or discuss

RED- Not really, was a good template, it functioned well and I couldn't find any bugs so all good from me

Ewan- Thanks you RED, what about you BLUE?

BLUE- Thought it was really good, only thing I'd say would be make some of the comments a bit cleaner and remove that bug I said, but apart from that was good

Ewan- Thanks BLUE I'll do that. And what about you GREEN?

GREEN- yes thought it was really good, like no bugs, did what it's supposed to, I guess you could add more features like washing plates or when you burn something in the Oven it sets on fire?

Ewan- I didn't include them because they weren't core to the genre I thought, but given more time I would add more non-essential features like that

GREEN- Oh yeah they're definitely not essential but I feel it would be good if you could add them in the future

Ewan- Yes, I agree thanks, GREEN. Well, that concludes this focus group, thanks everyone for coming

The results from the focus group proved to be very interesting. Not only did the candidates highlight bugs that were not mentioned in the questionnaires, but the census of that the commenting of the code specifically needed to be made clearer was reiterated as users were finding it difficult still to understand what it did. Just as the feedback from the questionnaires did, the responses from the focus group proved vital in guiding my iterative development process. I attribute responses from the focus group specifically to greatly helping the bug finding and fixing process as one candidate highlighted bugs that had previously been unaware to me. Another major success of the focus group was providing evidence that candidates had in fact used the template to make their own Cooking Management games. 2 out of 3 candidates used the template to make their own Cooking Management games with both understanding how to use the template with only BLUE having some issues understanding what some code did, which they attribute to its unclear commenting. In conclusion, I consider the focus group to have been an enormous success, not only serving its purpose of providing more detailed insights from my target audience but it also helped correct the mistakes made in the questionnaires i.e not specifically asking if candidates had used the template make their own Cooking Management games, which this focus group proved whilst also giving insight into how easy and effective users found the template to be.

In-house Testing

Throughout the development of my product, I constantly tested my template in-house. I did this in order to keep up to date with new bugs being found in my product as in my iterative development, new updates were constantly being made based on user feedback. This in turn meant more bugs would plague my template each time I made a change to my template. Therefore in order to keep up with the constant flow of new bugs being found in my product, I tested for bugs each time I made a change. I attribute this regular in-house testing to be a major factor in the lack of bugs in my final product and coupled with my iterative development approach I believed greatly enhanced the quality and polish of my product. As a result I would consider the in-house testing to be one of the resounding success in my testing and development process as a whole.

Conclusions

Monday, April 18, 2022 12:29 PM

What went well- I felt the overall development of my product went very well, with all the essential features of my template being created and implemented into my product. Additionally, I was extremely happy with the bug testing and fixing process as in its current iteration, I believe there to be no bug in my template. After multiple iterations of iterative development and constant in-house bug tests on my part I found there to be no bugs currently in the template, with all known bug/issues such as issues with picking up preparing/cooking item from appliances not stopping the timer, being able to place ingredients next to appliances and not being able to pick them back up, the customer not recognising that the meal served was the correct order, giving back an order failed for every meal served, to be resolved. [Testing \(Web view\)](#) [Challenges and Solutions \(Web view\)](#)

What went wrong- I felt however the optimisation of my code was an issue that still lingers in my product currently. I believe the code of many of my systems could be done a lot more efficiently and the methods of which my systems are coded to achieve their intended goals could be done in a more optimal way for example not having to create references to other blueprints by using get actors of class in many blueprints as this is not only inefficient but also requires that actor to be present in each level even if users do not wish for that actor to be. Furthermore I think that further cycles of iterative development should have taken place as I only managed to make 2 sets with my audience. Despite me going through countless cycles of iterative development with myself I still feel that more testing with my target audience to ensure the product fit user's requirements. [User Requirements Analysis Testing \(Web view\)](#) [Challenges and Solutions \(Web view\)](#)

What I learnt- From the development process I learnt the importance of iterative development and testing as I felt the any cycles of iterative development and testing I did helped greatly in reducing the number of bugs within my product. Feedback from users helped identify many key issues with previous iterations of my product including the lack of UI and clarity of core systems, confusion over the controls and the model of the burger still remaining on the stove even though it had been picked up. [Testing \(Web view\)](#)

What I would do if I had more time- if given more development time, I would create and implement more non-essential features in the template. This would include money/income, more ingredients/meals, different types of appliances (steamers, boiling pots, Deep fat fryers etc.), plates and dishwashing and more. I decided not to include this as I felt planning to include these features in my product would be an overscope. Additionally as my Product specification states, these features were concluded that they were not core features to Cooking Management games and therefore due to the nature of templates including only essential features of genres, it was not required to include aid nonessential features in order to achieve the product's purpose- to allow my target audience (primarily game developers experienced and inexperienced) to develop Cooking Management games as my product includes the core features required to create such games as shown in my Literature Review, Technical investigation and my Product Specification. [Literature Review \(Web view\)](#) [Technical Investigation \(Web view\)](#) [Product Specification and Design \(Web view\)](#)