trouble's Brewing

game design document

Trouble's Brewing is a VR game about preparing potions to fulfil orders as quickly as possible. In the game the player must experiment to discover the effects of ingredients at their disposal and practice their techniques to produce the highest quality potions.

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CONTENTS

version history

VERSION 1.0

- Shop environment built in Unity.

- 3D assets imported into the environment and optimised into prefabs.

- Experimentation with toon shaders.

VERSION 1.1

- Putting liquids in cauldrons added.

- Materials finalised.

- Lighting added

- Ingredient jars added

VERSION 1.2

- Made all relevant objects interactable.

- Added ingredient usage to cauldron.

- Added village environment

VERSION 1.3

- Reduced number of cauldrons to one, multi-cauldron functionality will come later.

- Potion spawning added.

- Data structure for ingredients added.

VERSION 1.4

- Added basic NPC.

- Stirring and cooking added.

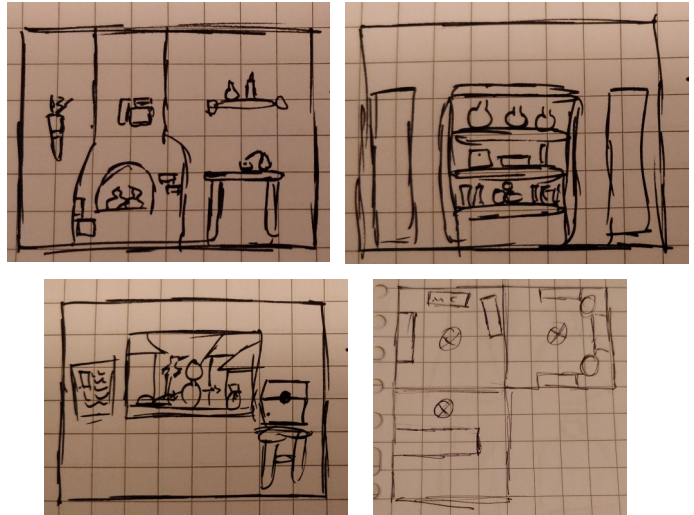- Sounds added.

VERSION 1.5

- Basic random quests.

- Chopping and grinding.

- General polish.

Concept Art

ENVIRONMENT

These sketches show what we thought the environment for the game would look, and how it would be laid out.
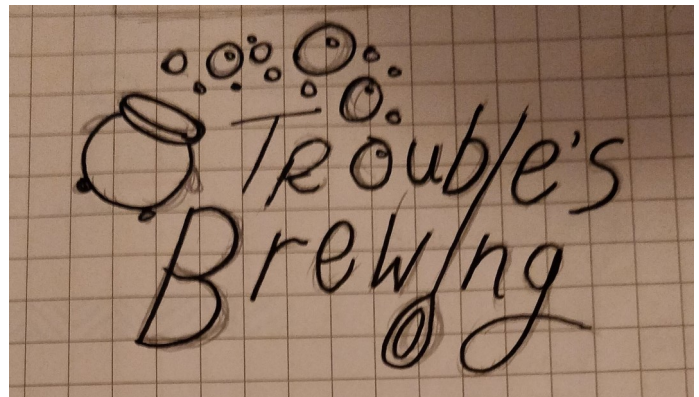
The final design is very faithful to the layout shown here since we were quick to realise the aesthetic we wanted.

TITLE LOGO

This is the original sketch for the game's logo.

As soon as we had decided on the name we tried to incorporate a few elements of the game's concept into the design.

ASSET PROTOTYPES

These sketches show the designs for a few of the assets that were custom modelled for the game.

The top left shows some of the ingredients, top right shows the cauldron, knife and spoon, and the bottom show the potion bottles.
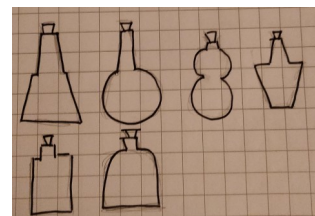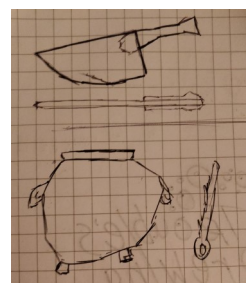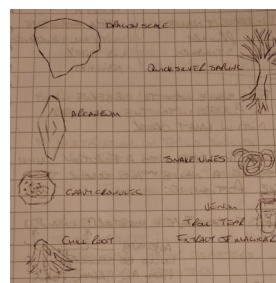
design goals

#1

Ability to create potions from every combination of ingredients available, with each ingredient having different effects depending on what it is paired with. These effects would be unknown to the player to begin with but with each successful potion they would become visible when hovered over.

#2

Randomly generated quests with vague indicators of what the player needs to make for the quest giver, encouraging experimentation. Additionally, a series of more substantial quests and objectives that deliver a narrative for the player to follow, to encourage continued play.

#3

A potion quality system that rates the player's technique and grants bonuses and penalties for excellent or subpar scores, and a reputation system based on the quality of potions that the player hands in to quest givers as well as how accurately the player was able to determine what potion was required.

#4

A currency system that the player can use to repair and purchase additional or upgraded equipment to make more and better potions, these would feed into the main questline in order to create a slight level gate for the player to work past.

#5

A daily (in game) restock of the ingredients used, which would come with the opportunity to purchase recipes to discover the effects of ingredients, possibly also with the chance to buy rare ingredients for the main questline.

#6

A partially interactive environment where the player can interact with the items they need to complete their objectives without making such a mess that playing the game becomes Frustrating, and an active environment outside of the player's space to make the world seem lived in.

game details

WHAT IS THE PURPOSE OF THE GAME?

The player combines ingredients into the different potions and concoctions requested by NPC customers. They have to prepare and mix ingredients in the right order and maintain their workstation as they play. The player's goal is to earn renown and carry out work for bigger and better rewards.

WHAT MAKES THIS GAME DIFFERENT FROM THE COMPETITION?

The pacing of the game will stand out against the slower moving games currently on the VR market. It will also take place in a single confined space, removing the need for movement mechanics that can often negatively affect the flow of VR games.

WHAT IS THE SETTING?

The story is set in a medieval age fantasy town, where the player serves as the apothecary. The town is filled with a population of common folk but is frequently visited by adventurers, wizards, and kings, who set the player about brewing the concoctions they need.

WHAT/WHO WILL THE PLAYER CONTROL?

The player controls an ordinary person in a first-person perspective, no part of the player's character is visible so it functions more as a self-insert situation. It may be that adding lore into the game would require that the player avatar become a more developed character.

gAme detAils (cont)

WHAT IS THE MAIN OBJECTIVE?

The main objectives of the game are to explore and unlock all of the ingredient combinations by completing the specific orders that NPCs set, reach the maximum reputation level, collect wealth, and complete the full set of special quests set by named NPCs.

SINGLEPLAYER/MULTIPLAYER

The game will be entirely singleplayer, introducing multiplayer would likely lead to very entertaining gameplay, however multiplayer VR is not especially accessible.

GAMEPLAY HOURS

In theory the game can be played infinitely with an endless supply of randomised quests, but with focused gameplay the main quests might be concluded in just a few hours.

VICTORY CONDITIONS

Completing main quests would serve as victory conditions, though they would not end the game. A true victory would likely be the completion of all upgrades.

inspiration

OVERCOOKED

Our primary inspiration for the tone of the game is Ghost Town Games' cooking simulator.

- Pacing, which grows more frantic as time goes on.

- Variation, the player is given different orders to fill within a level.

- Task management the player has to keep track of multiple different tasks at the same time.

SKYRIM

Skyrim's potion making mechanics informed a great deal of how we designed our game.

- Ingredients have 4 different effects each, which the player must experiment to understand.

- Different model assets and colours for each variety and effect of potion.

- The concept of potency and quality based on experience and materials used.

game world

THE VILLAGE

The village that can be seen outside the potion shop is the home of all the player's customers. It's a traditional fantasy setting , where folk are dependent on magic and potions for their daily lives.

Some occupants of the village include: a bumbling wizard, a young knight, a witty maiden, and an impatient innkeeper.

The player cannot access this space, only interacting with it through the window.

SHOP FRONT

This is the place where the player receives their quests, and hands over the potions they make. The player can use the ledger kept here to restock on ingredients and upgrade their equipment.

The player can also view their current reputation on a scroll on the wall and their gold supply in the chest.

This space is through a doorway from the rest of the shop.

KITCHEN

This is the main gameplay area, situated between shop-front and the shelf space.

The player uses the tables in this area to chop, grind, and stir ingredients into potions, and can work between a number of cauldrons that can be placed in the large fireplace.

This area is in the same room as the shelves, however they are separated by a table.

SHELVES

The shelves keep every ingredient the player needs ready to use in the game world. The back wall has a mounted shelf with a large number of small jars, while the left and right walls have big standing shelves with a few bigger jars on them

Some of the smallest ingredients sit in vials on a barrel to one side.

The open space in the middle of this area is where the player begins the game.

game characters

THE POTION MAKER

- The player's character throughout the game, this individual is little more than an avatar for self insert.

- Some lore may be added to explain the reason behind the character's situation.

THE PREVIOUS OWNER

- This character is the player's source of information when beginning the game.

- They may be a deceased relative or a total stranger.

THE WIZARD

- Could serve as the tutorial quest giver, as wizards share a theme with potion making.

- Should be bumbling and a little inept, giving the player a reason to help him.

VILLAGERS

- Everyday folk from all walks of life that need potions, if there are to be fixed characters they should come with predefined personalities and wants.

- At least 3 should be named regulars, the rest can be randomised to give greater variety of requests.

SOUNd ANd MUSIC

MUSICAL SCORE	SOUND EFFECT
Title Screen Theme	Bubbling Water
Ambient Theme	Glasses Clinking
Quest Get Jingle	Pouring Water
Quest Complete Jingle	Mixing
Potion Made Jingle	Chopping
	Grinding
	Footsteps
	Teleport
	Fire Crackle
	Page Turn
	Coin Dropping
	Cork Opening
	Dropping Sound
	Splash into Water
	Fizzing
	"Speech"

Asset design

ENVIRONMENT

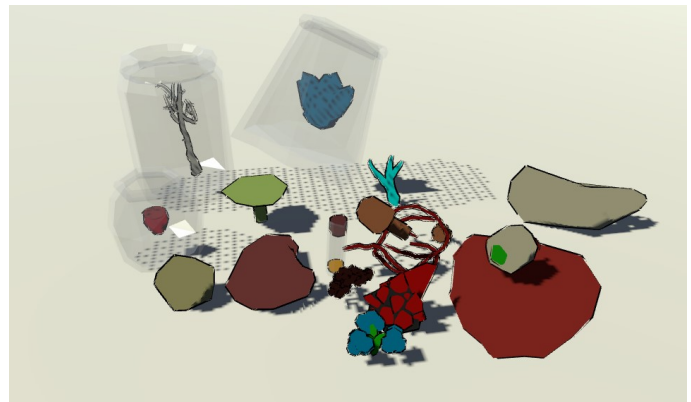Here are some of the assets modelled for the game.

A few, like the chopping board and the mortar and pestle, were made for use on mechanics that weren't included in the prototype.

INGREDIENTS

These are the ingredients used by the player to make potions.

Each is saved as an independent prefab, and also inside of a jar, so they are on display at all times.

VILLAGE

This village model is the only asset not made custom for the game.

We sourced the model from SketchFab and removed the static people from it, then added the same toon shader as the rest of our materials use.

gAMe Blueprint

START UP

1. From the title screen player selects "Begin Game".

2. Player spawns in the back of the shop.

3. Player is prompted to open notebook for tutorial.

4. Player is given navigation instructions.

5. Player navigates to the shop front.

TUTORIAL QUEST

1. From the shop front player interacts with the wizard, who asks for a potion.

2. Player is given a note in their notebook stating the effects the potion should have.

3. Player is directed to the kitchen area and given instructions on potion mixing.

POTION MAKING

1. Player adds a base liquid to the cauldron.

2. Player selects and adds a primary ingredient.

3. Player stirs potion.

4. Player selects and adds secondary ingredient.

5. Player places cauldron in fireplace.

QUEST COMPLETE

1. The potion the player has made appears above the cauldron.

2. Player takes potion and navigates back to the shop front.

3. Player places potion on the counter.

4. Player receives "Quest Complete" notification, and rewards.

credits

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Programming

Asset Modelling

Texturing

GEORGE BELT

Level Design

Lighting Effects

Particle Effects

JOSH WEEDEN

VR Optimisation

Programming

Writing

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DIS*