



SIPHON MASTER

design document

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EDCI 556, William Watson, 4/21/2020

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GAME CONCEPT

INTRODUCTION

Siphon Master is a relaxing 2D simulation game designed to teach anyone the nuances of professional coffee siphon brewing technique.

Description

By playing, you become a Siphon Master. Practice coffee industry-approved methods of making perfectly brewed siphon coffee in real time. Entertain a variety of interesting customers by preparing siphon coffee. Learn how proper technique leads to accurate extraction while unlocking new levels. Face a new challenge every level, and earn badges to earn the chance to test a wide variety of siphon brewing equipment. Claim rewards that expand your general coffee siphon knowledge each time you prepare coffee.

Genre

Serious stylized simulation

Players

Single player

Platform

Designed for mobile.

KEY FEATURES

- Provides a relaxing, judgment-free training space
- Teaches siphon techniques approved by the Barista Guild
- Allows players to compare the performance of a wide variety of expensive equipment
- Clear and immediate feedback on coffee extraction

- Scoring condensed from World Brewer's Cup evaluation standards

MARKETING

Background

Customers and baristas alike often find the technical side of coffee impenetrable. There is an extreme lack of widely available information on brewing technique and coffee history. On top of that, my search for serious games about coffee yielded no results. The main returns on a 'coffee game' search are games that are business simulators modeled after 'diner dash' or any game with 'tycoon' in the title.

Coffee Siphons, which have existed for about 300 years (Harris, 2007), are currently gaining popularity in the United States (Smith, 2016). Still, siphons remain somewhat a mysterious. Although Siphon brewing is theatrical and fascinating, I have met many experienced baristas who, upon their first exposure to siphon brewing, expressed feelings of intimidation and said, 'that seems too complicated for me to learn'. Yet coffee siphons were a prevalent home method of brewing coffee until the advent of the auto drip brewer (Harris, 2007).

Target Audience

The target player is a coffee professional that already wants or needs to learn proper siphon technique. There are huge barriers to entry into siphon brewing. According to the Specialty Coffee Association of America (2014), the average Barista in the United States earns \$22,035 per year (p. 10). Even if one wanted to try making coffee with a siphon, the necessary equipment is cost prohibitive. Siphon setups are fragile and generally range from \$70-\$600 (US). Siphons also have an element of danger as they often utilize open flames.

Reasons to Utilize Siphon Master

There are huge barriers to entry into siphon brewing. According to the Specialty Coffee Association of America (2014), the average Barista in the United States earns \$22,035 per year (p. 10). Even if one wanted to try making coffee with a siphon, the necessary equipment is cost prohibitive. Siphon setups are fragile and generally range from \$70-\$600 (US). Siphons also present an element of danger as they often utilize open flames.

Training employees using this game will save employers from investing in an inordinate amount of 'training' equipment. Allowing employees to learn the basics of siphon brewing using the game will also reduce labor by minimizing in-person practice guided by a mentor or trainer. Siphon master will allow retailers to quickly and confidently implement theatrical coffee siphon service in their cafes.

Having a quick way to train new hires makes good business sense; in the specialty coffee industry, a barista's average tenure at one company is only 2 years (Specialty Coffee Association of America, 2014, p. 16). Siphon Master will reduce stress on teams due to high turnover by automating portions of siphon training and ensuring that all coworkers learn identical technique.

The game is structured such that players can progress at their own pace. Baristas that already know the basics will be able to unlock content quickly, while players that need more help will still be rewarded even when they repeat levels. Allowing new hires to complete a portion of their training independently will reduce peer pressure and performance anxiety during the training session.

Demographics

According the Specialty Coffee Association of America (2014), the average age of a barista is 20 (p. 6). 60% of Americans play video games, and the average gamer is a 33-year-old who has already been gaming for 14 years (Entertainment Software Association,

2019, p. 6). The target audience for Siphon Master are likely already receptive to games.

Hooks

- Inviting, nurturing environment
- Rewards earned regardless of score motivating the player to complete their collection of badges and equipment
- Level progression and feedback enable players to reflect on their own progress
- Meeting new unique customer personalities

CORE GAME ELEMENTS

OVERVIEW

Siphon Master contains several levels. You must achieve a ‘good’ score on every stage within one level in order to unlock the next level. After unlocking a level, you may replay any previous stage to earn a better score if desired. Each stage will follow the same basic pattern with different elements added based on the theme of the overall level. You will brew and serve siphon coffee to a customer. Afterwards, you receive a reward and tips.

GAME MINUTE

At the beginning of the game, the ‘Tutorial’ level as well as the ‘Minimal Master’ level are available. Although locked, the other levels are visible. Entering the ‘Tutorial’ introduces you to the main brewing stage.

When the tutorial begins, you meet a trainer who begins preparing siphon coffee for you. As they go, they describe each step in the process. The center of the screen starts with only the base of a siphon; as the trainer begins to prepare the siphon, more

elements are added to the base. At the bottom of the screen, icons representing the elements of the siphon are highlighted as the trainer adds them to the brew. Once the coffee grounds are added to the brew, a timer appears (in the top right corner). The timer is highlighted at key points during the brew. The trainer serves you the coffee and encourages you to try making a siphon yourself.

Once you accept the trainer's coffee, you will select a customer to brew coffee for and enter the main brewing stage. Your customer greets you (from the top left of the screen). Every other visible matches the beginning of the tutorial. You begin replicating the trainer's siphon technique by activating the icons at the bottom of the screen. As you brew, your customer makes small talk and reacts to the siphon's theatrics. If your brew finishes with a dome (60% chance), you collect a piece of equipment.

Once the siphon coffee is ready, you serve the customer and they rate the coffee you've served. The customer rewards you with a badge. Next, the trainer will break down your roast, body, and acidity scores. If your scores are not perfect, the trainer gives you a technique pointer to improve your cup quality. From the feedback screen, you may choose to replay the same stage, move on to the next, or examine your newly earned badge.

CHARACTERS

Character Speech

Characters' dialog will be displayed in speech bubbles, rather than voice-over. Basic characters (trainer, starter customers) will speak in Helvetica. Several customer characters will speak in fonts not used elsewhere in the game. Dialog will be triggered at key points in the brewing process, and will not require direct player input to trigger or advance.

Player Character

The player character is not defined by the game.

Non-player Characters

Trainer – The trainer is an androgynous character who wears an apron. The Trainer presents the tutorial level, the final score feedback after each brew, and appears in the background of the trophy/badge area. The trainer character is a friendly presence who cheers the player on.

Customers – Each time the player brews coffee, they will be given the opportunity to choose a customer to serve. Each customer has unique dialog, and the customer will make small talk and respond to the player's actions. If the player makes an error, they will respond in an encouraging tone. 3 choices will be available at the beginning of the game. As the player progresses through the levels, more characters will appear.

Customer character ideas:

Starter customers:

- Parental – encouraging, amazed, jokey
- Teen – image-obsessed, antagonizing
- Professional – friendly, impatient

Customers unlocked over time:

- Lumberjack – quiet, grunts
- Stuffed Animal – cute bordering on creepy, laughs often
- Princess – shy, curious
- Alien – speaks in wingdings
- Strict Aunt – suspicious of player
- Coffee Hobbyist – Asks questions, directs player
- Jokey Uncle – Parental customer x10

NARRATIVE

Embedded

Customers – As they player gains skill at brewing the siphon, they will have more time to read the customer dialog. They will slowly

discover the personalities of the customers as their performance improves.

Trainer – The player will see the trainer after every brew. The trainer’s core function is to encourage the player. However, the trainer requires enough variety of dialog to add an element of humor. The player will gradually learn about the trainer’s personal life (favorite movies, favorite food, living situation, etc.)

Unlocking content – Players will gain access to new levels as soon as their scores are good enough. Equipment is unlocked in order from most common to rarest/ most expensive.

Instant fails – Certain actions will cause player to instantly fail the stage.

Emergent

Dome reward – When the player finishes any brew, they have a 60% chance of creating a perfect dome of grounds, which will unlock a piece of equipment.

Badges – The badges earned at the end of a brew are rewarded randomly, not in a specific order. Additionally, the player will earn a badge after completing any stage, even if they have already passed that stage.

Sandbox Master – One of the levels allows the player to mix and match the equipment they have unlocked in any combination.

GAME MECHANICS

SCORING AND FEEDBACK

Artificial Intelligence

The artificial intelligence has three primary functions in this game.

1. Determining whether the player has earned rewards (dome, or badge)

2. Determining whether the player has unlocked content (levels)
3. Calculating the player's score and/or if they have instant failed a level (see rules)

Rules

1. Add water (instant fail if not added first)
2. Add brewing chamber
 - a. Brewing chamber spawns un-sealed from base
 - b. No points subtracted if this is added after step 3, but before step 5
 - c. If brewing chamber is clicked, it will seal upright on base (instant fail if chamber is sealed before step 5)
3. Add heat source
 - a. Heat source will automatically spawn at high heat
 - b. If clicked, heat source will be turned to low heat
 - c. Invisible timer will begin
 - d. If heat level is changed, the timer will reset
4. Wait for water to boil
 - a. If heat is on high, this will occur 30 seconds after the heat was added.
 - b. If the heat is on low, this will occur after 1:30 minutes
5. Seal brewing chamber on siphon base
 - a. Invisible timer will begin
6. Wait for water to ascend into brewing chamber
 - a. This will begin 10 seconds after sealing the chamber and complete after a total of 30 seconds
 - b. Instant fail if the player attempts to move on to any other step before the 30 second timer is complete
7. Turn the heat source to low
 - a. An invisible timer will begin
8. Wait for the water to transition from boiling to still
 - a. This will occur 15 seconds after the timer in step 7 starts
9. Add coffee grounds

- a. A VISIBLE timer will spawn in the top right corner of the screen
 - b. May be completed at any time after step 6
10. Stir coffee grounds vigorously
 - a. By double-clicking the stirrer tool
11. When the VISIBLE timer is between 30-45 seconds, stir coffee grounds gently
 - a. By clicking the stirrer tool once
12. When the VISIBLE timer is between 1:00-1:20, stir coffee grounds vigorously
 - a. By double-clicking the stirrer tool
13. Remove the heat source
 - a. By double clicking it
 - b. May be completed before step 12
 - c. Instant fail if this step is completed before step 11
14. Player input is finished, AI will determine dome/no dome finish.

Scoring

The player's score is based on the finished brew's:

- Acidity
- Body
- Sweetness

Adding and subtracting for final score:

- 10 points are possible in each category
- Each category starts the stage at 5 points
- Points are added/subtracted from each category based on player's accuracy

Acidity

- Completing timed tasks within required time limits = +1 instance
- Adding coffee grounds during or before step 8 = - all points
- Failing to complete step 13 on time = - 4 points

Body

- Completing tasks late = +1 each instance
- Completing tasks too early = -2 each instance
- Stirring vigorously = +1 each instance

Sweetness

- Completing all steps in the order listed in rules = + 5

Evaluation

- The player will be graded using verbiage applied in official World Brewer's Cup Championship scoresheets (Rules & Regulations, 2014).
- The player will receive a star rating (1-6 stars) that corresponds to the adjective awarded.
- If each category is at least 6, the player will earn at least a 'good' (required to unlock next level)

Full list of grades:

- 0-9 points earned – Unacceptable, 0 stars
- 10-14 points earned – Acceptable, 1 star
- 15-17 points earned – Average, 2 stars
- 18-20 points earned – Good, 3 stars (passing grade)
- 21-23 points earned – Very Good, 4 stars
- 24-26 points earned – Excellent, 5 stars
- 27-30 points earned – Exceptional, 6 stars

LOOK AND FEEL

Layout and design

- The game screen will be tall and thin; set up in portrait orientation utilizing the dimensions of an iPhone
- Color pallet should be limited to grayscale and 5 muted colors
- All typography will be set in the Electra LT Std family of fonts except speech bubbles

On every screen (whether it be a stage, a reward zone, or a menu):

- The center 1/3 of the screen will be devoted to the main play area on every screen
- The top 1/3 of the screen will contain secondary information
- The bottom 1/3 of the screen will be usable icons or buttons

Sound and Music

- Realistic sound effects will be used for the brewing process. A variety of water sounds are especially important
- Music is instrumental, moderate tempo music that could be classified as chill, LoFi, or Acid Jazz

Artwork

- Drawings of the siphon equipment will be minimal, consisting mostly of outlines
- Characters will be graphic, and flat. They may consist of no more than two colors.

USER NAVIGATION

- The user will be able to navigate to the main menu from any screen
- The player can restart a stage at any time

GAME PROGRESSION

Level Synopsis

Tutorial

One stage only, game will model steps and provide explanations. This stage will be auto played by the trainer character

Minimal Master

With three stages, this level will have the simplest setup throughout. The player will only be able to serve 3 starter customers.

One – Set up exactly like the tutorial level. Icons and visible timer will indicate hints if too much time passes without the player taking acting. Player should be able to easily replicate the tutorial.

Two – Same as One with no hints.

Three – Same as two with no visible timer.

Swag Master

This level will contain 4-8 stages. Each stage will feature a different siphon design for the player to test. Siphon designs will be based on the unique features of products currently available on the market. This level could be updated as new products emerge. Each stage in this level will have a short introduction similar to the tutorial to point out how the equipment differs from a basic setup. Each stage for this level will include a unique customer or even a group of customers.

Speed Master

This level only has one stage. The player will receive the basic setup from levels 1 and 2. They will need to complete the siphon at 2x speed (background music and timer will speed up!). To cheer them on, the player may pick any customer they have previously unlocked.

Style Master

This level will have 4-8 stages. Each stage will include a tutorial that introduces the player to an alternative method of siphon brewing. During each stage in this level, the player will serve the barista most associated with the recipe being used.

Sandbox Master

While this level has only one stage, the player can customize it any way. They will be able to mix and match tools, customers, and methods as they wish.

IMPLEMENTING SIPHON MASTER

LEARNING OBJECTIVES

Primary Objectives – practical and technical knowledge

1. Understand the essential tools and accessories related to siphon brewing
2. Learn to brew coffee using a coffee siphon
3. Rehearse accurate timing
4. Become familiar the cause and effect nature of siphon brewing
5. Anticipate common technical difficulties in siphon brewing
6. Learn how specific technical errors relate to sweetness, body, and acidity in the cup

Secondary goals – expand the learner’s coffee siphon literacy

1. Test less-common siphon techniques
2. Test a variety of siphon styles and accessories currently available on the market
3. Learn key moments in siphon brewing history

How the Game Supports Learning Objectives

Primary Objectives – practical and technical knowledge

1. Players will repeatedly interact with the tools and accessories related to siphon brewing and observe their functions.
2. Rehearse the steps and timing of siphon brewing repeatedly motivated by earning rewards
3. Rehearse proper timing both with a visible timer and without a timer
4. Reflect on feedback containing specific comments regarding cup character
5. Make mistakes in a safe playground that can be reset in an instant

6. Learn how scoring relates to cup character through repeatedly comparing performance errors with the supplied feedback

Secondary goals – expand the learner’s coffee siphon literacy
The secondary learning goals emerge when the player becomes more advanced in the game. Each badge will be fun to look at and will contain a tidbit of siphon history. Each equipment item will have a brief description included. As the player advances, the customer characters will begin to ask questions triggering the player to look up badge information.

SAMPLE LESSON PLAN

1. Introduce siphon brewing by demonstrating in person or showing a short video while narrating
2. Describe their company’s reasons for implementing siphon service
3. Provide a printed version of any proprietary Standard Operating Procedures to trainee(s)
4. Give trainee(s) time to begin playing the game (10-20 minutes)
 - a. Instruct trainee(s) to return when they reach a ‘good’ score on Minimal Master: stage One
5. Ask each trainee individually if they feel comfortable trying to brew a real siphon
 - a. If they do feel confident, have them demonstrate the ability
 - b. If they do not feel confident, have them complete the entire Minimal Master level
6. Give trainee(s) another goal within the game before dismissing them
7. When you see them again, discuss what they learned by playing Siphon Master!
- 8.

Other activities

If all trainees feel confident:

- Have them compete to see who can beat Minimal Master fastest
- Ask trainees to try to explain how Acidity, Body, and Sweetness scores are calculated based on their knowledge of coffee extraction

If trainees are hesitant:

- Brew a siphon in person while they play a stage simultaneously
- Brew a siphon incorrectly while they watch the tutorial level and ask them to critique your performance afterward

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