

# **Business Plan – Draft 1**

Bar Bee Tender

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A division of <u>Huckleberry Finn Corp.</u>

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# **Executive Summary**

#### **Business Overview**

Bar Bee Tender, a division of Huckleberry Finn Corp, is a consumer goods company that enhances athome social experiences through its innovative product - a gamified countertop cocktail-making machine. The machine, which gets more challenging as it dispenses more drinks, features a local game similar to 1980's Simon and trivia games, and offers Wi-Fi connectivity for extended social interaction through a smartphone app and integration with social gaming platforms. The company aims to market this product to higher-income households.

#### **Business Model and Revenue Streams**

Revenue for Bar Bee Tender is generated through multiple channels:

- Sales of the cocktail-making machine, which combines entertainment with the convenience of perfectly mixed drinks.
- Sales of accessories like additional tanks, cleaning supplies, mobile accessories (carrying case, Bluetooth speaker battery pack).
- Digital sales including a monthly subscription to the smartphone app and add-ons like trivia and recipe expansion packs.

#### **Market Analysis**

The primary target market includes individuals aged 30-60 with household incomes of \$150,000 or more, with a focus on tech enthusiasts and early adopters in urban tech centers. The design of the machine is tailored to appeal to this demographic's preference for quality and luxury. The product will initially be launched via Kickstarter to gauge market interest and subsequently expanded to a wider consumer base.

#### **Organization and Management**

Bar Bee Tender is owned by Nicole and Jeff Sawyer, with Jeff as the CEO. Jeff's expertise lies in electrical engineering, product design, and internet sales, while Nicole focuses on concept design and product testing. Currently, there are no other owners or full-time employees.

#### **Product Line**

The flagship product is the Bar Bee Tender machine, available in various styles (art deco, old west, etc.) and capable of making a wide range of cocktails. It features a capacitive touch screen and precision pouring technology.

#### **Patents and Trademarks**

A patent is pending for the unique gamification concept of drink pouring. The company also owns the trademark for Bar Bee Tender and has established a website and blog.



#### **Technology and Development**

The product is based on an ESP32 microcontroller with Wi-Fi and Bluetooth capabilities. Development involves collaboration with various partners for manufacturing and design, with plans to launch a prototype by mid-2024 and start production later in the year.

### **Marketing and Sales Strategy**

The product launch will occur in three phases, starting with a Kickstarter campaign targeting early adopters, followed by a broader consumer rollout through direct-to-consumer channels and eventual expansion to online and physical retail stores.

#### **Financial Projections**

The financial projections include estimates for the development phase, Kickstarter campaign, and second-year operations. The projections consider various scenarios based on unit sales and price points.

#### **Operations Plan**

Initial supply chain operations will be outsourced, focusing the team's efforts on enhancing the user experience of the device and app. As the company grows, certain supply chain elements may be internalized.

#### Conclusion

Bar Bee Tender is positioned as a socially focused, innovative company aiming to revolutionize home entertainment with its unique cocktail-making machine. Its strategic focus on a specific high-income market segment, coupled with a scalable business model, positions it well for success in the consumer goods industry.



# **Business Description**

Bar Bee Tender is a division of the Huckleberry Finn Corp, a holding company. Bar Bee Tender is a consumer goods company that creates social experiences at home by manufacturing a countertop cocktail-making machine that is gamified. The cocktail-making machine has a local game based on Simon from the 1980's as well as a fun trivia game. The key to the fun is that the games get more difficult as the machine pours more drinks. In addition to the local game the cocktail-making machine is connected to the internet, via Wi-Fi, allowing for endless social interaction via a Smart Phone app as well as integrations with social gaming platforms via open APIs. The industry is consumer goods. This product will be marketed at higher end households with enough disposable income to purchase a countertop cocktail-making machine.

The name Bar Bee Tender is intentional. Bar and Tender coming from bartender. The Bee, because you are getting buzzed, not only from the drinks but also from the fun social experience that is created.

Incomes for Bar Bee Tender will come from a variety of sources. One being the sale of the physical device, that stand alone provides a fun social experience coupled with pouring the most perfect cocktails. Another component of the business model is the sell of accessories, such as additional tanks, cleaning supplies, mobile accessories such as a carrying case and Bluetooth speaker battery pack. The last, and potentially most lucrative, tier of revenue comes from digital sales, a monthly subscription to the smart phone app coupled with addons such as trivia and recipe expansion packs.

Bar Bee Tender is a social company focused on bringing fun to the world. This is memorialized with our Massive Transformative Purpose (MTP) being:

**Bringing people together and breaking down social barriers:** This means that our company provides a platform to bring people of different cultures and communities together to have fun. Our first product Bar Bee Tender does this by providing a fun, social gaming atmosphere that crosses all barriers both physical and virtual.

In addition to this purpose, we are a conservation minded company with some of the proceeds of the the sale of Bar Bee Tender being donated The Pacific Trail Association, who maintains the PCT which is a trail that traverses the west coast mountains of the US from Mexico to Canada. This is important since the device and company was founded in Wrightwood, CA, a small mountain town situated on the PCT.

Our competitive advantage is that we have a unique experience that brings people together to have fun while enjoying perfect cocktails they don't have to pour. This experience includes the patent pending coupling of the gamification of cocktail pouring with the physical and virtual social experiences.

# Market Analysis

Our target market is people aged 30 to 60 years old with a household income of \$150,000 and above, who enjoy cocktails. Initially this market will be tech enthusiasts and early adopters that would be willing and interested in purchasing a new cocktail-making machine on Kickstarter. That is, they are early adopters of technology, likely living in tech centers like San Francisco, Los Angeles, New York, Boston etc. Early adopters will likely be from the younger half of the target group since they are typically more tech savvy and interested in cool new tech devices.



The selection of households with income of \$150,000 and above, is because they will typically have more disposable income that can be spent on luxury items and hobbies. They are likely to value quality and are willing to pay a premium for products that align with their interests and lifestyle. This is why the design of the machine is critical, it needs to be elegant and sexy, something this demographic would be willing to showcase on their bar or kitchen counter.

To attract this demographic on Kickstarter, it will be important to emphasize the technological innovation, ease of use, and the exclusive nature of the cocktail-making machine. Highlighting how the product aligns with a tech-savvy, luxurious lifestyle would also be key. This strategy will be covered more later in the sales and marketing section.

The market described above is a very specific market, the selection of this focused market is intentional for the initial roll out. It is essential that a small, focused demographic be selected to reduce marketing costs. The market will be expanded as the roll out continues.

The percentage of households in the US that make over \$150,000 is about 20%. The U.S. Census Bureau estimates that there are 131.43 million households in the US. Of those households making more than \$150,000 we can estimate that 1% might purchase a product like the Bar Bee Tender. This makes the phase 1 potential market size of 262,860 units. A sizable market for the initial offering.

The strategy of using Kickstarter to gauge interest in the MVP is key to understanding who is interested and confirming the phase one market described. Eventually expanding to all households with a like for cocktails and a sufficient disposable income. Other channels that this concept can be expanded into are bars (portion control and pre pour), hospitality and professional conferences.

# Organization and Management

Huckleberry Finn Corp, the holding company that owns Bar Bee Tender is a S-Corp located in California, USA and is owned 51% by Nicole Sawyer and 49% by Jeff Sawyer, both founders of the company. Jeff Sawyer is the CEO. Jeff has a Master of Science in Electrical Engineering from the University of Southern California. He has close to 20 years' experience working with wholesale distributors who import consumer goods and market them. He possesses a deep understanding of product design, backend systems design, supply chain logistics and internet sales. The inspiration and initial idea are the brainchild of Nicole. Nicole holds a Batcheler of Science in Psychology from CSU Northridge. She is critical in concept design and product testing. There are currently no other owners or full time employees.

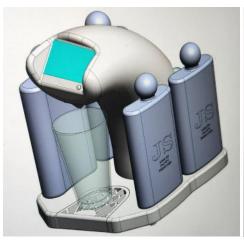
## Product or Service Line

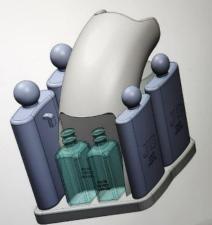
Our product line is built around a countertop cocktail-making machine, named the Bar Bee Tender. This machine will be offered in different styles, for example art deco, old west, traditional and space themed. The initial version will have six tanks, four of which can hold a bottle of 750mL liquor and two smaller 350mL tanks for mixers such as bitters, simple syrup, or fruit juice. The combination allows for the machine to pour the perfect cocktail be it an Old Fashioned, Manhattan, Straight Bourbon, Margarita, or anything that can be created using the ingredients in the machine. Using the connected smart phone



app the user can select what is in each tank and the system will suggest drinks that can be made with those ingredients.

Below are concept photos of the art deco version. This will be the version first released. You can see the 4.3 inch capacitive touch screen on the main column that will be coated chrome. The four main tanks will be oblique or solid plastic, with the back tanks designed to look like medicine bottles. The machine will fit in about a 30cm cube.





Not only can the Bar Bee Tender mix a perfect cocktail that rivals a professional mixologist there are features that bring a fun social interactive experience. This experience is created by two unique features, gamification and social connection.

#### Gamification

The embedded gaming system that gets harder as more drinks are poured. For example, the Simon based game will require a user to pass more levels as the machine pours more drinks, or the trivia game will ask more and more difficult questions as the night continues. Originally designed to slow the drinker down, it has become a fun social experience in that many party goers work together to get the next drink poured.

#### **Social Connection**

The Bar Bee Tender smart phone app not only brings those same games to a smart phone and smart speaker it expands the experience to be interactive. Like multi person drink pong, where the people do not even have to be in the same location. Or an integration with existing drinking games via APIs. In the future an interface with the virtual reality world allowing a friend to buy you a drink at a virtual bar. Furthermore a "send a drink" interface can be created where you can send your friend or loved one a drink for their birthday, so when they turn their Bar Bee Tender on again it will say Happy Birthday and offer up a drink of their choice. The machine is connected to other devices using Wi-Fi or Bluetooth with AWS which makes these ideas possible.

#### **Accessories**



A standard line of accessories will be offered. Additional tanks, a tank stand, an integrated speaker, and battery pack, carrying case, cleaning kits and branded glassware are examples.

#### **Additional Models and Other Uses**

In addition to the model that is focused at the \$150,000 household income demographic, a reduce feature set model could be created and pushed down market. Especially to college students and young professionals. For example, the college version would be focused on pouring shots and have more social "drinking" games like pong and other popular games played by college students. Other uses to the connected drink pour could be back of house bars where servers could put in drink orders and the liqueur could be perfectly dosed and ready for the back of house bar to complete the drink. This provides efficiency where a single bartender can pour more drinks per hour and provides dosing control to the restaurant owner. These are a few examples of opportunities on the horizon to provide growth as the business matures.

#### **Patents and Trademarks**

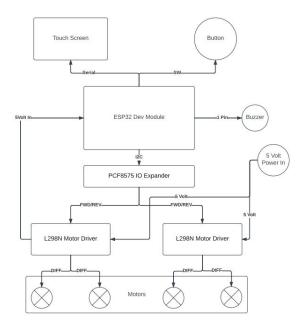
The novel concept of the gamification of the drink pour has a patent pending (63/529,969 USPTO) with plans to file the complete patent application mid-2024. The patent is owned by Jeff Sawyer and will be licensed to the company initially at no cost. The Bar Bee Tender name has a trademark filed with the USPTO and is an asset of Huckleberry Finn Corp. The website barbeetender.com has been established with a blog and will eventually have an eCommerce platform for direct-to-consumer sales.

#### **Product Technology and Development Plans**

The brains of the device are the ESP32 microcontroller, which provides Wi-Fi and Bluetooth connectivity with a 2-core processor. The Human Interface is a 4.3-inch capacitive touch screen that allows for a rich and dynamic interface for the user. Ingredient dosing is done using six parasitic pumps that allow for a pour precision of 1/30<sup>th</sup> Oz while providing a food grade sanitary solution. The interface allows for purging, priming, and cleaning of all liquid lines within the system.

Below is a sample block diagram of the core electronic components of the system.





The development process started with a home working prototype. Once the concept, interface and electronics were worked out, research was done to plan how to convert the home prototype into a manufacturable appliance. Huckleberry Finn Corp. has contracted with MorphoMFG based in Hong Kong to help identify and manage factories in Asia. The initial design files in solid works have been made by an Aerospace Engineer based in the United States. The electronics (main board) has been designed in the United States. And finally, the firmware and the HID interface experience has been written and designed. A proof-of-concept AWS infrastructure and Smart Phone app have also been written. Once the final design is completed in CAD and the board finalized, these will be delivered to MorphoMFG to identify the factories and create a prototype. The firmware, backend AWS infrastructure and app will all be developed over time and updated using an over-the-air update mechanism, this allows for the hardware to be shipped and updated over time. AWS has been selected for its ability to auto scale to keep up with growing customer demand as well as their rich and deep technology stack including serverless lambda functions, IOT device management and account security features. After the machine prototype is accepted, production will be started. The prototype is targeted for mid-year 2024 with production starting later in 2024 and delivery to customers before Christmas 2024.

# Marketing and Sales Strategy

Bar Bee Tender will be rolled out to the market in three phases. The first being the early adopters and market testing phase which will be focused on a Kickstarter campaign leveraging tech and cocktail focused blogs, social media influencers in the cocktail and lifestyle sectors and a limited social advertising spend. This phase is key to define "is there a market" and the attempt to "go viral". The second phase will be a roll out to additional consumers using word of mouth and social media advertising and influencers via a direct-to-consumer model. This phase will also include marketing to Airbnb owners, hotel operators and other hospitality focused companies. These are being targeted since hospitality can allow their customers to experience the Bar Bee Tender fun leading them to purchase



machines for their home. All followed by phase three which is a full roll out to online and physical retail stores and the larger consumer market.

Phase one is critical to the success of this product. The plan is to gather a list of blogs and influencers that can be given discounts on product in exchange for stories and marketing via their channels. A big bang market campaign will be launched with these blogs and influencers on the day the Kickstarter campaign is launched. It is expected that this launch will drive traffic to the Kickstarter site and result in more sales. The target initial product launch is at least 300 units at a price point of \$499 creating a revenue of \$149,700. The price point of \$499 has been selected because this is believed to be a price that a household with the demographics of \$150,000 household income would be willing to spend on this type of product. Market research into the competition also indicates that a basic machine, without social experience starts at a price point of \$369. The addition of social experience, a sexy but eloquent design, a better human interface and the superiority of our cocktail pours leads us to believe that we can charge a premium over the competition. Especially when selling to early adopters via Kickstarter that are excited about the new automatic and social cocktail pouring experience.

A second and potentially more lucrative revenue stream is the subscription sales for the smart phone app. A monthly cost coupled with addon charges for additional games and game expansion packs. The monthly subscription price of the app is projected at \$4.99 with additional games and expansion packs being sold in the price range of \$3.99 to \$9.99 depending on the item. This revenue stream will not begin at first since the early adopters will be given the app for free.

# **Financial Projections**

Since this is a very early-stage venture the financial predictions below are an educated guess. Once the MVP is created and the Kickstarter campaign is launched better predictions will be able to be made. Below are estimates based on the data known at the time of the creation of this document. Three tables are below. The first is the estimate of the development phase and Kickstarter campaign. The second shows the development phase profit for four options, 300 and 500 units sold and two different price points \$449 and \$499. The last being an estimated second year financial projection. Salaries for executives are not factored in these projects and all monies are expected to be reinvested in the company for future growth. Additionally, costs are estimated at the high end and revenues are estimated at the low end. We are hoping that the Kickstarter campaign performs much better than estimated. It should also be noted that in the initial year we are seeking an investment of capital of at least \$100k to help fund the design and development since the sales of the units alone will not be sufficient.



## 1st year projections

| Knobs                         |                |                |                 |
|-------------------------------|----------------|----------------|-----------------|
| Units                         | 300            |                |                 |
| Price                         | \$ 499.00      |                |                 |
| Top line revenue              | \$ 149,700.00  |                |                 |
| Investment                    | \$ 100,000.00  |                |                 |
| Profit                        | \$ (13,075.40) |                |                 |
| Maufacuring and Planning      | QTY            | Price          | Extended        |
| Broker Fee                    | 1              | \$ (5,000.00)  | \$ (5,000.00)   |
| Design                        | 1              | \$ (70,000.00) | \$ (70,000.00)  |
| Molds                         | 1              | \$ (70,000.00) | \$ (70,000.00)  |
| Initial Order                 | 300            | \$ (150.00)    | \$ (45,000.00)  |
| Inbound Frieght               | 300            | \$ (20.00)     | \$ (6,000.00)   |
|                               |                |                | \$ (196,000.00) |
| Marketing                     |                |                |                 |
| Influancers                   | 2              | \$ (2,000.00)  | \$ (4,000.00)   |
| Ads                           | 1              | \$ (4,000.00)  | \$ (4,000.00)   |
| Other Marketing               | 1              | \$ (5,000.00)  | \$ (5,000.00)   |
|                               |                |                | \$ (13,000.00)  |
| Kickstarter                   |                |                |                 |
| Campain Value                 | 1              | \$ 149,700.00  | \$ 149,700.00   |
| Campain Fee                   | 5%             | \$ (7,485.00)  | \$ (7,485.00)   |
| Credit Card Charges           | 3.20%          | \$ (4,790.40)  | \$ (4,790.40)   |
| Outbound Shipping             | 300            | \$ (25.00)     | \$ (7,500.00)   |
|                               |                |                | \$ 129,924.60   |
| Other                         |                |                |                 |
| Investment                    | 1              | \$ 100,000.00  | \$ 100,000.00   |
| Platform (AWS Development and |                |                |                 |
| hosting)                      | 1              | \$ (29,000.00) | \$ (29,000.00)  |
| Patent Submission             | 1              | \$ (5,000.00)  | \$ (5,000.00)   |
|                               |                |                | \$ 66,000.00    |
| Profit                        |                |                | \$ (13,075.40)  |

# Permutations of Variables

| Units            | 300            | 500           | 300            | 500           |
|------------------|----------------|---------------|----------------|---------------|
| Price            | \$ 499.00      | \$ 499.00     | \$ 449.00      | \$ 449.00     |
| Top line revenue | \$ 149,700.00  | \$ 249,500.00 | \$ 134,700.00  | \$ 224,500.00 |
| Investment       | \$ 100,000.00  | \$ 100,000.00 | \$ 100,000.00  | \$ 100,000.00 |
| Profit           | \$ (13,075.40) | \$ 39,541.00  | \$ (26,845.40) | \$ 16,591.00  |



## 2nd year projections

| Knobs                    |               |                |                |
|--------------------------|---------------|----------------|----------------|
| Units                    | 500           |                |                |
| Lifetime Units           | 800           |                |                |
| Price                    | \$ 449.00     |                |                |
| Top line revenue         | \$ 224,500.00 |                |                |
| Investment               | \$ -          | **             |                |
| Profit                   | \$ 97,254.60  |                |                |
| Credit Card Percent      | 3.20%         |                |                |
| App monthly price        | 4.99          |                |                |
| 3PL shipping cost        | 5%            |                |                |
| App store fee            | 30%           |                |                |
| Maufacuring and Planning |               |                |                |
| Order                    | 500           | \$ (100.00)    | \$ (50,000.00) |
| Inbound Frieght          | 500           | \$ (20.00)     | \$ (30,000.00) |
| 3PL Storage              | 500           | \$ (20.00)     | \$ (2,500.00)  |
| 31 E Storage             | 300           | (٥٠٠٥) ج       | \$ (62,500.00) |
|                          |               |                | \$ (02,300.00) |
| Арр                      |               |                |                |
| Subscription             | 400           | \$ 59.88       | \$ 23,952.00   |
| Expansion Packs          | 400           | \$ 4.99        | \$ 1,996.00    |
| App store fees           | 400           | \$ (19.46)     | \$ (7,784.40)  |
|                          |               |                | \$ 18,163.60   |
| Marketing                |               |                |                |
| Influancers              | 6             | \$ (2,000.00)  | \$ (12,000.00) |
| Marketing                | 1             | \$ (6,000.00)  | \$ (6,000.00)  |
| Ads                      | 1             | \$ (5,000.00)  | \$ (5,000.00)  |
|                          |               | ,              | \$ (23,000.00) |
| Sales                    |               |                |                |
| Campain Value            | 500           | \$ 449.00      | \$ 224,500.00  |
| Credit Card Charges      | 500           | \$ (14.37)     | \$ (7,184.00)  |
| 3PL Fee                  | 500           | \$ (22.45)     | \$ (11,225.00) |
| Outbound Shipping        | 500           | \$ (25.00)     | \$ (12,500.00) |
| Outboaria Siripping      | 300           | 7 (23.00)      | \$ 193,591.00  |
|                          |               |                |                |
| Other                    |               | <u> </u>       |                |
| Investment               | 1             | \$ -           | \$ -           |
| Platform                 | 1             | \$ (29,000.00) | \$ (29,000.00) |
|                          |               |                | \$ (29,000.00) |
| Profit                   |               |                | \$ 97,254.60   |
|                          |               |                |                |



# Operations plan

In the initial stages of the business the supply chain operations will be outsourced to third party providers that will handle conversations with factories, import logistics, warehousing, shipping, and call center services. Jeff has experience in 3PL warehousing and setting up call centers. All software including all user experience aspects will be handled by key team members and will not be outsourced. This approach will increase costs in the supply chain but will allow key members of the company to focus on creating the best human social experience possible via the physical device design and smart phone app.



# **Appendix**

**Provisional Patent Application** 

# AUTOMATED system that dispenses A drink IN ASSOCIATION WITH A game

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] None.

#### **BACKGROUND**

[0002] The embodiments herein relate generally to drink dispensers.

[0003] In some social games, drinking a beverage is a component of the game rules. Each participant manually pours their own drink or another person pours for them. Pouring a drink manually can be tedious, lead to a break in the action, or in some cases, manipulation/cheating by participants.

[0004] Automated drink dispensing systems include for example, electronic taps that pour a pre-defined volume of spirit into a cup. Generally speaking, these are stand-alone systems that are activated manually by an end user.

#### **SUMMARY**

[0005] According to one embodiment of the subject technology, an automated drink dispensing system is disclosed that includes a drink dispenser apparatus and an app. The drink dispenser apparatus may be controlled to pour one or more fluids for a drink. The app may control the operation of the drink dispenser apparatus. The app may include one or more games that end users can play. Events/actions in the game may trigger automatic dispensing of a drink by the drink dispenser apparatus. Some embodiments include a network of connected drink dispenser apparatuses that allow users to participate in games remotely from one another through a mobile computing device.



#### BRIEF DESCRIPTION OF THE FIGURES

**[0006]** The detailed description of some embodiments of the present invention is made below with reference to the accompanying figures, wherein like numerals represent corresponding parts of the figures.

[0007] Figure 1 is a top, perspective view of a photograph of an automated drink dispensing system in accordance with an exemplary embodiment of the subject technology.

[0008] Figure 2 is a side perspective view of the system of Figure 1.

[0009] Figure 3 is a front end view of the system of Figure 1.

**[0010]** Figure 4 is a block diagram of a networked computing system using multiple instances of the automated drink dispensing system in accordance with an exemplary embodiment of the subject technology.

#### DETAILED DESCRIPTION OF CERTAIN EMBODIMENTS

[0011] The word "exemplary" is used herein to mean "serving as an example or illustration." Any aspect or design described herein as "exemplary" is not necessarily to be construed as preferred or advantageous over other aspects or designs.

[0012] In general, exemplary embodiments disclose an automated drink dispensing system that includes a drink dispenser apparatus and an electronic software application (referred to in general herein as the "app") that remotely controls the drink dispenser apparatus. In some embodiments, the subject technology provides a programmable and remotely controlled drink dispenser apparatus that includes tanks that can be filled with fluids. The app may indicate what fluids are in each tank. The app may control the apparatus to dispense and mix fluids to generate cocktails based on the contents of the tanks.



[0013] In some embodiments, the drink dispenser apparatus may be operated in

conjunction with the app to trigger dispensing of a drink in response to a game action. The system

allows for a fair and controlled way of distributing drinks or beverages based on for example, the

outcome (win/loss) of a game interface. The single apparatus or multiple interfaced devices will

distribute a controlled amount of liquid, intended for human consumption, into a glass, shot glass,

mug, paper or plastic cup, or other such drinking vessel(s). As will be appreciated, the apparatus

will allow for the gamification of drinking one or more beverages for a single person or for multiple

people across multiple connected apparatuses simultaneously, whether the participants of the game

are in either local or remote locations.

[0014] The app may include one or more programmed games wherein an event in the game

triggers the drink dispenser apparatus to pour the drink. Participants may interact with the app

through a single computing device or from respective computing devices (for example, smart

phones or similar). As shown in Figure 4, end users may participate in a game from locations

remote from each other that each have an instance of the drink dispenser apparatus. Signals from

respective computing devices may be received by the different computing devices and the

respective drink dispenser apparatuses through the network so that dispensing of drinks and/or

game action is coordinated at each location.

[0015] Referring now to Figures 1-3, a drink dispensing apparatus is shown according to

an embodiment. In one example embodiment, the drink dispensing apparatus includes a control

device (microcontroller) (1) that is capable of controlling one or more motors, lights, and switches

with connectivity via local wireless or remote-based computing systems. Firmware (2) is

updatable by direct wire connection or over the air updates. Multiple liquid dispensing pumps (3)

allow for fast and precision dispensing of a controlled amount of liquid into one or more drinking



vessels. A delivery device (4) allows for the travel of a controlled amount of liquid from one or more holding containers through pumps to the dispensing system. Vessels (or tanks) (5) contain the liquids to be dispensed. These can be part of the device or an external apparatus that connects to existing bottles. These vessels or apparatus can contain an optional sensor to detect if liquid is available to dispense. Drink vessels (6), for example, glasses, shot glasses, mugs, paper/plastic/glass cups, or other such drinking vessels receive the dispensed liquids but are not necessarily part of the apparatus or system. Some embodiments include a human interaction device (HID) or interface (7) that allows for local control of the apparatus. The interface (7) may include a screen with a user input device (for example, a rotary switch, touch interface, or buttons).

[0016] A local gaming module (8) may be coupled to the microcontroller 1 and/or firmware (2). In some embodiments, the local gaming module (8) may be an interactive device that is operated based on users providing input to the gaming module (8). In some embodiments, the local gaming module (8) may have features that end users respond to as part of a game. In the example, shown, the local gaming module (8) includes a set of colored light buttons. End users may play games that require contacting the lights (for example, a reflex touch or pressing the lights in an order). A failed or passed attempt may trigger dispensing of a drink. When one or more end users fail an attempt, the system may register the event to other participants through the app. In some embodiments, the buttons may be used to identify a participant in a game.

[0017] Some embodiments include a mounting system (10) that allows for holding one or more drinking vessels that includes an optional sensor to detect whether the vessel is present. Other elements include a power supply (11) (electrical outlet or battery operated) and circuit boards, wiring, and components (12) for connectivity. In one embodiment, the remote computing environment (9) includes computing device interfaces for games, monitoring actions and liquid



levels, and APIs for remote access. The user interacts with this environment using a device such as a mobile computing device, web browser or a third party application.

[0018] In one example of operation, the control device (1) is connected to the pumps (3) and to the local gaming module (8). The control device is loaded with firmware (2) to control the device. The human-machine interface (7) is connected to the control device (1) for human interaction with the device. The control device (1) may log into the remote computing system (9) when the system is turned on. All electrical and physical connectivity is done using the components (12). The pumps (3) dispense liquids from the tanks (5) via the delivery device (4) to dispense liquids into the drinking vessel (6) positioned in or on the mounting device (10). The system is powered by a power supply (11).

[0019] In one example of setting up use of the system, a user provides liquids to be used in the drinks into the tanks (5). The hoses may be primed so that dispensing is ready once the activity associated with pouting begins. A glass(es) are placed below the pouring spout(s) of the drink dispensing apparatus. There are multiple ways for the apparatus to be triggered to pour a drink. One method is to review a list of available recipes and select one. Once the recipe is selected the user may engage in a game for game triggered pouring or by direct command for a drink using their remotely connected device. Another way to pour a drink is using a socially interactive game, for example, a trivia game where the winning user triggers a pour of a drink. In this interface, the type of drink being poured is selected as a preference by the user either at the time of pouring or before playing the game. Other games could be virtual beer pong, card games, and classic arcade games.

[0020] As will be appreciated by one skilled in the art, aspects of the disclosed invention may be embodied as an apparatus, a system, a method or process, a circuit, a module, or a computer



program product. Accordingly, aspects of the disclosed invention may take the form of an entirely hardware embodiment, an entirely software embodiment (including firmware, resident software, micro-code, etc.) or an embodiment combining software and hardware aspects that may all generally be referred to herein as a "module", "circuit", or "system." For example, some of the elements disclosed above were referred to as a "controller" which may take the form of a circuit of various electronic elements, an integrated circuit, a system on a chip (SoC), a standalone processor, microchip, or microcontroller unit or any combination of the aforementioned. Furthermore, aspects of the disclosed invention may take the form of a computer program product embodied in one or more computer readable media having computer readable program code embodied thereon. The computer system readable media may be performed on a computing device (not shown). The system memory for a computing device may include at least one program product having a set of program modules that are configured to carry out the functions and/or methodologies of embodiments of the invention as described above.

[0021] Persons of ordinary skill in the art may appreciate that numerous design configurations may be possible to enjoy the functional benefits of the inventive systems. Thus, given the wide variety of configurations and arrangements of embodiments of the present invention the scope of the present invention is reflected by the breadth of the claims below rather than narrowed by the embodiments described above.

[0022] Terms such as "top," "bottom," "front," "rear," "above," "below" and the like as used in this disclosure should be understood as referring to an arbitrary frame of reference, rather than to the ordinary gravitational frame of reference. Thus, a top surface, a bottom surface, a front surface, and a rear surface may extend upwardly, downwardly, diagonally, or horizontally in a gravitational frame of reference. Similarly, an item disposed above another item may be located



above or below the other item along a vertical, horizontal or diagonal direction; and an item disposed below another item may be located below or above the other item along a vertical, horizontal or diagonal direction.

## **CLAIMS**

What is claimed is:

- 1. An automated drink dispensing system comprising a drink dispenser apparatus and an app as disclosed herein.
- 2. A software app that controls automatic dispensing of a drink in response to a pre-defined event in the software app.

# **ABSTRACT**

An automated drink dispensing system is disclosed that includes a drink dispenser apparatus and an app. The drink dispenser apparatus may be controlled to pour one or more fluids for a drink. The app may control the operation of the drink dispenser apparatus. The app may include one or more games that end users can play. Events/actions in the game may trigger automatic dispensing of a drink by the drink dispenser apparatus. Some embodiments include a network of connected drink dispenser apparatuses that allow users to participate in games remotely from one another through a mobile computing device.