Build-A-Beer

P1: Research Findings[1] – CPSC 481, Spring 2018

[1] Completed in accordance to assignment guidelines found at https://silvadasilva.github.io/CPSC481-2018S/en/#!pages/project1.md

Project Overview

Build-A-Beer seeks to exploit the gap that exists between microbreweries and home breweries by providing facilities, staff, and experience to customers who will distribute, promote, and identify recipes of beer.

Build-A-Beer has a public event that they call an 'exBeerience' in which customers create beer with the aid of an on-site brewmaster, but seek to allow customers to purchase and customize beers online as well.

Users purchasing beers online will be able to choose a previous beer recipe made at an exBeerience, chosen from Build-A-Beer's catalog, or to create a beer on-the-fly using a 'building beer' webapp, which will be the main function of this report.

We expect this webapp to be used through a module on the Build-A-Beer website.

Stakeholders

Who is impacted by our system:

- Customers
    - Customers need a notification to see when their brew is ready to be delivered or picked up and need the ability to select which option they prefer
        - Customers' needs could change after the order date: not many people know what they are doing five weeks from now
    - Customers need to have all relevant information about the Build-A-Beer/general microbrewery process to ensure clear use
- Consumers
    - Friends and family who will be drinking the finished product with the customer need to have confidence in the system's quality
- Manufacturers
    - The microbrewery will need to receive orders from the webapp and schedule when to brew and with what ingredients
    - They will also need to know if the customer requires a rented keg or a case of beer bottles, as well as whether a specific label needs to be printed and applied
- Warehousing
    - Warehouse staff need a way to organize which batch is assigned to a specific order
    - Delivery staff need a way to contact the customer to drop off the keg
    - Warehouse staff need the information required to facilitate order pick-ups
- Ownership

- The ownership group needs the system to work in a way such that it satisfies all above stakeholders
- The ownership group needs to ensure that the system abides by industry standards in order to ensure compliance with liquor legislation and to minimize bad debt

Task Descriptions

We expect our system to be used in the following ways:

- As a user I want to create a beer through the webapp
- As a user I want to make an account on the Build-A-Beer webapp
- As a user I want to buy a saved brew I created with a group of friends
- As a user I want to buy a saved brew from the Build-A-Beer catalogue
- As a user I want to place a bulk order for a future pickup date
- As a user I want to place a recurring order for my business
- As a user I want to place an order for delivery instead of pickup
- As a user I want to bind my Build-A-Beer account to the webapp on my phone
- As a user I want to add a label to the cases of beer I am ordering

Research Goal

We are attempting to find information that satisfies the following concerns we have identified:

1. Granularity
    a. How specific do we need to be for users? If we are too specific, will more experienced users be put off?
    b. How complex can the beer-making process be? How can it be simplified for a wide range of user experience levels?
2. Advice/Information
    a. What level of customization detail should we give to various user types/stakeholders?
    b. What, if any, recommendations should we give during the beer customization process?
    c. What steps are required for the beer-making process (basic varieties of beer)? What degree of variance is feasible?

Research Methods Chosen

1. Persona
    - Industry research from the business-provided profile statistics
2. Secondary Research
    - Research on microbrew/kit-based craft beer to determine what requirements need to be in the webapp

Research Method Design

1. **Persona**

   Build-a-Beer provided us with a profile of their target consumer group, as cited from a 2012 journal article.[2] As this article notes that 93% of respondents describe themselves as "passionate or enthusiasts," we used this profile as a tool for building the persona of a beer connoisseur. This persona, which we have given the name of Robert Atkins, is attached in Appendix 1.

   In addition to our persona of a beer connoisseur, we wished to create a persona of a more casual beer consumer. To do this, we used statistics obtained from the Beverage Marketing Corporation's U.S. Beer Guide 2017, attached in Appendix 3. This persona, which we have given the name of John Smith, is attached in Appendix 2.

2. **Secondary research**

   We discussed various areas surrounding the project that we required clarification or additional knowledge surrounding. We then conducted research into the intricacies of the craft-brewing process.

Findings

I. Persona

Two personas were created for two hypothetical target users: a connoisseur and an average beer drinker. The profiles were created based on information obtained from the infographic of the average beer drinker.

The main points of findings from surveys and research were:

[2] Murray, D. W., & Oneill, M. A. (2012). Craft beer: penetrating a niche market. British Food Journal, 114(7), 899-909.

- 60% of beer drinkers are male
- 42% of craft beer enthusiasts are between ages 35-49
- 72% have a bachelor's degree or higher
- 63% have a yearly income of over $75,000
- 93% self-identified as passionate or enthusiasts of beer

Other profiles could be created for users that fall outside of these demographics or for more extreme users. This would likely be done in an evaluation phase if we determined that additional personas were required.

The findings from the research created personas indicated the following:

- What we create should be well-thought-out and not overly simplistic in usage due to the fact that our personas were both proficient users of technology
- An above-average amount of information should be at hand and made readily available to assist the persona in creating a custom creation
- For the connoisseur-type user, comments and recommendations from the community on individual recipes should be available and users should be encouraged to document their creation so others may benefit from past knowledge
- Similar recipes might be shown as alternatives or baselines
- History and 'wishlists' might be a good option to consider
- Both pre-built and customization options would be required for the user base
- Quality and interest will be valued more highly by customers than quantity or price

Due to the education and career information from the above profiles, three main trends present themselves, but the key is the persona’s high knowledge and keenness to absorb more information. Within our system, knowledge and data must be readily available and easy to transition into and out of throughout the ordering and customization process.

Three key focuses that emerged are:

1. The interface must be polished and efficient in layout and use

2. Reference information should be prolific and readily available for processes and ingredients should users which to pursue them further. It should be easy to flip back and forth between information.

3. Customization and tweaking options should be readily at hand, built on top of basic options for the everyday user that can easily select and order popular pre-built recipes.

II. Secondary Research (Beer-Making Process)

The beer-making process contains three broad areas in which choice from the user will be required. They are as follows:

1. Fermentation Process
    a. Users should be asked about this option first, although it is the last step in the actual manufacturing of beer. Beer can generally be classified into these two categories:
        i. Ale: five-week fermentation period in a room-temperature environment
        ii. Lager: many more weeks in a cool environment
    b. Though the work being done during the fermentation process is largely back-end, it's important to let the users make this vital decision about their product as soon as possible
2. Malting Process
    a. The malting process can be broken down into two main categories:
        i. Grain-based malt: users combine a mix of barley, wheat, rye and other grains that reduce into a 'base' of beer. Though this is often entirely barley, variations exist that are often kept secret
        ii. Premade malt: can be bought already made and is essentially a heavy syrup that will contain the flavour base. This shortens cooking time by about eight hours and is most often used by home breweries to save time spent creating their own malt
3. Boiling Process
    a. The boiling process is when we take our brew and add flavour through a steeping process, similar to making tea
    b. Hops are added here to provide a bitter flavour and to help preserve the beer
    c. Flavour shots are also added here. For example, raspberries are added for raspberry beer or lemons are added for a citrus taste

Conclusion

Upon considering the relationship between our project and its stakeholders and task descriptions, we utilized two IDEO design techniques in order to complete the investigation phase of our Build-A-Beer project.

The first design technique used was creating personas, which gave us information about the types of users we can expect to serve as our target audience and how their traits and mannerisms can be used to inform important design decisions we will make when developing prototypes for our webapp.

The second design technique used was secondary research, which provided us with necessary information about the beer-making process not previously available to us and helped us to understand how best to structure our webapp in order to effectively serve our users and stakeholders.

Upon the completion of our initial project overview and investigation, we feel confident in our ability to enter the ideation process and construct lo-fidelity prototypes informed by the results of this report.

APPENDIX A