

Revision History

Version	Date	Description	Author
Inception Draft	1/27/2016	First draft. Will be refined as project continues.	Sam McAdams, Greg Dudar, Thomas Andrikus, Anthony Whitaker
Phase 2 Draft	3/30/16	Updated based on discussed changes, updated vision for reports.	Sam McAdams, Greg Dudar, Thomas Andrikus, Anthony Whitaker
Phase 3 Draft	4/25/16	Updated based on changes made during the course of the project and the finished product.	Sam McAdams, Greg Dudar, Thomas Andrikus, Anthony Whitaker

Introduction

We're trying to create an alcohol inventory system for a bar/restaurant. Our system will enable an establishment to accurately determine how much alcohol is on hand versus how much alcohol has been sold. Additionally, the system will allow the user to view a variety of other reports that display useful information about inventory and the movement of alcohol. These reports can be displayed over an interval chosen by the user to fit different needs of the bar. Our system will also allow an establishment to create custom cocktails so that inventory can be accurately assessed without having to individually edit each liquor inventory based upon cocktails sold. This will allow an establishment to quickly and accurately determine if the bartenders are giving drinks away, thus increasing the profits of said establishment. Our system will also allow the bar to flawlessly add and remove drinks and custom cocktails from the system, allowing for painless transitions when drink selections inevitably change.

Positioning

Problem Statement

Internal theft is one of biggest deterrents to any bar/restaurant. Therefore, being able to determine if drinks are being given away is vital to any bar/restaurant. Currently in order for an establishment to monitor their inventory there are limited options. They can pay a company to manage the system track the inventory for them, which can be costly, or track it on their own. If an establishment tracks the inventory on their own they either have to maintain spreadsheets, which is time consuming and quickly overwhelming, or use other software such as apps for iOS or Android. Additionally, maintaining a thorough history is difficult for many reasons.

Firstly, keeping track of inventory for an entire bar over a period of months or even years is going to generate a lot of clutter that can be hard to store and keep track of. On top of this issue, looking back at a certain date or period of time is a hassle, because it forces the bar staff to manually dig through a giant stack of papers to find the dates they need. Finally, the current apps on the market allow do not have the ability to determine what alcohol was sold based on mixed cocktails. This affects owner and/or managers of bar/restaurant establishments.

Alternative and Competition

- The person in charge of inventory may maintain spreadsheets
- The person in charge of inventory may consult previous inventory records and perform manual calculations to analyze changes in inventory over a certain time interval
- Outside companies such as “Bevinco”
- iOS and Android apps that allow for the managing inventory

Stakeholder Descriptions

Market Demographics

Inventory managers at bar/restaurant establishments.
Owners of said bar/restaurant establishments.

Key High Level Goals and Problems of the Stakeholders

High-Level Goal	Priority	Problems and Concerns	Current Solutions
Maintain Inventory	High	Inability to add customized drinks Bug-ridden updates could cause lag or even block any users from logging in	Add new column for new drinks on a biweekly basis Do plenty of testing prior to releasing new upgrades
Limit internal theft	High	Manager's account could be used by guest, allowing bartenders or outside actors to modify inventory	Inventory manager must ensure that he/she logs out of every session, regardless whose device it is logged on
Inventory tracking and information retrieval	Medium	Tracking inventory by hand over a long period of time is difficult to do efficiently, and retrieving old information over a specific period of time is difficult.	Manual selectin of a time frame to retrieve information

User Summary

This system is primarily designed for inventory manager of bar/restaurant to maintain inventory and limit internal theft. It will also allow for “Guests” to be able to view inventory but not edit it.

User-Level Goals

-Inventory manager: Input sales numbers from the POS system since the last time inventory was taken, compare current inventory numbers with previous inventory numbers to identify potential losses, print a summary of updated inventory numbers, create initial list of beer, liquor, cocktails, and food, add new drinks and retire old drinks as demand changes. Display and print a variety of different reports regarding the bar’s inventory and movement over a chosen interval of time.

-Guest account: Display a summary of the current inventory

User Environment

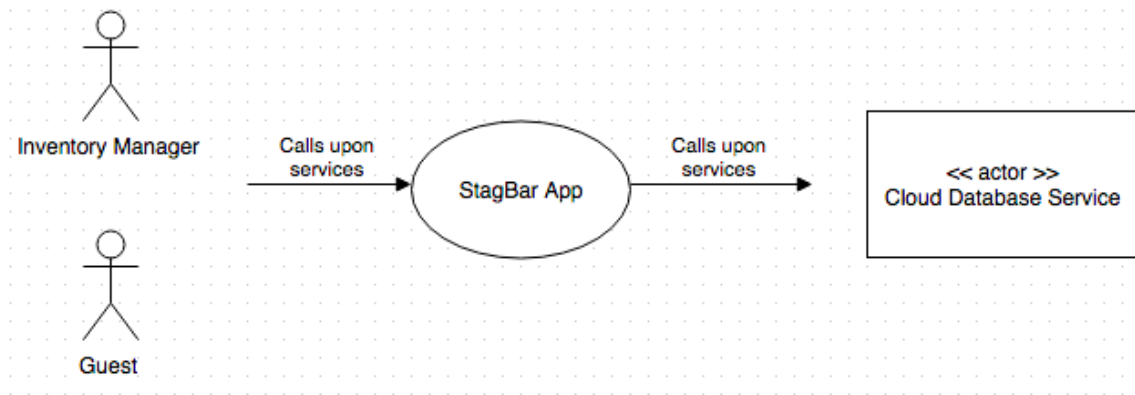
The user will begin their interaction with the system by logging in using a username and password. Depending on the permissions that their particular account has been given, the user will be shown a GUI with varying options. In the case of a guest account, the user will be given the option to view the inventory. In the case of an account with elevated privileges, the user will have options Alcohol, Mixed Drinks, Data Entry, Reports, and User Management. Alcohol allows for the creation of drinks, the retiring of drinks, and the creation of custom types. The mixed drinks screen allows for the addition of new mixed drinks, the editing of already existing mixed drinks, and the retiring or reinstating of mixed drinks. Data entry allows the user to enter information about their current inventory, sales, and add deliveries. Reports prompts the user with a start date and an end date, and displays reports over the chosen dates. Finally, user management will allow for the creation of new users, password changes, editing the permissions of existing users, and the deletion of users.

Product Overview

Product Perspective

This software is designed to work along with POS software that is already in place. It will take information that is generated by the POS software and use that information to make sure that the inventory is correct and up to date. The info will have to be manually added by the inventory manager however to allow for compatibility with all POS systems. It will allow users to view current inventory, as well as allow inventory managers to update inventory and monitor changes.

Figure vision - StagBar inventory app context diagram



Summary of Benefits

Supporting Feature	Stakeholder Benefit
User authentication	Allows management to limit access to the inventory information while still allowing employees to complete their respective duties
Automatic updating of inventory based on user's input of sales	Removes the need to manually update inventory numbers based on how much has been sold
Automatic removal of the correct amounts of liquor when a cocktail is sold	Eliminates the need to manually subtract the correct amounts of each liquor from inventory when a cocktail is sold
Comparison of current inventory numbers with previous inventory numbers	Allows management to keep up to date with drinks that are selling well or selling poorly; allows management to identify drinks that are possibly being given away, costing the bar money
Adding new drinks or remove old drinks from inventory	Allows management to easily and painlessly begin selling a new drink or retire an old drink to keep up with demand
Viewing and printing reports on the bar's inventory over a given interval of time	Provides numerous benefits for the bar, including which drinks are selling well/poor and peak times of the year for certain drinks that may demand an increase in inventory to meet demand.

Summary of System Features

- User authentication
- Initial setup of inventory
- View current inventory
- View reports
- Update current inventory
- Print reports on current inventory
- Compare current inventory with previous inventory over a selected period of time
- Add custom groups to help sort the alcohol effectively
- Add or remove drinks

Other Requirements and Constraints

This software isn't intended to be a replacement to POS software that is already in place. We are making the assumption that the establishment using this software already has POS software in place, and that that software is capable of printing out sales reports that are going to be used to enter information into this software.