**Comprehensive Systems Control Plan**

**Introduction**

The purpose of this document is help ensure business continuity. The client will need to process transactions without interruption in the event of a threat. This document will help to document the quality control related to this system.

**Data Entry Controls**

**Input Errors** can be a typo from a user inputting a change in inventory. For example, ‘11’ instead of ‘1’ for a quantity of bottles.

* Check to make sure all fields have a valid entry by using inputs masks where available
* Validate that all fields have the correct format by using input masks and field validation rules
* Validate entry by checking for correct data type by the use of combo boxes in the forms
* When making an entry to adjust inventory levels, we will set amount ordered or amount taken out data to be a required field

To ensure valid entries are made into the system input masks and field validation rules will be used within Access.

**Output Controls-** the data in this system is not confidential so output controls will not be necessary.

**Database Controls** are useful to properly maintain an up to date and accurate database. These controlswill include a backup to an external hard drive. This will help to ensure that in the event of a system crash, causing corruption of data or data loss, the system will be easy to restore.

* Database will be backed up every week on pc and external hard drive

The backup will be performed by the General Manager, and will be kept on an external hard drive. The external hard drive will be stored in a fire-proof locked safe in the administrative office in The Max.

**Access Controls** ensure that only people with proper credentials access the system. This will help keep data from being breached. These controls will include using a password to gain access to database. This will help to ensure that only people with proper credentials are using the system.

**Software Controls**

**Unintentional Errors** are errors that were left in the code by the developer on accident.

* **Software bugs** will be avoided by thorough testing of the database. It is important that data is put in and stored accurately to have proper reports generated.

**Intentional Errors** are errors that are caused by someone outside of the organization. These errors are done with the intent of hurting the organization.

To avoid intentional errors, such as viruses and malware, an anti-virus will need to be installed. Team Awesome suggests using Symantec. This software will be scheduled to run weekly to keep up with scans and updates.

**Hardware Controls**

**PC Control** will begin with the PC remaining in the existing office, which is kept locked when no one is in there. The PC and external hard drive will utilize a surge protector. The external hard drive will be kept in the fire-proof safe that is currently in office.

**Disaster Recovery Section**

**Contention Plan**

In case of a disaster the PC will be in a locked office, and the external hard drive will be in a fire-proof locked safe. The safe should protect against most natural disasters that might occur in this region. If a disaster is predicted to happen, the system will be shut down and stored. The user will then use their contingency plan. In the event of an unpredictable disaster, such as a fire, the system will remain running and be shut down when possible to preserve hardware as much as possible. Users will be advised to seek personal safety first and foremost in the event of a natural disaster. Safety of all employees and consumers is a priority of the club, with all else following suit.

**Contingency Plan**

In the event of a disaster the client will resort to using their current method of pen and paper while the system is out.

**Recovery Plan**

In the event of a recovery, if the PC is not operable a new one will be purchased. When a working PC is established, the backup from the external hard drive will be mounted on the PC. The pen and paper transactions will then be input into the system so the data in the system is up to date.