

# Use Case Report

## Desktop Application

### Add/Remove Drinks

In the settings of the adminconsole drinks can be added and removed. The added drinks can be sold at the party. Drinks are saved to a database. A drink has the following attributes:

- Name
- Size
- Minimum Price
- Maximum Price
- Start Price

### Adjust Settings

In the adminconsole the settings of the party can be adjusted. The following settings are planned to be adjusted:

- Adjust the price of a drink manually
- Change layout of the desktop application
- Change layout of the graph
- Change language
- Change time interval for updating the graph
- Change currency
- Change algorithm for calculating the drinks prices

### Show Graph

The graph should show the price history of all drinks. If an alcohol tester is registered, also the average alcohol level per time is shown.

### Show Statistics

In the adminconsole the statistic of the party is shown. You can see the price history of all drinks. In addition to that organizer information is shown.

### Buy Drinks

Drinks can be bought at a cash panel. At a party there can be several cash panels. Each drink which is bought has to be recognized in the system. When an RFID reader is connected to the cash panel a dialogue pops up, when the RFID reader recognizes an RFID card. At this point the current stock prices of the drinks will be paid. In the dialogue drinks can be selected. The customer does not pay at the cash panel. The drinks he buys are saved to the database.

When no RFID reader is connected to the cash panel, the drinks can be ordered manually and are paid at the cash panel.

### Stockcrash

A stock crash means the prices of all drinks reach the minimum price of the drink. A stock crash can be fired in the adminconsole.

## Hardware Interfaces

For stockparty two hardware interfaces are needed: RFID reader and alcohol tester.

RFID reader are used to recognize the ID of a party member. Each party member receives an RFID card at the beginning of the party. The RFID card has a unique key, with which a party member is identified.

Alcohol tester can be spread over the party location. The alcohol tester shows a party member his alcohol level. The alcohol level can be identified with the party members ID and can be used to calculate the stock prices.

## Create Algorithm

The algorithm for the price of the drinks has to be developed. Therefore the history of sold drinks and the alcohol level can be used.

## Smartphone App

### Show Statistics

In the Smartphone App the user can see several statistics of the party. The user can see a statistic of the price of each drink and also a statistics of the drinks he bought.

When there is an alcohol tester at the party, the user can also see a statistic of his alcohol level.

### Realtime Graph

The user can see a realtime graph of the current prices.

### Notifications

The user can receive notifications. For example the smartphone notifies the user when there is a stock crash. In addition to that the user can specify additional notifications. For example if the price for its favorite drink sinks below a customized price.

The notification can be vibration.