# SPOT CAFÉ SOFTWARE

The purpose of the software is to control the cybercafé client computers. To manage user accounts: balance and payment. And to report usage and financial statistics.

The cybercafé system we want, consists of 3 installable windows programs:

- The client
- The operator
- The server

The client will be the user interface for the customers.

The operator will be the control center for the staff.

The server will be the backbone of all the program, the client and operator function based on its settings and data. It shall be installed on a separate server.

The software we want should be compatible with all windows versions later than windows 7 for the client and operator, and windows server 2008 for the server.

The software should support one language for the time being: English.

With the possibility to install a language pack that will change the interface language.

# THE SERVER

The backbone of the software. It could be a service installed on a server machine. It will serve as the base of the software. The server settings could be changed through the installed application .exe. Or through connecting to the server's web service with an editable port, through a web browser with the right credentials.

# Features

The following list is the features required in the server. They should be divided to pages and tabs in an easy-to-edit user-friendly way.

#### General:

A page to create/edit employee accounts and their access privileges. The access rights are many, they will separate the tech staff from the cashier staff and so on. Some of the access rights are: access to the cash register, access to admin mode or maintenance mode on client PCs, access to server settings, etc.

A page to setup the database type and its settings. The database could be an SQL installed on the same computer, or a cloud based database accessible from anywhere. This database will have all the user information, client settings, financial data and statistics in raw form.

A page to setup computer groups. This will allow us to change hourly pricing on some PCs, and restrict access to some user groups from using certain PCs.

A page to setup user groups. In other words: Membership levels. Which will allow us to categorize customers the way we see fit, and allow us to offer some paid membership programs (for limited durations, example: VIP for 1 month). Different user groups should be flexible to having different UI, different pricing, different security settings, different computer group access.

More information is available upon request.

#### Additional:

From the server side, to control client computers, we want to have scheduled tasks to be pushed to PCs like: shutdown PC after X minutes of idle time. logout user after X minutes of idle time. etc.

## Security:

A page to setup security profiles through tick boxes of a list of features, to later be assigned to computer groups and/or user groups.

## Message of the day:

We want to assign a "message of the day", which will have some variable codes in it like %favorite\_game%, %username%, %birthday%, etc.

Example of MotD "Welcome %first\_name%, your last visit was %last\_visit%, enjoy..."

## Application management:

This can be done from the server side as a separate page, or from the control panel (maintenance mode from inside the client).

What we want here is a way for us to edit the custom UI into including the programs and applications that we want to include.

We want to have application profiles to assign to computer groups or user groups later. Different application profiles will have different applications available for each user group, or computer group.

The application type will decide which page this application will be on. Mainly we'll have 2 pages: Programs and Games. In each page, icons should be added and edited easily from the maintenance mode in the client.

A filter tool is needed on these pages for categorizing the programs and games into easier to find subgroups.

More information is available upon request.

## Reporting:

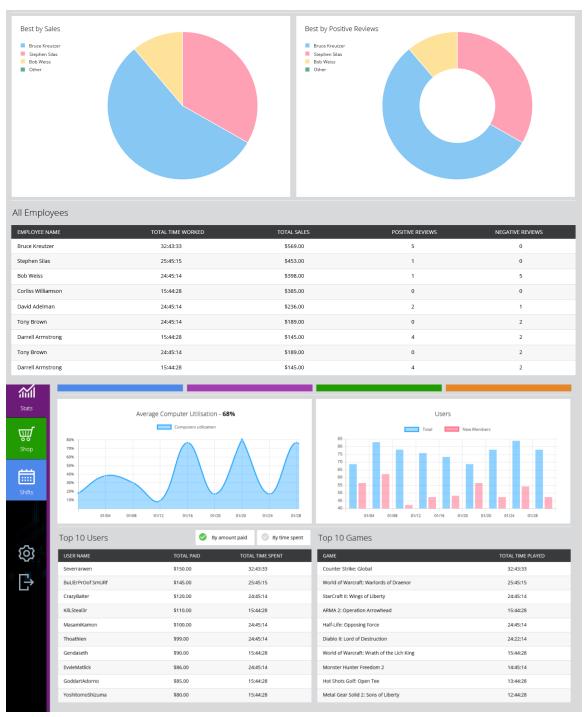
What we want here is detailed and presentable statistics of usage, financials, etc.

The reporting should be in form of graphs and other forms of easy-to-understand presentation.

Example:

The reporting system should have an option of sending daily reports by email.

More details on the reporting system upon request.



#### **Pricing:**

We want an advanced pricing system. something that can change prices depending on either: user group, computer group, time of the day, day of the week, holiday or not, online friends playing the same game, online friends playing different games.

We want to have it possible to make discounts by %, and/or by amount.

Users have 3 types of currency in their account balance, gold and points are virtual currencies specific to the cafe using this software. Gold is the paid currency, VP are the loyalty points.

Payment methods can be set to be one or more of the following: USD, Gold or Points.

An account with zero balance should start going to negative balance if they use their account to login.

Accounts with "X" negative balance (example: an account with -6\$) should be restricted to login. A specific credit limit for each user group is necessary.

Accounts with negative balance will have their VP drained out (decay) increasingly over time.

Idle time mercy feature: when a PC is idle for X minutes while a user is logged in, the pricing should be changed by Y%.

#### **Products:**

A page to set up which products we sell, with price/image/cost price to be edited.

These products will also be divided into consumables and gaming gear. Consumables will be mainly drinks and snacks ordered from the cafeteria.

Gaming gear and other products will be added to a different page.

### Offers:

A page to set up offers.

Offers should be flexible in their settings.

Some offers should be saved to a list of offers to be used frequently by the operator to add to customers, or by the customers who have prepaid credit to buy from the client.

We want the time added in these offers to be selectively available in certain times of the day or days of the week.

We want the offers to be able to add any currency (time, coins, etc.) and to have an expiration date.

We want the time added to have a priority level, for example: If you bought 2 offers that apply on the same time, only one of them should be consumed and the other saved, we want to be able to choose which offer is applied for time consumption.

More information is available upon request.

#### Friends feature:

Linked accounts feature:

A verified user account can send a link/pair account request to another user account, up to a maximum of 5 linked accounts.

When linked account users login at the same time they get the following benefits:

2 accounts: 10% discount

3 accounts: 15% discount

4 accounts: 20% discount

5 accounts: 25% discount

an additional 10% discount is applied if the linked accounts are playing the same game

This would serve as a Team option. The values are subject to change.

## Gifting feature:

User accounts can buy offers and products for other users on their friends list.

Gifts are limited to X times per day.

#### Website API feature:

We want to be able to show some data from the program to the web, example: which pcs are free at the moment.

This should be accessible by selected levels of user groups.

#### Software API features:

We want a phone app that allows users to login to their Spotnet usernames on.

Depending on their user group level, they should be able to see our PC map overview to check which PCs are free and which aren't.

They would also check who's logged in to some PCs.

This same APP should have an authenticator program that will generate random codes as passwords for the users to be able to login to Spotnet client computers. (additional optional security)

### Game reward system:

For certain games, game results are public.

For those who linked their game accounts to our café accounts:

A data collecting system that will verify the games played at the café, and reward players based on their in-game performance. Example: reward 10 VP for each league of legends kill.

More information regarding this is available upon request.

## Energy bar feature:

Each user should have an energy bar that drains out as the user plays. The energy bar is 60 units full by default. It automatically refills 1 point every 5 minutes (whether playing or not). It drains 12 points per hour of playing.

Energy should be considered a currency to be used in creating offers.

#### Note:

All settings values mentioned should be variable, not fixed. To be edited in the server settings page.

The numbers used here are for the purpose of giving an example. So, in the actual program we want these numbers to be the default values in fields.

Each feature should be flexible to be enabled or disabled for each usergroup and computer group. To be edited in the server settings in the corresponding page.

Each setting should be flexible to be accessible or inaccessible for each employee user. To be edited in the server settings in the corresponding page.

Only the applications listed inside the game/client shell are allowed to open. The applications and games setup in the applications settings page in the server settings are automatically white listed. The white list of applications can be manually edited.

Other black listed applications should be completely disallowed to run while the shell is active.

The black list and white list could be edited from the server settings and client maintenance mode.

# THE CLIENT

## Interactive UI Windows shell with multiple 3D themes.

The launcher of the client should be the first program to automatically start after Windows login, and immediately take over the system, preventing the use of the original OS UI and its original functions.

The client part of the software, the one that we install on client gaming computers. It will provide an alternative interface -overcoming the windows original UI- for a faster, more user friendly, and more secure experience.

For this UI: we want it to look like a simple game.

A full screen game where the user -on their first login- must first chose one of 3 standard built in themes (aesthetics only). The 3 default themes: 1-darkness, magic. 2-desert, war. 3-clean, high-tech. These would be skins that will change the layout of the game. It can be changed later from the user's edit profile page. And then must create a 3D avatar character, and later on control that character around to perform tasks. These tasks will be the ones mentioned below, like: shortcuts to applications, mini custom tools like mouse sensitivity adjustor, visit the cafeteria menu, etc.

The user's character will move around "Neighbors from Hell" style and interact with objects in the rooms to achieve those tasks instead of simply clicking on icons. But instead of a house environment, we want it to be a correspondently themed flamboyant cybercafé environment.

The shell will include customized functionalities that will replace: the task bar, clock, language bar, start menu, etc. These functionalities can be packed in the "HUD" panel. Which will also display the user information at all times.

Additionally, they could see other avatars of other logged-in users moving around and interacting with objects as well.

The client software should be compatible with all monitor resolutions, like UHD and ultra-wide QHD, etc.

## Login screen:

Multi authentication options: credentials prompt, fingerprint, magnetic card, Spotnet special.

Customizable background supporting video content.

Optional customizable banners on the side.

## Logged in client interface:

After the user has logged in, he will have to navigate his character in the game to complete tasks.

Each user will have a small info HUD. An overlay panel displaying: avatar icon, user balance (all currencies), brief stats, username, user group, session timer.

We want to benefit from your innovation and imagination on this one. Here are a few of our ideas to build upon:

- A computer section, when clicked on the character will move to it and sit on the gaming chair, the animation would zoom into the game's monitor to allow the user to browse a list of applications and games to choose from and play.
- A cafeteria section, when interacted on a waitress appears to take the order and a cafeteria menu appears.
- A wooden board on the wall with papers pinned to it, interacting with this will open the leaderboards page. Showing top players' stats.
- A gadgets and gear table, interacting with it will open a settings wizard that will allow the
  user to change mouse sensitivity, test and control volume, test and control the microphone,
  change monitor resolution and refresh rate, and edit NVIDIA Color Settings.

For the rest of the tasks we want something similar and compatible with all the features.

We want to have customizable spots in the environment of the game, with sections for special content like banners and links.

The programs and games list should be well categorized, and must have large editable icons and animated titles.

Upcoming events popups, with RSVP buttons.

Clickable social media customizable buttons in a corner.

Edit profile page, and view his latest activities and achievements, and monitor his online gaming progress (League of Legends division, Dota 2 MMR, etc.). And change his profile settings.

"I NEED HELP!" feature that sends a support request to the staff.

Feedback feature that lets users type a text feedback, and take an optional poll.

Favorites section showing the most used apps by this user.

Buy offers menu: users with positive balance can buy time offers directly from the client, to be added to their own user account or sent to a friend as a gift.

Expandable Friends section, where users can add other users to their friends list. Then they can view their profile, send them messages, invite them to teams, and send them gifts. see their latest cybercafé recent activities (purchased free time with coins, bought a membership pass, etc.) and gaming achievements (from in-game collectable data).

A chat interface with collapsible chat popups, to chat with online friends. Interacting with another user's character in the game/client should open the same chat popup.

Code redemption feature: special generated codes that –when redeemed here- will add time or offers to the user account.

Additional interactive content: Lottery; X\$ or Y coins will be deducted from the user's positive balance, an amount between 5 minutes and 5 hours will be added to the user randomly, the average amount won should be 90 minutes per user. With a 1% chance to trigger a critical hit and win 10000 minutes, and a 1% chance to miss and win only 1 minute. (this could be a slot machine interaction)

A logout button. When clicked a popup message appears asking "Do you want to schedule your next visit?" with a calendar and an easy to handle clock on the side, for the user to set a date and time for their next visit. And then a logout confirmation popup message. (this could also be achieved by running to the exit door in the game/client)

#### Competition section:

Where you can create a team for each of the selected games and invite friends to join it.

## Profile page:

A page where the user can edit their profile info and check their stats.

A 3D model of the avatar with options to customize its appearance and attire. Some of the special attire items can be rewarded for achievements. Others can be bought from the store.

At this page the user will also be able to link their café account to their game accounts. This will allow us to show his global rank and game stats. Example: Login with steam, Link LoL accounts, etc.

Here they will be able to change some options like: turn friend requests on/off, turn chat on/off, change theme, etc.

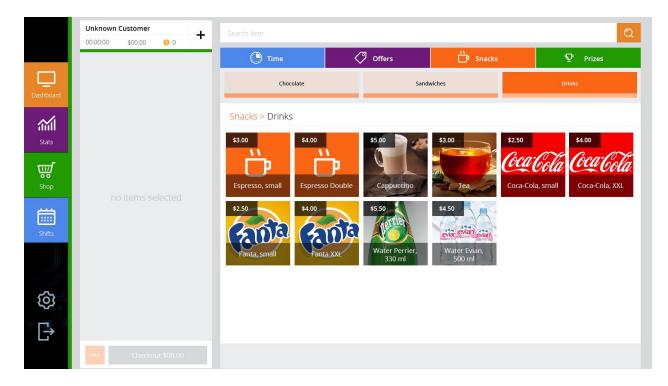
#### Notes:

Links' URLs, values of currency and time should be adjustable from the server options.

Specific selective restrictions will be configured from the server as well.

A tutorial should be made for first time users to familiarize them with the features of the game/software and how to use them.

A Store page: A full size page for products and offers to be bought from the client UI if the user has enough balance. Another full-size page for cafeteria orders: purchasing drinks and meals.



#### Notes:

If we mouse over an icon for any app/game, an info panel should appear, showing: time played, last played, first time opened, etc.

Pages will also have subcategories and tags to filter apps better.

Each icon should have a rating handle of 5 stars, custom for each user. Apps marked 5 stars will be shown in the favorites section in the homepage. Other rated apps will later be sorted in lists and pages by rating.

#### Maintenance mode:

Assign a keyboard shortcut to start the maintenance mode that requires staff login.

This will unlock a menu with few buttons.

One button should enable/disable the windows restrictions, making it possible to show the desktop, open start menu, use cmd, etc.

Another button should open/close a control panel that allows us to customize the UI and adjust software settings.

Most settings will be set from the server side. But some quick settings like adding new shortcut buttons, changing the UI profile, should be done from within the client maintenance mode control panel.

Another should close this maintenance menu and go back to client/user mode.

# THE OPERATOR

The cashier/support part of the software. The operator could be accessed through an .exe application installed on the cashier computers. Or through connecting to the server's web service with an editable port, through a web browser with the right credentials.

## Features:

- Waiting list feature
- Reservation feature
- Sound alerts for custom events (user logout, customer needs help, etc.)

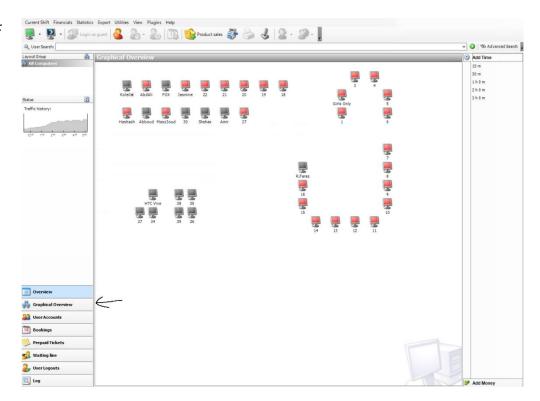
The main page of the operator would be the complete eagle eye overview of the cafe. With adjustable computer positions on a scalable grid.

The main page can be toggled to be something different.

## Main page modes:

- List overview
- Map overview
- Latest transactions
- Recent log
- Customer orders
- Users

#### Example:



## Computer options:

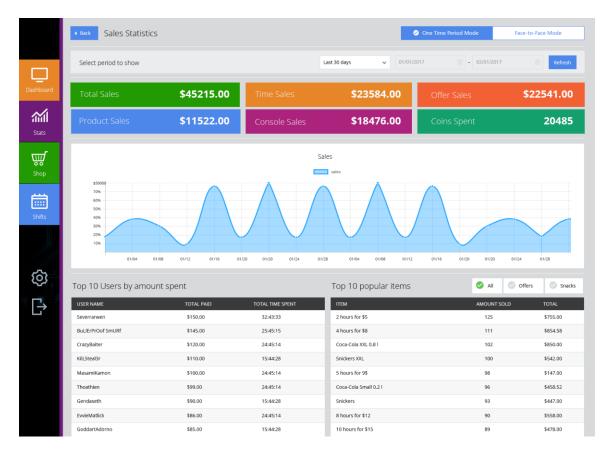
- -Remote task manager: The task manager of a selected client computer, with the option to end some tasks from the operator computer.
- -Remote desktop: The name is self-explanatory.
- -Logout user, Login user, Shutdown PC, Restart PC.

### Statistics:

Detailed custom user statistics should be available for retrieval from this operator.

The operator should extract data from the database and show it in a presentable manner.

Statistics should be comprehensive. Some of them are: Money spent, time played, applications used, etc.



### **Users:**

New users can only be created from the operator, where the basic user information should be entered: Name, last name, birthday, phone number, email.

Users profiles can be accessed through the "users" page.

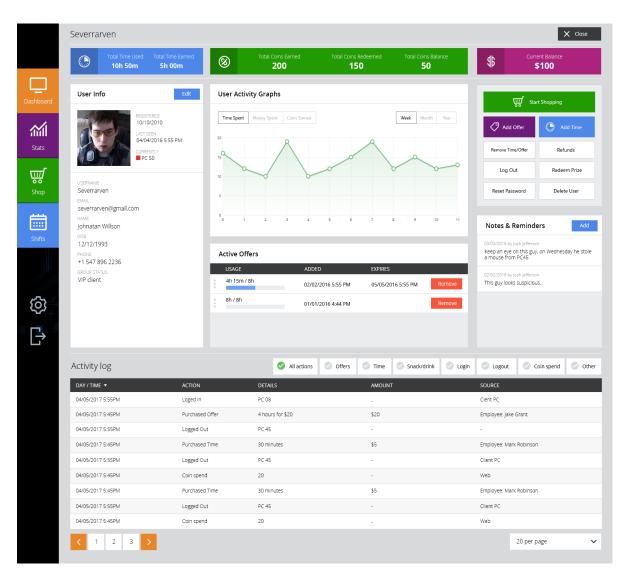
An advanced search tool is mandatory.

An option to ban users manually.

An option to set a note on a user. (viewable by operators only)

A detailed log of the user.

A detailed session history of the user.



## User currency:

User accounts can have 3 types of currency: USD (\$), Gold (coins), and VP victory points (stars).

The operator with the right access can purchase time and offers for the user.

Offers and products should be sold by the selected payment methods.

Each should have a special icon to represent it.

USD can be added directly from the operator cashier.

Gold coins can be purchased from the store. Gold coins are the cafe specific currency, which can be obtained by purchase or given as a prize.

VP, Victory points can only be acquired by playing. 1 to 5 VP is earned per minute. These are considered loyalty points.

#### Notes:

The images examples listed in this file are not exactly what we want. What we want to build is better.

The images are taken from the programs: Smartlaunch and ggLeap.

For each option listed here, it is good to view its equivalent in these 2 mentioned programs. It should be good for your inspiration. And it will provide more emphasis on the details of what we really need from each single button—from a cybercafé workplace perspective—and how your software will make our lives easier.