Basic Discount.

1. Discount Ratio.  
   Specifies discount ratio to add to base product price e.g. 5%.
2. Flat Rate.  
   Specifies flat discount to add to base product price e.g. 3$.  
   **If both specified flat rate always takes precedence on base discount.**

Product-User Group Discount.  
A discount given to a specific user group for a specific product.

Product-User Group discount the basic discount and adds an ability to specify a fixed price of product for the specific user group.  
**If fixed price specified it takes precedence of base price.**

Money spent discount

Discount user receives when he spends an x amount on x products.

Product count discount

Discount user receives when he buys x amount of products

Product Bonus

Amount of bonus products user receives when he buys an x amount of products or spends x amount of money.

Units of Measure

Each UOM should have an options flag for later use e.g. (enabled etc.)

Should have an option to enable or disable UOM functionality globally.

Global setting for default unit of measure for sale & purchase.

Transactions

1. Option to remove item from the user without canceling economical transaction.
2. Option to remove item from the user and void economical transaction.
3. Statistic to clearly show voided or removed items or money transactions.
4. Void/Remove Control by permission.
5. Option to disallow void or remove used products.  
   Some products like time offer might be considered used once user use it to gain access to a computer so there should be ability to disallow void of such time offers.

**User Deposit**

Represents an amount of money user currently have.

Requirements

1. Money balance can be used to purchase products or offers.
2. During the computer use the amount is subtracted based on current billing profile.
3. Time offers are always takes priority to money balance.
4. Ability to partially repay debt in case of negative balance.
5. Ability to specify user credit limit. (Will override user group credit limit)  
   This will be controlled by operator and can be disabled by permission.
6. Ability to specify user group credit limit.

User Time balance

Represents the amount of available use time user currently have.  
This amount is calculated dynamically and depend on multiple factors such as current user money balance or time offers user currently have.

# Requirements

1. Time balance can become negative.

Period Entities

Period derived entities have the ability to be counted within a daily 24 hour range on specified day of the week.

Multiple entities will be derived or linked to this entities.  
For example a time offer can be only available on specific period of weekday or daytime.  
  
**Period Properties.**

1. 24 Hour range.
2. Week day range.

Billing Profile

Billing profile is used to unify multiple billing rates.

**Properties.**

1. Name  
   Profile name.
2. Default Rate  
   Default rate that will be used.
3. Rates  
   Child rates.

Billing Rate

Defines how the user will be bellied for a computer usage based on time computer used.

The billing rate can be either be simple where user defines a standard rate per minute or advanced where rating can be changed during the time passage.

# Requirements

1. Billing rates are always used as part of a billing profile.

Point / Loyalty System

Point system will allow reward loyal users with points.  
For every sale of product, offer or time points are awarded to the customer.

Customer can use points to purchase products.

Requirements

1. We should not take into account money deposits since they can be withdrawn.
2. Will allow specifying point amounts per money used by rate.
3. Option to specify when points will be redeemed payment or pay later (order).

Ticket / Prepaid Account System

Ticket system will allow a creation of prepaid ticket accounts.

Guest Accounts

We will need to have a set of accounts in the system which does not represent an actual existing user but it’s rather a virtual automatically generated one.  
  
The amount of guest users in the system is based on amounts of hosts in the system.  
In some cases host can represent a console or pool table that would allow it to be used by multiple users. For example a console can have up to 4 concurrent users using it.

The crucial point is guest user’s implementation since any financial transactions can be related to them.

Booking

Booking system will allow booking of one or multiple computer systems for a specific amount of time and on specific date.

Payment Methods

A mix of predefined (system wide known) and user defined list of available payments methods.

The payment method defines how the payment will be done by costumer.

Built in payments methods.

1. Cash: Payment by cash.
2. Credit Card: Payment with credit card.
3. From account: Payment is done from user current balance. This would be disabled if current user balance is negative or insufficient.
4. Pay Later: No payment occurs and all debt remains on user account.
5. Points  
     
   **Payment Method Properties**
6. Name.  
   Name of the payment method.
7. Description.  
   Payment method type.
8. IsEnabled.  
   Indicates if method is enabled.
9. Surcharge  
   Surcharge when using the payment method, can be and usually will be zero.

Payments

Payments are always done against an invoice.

# Requirements

1. Payment can be done by database existing or not existing user.
2. Payments should allow to be done in partial manner.

Monetary Units

A user defined list of entities that represent country/region monetary units.  
The unit definition is left to user since we will operate in different region with unique currencies.

**Example:** 1 (0, 0100) cent, 2 (0, 0200) cents, 5 euro (5, 0000)

# Requirements.

1. Unit Name.  
   Each unit should have a unique name.
2. Unique value.  
   Each unit value should be unique.

Tax

User defined list of entities representing taxes.  
Taxes will be used by multiple entities and which will be able to reference null or multiple taxes.

The tax definition is left to user since we will operate in different region with unique tax rates.

**Example:** 12%, 14%, and 23%

**Properties.**

1. Tax Name  
   Unique Tax Name.
2. Value  
   Defines tax value.

Product Groups

User defined list representing product groups.  
The goal of product groups is to allow easier organization of the products, where  
each product group will have a single or none parent group.

**Example:** Candy, Drinks, Offers

**Properties.**

1. Name  
   Each Product Group should have unique name.
2. Parent Group  
   Group can either have a parent or be a root group if no parent is set.
3. Taxes  
   List of taxes applied to the child products if none defined for product itself.

Product

A product is a representation of physical or service goods.  
 Products can be bought with cash, from money balance or redeemed with points.

**Example:** Soda Can, Print, computer repair, I suppose it’s self-explanatory.

# Requirements

1. Ability to flag product as bundled only. This will disallow sale of a product outside bundle.
2. Ability to enable purchase product only with points or with cost combined.
3. Ability to set different prices to specific user group.
4. Ability to disallow sale to specific user groups.

**Product properties.**

1. Parent Product Group  
   Each product will always belong to a single parent product group.
2. Name.  
   Each product should have unique product name.
3. Base Price  
   Sale price of a product.
4. Cost  
   Cost price of the product.
5. Barcode  
   Product identifier barcode.
6. Flags  
   Product specific flags.
7. Taxes  
   List of taxes applied to the product.
8. Points  
   Amount of points user receives for purchase.
9. Points Price  
   Amount of points this products costs to the user.
10. User group Pricings points  
    Amount of points this product cost to specific user group.

Time Offer

Time offer inherits the product with all of it properties.

Represents amount of time that can be purchased for a specified amount of money.  
Time offers are not affected by rates in any way.

# Requirements

1. Ability to disallow usage of time offer on specific computer groups.
2. Ability to specify allowed usage period.
3. Ability to set priority for the time offer.
4. Ability to set maximum minutes usage on week days and weekends.
5. Ability for the end user to choose if he willing to continue using money balance when time offers expire.
6. Ability for operator to select if user will continue using his money balance when time offers expire. This will override the global option.
7. Global option for default action when user time offers expire.  
    Possible values: Use Money balance, Ask user, Logout.
8. Ability to set an application profile to use when this time offer is used.
9. Ability to set expiration.

Product Bundle

A unification of multiple products or time offers.

With product bundles it will be possible to create packages of multiple sale items.  
Each item price and user group price can be overridden and allow creating discounted product packages targeting all or specific user groups.  
Bundles will inherit all of the product properties e.g. Description, Stock options, Barcode etc. (except of price) allowing them to appear as normal product.

The total cost of bundle will be dynamic and calculated based on child product costs sum with taxes applied based on each child item configuration.

# Requirements

1. Ability to disable bundled products points.  
   When enabled the bundled product points will not be counted in financial transaction.
2. Stock control. Full stock control just as with normal products where bundle is counted as a separate product.
3. Option to disallow sale if at least one of bundled products is out of stock.
4. Option to disable subtracting stock of child items.
5. Will always override allowed user groups of child products?

Product stock

List of current stocked amount for specific products.

# Requirements

1. Option to disallow sale of item if out of stock.
2. Option to enable or disable stock control individually for a product.

Inventory

Allows asset management.  
Provides usage statistics and asset tracking.

Gift / Prepaid cards / Tickets / Discount Coupon

Waiting Line

Employee Shifts

Shifts represents a time period that starts when an employee (operator user) logs in and ends when the employ explicitly ends his shift.  
The primary goal of shifts is simply to store the actual range of employee shift and it should allow an easier way to get the transactions statistics for a specific shift.

We can also use shift to track employee overtimes etc.