**SOFTWARE REQUIREMENTS SPECIFICATION (SRS)**

**FOR**

**CRM BILLING MODULE MODUEL**

**FOR**



**Version 1.0**

**September 23, 2012**

**SOFTWARE REQUIREMENTS SPECIFICATION (SRS)**

**FOR**

**CRM BILLING MODULE MODUEL**

**FOR**

**PANACEA SYSTEM LTD**

Approved: Accepted:

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Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description / Reason of Changes** | **Author** |
| October 10, 2012 | 1.0 | Initial version | Abdulla Hil Kafi |
|  |  |  |  |

Introduction

This document defines the software functional requirements of Billing Module in CRM Application version 1.0. The five basic billing features - product, order, invoice, payment, and customer account update will be developed by .net team to provide a payment solution for CRM clients.

**1.1 Purpose:**

The purpose of this SRS document is to provide a detail overview of CRM billing module including functions, use case, activities and process flow for intended audience.

**Intended audience:** Software Developers, Software Tester, UI Designers and Software Analyzer



|  |  |
| --- | --- |
| **Figure 1: Work Flow Diagram of Billing Module** | |
| Client will buy CRM **products** by placing **purchase orders.**  **Billing module** will generate invoices based on these **purchase orders**.  Client will then pay the **invoices** by submitting **payments thru online or cash in bank**.  Client will receive all types of notification to confirm his/her purchase.  Client will get agent helps from call center. | |
| **1.2 Scope:**  **Initial functional requirements will be as flows** | |
| **Product** | Product will represent the catalog of services or goods sold by CRM application. Here is where customer detail the description and price of a product that customer might want an invoice to contain. |
| **Order** | A purchase [order](http://www.businessdictionary.com/definition/order.html) [sets](http://www.businessdictionary.com/definition/set.html) forth the descriptions, [quantities](http://www.businessdictionary.com/definition/quantity.html), [prices](http://www.businessdictionary.com/definition/price.html), [discounts](http://www.businessdictionary.com/definition/discount.html), [payment terms](http://www.businessdictionary.com/definition/payment-terms.html), date, **Order periods** other associated terms and conditions, and identifies a specific customer's subscription or purchase. |
| **Invoice** | A list of services rendered to customer, containing prices and charges. Invoice will feature the name of Customer Company and contact information as well as the invoices number and ID, the date at which it was issued, its due date, and so on. |
| **Payment** | The [process](http://www.businessdictionary.com/definition/process.html) of [buying](http://www.businessdictionary.com/definition/buyer.html) [goods](http://www.businessdictionary.com/definition/goods.html) which includes the initial [decision](http://www.businessdictionary.com/definition/decision.html) to make the [purchase](http://www.businessdictionary.com/definition/purchase.html), Involve in cash payment, cheque payment and credit card payment. |
| **Notification** | Invoices notification: Reminds clients that an invoice has been sent to him\her. Orders notification: Reminds clients that their purchase order will expire on a certain date. Payments notification: Let clients know if their payment has been successful, or if it has failed.  User’s notification: Let customers know if they have overdue payments, if they have a suspended account, if they have been deleted, if they have lost their password, or if they need to provide updated credit card information. |
| **Brac Bank Merchant Account Integration** | Involve in cash and check payment, bank feed, authentication, authorization, accounting, customer account update, merchant account update |
| **Brac Bank Payment Gateway Integration** | Involve in online payment, Credit card transactions, AAA, merchant account update, customers payment account update, transaction history update. |
| **Cloud Calls Center (c3) Integration** | AuthenticationAuthorization Accounting (AAA), call details record (CDR), C3 uses calculation. |



|  |
| --- |
| **Figure 2: Activity Diagram of CRM Billing Module** |
| From the CRM point of view, billing module have four users CRM administrator, Sale, Marketing manager and C3 Agent whose have the privilege to purchase new services/product, pay the uses bill, and view related reports. The system allows authorized user to do work, related to payment and uses bill. Authorized user based on role will be able to perform task on different module. If the user is other than CRM Admin/Sale Manager role, user will not be able to do any of the tasks involving payment and bill pay. CRM sales/marketing manager role user will be able to manage order, invoice and payment related work and will be able to view some reports related of this fields. Agent user will only be able to see billing reports and CDR. |



|  |  |
| --- | --- |
| **Figure 3: User Activity Diagram CRM Billing Module** | |
| **Actor** | **Function** |
| CRM ADMIN | CRM Admin has complete control over all the activities that can be performed. |
| MARKETING MANAGER | The CRM application notifies the marketing manager of all creation requests, and the manager can then approve or reject them, The make and checker concept with sales people. The Marketing people also manage the list of available product categories. The manager can also view and delete entries in the guestbook. |
| SALES MANAGER | Look after the order, invoice, payment and accounting activities. |
| AGENT | In Billing Module agent will have only view privilege to solve customer‘s issues. |

**1.3 C3 Call Flow and Customer Available Limit Checking Process**:

|  |  |
| --- | --- |
| Steps | Description |
| 1 | Agent dials to a destination number. |
| 2 | C3 Call engine send a client’s account inquire request in CRM Billing. |
| 3 | CRM receive the transaction request. |
| 4 | CRM checking the authentication and authorization part of the request. Authentication checks the certification validity and authorization checks the session validity of the request. If checking true then send request to the billing for client’s account checking. |
| 5 | Billing checks the available limit of client account and sends response to the billing driver. |
| 6 | Billing driver send the response to C3 call engine. |
| 7 | C3 engine check the client available limit if the client calls limit > 0 then connect the call to destination number and continuing conversation else drop the call. Send call log to call detail record. |
| 8 | If the available limit is true then call engine connect the call and cross check the call duration and client available limit. If call duration > client available limit then drop the call. Cross checking is continues process during conversation. |
| 9 | After conversation of call disconnect C3 engine send the call log to CRM. |
| 10 | CRM check the transaction validity and billing module update the client available limit. |
| 11 | Billing module update the CDR. |



**Figure 4: C3 Call Flow and Customer Available Call Limit Checking Process**



**Figure 5: Diagram of Cash and Check Payment Process**

## 

**Figure 6: CRM Credit Card Payment Process**

|  |
| --- |
| 2 FUNTIONAL REQUIRMENTS – SCOPE, ATTRIBUTES & USE CASE |

## 2.1: Product

|  |  |  |  |
| --- | --- | --- | --- |
| 2.1 | Scope ID | : | **crm/bm/srs/sc/2.1** |
| General Description of Scope: | | | |
| Product will represent the catalog of services or goods sold by CRM application. Here is where customer detail the description and price of a product that customer might want an invoice to contain. | | | |

**Product Attribute List of** **crm/bm/srs/sc/2.2**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of Attributes** | **Description** | **Field Type/Size** | **Mandatory/Optional** |
| Product ID | System will auto generate this id according to ID sequence | Number 8 digits | M |
| Product Code | This is product code name ex: Nokia | Varchar / 100 | M |
| Product Name | Identical Name of the product Ex. N70 | Varchar / 100 | M |
| Product Description | Here is where a product is named and perhaps described briefly. These name and description will eventually be displayed on the invoice. It can be edited when creating a purchase order. | Varchar / 100 | M |
| Price / Rate Plan | This is a list of rate to select by user or user can manually input the price to choose radio button option. | List / decimal | M |
| GL code | This general ledger code that the price transaction hit the debit/credit head in chart of account | Number 12 digits | M |
| Product Create Date | Create date collect from system clock | Date type | M |
| Product cycle End Date | Input by user | Date type | O |
| Product Create By | ID of the user collect from user list | Number 10 digits |  |

**2.3 Use Case**

**2.3.1 View Product Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.3.1** |
| Use case Description: | This use case describes the flows of viewing detail information of product page in the CRM Billing Module.  Display all products in lists including product categories name.  Display product code label  Display product code label and input text box  Display product Add Button.  Display product category add button.  Display product Edit Button.  Display product cancels Button.  Display product search Button and search text area.  Display all the matching information based on the search.  Display product GL Code  Display Product Create date  Display Product Cycle end date  Display Product create By user name  Allow user to select product lists.  Allow users to click mouse and keyboard action on add Button.  Allow user to click mouse and keyboard action on Edit Button.  Allow users to click mouse and keyboard action on cancel Button.  Enable user to enter the search text on the screen in billing module.  Enable user to select multiple options on the screen to search.  Enable user to navigate between the searches results  Enable user to view search result by ascending or descending or dictionary order or recent time add. |
| Actors: | System Administrator and View privilege user- Marketing/Sale manager |
| Pre-Condition: | System Administrator and View privilege user must be authorized user.  System Administrator and View privilege user must be logged into the system.  System Administrator have all privilege and View privilege user must have "View" access privilege on product page information.    Product information must have existed in system. |
| Post-Condition: | System Administrator and View privilege user can see detail information of selected configuration information in the system. |
| Normal Flows: | **System Administrator**: initiates to view the existing product information.  2. **System**: Will display product page showing the available level, fields, text area, list, radio buttons, and combo box existing in of product Page.  3. **System Administrator**: To create new product, System Admin will input all value (in mandatory fields) and choose the following value to find the desired information from List, combo box and radio button.  a. Price  b. GL Code  4. **System**: Will display configuration information based on the selection criterion.  **View privilege user**: Initiates to view the existing product information.  2. **System**: Will display product page showing the available level, fields, text area, list, radio buttons, and combo box existing in of product Page.  3. **View privilege user**: view user could not create new product, view user can only see the new product id, product code, product name, Product description, product GL code and every components of this page.  **System Administrator**: To view new product parameter, view user will see all value (in mandatory fields) and choose the following value to find the desired information from List, combo box and radio button.  a. Price  b. GL Code  4. **System**: Will display configuration information based on the selection criterion. |
| Alternative Flows: | System administrator can view these information from data by 3rd party ID like Toad, Database Manager, etc. |
| Exception: | N/A |
| Frequency of Use | Medium |
| Cross Reference | Product Category, Customer, Order, Invoice, Payment. |

**2.3.2 Add product Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.3.2** |
| Use case Description: | This use case describes the flows of storing configuration information into the system.  Display product ID generate by system.  Display product code label and input text box.  Display product name label and input text box.  Display product description label and input text area.  Display Product GL code and product GL input box.  Display product price options and radio buttons.  Display price option label and radio button.  Display manual price input text box.  Display rate from list or combo box.  Display product GL Code and input box or combo box.  Display Product creates date and input box.  Display Product Cycle end date and input box.  Display Product creates By user name.  Check validity of new information.  Display product add confirmation message.  Display exception or error message for add new product.  Enable user to enter product code into text box.  Enable user to enter product name into text box.  Enable user to enter product description into text area.  Enable user to select product GL code Combo box.  Enable user to select product price options from radio button.  Enable user to enter manual price into textbox.  Enable user to select rate from rate list combo box. Enable user to select category ID from list.  Enable system to auto numbering and generate product ID.  Check validity of manual price input field.  Allow user to cancel the add process before save change. |
| Actors: | System administrator / CRM administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system. 2. System Administrator must have "Add New" access privilege on configuration information. |
| Post-Condition: | 1. There will be make-checker approval process  If Product manager create new product then the new product  will stay in approval stage until the checker not review and  approve the creation.   1. System will store the information and will generate a confirmation message. |
| Normal Flows: | 1. **System Administrator**: initiates to add new product creation information. 2. **System**: will show common new product input page. 3. **System Administrator**: will input values and other information, Will click on Add/Save button after completion of required information. 4. **System**: will do the following task   a. Alert Administrator for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert Administrator for duplication for duplicate entry.  c. Will save information. |
| Alternative Flows: | N/A |
| Exception: | If configuration Type is not available  System: Cancels to add new common configuration information. |
| Frequency of Use | Low |
| Cross Reference | Product Category, Customer, Order, Invoice, Payment. |

**2.3.3 Update product information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.3.3** |
| Use case Description: | This use case describes the flows of updating of an existing configuration into system.  Display product code label and input text box.  Display product name label and input text box.  Display product description label and input text area.  Display product code input box.  Display Product GL code and product GL input box.  Display product price options and radio buttons  Display label manual price input and input text. Add products  Display add product rate from rate list combo box.  Display update changes  Display exception for error update.  Enable user to enter product name into text box.  Enable user to enter product description into text area.  Enable user to select product GL code Combo box.  Enable user to select product price options from radio button.  Enable user to enter manual price into textbox.  Enable user to select rate from rate list combo box.  Page shall check validity of manual price input field.  Enable auto numbering function to generate product ID.  Enable auto numbering function to generate category ID  Allow user to cancel the add process before save change. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system. 2. System Administrator must have "Edit" access privilege on configuration information. 3. Configuration information must have existed in the system. |
| Post-Condition: | 1. There will be make-checker approval process  If Product manager create new product then the new product  will stay in approval stage until the not review and approve the  creation.  2. System will generate a confirmation message  3. Audit trial will be generated into system |
| Normal Flows: | **1. System Administrator**: initiates to update the configuration information and selects the desired configuration.  2. **System**: will display the detail information in entry page.  3. **System** **Administrator**: Will update the desired information  4. **System**: will do the following task  a. Alert **System** **Administrator** for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert **System** **Administrator** for duplication for duplicate entry.  c. Will save updated information. |
| Alternative Flows: | N/A |
| Exception: | If update input value not match with require data type then validation function will generate exception and show error message, field information, solution to the user. |
| Frequency of Use | Low |
| Cross Reference | Product Category, Customer, Order, Invoice, Payment. |

**2.3.4 Delete Product Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.6** |
| Use case Description: | This use case describes the flows of deleting of existing configuration information from system.  Allow user to select a single product from product list.  Allow user to click mouse on delete Button  Display the selected item that he/she wants to delete.  Display user to read and check delete related message before delete action execute.  Enable user to click on delete button for delete action execution.  Allow system to delete the selected item  Display the delete confirmation message and return to previous page with new refresh action. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system.  2. System Administrator must have "Delete" access privilege on configuration information.  3. Setup must have existed in system. |
| Post-Condition: | 1. Deleted configuration information will be removed from the system and generate a confirmation message. 2. Audit trial will be generated into system. |
| Normal Flows: | 1. **System Administrator**: initiates to delete the configuration information and selects the desired setup  2. **System**: Will generate a confirmation message showing “Yes” and “No” button.  3. **System Administrator**: click on either “Yes” or “No”  4. **System**: if click on “Yes”, Will delete the information. |
| Alternative Flows: | N/A |
| Exception: | 3a. **System Administrator**: If click on “No” button  3a1. **System**: Cancels the deletion activities  4a. If parent-child relation exists  4a1 System: Cancels the deletion activities |
| Frequency of Use | Low |
| Notes and Issues: |  |
| Cross Reference | Product Category, Customer, Order, Invoice, Payment. |

**2.4 Product Category**

|  |  |  |  |
| --- | --- | --- | --- |
| 3 | Scope ID | : | **crm/bm/srs/sc/2.2.1** |
| General Description of Scope: | | | |
| Product category will represent the Group name or item name of the products in CRM application. | | | |

**Product Category Attribute List of crm/bm/srs/sc/2.4**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of Attributes** | **Description** | **Field Type/Size** | **Mandatory/Optional** |
| Category ID | System will auto generate category id | Integer 10 digits | M |
| Category Name | This is Name of the item | Varchar | M |
| Category Description | This is the details of the product category. Example: Mobile | Varchar | M |

**Use Case**

**2.4.1 View Product category Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.4.1** |
| Use case Description: | This use case describes the flows of viewing detail information of product category page in the CRM Billing Module.  Display Category ID number.  Display Category name.  Display add new category button.  Display the save changes.  Display Cancel button. |
| Actors: | System Administrator and View privilege user |
| Pre-Condition: | 1. System Administrator and View privilege user must be authorized user. System Administrator and View privilege user must be logged into the system.  2. System Administrator have all privilege and View privilege user must have "View" access privilege on product page information.  3. Product information must have existed in system. |
| Post-Condition: | System Administrator and View privilege user can see detail information of product category in the system. |
| Normal Flows: | **System Administrator**: initiates to view the existing product category information.  2. **System**: Will display product category page showing the available level, fields, input text area, existing in of product category page.  3. **System Administrator**: To create new product category, System Admin will input all value (in mandatory fields).  4. **System**: Will display information based on create new category.  **View privilege user**: initiates to view the existing product information.  2. **System**: Will display product page showing the available category level, fields, text area existing in product category page.  3. **View privilege user**: view user could not create new product category, view user can only see the new product category id, product category name, product category description.  4. **System**: Will display category information. |
| Alternative Flows: | N/A |
| Exception: | N/A |
| Frequency of Use | Low |
| Cross Reference |  |

**2.4.2 Add Product Category Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.4** |
| Use case Description: | This use case describes the flows of storing product category page input value into the system.  Allow user to input category name in textbox  Allow user to save new category name in system.  Allow user to cancel the add process before save change. |
| Actors: | System administrator or Product Manager |
| Pre-Condition: | 1. System Administrator and Product Manager must be authorized user. System Administrator must be logged into the system. 2. System Administrator and Product Manager must have "Add New product category" access privilege on configuration information. |
| Post-Condition: | 1. There will be make-checker approval process  If Product manager create new product  then the new product category creation will stay in approval  stage until the checker System Administrator not review and  approve the creation.   1. System will store the information and will generate a confirmation message. |
| Normal Flows: | 1. **System Administrator**: initiates to add new configuration information. 2. **System**: will show add category entry page. 3. **System Administrator**: will enter name of the category and, Will click on Add/Save button after completion of required information. 4. **System**: will do the following task   a. Alert Administrator for mandatory information If system manager to enter mandatory information.  b. Alert Administrator for duplication for duplicate entry.  c. Will save information. |
| Alternative Flows: | N/A |
| Exception: | If configuration Type is not available  System: Cancels to add new product information. |
| Frequency of Use | Low |
| Cross Reference | N/A |

**2.4.3 Update product information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.3.3** |
| Use case Description: | This use case describes the flows of updating of an existing configuration into system.  Display product category code.  Display product category name label and input text box.  Display product category description label and input text area.  Display exception for error update.  Enable user to enter product category name into text box.  Enable user to enter product category description into text area.  Enable auto numbering function to generate product Category ID.  Allow user to cancel the add process before save change. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator and Product Manager must be authorized user. System Administrator must be logged into the system. 2. System Administrator and Product manager must have "Edit" access privilege on configuration information. 3. Product Category update information must have existed in the system. |
| Post-Condition: | 1. System will generate a confirmation message  2. Audit trial will be generated into system |
| Normal Flows: | **1. System Administrator**: initiates to update the configuration information and selects the desired configuration.  2. **System**: will display the detail information in entry page.  3. **System** **Administrator**: Will update the desired information  4. **System**: will do the following task  a. Alert **System** **Administrator** for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert **System** **Administrator** for duplication for duplicate entry.  c. Will save updated information.  **1. Product Manager**: initiates to update the configuration information and selects the desired configuration.  2. **System**: will display the detail information in entry page.  3. **System** **Administrator**: Will update the desired information  4. **System**: will do the following task  a. Alert **System** **Administrator** for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert **System** **Administrator** for duplication for duplicate entry.  c. There will be make-checker approval process If Product manager create new product then the new product will stay in approval stage until the not review and approve the creation.  d. Will save updated information |
| Alternative Flows: | N/A |
| Exception: | If update input value not match with require data type then validation function will generate exception and show error message, field information, solution to the user. |
| Frequency of Use | Low |
| Cross Reference | Product Category, Customer, Order, Invoice, Payment. |

**2.4.4 Delete Product Category Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.6** |
| Use case Description: | This use case describes the flows of deleting of existing configuration information from system.  Allow user to select a single product from product list.  Allow user to click mouse on delete Button  Display the selected item that he/she wants to delete.  Display user to read and check delete related message before delete action execute.  Enable user to click on delete button for delete action execution.  Allow system to delete the selected item  Display the delete confirmation message and return to previous page with new refresh action. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system.  2. System Administrator must have "Delete" access privilege on configuration information.  3. Setup must have existed in system. |
| Post-Condition: | 1. Deleted configuration information will be removed from the system and generate a confirmation message. 2. Audit trial will be generated into system. |
| Normal Flows: | 1. **System Administrator**: initiates to delete the configuration information and selects the desired setup  2. **System**: Will generate a confirmation message showing “Yes” and “No” button.  3. **System Administrator**: click on either “Yes” or “No”  4. **System**: if click on “Yes”, Will delete the information. |
| Alternative Flows: | N/A |
| Exception: | 3a. **System Administrator**: If click on “No” button  3a1. **System**: Cancels the deletion activities  4a. If parent-child relation exists  4a1 System: Cancels the deletion activities |
| Frequency of Use | Low |
| Notes and Issues: |  |
| Cross Reference | Product Category, Customer, Order, Invoice, Payment. |

Note: If a category will create and a product assign on it then this category will not have delete or update option.

**Order**

Order

|  |  |  |  |
| --- | --- | --- | --- |
| 3 | Scope ID | : | **crm/bm/srs/sc/2.2.1** |
| General Description of Scope: A purchase [order](http://www.businessdictionary.com/definition/order.html) [sets](http://www.businessdictionary.com/definition/set.html) forth the descriptions, [quantities](http://www.businessdictionary.com/definition/quantity.html), [prices](http://www.businessdictionary.com/definition/price.html), [discounts](http://www.businessdictionary.com/definition/discount.html), [payment terms](http://www.businessdictionary.com/definition/payment-terms.html), date, **Order periods** other associated terms and conditions, and identifies a specific customer's subscription or purchase. | | | |

Order Attribute List of ccrm/bm/srs/sc/

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of Attributes** | **Description** | **Field Type/Size** | **Mandatory/Optional** |
| Oder ID | The name of Group of Product Ex: Mobile | List from product category table | M |
| User ID |  |  |  |
| Product ID |  |  |  |
| User Name | System will auto generate this id according to ID sequence | Number 2^4 | M |
| Create date | This is product code name ex: Nokia | Varchar | M |
| Order Quantity | Identical Name of the product Ex. N70 | Varchar | M |
| Order total price | Here is where a product is named and perhaps described briefly. These name and description will eventually be displayed on the invoice. It can be edited when creating a purchase order. | Varchar | M |
| Discount | This is a list of prices to select by user or user can manually input the price to choose radio button option. | List / decimal | M |
|  | This general ledger code that the price transaction hit the debit/credit head in chart of account | Number 6 digits | M |

**View Order Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.3** |
| Use case Description: | This use case describes the flows of viewing detail information of product category page in the CRM Billing Module.  Display product list.  Display all unpaid and recent order in list.  Display Add order, cancel order, edit order button.  Display the order related information field as order ID, customer name, order create date, order amount, order price, order active since, next invoice, order status, order type, notes.  Display order search button and search text area.  Display all the matching information based on the search.  Display input order details fields period = one time or monthly or yearly, type = post-paid or pre-paid, status = active or close, active science = date, due date = date, notes.  Display the invoice information that base on the inputs in add order page.  Display save change button and cancel button. |
| Actors: | System Administrator and View privilege user |
| Pre-Condition: | 1. System Administrator and View privilege user must be authorized user. System Administrator and View privilege user must be logged into the system.  2. System Administrator have all privilege and View privilege user must have "View" access privilege on product page information.  3. Product information must have existed in system. |
| Post-Condition: | System Administrator and View privilege user can see detail information of product category in the system. |
| Normal Flows: | **System Administrator**: initiates to view the existing product category information.  2. **System**: Will display product category page showing the available level, fields, input text area, existing in of product category page.  3. **System Administrator**: To create new product category, System Admin will input all value (in mandatory fields).  4. **System**: Will display information based on create new category.  **View privilege user**: initiates to view the existing product information.  2. **System**: Will display product page showing the available category level, fields, text area existing in product category page.  3. **View privilege user**: view user could not create new product category, view user can only see the new product category id, product category name, product category description.  4. **System**: Will display category information. |
| Alternative Flows: | N/A |
| Exception: | N/A |
| Frequency of Use | Low |
| Cross Reference |  |

**Add Order information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.4** |
| Use case Description: | This use case describes the flows of storing configuration information into the system. |
| Actors: | System administrator / CRM administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system. 2. System Administrator must have "Add New" access privilege on configuration information. |
| Post-Condition: | 1. There will be make-checker approval process  If Product manager create new product then the new product  will stay in approval stage until the the checker not review and  approve the creation.   1. System will store the information and will generate a confirmation message. |
| Normal Flows: | 1. **System Administrator**: initiates to add new product creation information. 2. **System**: will show common new product input page. 3. **System Administrator**: will input values and other information, Will click on Add/Save button after completion of required information. 4. **System**: will do the following task   a. Alert Administrator for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert Administrator for duplication for duplicate entry.  c. Will save information. |
| Alternative Flows: | N/A |
| Exception: | If configuration Type is not available  System: Cancels to add new common configuration information. |
| Frequency of Use | Low |
| Cross Reference | N/A |

**Update Oder information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.5** |
| Use case Description: | This use case describes the flows of updating of an existing configuration into system. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system. 2. System Administrator must have "Edit" access privilege on configuration information. 3. Configuration information must have existed in the system. |
| Post-Condition: | 1. There will be make-checker approval process  If Product manager create new product then the new product  will stay in approval stage until the not review and approve the  creation.  2. System will generate a confirmation message  3. Audit trial will be generated into system |
| Normal Flows: | **1. System Administrator**: initiates to update the configuration information and selects the desired configuration.  2. **System**: will display the detail information in entry page.  3. **System** **Administrator**: Will update the desired information  4. **System**: will do the following task  a. Alert **System** **Administrator** for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert **System** **Administrator** for duplication for duplicate entry.  c. Will save updated information. |
| Alternative Flows: | N/A |
| Exception: | If update input value not match with require data type then validation function will generate exception and show error message , field information, solution to the user. |
| Frequency of Use | Low |
| Cross Reference |  |

**Delete Order information.**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.2.6** |
| Use case Description: | This use case describes the flows of deleting of existing configuration information from system. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system.  2. System Administrator must have "Delete" access privilege on configuration information.  3. Setup must have existed in system. |
| Post-Condition: | 1. Deleted configuration information will be removed from the system and generate a confirmation message. 2. Audit trial will be generated into system. |
| Normal Flows: | 1. **System Administrator**: initiates to delete the configuration information and selects the desired setup  2. **System**: Will generate a confirmation message showing “Yes” and “No” button.  3. **System Administrator**: click on either “Yes” or “No”  4. **System**: if click on “Yes”, Will delete the information. |
| Alternative Flows: | N/A |
| Exception: | 3a. **System Administrator**: If click on “No” button  3a1. **System**: Cancels the deletion activities  4a. If parent-child relation exists  4a1 System: Cancels the deletion activities |
| Frequency of Use | Low |
| Notes and Issues: | N/A |
| Cross Reference | N/A. |

## 2.1 Billing Setup

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | Scope ID | : | **crm/bm/srs/sc/2.1.1** |
| General Description of Scope: | | | |
| The setup will maintain name-value information. Setup types will be defined by the system and value for each type will be entered by the end user. | | | |

Attribute List of **crm/bm/srs/sc/2.1.2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of Attributes** | **Description** | **Field Type** | **Field Size** | **Mandatory/Optional** |
| Currency | Payment type value | List, From currency table |  | M |
| Next run date | This is the date where the billing process is schedule to run. We will use scheduler for this function | Date Time |  | M |
| Statement date | This is the date where the statement process is schedule to run. | Date Time |  | M |
| Auto Invoice | Auto invoice will be generated in the selected date | Check Box |  | M |
| Due date | This is the last date of payment. | Date Time |  | M |
| Tax Field in percentage | This indicate the government pay charges | Text Field -100 |  | O |
| Create By | First Billing set user name | Varchar |  |  |
| Create Date | First Billing setup date | Date Time |  |  |
| Last Modified By | Text (Audit Table) | Varchar | 100 | O |
| Last Modifying Date | Text (Audit Table) | Date Time | 100 | O |

**Use Cases**

**View Billing Setup Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.1.4** |
| Use case Description: | This use case describes the flows of viewing detail information of common configuration information in the system.  Display all the payment parameter that can be configured.  Allow user to select the payment parameter to configure.  Display all the available components of the billing module to configure. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system.  2. System Administrator must have "View" access privilege on configuration information.  3. Billing Setup information must have existed in system. |
| Post-Condition: | System Administrator can see detail information of selected configuration information in the system. |
| Normal Flows: | **System Administrator**: initiates to view the existing configuration information.  2. **System**: Will display configuration page showing the available list of configuration information.  3. **System Administrator**: Will choose the following parameter to find the desired information.  a. Configuration Type  b. Configuration Name  4. **System**: Will display configuration information based on the selection criterion. |
| Alternative Flows: | N/A |
| Exception: | N/A |
| Frequency of Use | N/A |
| Cross Reference |  |

**2.1.3 Add Billing Setup Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.1.3** |
| Use case Description: | This use case describes the flows of storing configuration information into the system.  Enable user to add one or more component to the configuration.  Notify the user about any conflict in the current configuration.  Allow user to confirm the completion of current configuration. |
| Actors: | System administrator / CRM administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system. 2. System Administrator must have "Add New" access privilege on configuration information. |
| Post-Condition: | 1. System will store the information and will generate a confirmation message. |
| Normal Flows: | 1. **System Administrator**: initiates to add new configuration information. 2. **System**: will show common configuration entry page. 3. **System Administrator**: will select common configuration type and enters name of configuration and other information, Will click on Add/Save button after completion of required information. 4. **System**: will do the following task   a. Alert Administrator for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert Administrator for duplication for duplicate entry.  c. Will save information. |
| Alternative Flows: | N/A |
| Exception: | If configuration Type is not available  System: Cancels to add new common configuration information. |
| Frequency of Use | Low |
| Cross Reference | N/A |

**2.1.5 Update Billing Configuration information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.1.5** |
| Use case Description: | This use case describes the flows of updating of an existing configuration into system.  Enable user to update one or more component to the configuration.  Notify the user about any conflict in the current update.  Allow user to confirm the completion of current update. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system. 2. System Administrator must have "Edit" access privilege on configuration information. 3. Configuration information must have existed in the system. |
| Post-Condition: | 1. System will generate a confirmation message  2. Audit trial will be generated into system |
| Normal Flows: | **1. System Administrator**: initiates to update the configuration information and selects the desired configuration.  2. **System**: will display the detail information in entry page.  3. **System** **Administrator**: Will update the desired information  4. **System**: will do the following task  a. Alert **System** **Administrator** for mandatory information If Accounts Manager fails to enter mandatory information.  b. Alert **System** **Administrator** for duplication for duplicate entry.  c. Will save updated information. |
| Alternative Flows: | N/A |
| Exception: | N/A |
| Frequency of Use | Low |
| Cross Reference |  |

**2.1.6 Delete the Setup Information**

|  |  |
| --- | --- |
| **Use Case ID:** | **crm/bm/srs/uc/2.1.6** |
| Use case Description: | This use case describes the flows of deleting of existing configuration information from system.  Billing setup page shall enable user to delete one or more component to the configuration.  Billing setup page shall notify the user about any conflict in the current delete process.  Billing setup page shall allow user to confirm the completion of delete process. |
| Actors: | System Administrator |
| Pre-Condition: | 1. System Administrator must be authorized user. System Administrator must be logged into the system.  2. System Administrator must have "Delete" access privilege on configuration information.  3. Setup must have existed in system. |
| Post-Condition: | 1. Deleted configuration information will be removed from the system and generate a confirmation message. 2. Audit trial will be generated into system. |
| Normal Flows: | 1. **System Administrator**: initiates to delete the configuration information and selects the desired setup  2. **System**: Will generate a confirmation message showing “Yes” and “No” button.  3. **System Administrator**: click on either “Yes” or “No”  4. **System**: if click on “Yes”, Will delete the information. |
| Alternative Flows: | N/A |
| Exception: | 3a. **System Administrator**: If click on “No” button  3a1. **System**: Cancels the deletion activities  4a. If parent-child relation exists  4a1 System: Cancels the deletion activities |
| Frequency of Use | Low |
| Notes and Issues: | N/A |
| Cross Reference | N/A. |