Purpose and Overview

- Script/Module Name: customer_pkg
- **Summary**: This PL/SQL package manages customer-related operations within the system. It includes functionalities to add, retrieve, update, and delete customer records, as well as purge old customer data.

1. Procedure Name1: new_customer

1. Functional Overview - This function adds a new customer to the xy_customer table. **2. Procedure Input and Output Data** - **Inputs**: - p_customer_name (VARCHAR2): The name of the customer to be added. - **Outputs**: - Returns customer_id (NUMBER): The ID of the newly added customer.

2. Core Functionality

Processing Logic: - Inserts a new record into the xy_customer table with the given customer name. - Retrieves the customer_id of the newly inserted record.

Business Logic: 1. Insert the customer name into the xy_customer table. 2. Retrieve and return the customer_id of the new record.

Business Rules: | Condition | Description | |------| | Unique Customer Name | Ensures that the customer name is unique in the xy_customer table. |

Data Validation: - Ensures that p_customer_name is not null or empty.

 $\begin{array}{l} \textbf{Error Codes and Messages:} \mid Error \ Code \mid Description/Error \ Message \mid \mid ------\mid \mid \mid N/A \mid N/A \mid \end{array}$

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

• The function returns the customer_id of the newly added customer.

1. Procedure Name2: get_customer

1. Functional Overview - This function retrieves a customer row from the xy_customer table based on the given customer_id. 2. Procedure Input and Output Data - Inputs: -p_customer_id (NUMBER): The ID of the customer to be retrieved. - Outputs: - Returns xy_customer%rowtype: The row of the customer.

2. Core Functionality

Processing Logic: - Selects the customer row from the xy_customer table where customer_id matches the input parameter.

Business Logic: 1. Retrieve the customer row based on customer_id. 2. Return the customer row.

Business Rules: | Condition | Description | |------| | Valid Customer ID | Ensures that the customer_id exists in the xy_customer table. |

Data Validation: - Ensures that p customer id is a valid number.

 $\begin{array}{l} \textbf{Error Codes and Messages:} \mid Error \ Code \mid Description/Error \ Message \mid \mid ------ \mid \mid N/A \mid$

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

• The function returns the customer row.

1. Procedure Name3: getcustomername

1. Functional Overview - This function retrieves the name of a customer from the xy_customer table based on the given customer_id. **2. Procedure Input and Output Data** - **Inputs**: -p_customer_id (NUMBER): The ID of the customer whose name is to be retrieved. - **Outputs**: - Returns xy_customer_name%type: The name of the customer.

2. Core Functionality

Processing Logic: - Selects the customer name from the xy_customer table where customer_id matches the input parameter.

Business Logic: 1. Retrieve the customer name based on customer id. 2. Return the customer name.

Business Rules: | Condition | Description | |------| | Valid Customer ID | Ensures that the customer_id exists in the xy_customer table. |

Data Validation: - Ensures that p_customer_id is a valid number.

 $\begin{array}{l} \textbf{Error Codes and Messages:} \mid Error \ Code \mid Description/Error \ Message \mid \mid ------ \mid \mid N/A \mid N/A \mid \end{array}$

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

• The function returns the customer name.

1. Procedure Name4: set customer

1. Functional Overview - This procedure updates the name of a customer in the xy_customer table based on the given customer_id. 2. Procedure Input and Output Data - Inputs: - p_customer_id (NUMBER): The ID of the customer to be updated. - p_customer_name (VARCHAR2): The new name of the customer. - Outputs: - N/A

2. Core Functionality

Processing Logic: - Updates the customer name in the xy_customer table where customer_id matches the input parameter.

Business Logic: 1. Update the customer name based on customer_id.

Business Rules: | Condition | Description | |-----| | Valid Customer ID | Ensures that the customer_id exists in the xy_customer table. | | Valid Customer Name | Ensures that the p_customer_name is not null or empty. |

Data Validation: - Ensures that p_customer_id is a valid number. - Ensures that p_customer_name is not null or empty.

 $\begin{array}{l} \textbf{Error Codes and Messages:} \mid Error Code \mid Description/Error Message \mid \mid ------ \mid \mid N/A \mid N/A \mid \end{array}$

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

• N/A

1. Procedure Name5: set customer (row-based)

1. Functional Overview - This procedure updates a customer row in the xy_customer table based on the given row data. **2. Procedure Input and Output Data** - **Inputs**: - p_row (xy_customer%rowtype): The row data of the customer to be updated. - **Outputs**: - N/A

2. Core Functionality

Processing Logic: - Updates the customer row in the xy_customer table where customer_id matches the customer_id in the input row.

Business Logic: 1. Update the customer row based on customer_id.

Business Rules: | Condition | Description | |------| | Valid Customer ID | Ensures that the customer_id exists in the xy_customer table. |

Data Validation: - Ensures that p row.customer id is a valid number.

Error Codes and Messages: | Error Code | Description/Error Message | |------| N/A | N/A |

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

• N/A

1. Procedure Name6: delete customer

1. Functional Overview - This procedure deletes a customer from the xy_customer table based on the given customer_id. **2. Procedure Input and Output Data** - **Inputs**: -p_customer_id (NUMBER): The ID of the customer to be deleted. - **Outputs**: - N/A

2. Core Functionality

Processing Logic: - Deletes the customer row from the xy_customer table where customer_id matches the input parameter.

Business Logic: 1. Delete the customer based on customer_id.

 $\textbf{Business Rules:} \ | \ Condition \ | \ Description \ | \ | ------- | ------- | \ | \ Valid \ Customer \ ID \ | \ Ensures \ that \ the \ \texttt{customer_id} \ exists \ in \ the \ \texttt{xy_customer} \ table. \ |$

Data Validation: - Ensures that p_customer_id is a valid number.

 $\begin{array}{l} \textbf{Error Codes and Messages:} \mid Error \ Code \mid Description/Error \ Message \mid \mid ------ \mid \mid \\ N/A \mid N/A \mid \\ \end{array}$

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

N/A

1. Procedure Name7: purgeoldcustomers

1. Functional Overview - This procedure purges old customer data from the xy_customer table based on the given since_date and optionally deletes the audit trail. 2. Procedure Input and Output Data - Inputs: -p_since_date (DATE): The cutoff date for purging old customer data. -p_delete_audit_trail (BOOLEAN): Flag to indicate whether to delete the audit trail. - Outputs: - N/A

2. Core Functionality

Processing Logic: - Deletes customer rows from the xy_customer table where last_active_date is less than or equal to p_since_date. - Optionally deletes the audit trail if p_delete_audit_trail is true.

Business Logic: 1. Delete old customer data based on since_date. 2. Optionally delete the audit trail.

Business Rules: | Condition | Description | |------|-----| | Valid Since Date | Ensures that p_since_date is a valid date. | | Valid Audit Trail Flag | Ensures that p_delete_audit_trail is a boolean value. |

Data Validation: - Ensures that p_since_date is a valid date. - Ensures that p_delete_audit_trail is a boolean value.

Error Codes and Messages: | Error Code | Description/Error Message | |-------| N/A | N/A |

3. Integration Points:

Interfacing Systems: - System 1: CRM, e.g., updates customer records.

4. Final Output:

• N/A

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