**Project Design Phase-II**

**Project Development Phase**

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| **Date** | 04 Nov 2023 |
| **Team Id** | **NM2023TMID02492** |
| **Project Name** | Cosmetics Store Management |

Considering a functional feature related to customer registration. The objective is to implement a feature where a new customer can register in the system. The code should be well-structured, readable, and reusable.

CustomerRegistration.apex:

public class CustomerRegistration {

// Functional Feature: Customer Registration

public static void registerNewCustomer(String firstName, String lastName, String email, String address) {

try {

// Check if the provided email is unique and not already registered

if (!isEmailRegistered(email)) {

// Create a new Customer record

Customer\_\_c newCustomer = new Customer\_\_c();

newCustomer.FirstName\_\_c = firstName;

newCustomer.LastName\_\_c = lastName;

newCustomer.Email\_\_c = email;

newCustomer.Address\_\_c = address;

// Insert the new customer record into the database

insert newCustomer;

System.debug('Customer Registration Successful: ' + newCustomer.Id);

} else {

System.debug('Customer Registration Failed: Email already in use.');

throw new Exception('Email already in use.');

}

} catch (Exception e) {

System.debug('Error during Customer Registration: ' + e.getMessage());

}

}

// Check if the provided email is already registered

private static Boolean isEmailRegistered(String email) {

Integer existingCustomerCount = [SELECT COUNT() FROM Customer\_\_c WHERE Email\_\_c = :email];

return existingCustomerCount > 0;

}

}

Code Explanation:

* The functional feature is Customer Registration, which allows a new customer to register in the system.
* The code is well-structured, readable, and reusable, making it easy to understand and maintain.
* We use an algorithm to check if the provided email is already registered, which ensures optimal memory utilization.
* Debugging and traceability are performed using the **System.debug** statements to log registration success and failure.
* Exception handling is used to catch and handle exceptions, such as when the provided email is already registered.