**Spring & Hibernate Coding Assessment**

**Duration: 3 Hours**

Retail Management Portal.

Admin Module – All admin related operations related to adding /maintaining a new Grocery, adding/maintaining a new product, updating product prices will be part of this module

### System Usage

1. Search for Grocery / Product
2. Product Inventory Management which involves
   1. Add /Update/Delete Product

### Project Retail Management System – Functional Requirements

### Search for Products

* User can search for Products by Category

### Admin Module

### Add Products

* Admin should be able to Add Product on the Portal and can provide form for collecting other necessary information. Product can have attributes like Category, Type, Expiry Date…..just to name a few.

### Edit Products

* Admin should be able to retrieve the product by the productId and should be able to edit the Product details of the Product. He can update the data. Data such as Expiry date of any product cannot be extended.

### Delete Products

* Admin should be able to delete the product by product Id. The System should send him notifications on the products whose expiry date is in the current week. The Admin should be able to view the products whose expiry date falls in the current and next week.

### Product Search

* Any user irrespective of whether he is a guest user or a registered user, should be able to search for the Products.
* A user should be able to search for any product he is looking for with ease. The Products should be categorized into different categories and sub categories if need be. He should be able to see the product details of the chosen product
* A user should be able to add a product to the cart. He should be able to update the quantity of the products orders. He should also be able to remove the product from the Shopping Cart.

**Evaluation Criteria**

* Solution should be functional
* Solution should be extensible and maintainable.
* Usage of Spring and Hibernate concepts.
* Coding best practices.
* Naming conventions.