**SDA6 LUND**

**GROUP3 FINAL PROJECT**

**GROCERY ONLINE SYSTEM**

**(Technical Document)**

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# **AMENDMENT HISTORY:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author/Changed by** | **Status** |
| V1.0 | 20191212 | Karthicka Raju | Draft |
| V2.0 | 20191213 | Karthicka Raju / Veena Ramappa | Final |

# **1 - REQUIREMENT DETAILS:**

The importance of online grocery ordering system is growing up day by day, user needs a simple interface to order grocery items online, this project online grocery ordering system fulfils all the requirements of user and it provides an easy interface to navigate.

As this online application enables the end users to register to the system online, select the grocery items of their choice from the menu list, and order grocery items online.

# **2 - PLATFORM SPECIFICATIONS - DEPLOYMENT**

## **2.1 - SOFTWARE SPECIFICATION:**

1. Operating System - Windows and Mac
2. Java 8
3. Eclipse IDE
4. Database MySQL Server
5. JBoss Server

## **2.2 - HARDWARE SPECIFICATION:**

1. Processor Intel core i5
2. RAM 8GB
3. Minimum space required 100 MB
4. Display 24-bit color

# **3 - TECHNICAL REQUIREMENT:**

To implement Grocery Online System a java web application is developed based on MVC pattern (Model View Controller), where a POJO Model, Servlets, Controller and a JSP & HTML views developed to achieve the requirement.

# **4 - SYSTEM ANALYSIS:**

## **4.1 - FLOW DIAGRAM: MVC**

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**A screenshot of a cell phone

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## **4.3 - CHEN DIAGRAM:**

**A close up of a map

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## 

## **4.4 - LOGICAL DIAGRAM:**

* Customer(CustomerId,FirstName,LastName,PhoneNumber,Address,Zip,Country,pwd1,pwd2,Email)
* Product(productName,productPrice,productId,categoryId)
* Categories(categoryId,categoryName)
* Orders(OrderId,ContactName,DeliveryAddress,CDName,CDNumber,CDExpiryDate)
* OrderInfo (OrderId,ProductId,Quantity,Price)

# **5 - TECHNICAL OVERVIEW:**

## **5.1 - Packages created:**

1 - org.sda.model

1. EstablishConnection.java
2. Product.java
3. Registration.java
4. ShoppingItem.java

2 - org.sda.controller

1. ManageCartController.java
2. RegistrationServlet.java

# **5.2 - MODEL JAVA CLASS:**

## **5.2.1 - Registration.java:**

[Registration.java](Grocery_files/Registration.pdf)

## 

## **5.2.2 - EstablishConnection.java:**

[EstablishConnection.java](Grocery_files/EstablishConnection.pdf)

## **5.2.3 - Product.java:**

[Product.java](Grocery_files/Product.pdf)

## 

## **5.2.4 - ShoppingItem.java:**

# [ShoppingItem.java](Grocery_files/ShoppingItem.pdf)

# **5.3 - CONTROLLER JAVA CLASS:**

## **5.3.1 - RegistrationServlet.java:**

[RegistrationServlet.java](Grocery_files/RegistrationServlet.pdf)

## **5.3.2 - ManageCartController.java:**

[manageCartController.java](Grocery_files/manageCartController.pdf)

# **5.4 - JSP CLASS:**

* JSP known as Java Server Pages is a Java technology that helps software developers serve dynamically generated web pages based on HTML, XML, or other document types.
* JSP was released in 1999 as Sun's answer to ASP and PHP;
* A Web developer, working independently, can use Java code and other JSP specific tags to code the business logic.
* Java is known for its characteristic of "write once, run anywhere".  JSP pages are platform independent. You can port your .jsp pages to any platform.

## **5.4.1 - Bill.jsp:**

## 

## [Bill.jsp](Grocery_files/Bill.pdf)

## **5.4.2 - BrowseCatalog.jsp:**

[BrowseCatalog.jsp](Grocery_files/BrowseCatalog.pdf)

## **5.4.3 - CheckOut.jsp:**

[CheckOut.jsp](Grocery_files/CheckOut.pdf)

## **5.4.4 - HomePage.jsp:**

[HomePage.jsp](Grocery_files/HomePage.pdf)

## **5.4.5 - Index.jsp:**

[Index.jsp](Grocery_files/Index.pdf)

## **5.4.6 - LoginErrorPage.jsp:**

[LoginErrorPage.jsp](Grocery_files/LoginErrorPage.pdf)

## **5.4.7 - Menu.jsp:**

[Menu.jsp](Grocery_files/Menu.pdf)

## **5.4.8 - Order.jsp:**

[Order.jsp](Grocery_files/Order.pdf)

## **5.4.9 - Product.jsp:**

[Product.jsp](Grocery_files/Product1.pdf)

## **5.4.10 - ProductDetails.jsp:**

[ProductDetails.jsp](Grocery_files/ProductDetails.pdf)

## **5.4.11 - ProductTwo.jsp:**

[ProductTwo.jsp](Grocery_files/ProductTwo.pdf)

## **5.4.12 - SearchResults.jsp:**

[SearchResults.jsp](Grocery_files/SearchResults.pdf)

## 

## **5.4.13 - ShoppingCart.jsp:**

[ShoppingCart.jsp](Grocery_files/ShoppingCart.pdf)

## **5.4.14 - Thanks.jsp:**

[Thanks.jsp](Grocery_files/Thanks.pdf)

# **5.5 - HTML CLASS:**

* HTML was used to design and formulate the layout of the Web page.
* HTML known as HyperText Markup Language is a markup language used to construct online documents. HTML is the foundation of most websites today. AS a markup language, HTML allows us to:
* create links to other documents,
* structure the content in our document, and
* ascribe context and meaning to the content of our document.
* An HTML document contains structured information (Markup), and text-links (HyperText) to other documents. We structured our pages using [HTML elements](https://guide.freecodecamp.org/html). They are constructs of the language providing [structure](https://guide.freecodecamp.org/html) and [meaning](https://guide.freecodecamp.org/html) in our document for the browser and the element links to other documents across the internet.

## **5.5.1 - Registration.html:**

[Registration.html](Grocery_files/Registration1.pdf)

## **5.5.2 - about.html:**

## [about.html](Grocery_files/about.pdf)

## **5.5.3 - all.html:**

[all.html](Grocery_files/all.pdf)

## 

## **5.5.4 - index.html:**

[index.html](Grocery_files/index1.pdf)

# **6 - DATABASE DESIGN:**

The database has been developed by using MySQL Workbench is a graphical user interface (GUI) tool for MySQL. It allows you to design, create and browse your schemas, insert data and run SQL queries to work with the stores data.

## **6.1 - Categories:**

It holds the details of all the different categories, categoryId is the primarykey and it is automatically generated. Currently we have two categories Vegetables and Fruits as below in the picture.

A screenshot of a cell phone

Description automatically generated

## **6.2 - Customer:**

It holds the data of all the registered Users. Primarykey of the table is CustomerId and it is automatically generated, other fields of the table are as in below Picture.

A screenshot of a cell phone

Description automatically generated

## **6.3 - OrderInfo:**

It is an association table between Order and Product which holds the details of the orders containing different products. It has OrderId and ProductId as foreignKeys, Check the below picture.

A screenshot of a cell phone

Description automatically generated

## **6.4 - Orders:**

Order table is updated when the User completes his/her shopping and does the payment, OrderId is automatically generated as Primarykey. Refer to the below picture.

**A screenshot of a cell phone

Description automatically generated**

## **6.5 - Product:**

It holds the details of the different products, primarykey of the table is productid and it is automatically generated. CategoryId is a foreignkey indicating which category (In this case fruits and vegetables) belongs to other fields and details of the product table, refer to the below picture.

**A screenshot of a cell phone

Description automatically generated**