

Report On

# **Online Grocery Store Management**

Submitted in partial fulfillment of the requirements of the Course project in  
Semester IV of Second Year Computer Engineering

By

Swapnil Sawant (31)

Tanzil Sayed (33)

Supervisor

Ms. Sneha Mhatre

**Vidyavardhini's College of Engineering & Technology**

**Department of Computer Engineering**



**(2023-24)**

# **Vidyavardhini's College of Engineering & Technology**

## **Department of Computer Engineering**

### **CERTIFICATE**

This is to certify that the project entitled “Online Grocery Management System” is a bonafide work of “Swapnil Sawant (31), Tanzil Sayed(33),” submitted to the University of Mumbai in partial fulfillment of the requirement for the Course project in semester IV of Second Year Computer Engineering.

Ms. Sneha Mhatre

Mentor

Megha Trivedi

Head of Department

Dr. H.V. Vankudre

Principal

## **ABSTRACT**

The Online Grocery Management System (OGMS) is a comprehensive web-based platform designed to streamline and optimize the process of purchasing groceries online. With a user-friendly interface, it allows customers to browse, select, and purchase groceries from the comfort of their homes. The system integrates with existing grocery stores to provide a wide range of products and ensure timely delivery to customers' doorsteps. Advanced features such as personalized recommendations, order tracking, and secure payment processing enhance the shopping experience. Additionally, the system offers inventory management tools for grocery store owners to efficiently manage stock levels and fulfill orders. Through seamless integration and efficient management, OGMS revolutionizes the way people shop for groceries, offering convenience, reliability, and satisfaction.

## **CONTENTS:**

	<b>Pg. No</b>
1. Report Page	1
2. Certificate	2
3. Abstract	3
5.Module Description	5
6.Software Required	8
7.Program	9
8.Result	10
9.Conclusion	11

## MODULE DESCRIPTION AND FLOWCHART:

### 1. User Management Module:

- Registration: Allows users to create new accounts by providing necessary information.
- Login: Authenticates users to access the system.
- Profile Management: Enables users to update their personal information, change passwords, and manage addresses.

### 2. Product Catalog Module:

- Product Listing: Displays a categorized list of available grocery items with details such as name, price, description, and image.
- Search and Filter: Facilitates users to search for specific products and apply filters based on categories, brands, prices, etc.
- Product Details: Provides detailed information about each product, including nutritional information, ingredients, and reviews.

### 3. Shopping Cart Module:

- Add to Cart: Allows users to add products to their shopping cart for later purchase.
- Update and Remove Items: Enables users to modify the quantity of items in the cart or remove them entirely.
- Cart Summary: Displays a summary of all items in the cart along with the total price.

### 4. Checkout Module:

- Delivery Address: Allows users to select or add delivery addresses for their orders.
- Payment Methods: Supports various payment options such as credit/debit cards, net banking, cash on delivery, etc.
- Order Confirmation: Provides a confirmation page before finalizing the order, showing order details and total amount.

### 5. Order Management Module:

- Order History: Displays a list of past orders with order details, status, and tracking information.
- Order Tracking: Allows users to track the status of their current orders in real-time.
- Order Cancellation: Enables users to cancel pending orders within a specified time frame.

### 6. Inventory Management Module:

- Product Management: Allows administrators to add, edit, and delete products from the catalog.
- Stock Management: Tracks inventory levels and alerts administrators when stock is low or out of stock.
- Supplier Management: Manages information about suppliers, including contact details and product sourcing.

## SOFTWARE REQUIRED:

### Development Environment:

1. **Python:** The core language used for the project. Ensure you have the latest Python version installed, or at least a version that supports all the libraries you plan to use.
2. **Integrated Development Environment (IDE):**
  - **PyCharm:** Highly recommended for Python projects due to its robust features, including code completion, project management, and debugging tools.
  - **Visual Studio Code:** A lightweight, versatile editor with strong Python support via extensions.

### Libraries Module:

1. **tkinter:** Used for creating a graphical user interface (GUI) window. It provides various widgets and tools for building interactive applications with buttons, labels, entry fields, etc.
2. **qrcode:** Used for generating QR codes. This library allows the program to encode data into a QR code format, such as URLs, text, contact information, etc.
3. **PIL (Python Imaging Library):** Used for working with images. In this script, it is specifically used for displaying images in the GUI window. The **Image** module is used to open and manipulate image files, while **ImageTk** is used for displaying images in tkinter windows.
4. **resizeimage:** Used for resizing images. This library provides functionality to resize images to specific dimensions, which may be useful for adjusting the size of the QR code image before displaying it in the GUI.

## PROGRAM:

```
<!doctype html>

<html lang="en">
<head>
  <!-- Required meta tags -->
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">

  <!-- Bootstrap CSS -->
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/css/bootstrap.min.css"
rel="stylesheet"
integrity="sha384-BmbxuPwQa2lc/FVzBcNJ7UAyJxM6wquIlj61tLrc4wSX0szH/Ev+nYRRuWlolflfl"
crossorigin="anonymous">

  <title>products</title>

  <link rel="icon" type="image/png"

href="https://southeastasia1-mediap.svc.ms/transform/thumbnail?provider=spo&inputFormat=jpeg&cs=fFN
QTW&docid=https%3A%2F%2Fviteduin59337-my.sharepoint.com%3A443%2F_api%2Fv2.0%2Fdrives%2
Fb!-TkH7zP3u0qzVB9cQZpab9xSy5HTcYNGiPVaZVGJB71AhPiWukEhTIP3NrJ--oMG%2Fitems%2F01T
UWEME2CWUI2Q4OB6VC37TBHUAD5RVQT%3Fversion%3DPublished&access_token=eyJ0eXAiOiJK
V1QiLCJhbGciOiJub251In0.eyJhdWQiOiIwMDAwMDAwMy0wMDAwLTBmZjEtY2UwMC0wMDAwMD
AwMDAwMDAvdml0ZWR1aW41OTMzNy1teS5zaGFyZXBvaW50LmNvbUBjN2IwMGQ3Zi1hZDk5LT
Q0MmEtYjEyZi1jMmM5MTIwNDRmZGMiLCJpc3MiOiIwMDAwMDAwMy0wMDAwLTBmZjEtY2Uw
MC0wMDAwMDAwMDAwMDAiLCJuYmYiOiIxNjE4NDc3MjAwIiwiaXhwIjoiaMTYxODQ5ODgwMCI
ImVuZHBvaW50dXJsIjoiaWwtyTEl2Zzg0bTlyVXhmazJSaE5MUC9aQVUzQURaNGNFZGtLRjEyT0dCU
T0iLCJlbmRwb2ludHVybExlbmd0aCI6IjEyMyIsImZlbnRzG9veGJhY2siOiJ1enVlliwidmVljoiaGFzaGVkcHJ
vb2Z0b2t1biIsInNpdGVpZC16IiwuXWdOek01WmprdfpY3pNeTAwWVdKaUxXSXpOVFF0TVdZMVl6
UXhPV0UxWVRabSIsInNpZ25pbl9zdGF0ZSI6Imtte2lcIl0iLCJuYW1laWQiOiIwIiw5mfG1lbWJlcnNoa
XB8eWFzaC5mYWxrZUB2aXQuZWR1LmluIiwibmlpIjoibWljcm9zb2Z0LnNoYXJlcG9pbmQiLCJpc3VzZ
XliOiJ0cnVlliwiaXhwIjoiaMTYxODQ5ODgwMCIiwiaXhwIjoiaMTYxODQ5ODgwMCIiwiaXhwIjoiaMTYxODQ5ODgwMCI
mNvbSIsInR0IjoiaMTYxODQ5ODgwMCIiwiaXhwIjoiaMTYxODQ5ODgwMCIiwiaXhwIjoiaMTYxODQ5ODgwMCI
mNvbSIsInR0IjoiaMTYxODQ5ODgwMCIiwiaXhwIjoiaMTYxODQ5ODgwMCIiwiaXhwIjoiaMTYxODQ5ODgwMCI
zFHRzduT2xuVG9zNUdpYmxYRERpOD0&encodeFailures=1&width=1325&height=597&srcWidth=&src
Height=""/>
  <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.3/css/fontawesome.min.css"
integrity="sha512-OdEXQYCOLdjqUEsuMKsZRj93Ht23QRlhIb8E/X0sbwZhme8eUw6g8q7AdxGJKakBb
v7+/PX0Gc2btf7Ru8cZA==" crossorigin="anonymous" />

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta3/dist/css/bootstrap.min.css"
rel="stylesheet"
```

```
integrity="sha384-eOJMYsd53ii+scO/bJGFsiCZc+5NDVN2yr8+0RDqr0Ql0h+rpP48ckxlpbzKgwra6"
crossorigin="anonymous">
```

```
<style>
```

```
body {
  background-color: #F3EBF6;
}
```

```
nav {
  float: right;
}
```

```
nav ul {
  list-style: none;
  margin: 0;
  padding: 0;
}
```

```
nav ul li {
  float: left;
  position: relative;
}
```

```
nav ul li a {
  display: block;
  padding: 0 20px;
  line-height: 70px;
  background: #F3EBF6;
  color: #463f3f;
  text-decoration: none;
  /*
```

The full path of this code is `nav ul li a:not(:only-child):after`. This means that the code will apply to any a tag in our nav list that is NOT an only child, aka any dropdown. The `:after` means it comes after the output of the tag. I've decided that to specify any nav item as a dropdown, it will be followed by a unicode arrow – ▼ (#9662).

```
  */
}
nav ul li a:hover {
  background: linear-gradient(to right, #9C27B0, #E040FB);
  color: white;
```

```

}
nav ul li a:not(:only-child):after {
  padding-left: 4px;
  content: '▼';
}
```

```
nav ul li ul li {
  min-width: 190px;
}
```

```
nav ul li ul li a {
  padding: 15px;
  line-height: 20px;
```



```

}

.nav-dropdown {
  position: absolute;
  z-index: 1;
  /* Guarantees that the dropdown will display on top of any content. */
  box-shadow: 0 3px 12px rgba(0, 0, 0, 0.15);
  display: none;
}

.nav-mobile {
  display: none;
  position: absolute;
  top: 0;
  right: 0;
  background: #fff;
  height: 70px;
  width: 70px;
}

@media only screen and (max-width: 800px) {
  .nav-mobile {
    display: block;
  }

  nav {
    width: 100%;
    padding: 70px 0 15px;
  }
  nav ul {
    display: none;
  }
  nav ul li {
    float: none;
  }
  nav ul li a {
    padding: 15px;
    line-height: 20px;
  }
  nav ul li ul li a {
    padding-left: 30px;
  }
}

#nav-toggle {
  position: absolute;
  left: 18px;
  top: 22px;
  cursor: pointer;
  padding: 10px 35px 16px 0px;
}

```

```

}
#nav-toggle span,
#nav-toggle span:before,
#nav-toggle span:after {
  cursor: pointer;
  border-radius: 1px;
  height: 5px;
  width: 35px;
  background: #463f3f;
  position: absolute;
  display: block;
  content: "";
  transition: all 300ms ease-in-out;
}
#nav-toggle span:before {
  top: -10px;
}
#nav-toggle span:after {
  bottom: -10px;
}
#nav-toggle.active span {
  background-color: transparent;
}
#nav-toggle.active span:before, #nav-toggle.active span:after {
  top: 0;
}
#nav-toggle.active span:before {
  transform: rotate(45deg);
}
#nav-toggle.active span:after {
  transform: rotate(-45deg);
}

```

```

@media screen and (min-width: 800px) {
  .nav-list {
    display: block !important;
  }
}
/*

```

.navigation – the outer wrapper for the navbar. Specifies the height and color, and will stretch the full width of the viewport.

```

*/
.navigation {
  position: fixed;
  top: 0;
  height: 70px;
  width: 100%;
  background: #F3EBF6;;
}

```

```

/*
.nav-container – the inner wrapper for the navbar. Defines how far the actual content should stretch.
*/
.nav-container {
  max-width: 1000px;
  margin: 0 auto;
}

```

```

.brand {
  position: absolute;
  padding-left: 20px;
  float: left;
  line-height: 70px;
  text-transform: uppercase;
  font-size: 1.4em;
}
.brand a,
.brand a:visited {
  color: #463f3f;
  text-decoration: none;
}

```

```

</style>

```

```

<script type="text/javascript"
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script type="text/javascript">
  (function($) { // Begin jQuery
$(function() { // DOM ready
  // If a link has a dropdown, add sub menu toggle.
  $('nav ul li a:not(:only-child)').click(function(e) {
    $(this).siblings('.nav-dropdown').toggle();
    // Close one dropdown when selecting another
    $('.nav-dropdown').not($(this).siblings()).hide();
    e.stopPropagation();
  });
  // Clicking away from dropdown will remove the dropdown class
  $('html').click(function() {
    $('.nav-dropdown').hide();
  });
  // Toggle open and close nav styles on click
  $('#nav-toggle').click(function() {
    $('nav ul').slideToggle();
  });
  // Hamburger to X toggle
  $('#nav-toggle').on('click', function() {
    this.classList.toggle('active');
  });

```

```
}); // end DOM ready
})(jQuery); // end jQuery
</script>
```

```
</head>
```

```
<body style="background-image:url();
background-size: cover; background-attachment:fixed; background-color: #F3EBF6;">
```

```
<!--
```

Following Tania Ruscia's tutorial on creating your own responsive dropdown navigation bar.

<https://www.taniarascia.com/responsive-dropdown-navigation-bar/>

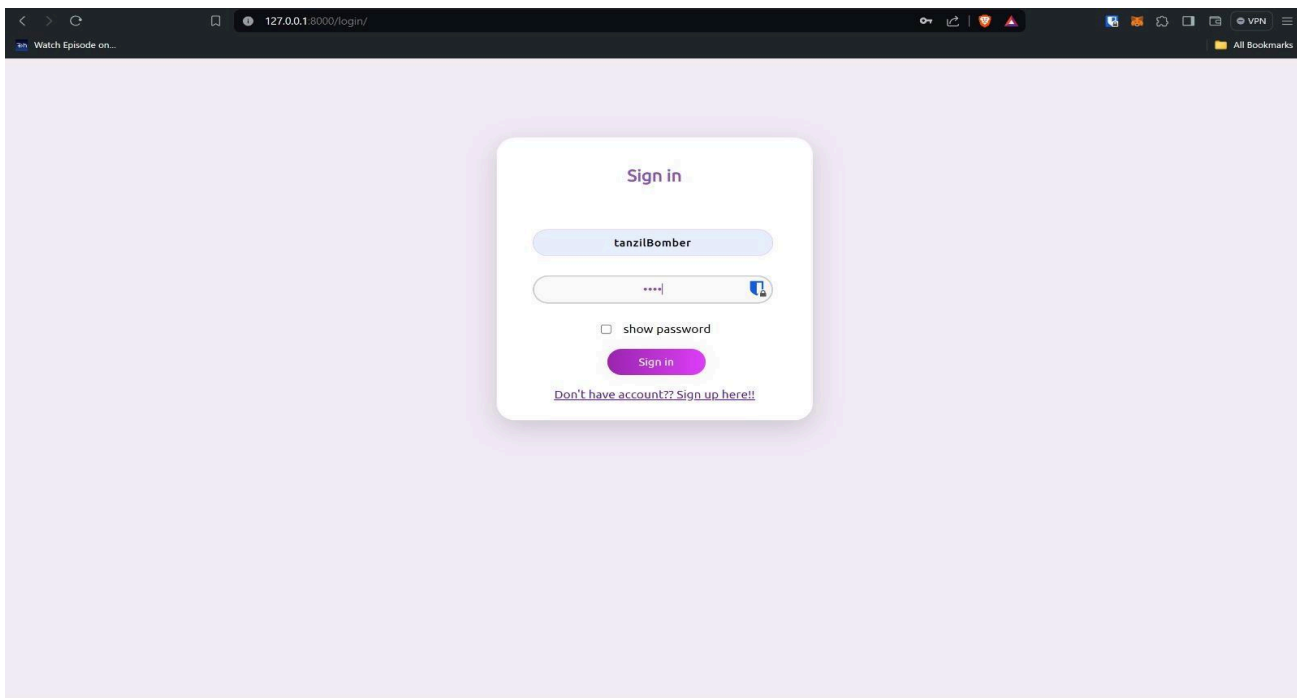
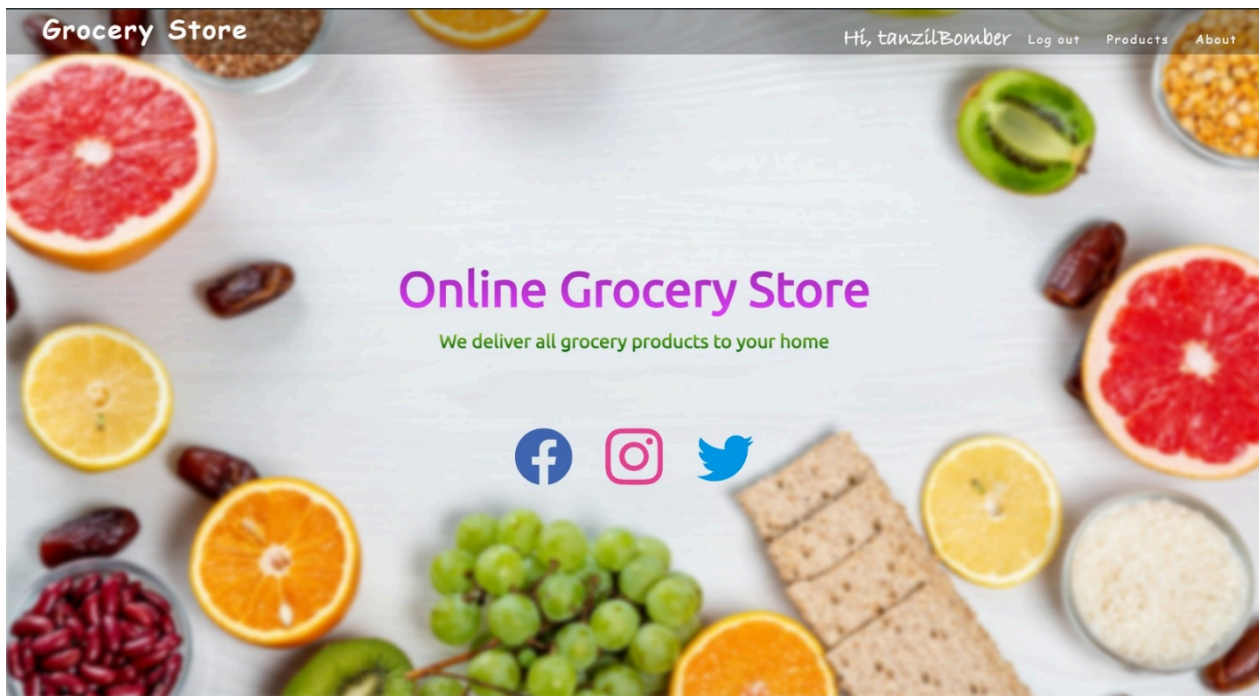
```
-->
```

```
<div class="container">
  {% block content %}
  {% endblock %}
</div>
```

```
</body>
```

```
</html>
```

## RESULTS:



# Shopping Cart

[Go to Product page](#)

PRODUCT	PRICE	QUANTITY(KG)	PRICE PER PRODUCT
kiwi	₹ 25.0/kg	4 kg	₹ 100.0
Ginger	₹ 75.0/kg	2 kg	₹ 150.0

## COUPON CODE

If you have a coupon code, please enter it in the box below

Apply coupon

## ORDER SUMMARY

Shipping and additional costs are calculated based on values you have entered.

Order Subtotal ₹ 250.0

Shipping and handling(tax included) ₹ 100.00

## INSTRUCTIONS FOR SELLER

PRODUCT	PRICE	QUANTITY(KG)	PRICE PER PRODUCT
kiwi	₹ 25.0/kg	4 kg	₹ 100.0
Ginger	₹ 75.0/kg	2 kg	₹ 150.0

## COUPON CODE

If you have a coupon code, please enter it in the box below

Apply coupon

## ORDER SUMMARY

Shipping and additional costs are calculated based on values you have entered.

Order Subtotal ₹ 250.0

Shipping and handling(tax included) ₹ 100.00

**Total ₹ 350.0**

Proceed to checkout

## INSTRUCTIONS FOR SELLER

If you have some information for the seller you can leave them in the box below

## **CONCLUSION:**

In conclusion, the Online Grocery Management System presents a comprehensive solution for streamlining the process of grocery shopping, both for customers and administrators. By leveraging modern technology and user-centric design, the system offers convenience, efficiency, and flexibility to users while enhancing operational efficiency for grocery store owners. For customers, the system provides a user-friendly interface to browse through a wide range of grocery items, add them to their shopping cart, and place orders seamlessly. With features such as product search, filters, and detailed product information, customers can make informed purchasing decisions from the comfort of their homes. The checkout process is streamlined, allowing users to choose delivery addresses, select payment methods, and track their orders in real-time. For administrators, the system offers robust inventory management capabilities, enabling them to track stock levels, manage suppliers, and update product information effortlessly. The reporting and analytics module provides valuable insights into sales performance, inventory turnover, and customer behavior, empowering administrators to make data-driven decisions to optimize operations and enhance profitability. Overall, the Online Grocery Management System bridges the gap between traditional grocery shopping and modern e-commerce, offering a convenient and efficient platform for users to fulfill their grocery needs. With its user-friendly interface, comprehensive features, and scalability, the system is poised to revolutionize the way grocery stores operate and cater to the evolving needs of customers in the digital age.