**“E-COMMERCE MANAGEMENT SYSTEM”**

**Advance Web Programming report submitted in the partial fulfilment the award of degree of**

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE AND ENGINEERING**

**By**

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**BONAFIDE CERTIFICATE**

This is to certify that the Thesis/Dissertation work entitled **“E-COMMERCE MANAGEMENT SYSTEM”** is a bonafide record prepared by A.Vyshnavi (211801350020), during 2022-2023 in the partial fulfillment of the requirements for the award of the degree Bachelor Of Technology In Computer Science And Engineering in the department of computer science and engineering, **Centurion University of Technology and management, Vizianagaram,** The results embodied in this project have not been submitted to any other University or Institute for the award of any degree or diploma.

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It is with at most pleasure and excitement we submit our project partial fulfillment of the requirement for the award of Bachelor of Technology.

The project is a result to the cumulate efforts, support, guidance, encouragement and inspiration from many of those for whom we have to give our truthful honor and express gratitude through bringing out this project at the outset as per our knowledge.

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**DECLARATION**

I hereby solemnly declare that the work done on the project entitled “**E-COMMERCE MANAGEMENT SYSTEM”** submitted to the department of computer science and engineering, **CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT**, **ANDHRA PRADESH.**, is prepared by me and was not submitted to any other institution for the award of any other degree.

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# **Introduction**

The following section provides an overview of the derived Software Requirements Specification (SRS) for the E-Commerce Management System (ECMS) topic. It begins by introducing the purpose of the document and outlining the target audience. Then, the scope of the project specified by the document is given, focusing on the resulting software's features and associated benefits. The nomenclature used in the SRS is also presented. Finally, a complete overview of the document is provided to assist the reader in understanding and navigating it.

* 1. **Purpose**

The purpose of this SRS is to outline both the functional and non-functional requirements of the subject ECMS. In addition to said requirements, the document also provides a detailed profile of the external interfaces, performance considerations and design constraints imposed on the subsequent implementation. It is the intention that the presented set of requirements possesses the following qualities; correctness, unambiguousness, completeness, consistency, verifiability, modifiability and traceability. Consequently, the document should act as a foundation for efficient and well-managed project completion and further serve as an accurate reference in the future. The primary audience of this SRS document will be the development team employed to implement the specified ECMS. It will not only provide an extensive capacity for project planning and progress assessment but it will further assist with developer/stakeholder interactions. The secondary document audience comprises the stakeholders of the project, that is, florist and associated staff.

## **Scope**

In current formal floral environments, some form of physical static flowers are utilized to convey the available flowers and bouquet choices to customers. Said designs are generally paper based and hence impose restrictions on the textual real estate available and the ability a florist has to update them. This document specifies the requirements for a florist to alleviate the problems associated with the current archaic method. Three related concepts are encompassed by the general scope of the Floral E-Commerce Website. It should be noted that while the suggested strategy incorporates the use of various hardware components, the primary focus of the presented SRS relates to the constituent software elements.

## **1.3. Overview**

We are going to focus on describing the system in terms of product perspective, product functions, user characteristics, assumptions and dependencies on the following section of this document. Next, we will address specific requirements of the system, which will enclose external interface requirements, requirements of the system, performance requirements, and other requirements.

# **Overall Description**

The E-Commerce (Floristry) Management System is a software package to facilitate a traditional floristry. The customer is able to view the designs or availability, call the florist, and organize the final bill through the surface computer interface built into their table. Florists are able to initialize a bouquet for customers, assist customers, send orders to bouquet preparation staff and finalize the bill – all through their wireless tablet PC. The food staff, with their touch-display interfaces to the system, are able to view orders sent to the florists. During preparation, they are able to let the customer know the status of each item, and can send notifications when items are completed, again through the touch display. The system contains full accountability and logging systems, and supports supervisor actions to account for exceptional circumstances, such as being refunded or walked out on. Customers are presented with an attractive and easy-to-use website

## **Product Perspective**

The E-Commerce Management System helps the florist to manage the orchid more effectively and efficiently by computerizing ordering, billing and inventory control. The system processes transaction and stores the resulting data. Reports will be generated from these data which help the florist to make appropriate business decisions for the floristry. For example, knowing the number of customers for a particular time interval, the manager can decide whether more staff are required. Moreover, easily calculate daily expenditure and profit. The whole management system is designed for a general Computerized Digital Floristry. So that florist can get it and can start automated process to his floristry.

## **Product Functions**

Whole functions will performed through this order.

* Customer Information
* Available flowers
* Required flowers
* Bouquet Designs
* Order
* Payment
* Customer Review

### 2.2.1 User Management Requirements

### User management is an essential component of a e-commerce management system as it allows the restaurant to control access to sensitive information and functions within the system. Here are some key aspects of user management that a e-commerce management system should include:

### User Roles and Permissions: An e-commerce management system should provide the ability to define user roles with specific permissions. For example, a server might only have permission to take orders, while a manager might have permission to access financial reports.

### User Authentication: The e-commerce management system should have a robust authentication mechanism that requires users to enter a unique username and password to access the system. This can be supplemented with multi-factor authentication for added security.

### User Profile Management: The e-commerce management system should allow users to manage their own profiles, including updating contact information and changing passwords.

### User Activity Logging: The system should maintain logs of user activity to track who performed what actions and when.

### User Account Deactivation: The e-commerce management system should allow administrators to deactivate or delete user accounts when necessary, such as when an employee leaves the company.

### By implementing robust user management features, an e-commerce management system can improve security, ensure accountability, and streamline operations.

**2.2.2 Code Editor Requirements**

One of the most important functionality expected from an e-commerce management system is a code editor which will ease the developer’s life. Code editor will be the main interface that developers deal with. It supports variety of programming language with highlighting, syntax checking, auto-indentation and language specific auto-complete.

### 2.2.3 Debugger Requirements

### Debugger is the main tool that developers can test and debug their target program. Debugger of the product should allow setting and displaying breakpoints on the code. It will also provide functionality of stopping/continuing of the execution of debugger. Finally, it will provide an expression interface where user can enter an expression and observe the value of expression at each step.

### 2.2.4 Terminal Requirements

### As an important part of the software development process, an e-commerce management system should provide a command line interface where user can work in old fashion and accomplish complicated tasks such as configuring git synchronization. Main component of CLI will be the terminal. Terminal will allow user to run UNIX command on his own workspace and also run predefined programs such as mvn, svn etc. Terminal will also provide auto-complete by list of available commands and browse in the command history.

### 2.2.5 Interface Requirements

This group of requirements is related to external interaction of the workspace with outer world. For user to interact with the workspace, product will provide both command line interface and graphical interface. Command line interface will be UNIX like and graphical interface will allow tabbed navigation of windows, hierarchical view of workspace etc.

Again as an external interface, product will support a synchronization interface for external services. Through this interface, user will be able to synchronize his workspace with external services like GitHub and SVN.

## **2.3. User Characteristics**

## 

The logical characteristics of each interface between the software product and its users. This includes those configuration characteristics (e.g., required screen formats, page or window layouts, content of any reports, or availability of programmable function keys) necessary to accomplish the software requirements. All the aspects of optimizing the interface with the person who uses, maintains, or provides other support to the system. This may simply comprise a list of do's and don'ts on how the system will appear to the user. One example may be a requirement for the option of long or short error messages.

**Hardware Interfaces**

These devices are the surface computers, the wireless tablets and the touch displays. All three devices must be physically robust and immune to liquid damage and stains. The devices(with the possible exception of displays) must also have good industrial design aesthetics, as they are to be used in place of normal restaurant tables and notepads and will be in direct contact with customers.

**Software Interfaces**

The RFOS will interface with a Database Management System (DBMS) that stores the information necessary for the RMOS to operate. The DBMS must be able to provide, on request and with low latency, data concerning the designs and flowers availability, employees (and their passwords) and available requirements.

## **Constraints**

Developers of the product should be aware that main feature of the intended product is portability. So they should use common libraries and tools that can work with all the common internet browser application with no problem.

Developers should also be careful about the privacy of users. Since product will be cloud application, all user data will be kept on cloud server and necessary precautions should be taken to protect user data.

Since product will be cloud application and all user programs will be executed on cloud server, developers should limit the privileges of the users so that they cannot harm other users’ data and system server.

# **Specific Requirements**

The e-commerce management system should at least include the following features,

* Allow to add and remove item to order
* Allow to add and remove bouquet designs
* Generate bills
* Manage payment of bills
* Generate order tickets

## **External Interface Requirements**

* Responsive Design: The system should be designed to be responsive and adaptable to different screen sizes and devices, including desktops, laptops, tablets, and mobile phones.
* Accessibility: The system should comply with accessibility guidelines, making it usable for people with disabilities.
* Social Media Integration: The system should allow users to share their experiences on social media platforms and facilitate social media marketing for the floristry.
* Analytics and Reporting: The system should have the ability to collect data and generate reports on customer behavior, sales trends, and other key performance indicators to help the floristry make informed decisions.
* Multilingual Support: The system should support multiple languages to accommodate customers from diverse linguistic backgrounds.
* Feedback and Review System: The system should have a feedback and review system to allow customers to leave reviews and ratings, helping the floristry improve its services and attract new customers.
* Loyalty Programs: The system should have the ability to implement loyalty programs, reward loyal customers, and offer promotions and discounts to drive repeat business.

### External Services Synchronization Interface

### Payment Gateways: The system should be able to synchronize with payment gateways such as Stripe, PayPal, Braintree, etc. to facilitate secure and reliable payment processing.

### Inventory Management Systems: The system should be able to synchronize with inventory management systems to keep track of flowers and supplies levels, ensuring that there are no shortages or wastage.

### Social Media Platforms: The system should be able to synchronize with social media platforms such as Facebook, Instagram, Twitter, etc. to post updates, interact with customers, and build a strong online presence.

### Customer Relationship Management (CRM) Tools: The system should be able to synchronize with CRM tools such as Salesforce, HubSpot, etc. to manage customer data, track interactions, and provide personalized services.

### Analytics and Reporting Tools: The system should be able to synchronize with analytics and reporting tools such as Google Analytics, Mixpanel, etc. to track website traffic, customer behavior, and other key metrics.

### Loyalty Programs: The system should be able to synchronize with loyalty program platforms such as Belly, Punchh, etc. to manage loyalty rewards, promotions, and discounts.

### Command Line Support

### Batch Processing: The system should support batch processing through command line scripts, allowing for bulk data import, export, and updates.

### Automated Tasks: The system should support automated tasks such as backups, system updates, and scheduled reports, which can be triggered through command line scripts.

### System Monitoring: The system should support system monitoring through command line tools, allowing administrators to check system logs, memory usage, and other key metrics.

### Data Management: The system should support data management through command line scripts, allowing for data cleaning, manipulation, and analysis.

### Security Management: The system should support security management through command line tools, allowing administrators to perform security audits, configure firewalls, and manage access controls.

### User Management: The system should support user management through command line tools, allowing administrators to create, delete, and manage user accounts.

### Configuration Management: The system should support configuration management through command line scripts, allowing administrators to configure system settings, update software versions, and manage dependencies.

### Debugging and Troubleshooting: The system should support debugging and troubleshooting through command line tools, allowing administrators to diagnose and fix system issues.

### Project/Workspace Explorer

### Project Structure: The explorer should display the overall structure of the project, including the main modules and components of the e-commerce management system.

### File Navigation: The explorer should allow users to navigate through the files and folders of the project, including HTML, CSS, JavaScript, and other relevant files.

### Search and Filtering: The explorer should allow users to search for specific files or keywords within the project and filter the results based on different criteria.

### Version Control Integration: The explorer should integrate with version control systems such as Git or SVN, allowing users to manage different versions of the project and track changes over time.

### Collaboration Tools: The explorer should integrate with collaboration tools such as Slack or Trello, allowing team members to communicate and manage project tasks within the workspace.

### Debugging and Testing: The explorer should provide debugging and testing tools to help developers identify and fix issues within the project, including syntax errors, runtime errors, and performance issues.

### Code Review: The explorer should provide code review tools to help team members review and critique each other's code, ensuring that it meets the standards and requirements of the project.

### Documentation: The explorer should provide tools for documenting the project, including APIs, user manuals, and technical specifications, to help ensure that the project is well-documented and easy to maintain.