**CHAPTER 1**

**INTRODUCTION**

* 1. **Organization/ Client Profile:**
* Organization/Client Name: Scarlett Boutique
* Location & Address: Kumar Plaza, Shop No. 5, Ground, MG Road, Camp, Pune, Maharashtra 411001
* About Organization: Scarlett Boutique Launched in 2012, This Boutique offers a wide range of apparel to fit any woman's, men’s unique sense of style. They are offering number of verities such as jackets, outwear, ethnic, bridal, shrugs, tops, jeans etc. They also provide end to end customer support.
  1. **Abstract:**

The purpose of Online Shopping is to automate the existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements so that their valuable data/information can be stored for a longer period with easy access and manipulation of the same. The required software and hardware are easily available and easy to work with.

Online shopping Systems, as described above, can lead to error-free, secure, reliable, and fast management systems. It can assist the user to concentrate on their other activities rather than concentrate on record keeping. Thus, it will help the organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant while being able to reach the information. The framework will also make it easier to manage the information and will keep It sorted in such a way that it will be target specific and can be accessed whenever required. This will be achieved with the help of using database which is on cloud.

* 1. **Existing System and Need for the System:**
  2. **Scope of the System:**
* In a computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.
* The system generates lot of information that can be used for various purposes.
* The system sends the email conformation for order.
* The system manages the shopping cart and wish list.

**Module Of online shopping:**

* Management Module: Used for managing the Clothes details.
* Order Module: Used for managing the details of Order
* Delivery Address Module: Used for managing the details of Delivery Address
* Item Category Management Module: Used for managing the information and details of the Item Category.
* Shopping Cart Module: Used for managing the Shopping Cart details
* Customer Module: Used for managing the Customer information
* Login Module: Used for managing the login details
* Users Module: Used for managing the users of the system
  1. **Operating Environment:**

**Hardware And Software:**

**Software on client side:**

Operating System : Android, Windows, Linux etc.

Web Browser : Chrome, Torch etc.

**Software at developer Side:**

Operating System : Windows 10 or Above

Web Browser : Chrome, Torch

DataBase : MongoDb(v4.15)

BackEnd : NodeJs(v17)

Frontend : HTML5,CSS3, JavaScript(ES2015)

Framework : ReactJs(v18.1.0)

Tools : Mongoose(v6.3.2),Express(v4.18.1)

* 1. **Brief Description of Technology used:**

**React:**

React has been designed from the start for gradual adoption, and you can use as little or as much React as you need. Whether you want to get a taste of React, add some interactivity to a simple HTML page, or start a complex React-powered app, the links in this section will help you get started.

React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes. Declarative views make your code more predictable and easier to debug.

**MongoDB:**

MongoDB is an open source NoSQL database management program. NoSQL is Used as an alternative to traditional relational databases. NoSQL databases are quite useful for working with large sets of distributed data. MongoDB is tool that can manage document-oriented information ,Store or retrieve information. MongoDB 5.0 Manual! MongoDB is a document database designed for ease of development and scaling.

The manual describes key concepts in MongoDB such as:

* The query API
* Operational and administrative references
* Tutorials and procedures

MongoDB offers both local and cloud-hosted deployment options:

* For locally hosted deployments, MongoDB offers both a Community and an Enterprise version of the database:
  + MongoDB Community is the [source available and free to use](https://github.com/mongodb/mongo) edition of MongoDB.
  + MongoDB Enterprise is available as part of the MongoDB Enterprise Advanced subscription and includes comprehensive support for your MongoDB deployment. MongoDB Enterprise also adds enterprise-focused features such as LDAP and Kerberos support, on-disk encryption, and auditing.
  + [MongoDB Atlas](https://www.mongodb.com/cloud/atlas?tck=docs_server) is a hosted MongoDB Enterprise service option in the cloud which requires no installation overhead and offers a free tier to get started.

**NodeJS:**

Node.js (Node) is an open source development platform for executing JavaScript code server side. Node is Useful for developing application that required a persistent connection from the browser to the server and is often used for real-time application such as chat, news feed and web push notification. There are several types of documentation available on this website:

JavaScript is a programming language that was created at Netscape as a scripting tool to manipulate web pages inside their browser, [Netscape Navigator](https://en.wikipedia.org/wiki/Netscape_Navigator).Part of the business model of Netscape was to sell Web Servers, which included an environment called Netscape LiveWire that could create dynamic pages using server-side JavaScript. Unfortunately, Netscape LiveWire wasn't very successful and server-side JavaScript wasn't popularized until recently, by the introduction of Node.js.

**CHAPTER 2**

**PROPOSED SYSTEM**

* 1. **Proposed System:**
* System will store information about the new entry of Food.
* System will help the internal staff to keep informed of Item Category and find them as per various queries.
* System will maintain quantity records.
* System will keep the record of Shopping Cart.
* System will update and delete the record.
* System will also a search area.
* It also needs a security system to prevent data.

Online Shopping Application is used to assist people in making purchases only ne. The Business-to-Customer aspect of electronic commerce (e-commerce) is the most visible business use of the World Wide Web. The primary goal of an e-commerce site is to sell goods and services online. E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web site providing functionality for performing commercial transactions over the web The Shopping Cart is a very important feature used in e-commerce to assist people in making purchases of products online.

* 1. **Feasibility of Work:**

As the name implies, a feasibility analysis is used to determine the viability of an idea, such as ensuring a project is legally and technically as well as economically justifiable. It tells us whether a project is worth the investment in some cases, a project may not be doable.

There can be many reasons for this, including requiring too many resources, which not only prevents those resources from performing other tasks but also may cost more than an organization would earn back by taking on a project that isn’t profitable. A well-designed study should offer a historical background of the business or project, such as a description of the product or service, accounting statements, details of operations and management, marketing research and policies, financial data, legal requirements, and tax obligations. Generally, such studies precede technical development and project implementation Types of Feasibility Study

**Technical Feasibility:**

This assessment focuses on the technical resources available to the organization. It helps organizations determine whether the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems. Technical feasibility also involves the evaluation of the hardware, software, and other technical requirements of the proposed system. As an exaggerated example, an organization wouldn’t want to try to put Star Trek’s transporters in their building currently, this project is not technically feasible.

**Economic Feasibility**:

This assessment typically involves a cost/ benefits analysis of the project, helping organizations determine the viability, cost, and benefits associated with a project before financial resources are allocated. It also serves as an independent project assessment and enhances project credibility helping decision-makers determine the positive economic benefits to the organization that the proposed project will provide.

**Legal Feasibility:**

This assessment investigates whether any aspect of the proposed project conflicts with legal requirements like zoning laws, data protection acts or social media laws. Let’s say an organization wants to construct a new office building in a specific location. A feasibility study might reveal the organization’s ideal location isn’t zoned for that type of business. That organization has just saved considerable time and effort by learning that their project was not feasible right from the beginning.

**Operational Feasibility**:

This assessment involves undertaking a study to analyze and determine whether and how well the organization’s needs can be met by completing the project. Operational feasibility studies also examine how a project plan satisfies the requirements identified in the requirements analysis phase of system development.

* 1. **Objectives of System:**
* To provide an E-commerce system to sell and purchase a Products.
* To provide a system where administrator can generate the automatic bill.
* To provide a system where user can generate the report of generated order.
* To provide a system where administrator can manage the stock.
* To provide a system where administrator can add the order status manually.
* To provide a system where user can access item by their choice and filter it.
* To manage the payment method.
* To promoting a service and product.
* To provide 24\*7 customer support.
  1. **Users requirements:**

There are two sets of users of shopping cart applications: site administrators and end users who purchase items using their Web browsers. After interviewing end users and administrators, application requirements such as the following may be generated.

**End User Requirements:**

* Users should be able to use the eCommerce application from any Web browser supporting HTML 3.2 (or later) and cookies.
* Visitors new to the site should be able to register by themselves. Users will be differentiated by unique user identifiers.
* Site visitors should be able to purchase goods or services via the electronic store.
* Users should be able to view a complete list of specified items available through the site.
* Users should be able to select items of interest and add them to their shopping carts for future purchase.
* Visitors should be able to modify the quantities of items in and/or delete items from their shopping carts before checkout.
* All selected items should be shipped to the user following purchase.
* Users should be able to view the status of items they have ordered.

**Administrator Requirements:**

* Administrators should be able to manage eCommerce applications using Web browsers.
* Data managers should be able to delete users.
* Site administrators should be able to change the status of goods purchased by users after items have been shipped.
* Administrators should be able to view all user transactions.
* Site managers should be able to view all transactions for the day.