Retail Store Stock Inventory Analysis

A Project Report

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Submitted by

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ABSTRACT

The retail industry is becoming rigorously competitive and narrowly profitable that retailers find themselves in a dilemma of neither excessive in-stock nor depleted out-of- stock is negotiable. This report investigates the answer to the question by providing a comprehensive evaluation of substantial inventory management models which are widely used by retailers throughout the history. Then it commences with the transformation that Big Data Analytics (BDA) made on inventory control. Results from literature review and inventory management practices show that BDA has made a great contribution to demand forecast improvement and inventory diminution. In particular, the application of BDA has significantly enhanced the preciseness in demand forecast and the visibility in inventory tracking, which conjointly support the reduction in inventory level. The report articulates the core problem of inventory management is the trade-off between shortage costs and overage costs. Again, the "performance frontier" graph indicates a pragmatic solution is introducing innovative to shift the efficiency curve. In this context, that innovative is BDA. The report finds the prospects of integrating BDA in the conventional inventory management techniques and promoting the viability and appropriateness of these models in the big-data era. However, the

limitations of BDA underlie data challenges, processing challenges and management challenges. Finally, the connection between BDA and tradition operation concepts is presented with insightful lessons from the personal perspective.

INTRODUCTION

Inventory management is the process of ordering, handling, storing, and using a company's non- capitalized assets - AKA its inventory. For some businesses, this involves raw materials and components, while others may only deal with finished stock items ready for sale.

Inventory control is vitally important to almost every type of business, whether product or service oriented. Inventory control touches almost every facet if operafions. A proper balance must be struck to maintain proper inventory with the minimum financial impact on the customer. Inventory control is the activities that maintain stock keeping items at desired levels. In manufacturing since the focus is on physical product, inventory control focuses on material control.

"Inventory" means physical stock of goods, which is kept in hands for smooth and efficient running of future affairs of an organization at the minimum cost of funds blocked in inventories. The fundamental reason for carrying inventory is that it is physically impossible and economically impractical for each stock item to arrive exactly where it is needed, exactly when it is needed.

Inventory management is the integrated functioning of an organization dealing with supply of materials and allied activities in order to achieve the maximum coordination and optimum expenditure on materials. Inventory control is the most important function of inventory management and it forms the nerve Center in any inventory management organization. An Inventory Management System is an essential element in an organization. It is comprised of a series of processes, which provide an assessment of the organization's inventory

Either way, inventory management all comes down to balance - having the **right amount** of stock, in the **right place**, at the **right fime**. And this guide will help you achieve just that. Retail is the general term used to describe businesses that sell physical products to consumers. While not exclusive to retail, inventory management tends

to play more of a role in this industry than any other. We'll therefore be focusing mainly on inventory management from a retail perspective within this guide.

Retail can be split into several areas:

Offline. Where a company sells via a brick-and-mortar store or physical locafion **Online**. Where a company sells over the internet via an ecommerce website or marketplace.

Mulfichannel. Where a company sells in mulfiple different places, usually a combination of online websites and marketplaces.

Omni channel. Where a company provides a unified, integral experience for customers across all the different online and offline channels it sells on.

Businesses may also choose to trade via wholesale channels. This involves selling inventory (usually in bulk) directly business-to-business (B2B) or taking part in B2B Commerce.

A company's inventory will therefore need to be managed in accordance with which of these retail models it operates within.

1(A) Project Overview:

- To Know fundamental concepts and can work on IBM Cognos Analytics
- Able to understand the value of Data Analytics
- Gain a broad understanding of plotting different graphs.
- Able to create meaningful dashboards
- It could create the ability to develop a site for a client purpose for managing the store stocks.
- It could create an ability to handle the enormous amount of data in a dashboard.
- In the conclusion of the project we can know the inventory management skills, creating a report and maintaining the data for future use, and also we can have an alternate for all the barriers.

1(B) Purpose:

- To provide operations with an ongoing supply of materials
- To maintain accuracy and current stock position
- Real-time inventory tracking helps you improve inventory management and ensures that you have optimal stock available to fulfil orders
- To create a user friendly and benefit able platform for aclient.
- To avoid the manual inventory management.
- It ensures the level of administration in a better way
- For better Forecasting.
- A good handle on your inventory management can ensure shipping, receiving and fulfilment processes run smoother, reducing errors and customer complaints that would

inhibit growth.

• All the things in will be displayed as data visualization chart.

2. LITERATURE SURVEY

The survey is a recognized and accepted part of modern society. It is one of the means by which society keeps it informed, a way of bringing under central situations of increasing size and complexity of obtain ng perceptive and standard of com parson. A survey gives an oversight of a field and is thus disfinguishing from a sort of study which consists of a m acroscopic examination of a turf; it is a map rather than a detailed plan. The survey must be planned before a start is made The literature survey plays an essential role in the research process. It is a source from where research ideas are drawn and developed into concepts and finally theories. It also provides the researcher a bird's eye view about the research done in that area so far.

Depending on what is observed in the literature review, the researcher will understand where his/her research stands. Here in this literature survey, all primary, secondary and terfiary sources of information were searched.

The study of literature on Retail Store Stock Inventory Analysis in general and in library and information science in particular revealed several efforts made by the scholars in different disciplines.

The purpose of the literature survey is to collect a lot of number of journal's arficle about a parficular topic like as I have collected --- Five number of arficles with abstract. The main aim of this collection is to provide a guideline and brief information for researcher, user a dot her person who want information about this topic.

2(A) Existing problem:

Inconsistent Tracking

Warehouse Efficiency

Inaccurate Data

Changing Demand

Inventory Loss

Manual Documentation

Problem Stock

Supply Chain Complexity

Poor Communication

2(B) References:

Paper: 1). Essentials of Inventory Management

Author: Max Muller

Paper: 2). Inventory Management Explained

Author: David J

Paper:3). Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing

Costs in the Modern Warehouse

Author: Gwynne Richar

Paper:4). Analysis of Retail Inventory and Financial Performance

Author: Maria Pitari

Paper:5).Improving Sales through Inventory Reduction: A Retail Chain Case Study Author: M. G. Mattos, J. E. Pécora Jr, T. A. Briso

These are the research paper and articles used for references in this project.

2(C) Problem Statement Definition:

A problem statement is a concise description of the problem or issues a project seeks to address. The problem statement identifies the current state, the desired future state and any gaps between the two

	l am				
Problem Stateme nt (PS)	(Customer)	I'm trying to	But	Becau se	Which makes me
				_	feel
PS-1	A Local Broker	To supply	l am unable	Due to the sudden change in demands of goods from	hopeless
		goods to local area shops	to safisfy the extensi ve needs	the customers and insufficient storage capacity	
PS-2	A beginner trader	Sell/b uy stocks on my	It leads to losses	Of insufficient knowledge on how stocks move over years based on previous data's	depress ed
		phone			

PS-1: Here we create a statement of problems that provided by user/clients itself. the problem is demand of goods and insufficient storage capacity, as a data analyfics crew we try to resolve the problem in our project

PS-2: In this statement the usere/client don't Know to buy or sell the stocks at right fime by the data visualization we used to solve this problem by creation of statisfics of previous year stocks.

IDEATION & PROPOSED

3(A) Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and afitudes.

Through this Empathy map canvas we used to find the things that we don't know while the project when we started, and we finally gets some idea about other clients by thy whatsay, feel, hear, and their

difficulfies...

3(B) Ideation & Brainstorming:

Brainstorming provides a free and open environment that encourages everyone within a team to parficipate in the creafive thinking process that leads to problem solving. Priorifizing volume over value, out-of-the-box ideas are welcome and built upon, and all parficipants are encouraged to collaborate, helping each other develop a rich amount of creafive solutions

Step-1: Team Gathering, Collaboration and Select the Problem Statement



Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

① 5 minutes

PROBLEM

How we might eliminate the issues faced in Stock Inventory Managemnet?

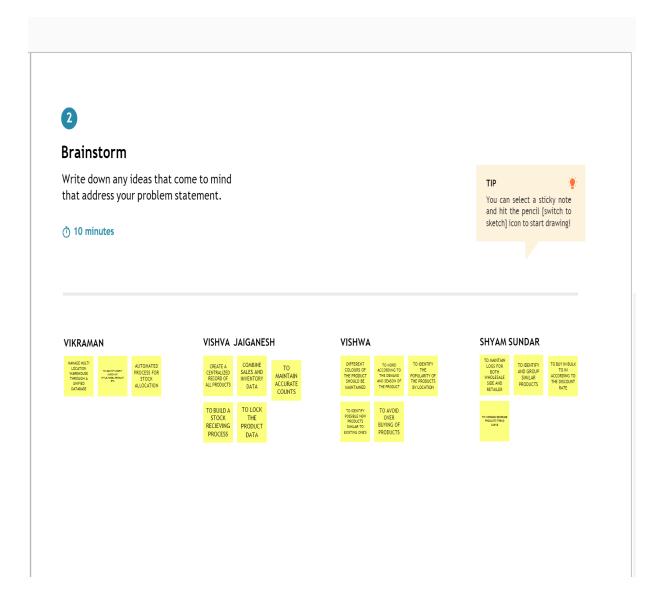


Key rules of brainstorming

To run an smooth and productive session

(a)	Stay in topic.		Encourage wild ideas.
CA-	Defer judgment.	3	Listen to others.
	Go for volume.		If possible, be visual.

Step-2: Brainstorm, Idea Lisfing and Grouping



3. Group Ideas:



Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

† 20 minutes



3(C)Proposed Solution:

Proposed Solution means the technical solution to be provided by the Implementation agency in response to the requirements and the objectives of the Project.

S.No.	Parameter	Descripfion
1.	Problem Statement (Problem to be solved)	The example used here will be a Fruit shop owner who's owning a small shop and a small inventory and the problem faced by him/her is how to manage the inventory of the goods as per the demand and the goodness of the fruit.
2.	Idea / Solufion descripfion	As per inventory management sohware we can see which stock is having the most movement and which has the least and restock according to the need
		2. if the stock(fruit) is starfing to enter the rofing stage then the vendor can move that stock to another processing industry(juice shop)where there they will process and sell it in another model

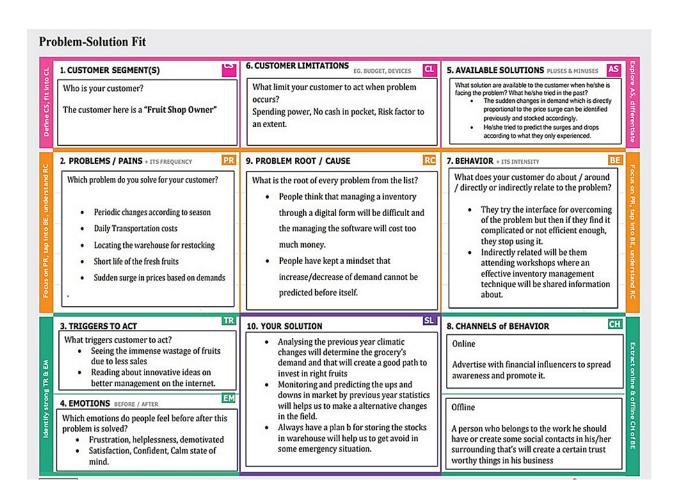
3.	Novelty / Uniqueness	Let it be restocking of stocks according to the demand we can priorly idenfify what season is coming and what fruit will be mostly demanded for and stock it according to the need.
		2. The unique idea from this model will be if the fruits start entering into the rofing stage then the sohware will update it and place an alert to move that stock out to another person (juice stall) so that
		the fruit is not wasted completely.
4.	Social Impact / Customer Safisfaction	1. By this solution method the customer will always get a fresh and perfect fit goods according to their need be it fresh fruit or be it a fruit juice.
		A posifive awareness will be spread on not to waste any food items.

5.	Business Model (Revenue Model)	1. This idea business model will increase the number of sales in accordance to quanfity of stock available because the stocks are only stored in the warehouse depending only upon the demand from the customers.
		2. If suppose the the vendor buys the banana(per dozen) for Rs.5/dozen there will be revenue here from two different ways:
		a. Will be by selling the fresh bananas directly to customer at a good amount of margin keep it Rs.14/dozen.
		b. The other will be if the banana starts approaching the rofing stage then the stock can be sold to the juice vendor at a lesser margin keep itRs.7/dozen.
		3. This method will result in comparafively no loss from the price of stock bought from the only the profitability will
		change depending on how much margin it sells of the above two.

6.	Scalability of the Solufion	The scalability on this model is high as
		there involves no wastage of food and the inventory space can be managed very
		efficiently and since the percentage of loss occurring is very less compared to other models and it is very suitable for
		small fruit shops.

3(D)Problem Solution fit:

Problem-solution fit is a term used to describe the point validating that the base problem resulfing in a business idea really exists and the proposed solution actually solves that problem



4.REQUIREMENT ANALYSIS:

4(A) Functional requirement:

Following are the non-functional requirements of the online food delivery system.

Online Food Delivery System

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Registrafion	Registrafion through app. If customer wants to order the food He/she must be registered, unregistered customer can't for ordering.
FR-2	Login	Login through valid user id. Login through valid password for ordering.
FR-3	Display the Menu	In this system all the items are displayed with Their rates.
FR-4	Modify Menu	System can make changes in menu like adding or removing food items which are not available.
FR-5	Select food item's	Items are selected customer feel free to Order.
FR-6	Changes to order	The customer can make changes in order like He/she can delete or add fooditems in order.
FR-7	Reviewthe orderbefore Submifing	Customer Name, Phone number, Locafion (address), and placed order, then finally order is submited.

FR-8	Payment	For customers there are many types of secure billing will be prepaid as debit or credit card, post paid as aher delivering, check or bank drah.
FR-9	Provide delivery and payment details	Here a bill is generated, order No, and payment is given and confirmation of delivery is done.
FR-10	Logout	Aher the payment or surf the product the customer will logout.

4(B) Non Functional requirement:

Following are the non-functional requirements of the online food delivery system

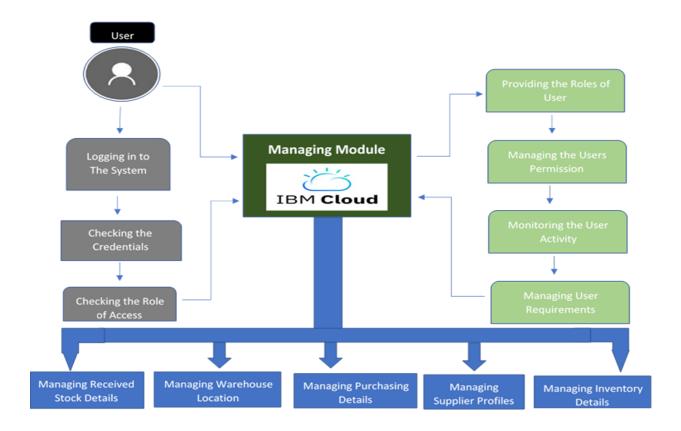
FR No.	Non-Functional Requirement	Descripfion
NFR-1	Usability	System should be easily used by the customer.
NFR-2	Security	Application should not be most vulnerable to any exploitation. That is strict authenfication mechanisms to be applied to the system.
NFR-3	Reliability	The ability of the system to behave consistently in a user acceptable manner when operating within the Environment for which the system was intended
NFR-4	Performance	Online food delivery application to order food that provides instant delivery for food. The app should be able to handle the load of many users at peak hours where maximum orders placed should be a particular minute. Performance should be fast.

Without functional requirements the system will not work. Without at least some non- functional requirements being met to a certain level. They ensure the reliability, availability, performance, and scalability of the sohware system. They help in constructing the security policy of the sohware system. They ensure good user experience, ease of operating the sohware, and minimize the cost factor and so on.

5.PROJECT DESIGN:

5(A) Data Flow Diagrams:

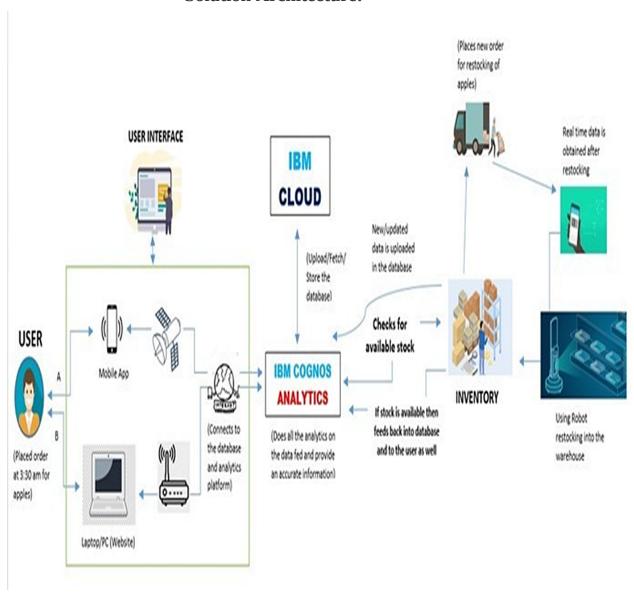
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



5(B)Solution & Technical Architecture:

A solutions architect creates the overall technical vision for a specific solution to a business problem. A solutions architect creates the overall technical vision for a specific solution to a business problem. They design, describe, and manage the solution.

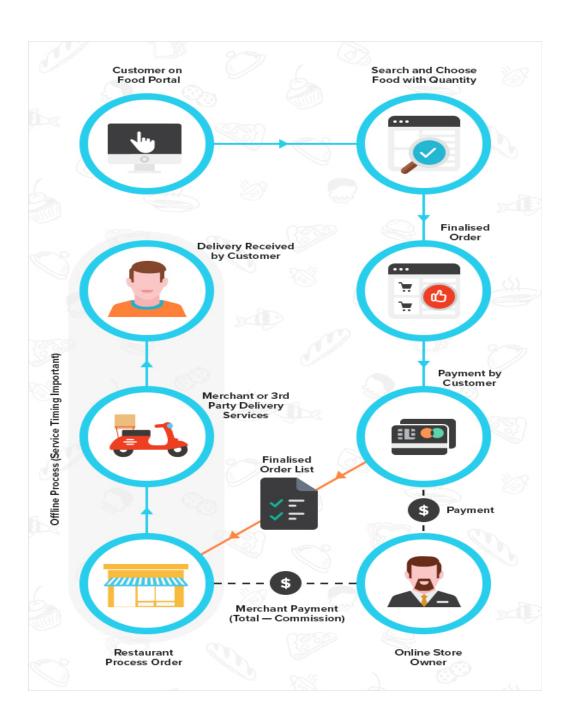
Solution Architecture:



Technical Architecture

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

Example: Creating an E commerce website for ordering, delivering and knowing the products regions with its locations



5(C)User Stories:

we use the below format to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	Registration	USN-1	As a Fruit	I can access	High	Sprint-1
				my		
(Fruit			Vendor, I can	account		
Vendor)				dashboard		
			know the			
			previous year			
			statistics about			
			the fruits			
	Data	USN-2	As a Fruit	I can	High	Sprint-1
				receive		
	Modules		Vendor, I can	confirmation		
			receive	message		
			1000110	&		
				click		
			confirmation	confirm		
				COMMIN		
			message once			
			the Stocks			
			were restored			

Dashboard	USN-3	As a Fruit	I can access the	Low	Sprint-2
		Vendor, I want to know my warehouse locations instantly	dashboard with my individual Login id/ password		
Login	USN-4	As a Fruit	I can know the	Medium	Sprint-1
		Vendor, I can identify the sudden ups and downs in the market.	market statement by the analytics		
Dashboard	USN-5	As a Fruit	I can know my day-	High	Sprint-1
		Vendor, I can log in to my stock activities	today activities by mean of having acceptance to view the data		

Customer (Stock broker)	Login	USN-1	As a stock broker, I can know my shares in the market by the analytics	I can know the value of stock in current trend by my analytics itself	High	Sprint-1
	Report	USN-2	As a Stock Broker, I can find the valuable stock at the period	I can know my all-market details and reports by own data analytic crew.	Medium	Sprint-2
	Data	USN-3	As a Stock Broker, I can predict the hike of the product	I can easily go through the movement of stocks in previous years drops and downs	High	Sprint-2
	Exploration					
Customer (restaurant)	Data module	USN1	As a Restaurant owner, I can easily able know my traditional	I can easily segregate the daily customer list through the analytics	Medium	Sprint-3
			customers			

User Type	Functional Requirement (Epic)	User Story Number	User Story <i>l</i> Task	Acceptance criteria	Priority	Release
	Report	USN2	As a Restaurant owner ,I can create my unique menu for my customer	I can easily find the taste of an customer by their orders and by my sales	Medium	Sprint-1
	Story		see a visual representation of my way of journey	I can easily identify my mistake and turnover of my organization	Low	sprint-1

6.PROJECT PLANNING & SCHEDULING

6(A)Sprint Planning & Estimation:

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

We use the below format to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High
Sprint-1	Registration	USN-2	As a user, I will receive a confirmation email once I have registered for the application	1	High
Sprint-2	Registration	USN-3	As a user, I can register for the application through google account or the one provided by the service provider.	2	Low
Sprint-1	Registration	USN-4	As a user, I can register using the collaborated Gmail ID as well.	2	Medium
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High
Sprint-2	Login	USN-6	As a user, for more secure protection 2 step authentication will be used.	1	High
Sprint-2	Login	USN-7	As a user, it will be redirected to the dashboard interface.	2	Medium

Sprint-3	Dashboard	USN-8	As a user, The dashboard will provide suitable	2	High
			information for us the user to		
			decide on the next move for the		
			retail inventory.		

Sprint-3	Dashboard	USN-9	As a user, The dashboard will recommend orders to be placed for the right season.	2	High
Sprint-4	Server & Data Analysis	USN-10	As a user, The data will be entered using a Barcode scanner or through analysis the items will be then processed and analysis will be done with the given data and a suitable output will be given.	2	High
Sprint-4	Server & Data Analysis	USN-11	As a user, The server will itself place the most suitable order and analyse if the stock will sale as soon as possible.	2	High

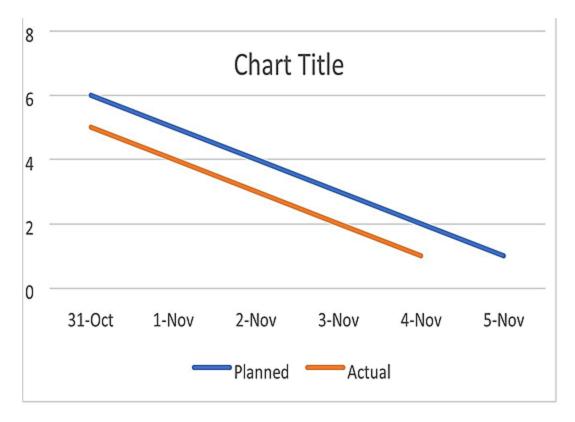
6(B)Sprint Delivery Schedule:

Sprint	Total	Duration	Sprint Start	Sprint End	Story Points	Sprint
	Story		Date	Date	Completed (as	Release
	Points			(Planned)	on	Date
					Planned End	(Actual)
					Date)	
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	10	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	10	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	10	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		19 Nov 2022

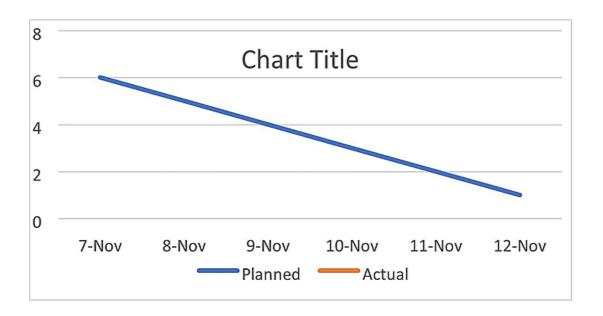
SPRINT-1



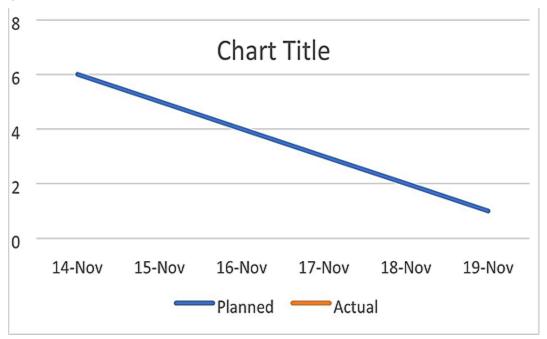
SPRINT-2



SPRINT-3

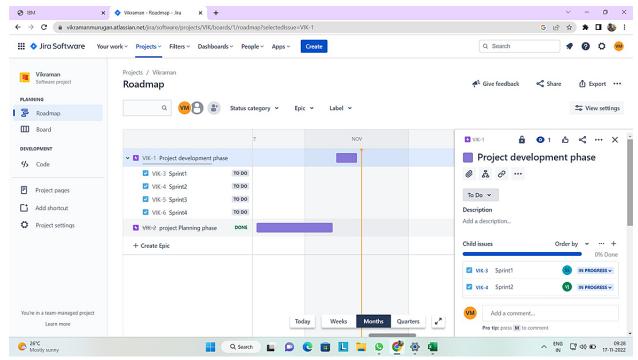


SPRINT-4

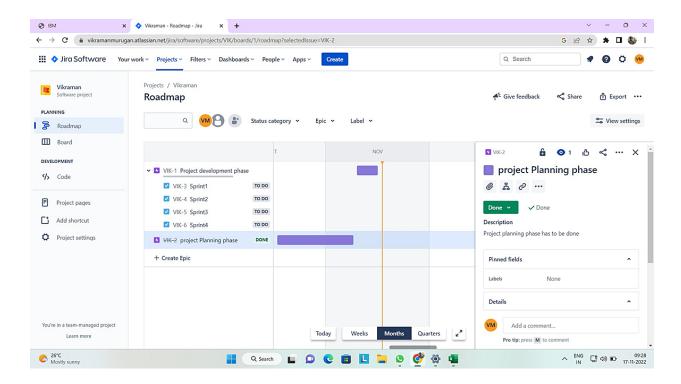


6(C)Reports From Jira:

Project DevelopmentPhase:



PROJECT PLANNING PHASE:



7. CODING & SOLUTIONING

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="utf-8">
 <meta content="width=device-width, initial-scale=1.0" name="viewport">
 <title>IBM PROJECT</title>
 <meta content="" name="description">
 <meta content="" name="keywords">
 <!-- Favicons -->
 <link href="assets/img/favicon.png" rel="icon">
 <link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">
 <!-- Google Fonts -->
 link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,6
00,600i,700,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins
:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">
 <!-- Vendor CSS Files -->
 <link href="assets/vendor/aos/aos.css" rel="stylesheet">
 k href="assets/vendor/bootstrap/css/bootstrap.min.css"
rel="stylesheet">
 k href="assets/vendor/bootstrap-icons/bootstrap-icons.css"
rel="stylesheet">
 <link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
 <link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
 <link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
```

```
<!-- Template Main CSS File -->
 <link href="assets/css/style.css" rel="stylesheet">
</head>
<body>
 <!-- ===== Header ===== -->
 <header id="header" class="fixed-top header-transparent">
  <div class="container d-flex align-items-center justify-content-between">
   <div class="logo">
    <h1 class="text-light"><a href="index.html"><span>TEAM ID
PNT2022TMID15458</span></a></h1>
   </div>
   <nav id="navbar" class="navbar">
    <l
     <a class="nav-link scrollto active" href="#hero">Home</a>
     <a class="nav-link scrollto" href="#about">About Us</a>
     <a class="nav-link scrollto" href="#services">Services</a>
     <a class="nav-link scrollto" href="#team">Team</a>
     <| class="nav-link scrollto" href="#contact">Contact</a>
    <i class="bi bi-list mobile-nav-toggle"></i>
   </nav><!-- .navbar -->
  </div>
 </header><!-- End Header -->
 <!-- ===== Hero Section ====== -->
 <section id="hero">
```

```
<div class="hero-container" data-aos="fade-up">
   <h1>Welcome</h1>
   <h2>We are team of students making data analytics a user friendly
process</h2>
   <a href="#about" class="btn-get-started scrollto"><i class="bx bx-
chevrons-down"></i></a>
  </div>
 </section><!-- End Hero -->
 <main id="main">
  <!-- ===== About Section ====== -->
  <section id="about" class="about">
   <div class="container">
    <div class="row no-gutters">
     <div class="content col-xl-5 d-flex align-items-stretch" data-aos="fade-
up">
      <div class="content">
       <h3>TEAM ID </h3>
       >
        PNT2022TMID15458
       <a href="#" class="about-btn">About us <i class="bx bx-chevron-
right"></i></a>
      </div>
     </div>
     <div class="col-xl-7 d-flex align-items-stretch">
      <div class="icon-boxes d-flex flex-column justify-content-center">
       <div class="row">
        <div class="col-md-6 icon-box" data-aos="fade-up" data-aos-
delay="100">
```

```
<i class="bx bx-receipt"></i>
         <h4>TEAM LEAD</h4>
         VIKRAMAN
        </div>
        <div class="col-md-6 icon-box" data-aos="fade-up" data-aos-
delay="200">
         <i class="bx bi-journal-richtext"></i>
         <h4>TEAM MEMBER 1</h4>
         VISHVA JAIGANESH
        </div>
        <div class="col-md-6 icon-box" data-aos="fade-up" data-aos-
delay="300">
         <i class="bx bx-images"></i>
         <h4>TEAM MEMBER 2</h4>
         VISHWA
        </div>
        <div class="col-md-6 icon-box" data-aos="fade-up" data-aos-
delay="400">
         <i class="bx bx-shield"></i>
         <h4>TEAM MEMBER 3</h4>
         SHYAM SUNDAR
        </div>
       </div>
      </div><!-- End .content-->
     </div>
    </div>
   </div>
  </section><!-- End About Section -->
  <!-- ===== Services Section ====== -->
  <section id="services" class="services">
```

```
<div class="container">
    <div class="section-title" data-aos="fade-in" data-aos-delay="100">
     <h2>Services</h2>
     A USER FRIENDLY INTERFACE TO DO THE DATA
ANALYTICS IN A VERY EFFICIENT AND TIME EFFICIENT
MANNER.
    </div>
    <div class="row">
     <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
      <div class="icon-box" data-aos="fade-up">
       <div class="icon"><i class="bx bx-link"></i></div>
       <h4 class="title"><a href="">DEMO LINK</a></h4>
       A Demo link of the project's working
      </div>
     </div>
     <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
      <div class="icon-box" data-aos="fade-up" data-aos-delay="100">
       <div class="icon"><i class="bx bx-file"></i></div>
       <h4 class="title"><a href="">PROJECT DOCUMENT</a></h4>
       A detailed information about all the project
documents and codes
      </div>
     </div>
     <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
      <div class="icon-box" data-aos="fade-up" data-aos-delay="200">
       <div class="icon"><i class="bx bx-tachometer"></i></div>
       <h4 class="title"><a href=""></a>A TOUR THROUGH OUR
PAGE</h4>
```

```
A Guided video on all the available features
on our page
      </div>
     </div>
     <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
      <div class="icon-box" data-aos="fade-up" data-aos-delay="100">
       <div class="icon"><i class="bx bx-shield"></i></div>
       <h4 class="title"><a href="">DATASET</a></h4>
       The Dataset used for Playstore Analytics
      </div>
     </div>
    </div>
   </div>
  </section><!-- End Services Section -->
  <!-- ===== Cta Section ====== -->
  <section id="cta" class="cta">
   <div class="container" data-aos="zoom-in">
    <div class="text-center">
     <h3>CUSTOMER CARE</h3>
     Our 24/7 Customer Care will guide you through your queries
     <a class="cta-btn" href="#">Call To Action</a>
    </div>
   </div>
  </section><!-- End Cta Section -->
```

```
<!-- ===== Portfolio Section ====== -->
  <section id="portfolio" class="portfolio">
   <div class="container">
    <div class="section-title" data-aos="fade-in" data-aos-delay="100">
     <h2>DASHBOARD</h2>
     A Reactive Dashboard to go through all the needed analysis
    </div>
    <div class="row" data-aos="fade-in">
     <div class="col-lg-12 d-flex justify-content-center">
      ul id="portfolio-flters">
       data-filter="*" class="filter-active">Overview
       data-filter=".filter-app">Installs
       data-filter=".filter-card">Ratings
       data-filter=".filter-web">Categories
      </div>
    </div>
    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&path
Ref=.my_folders%2Fplaystore%2Bdashboard&closeWindowOnLastVie
w=true&ui_appbar=false&ui_navbar=false&shareMode=emb
edded&action=view&mode=dashboard&subView=model0000
01847fef5aae_00000001" width="1150" height="750" frameborder="0"
gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
</section>
  <section id="portfolio" class="portfolio">
   <div class="container">
```

```
<div class="section-title" data-aos="fade-in" data-aos-delay="100">
     <h2>REPORT</h2>
     A Reactive Report
    </div>
    <div class="row" data-aos="fade-in">
     <div class="col-lg-12 d-flex justify-content-center">
      <!-- <ul id="portfolio-flters">
       data-filter="*" class="filter-active">Overview
       data-filter=".filter-app">Installs
       data-filter=".filter-card">Ratings
       data-filter=".filter-web">Categories
      </div>
    </div>
    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FPlayStore
%2BReport&closeWindowOnLastView=true&ui_appbar=false&a
mp;ui_navbar=false&shareMode=embedded&action=run&fo
rmat=HTML&prompt=false" width="1150" height="1000"
frameborder="0" gesture="media" allow="encrypted-media"
allowfullscreen=""></iframe></section>
  <section id="portfolio" class="portfolio">
   <div class="container">
    <div class="section-title" data-aos="fade-in" data-aos-delay="100">
     <h2>STORY</h2>
     A Cinematic Story on the Dataset
    </div>
    <div class="row" data-aos="fade-in">
```

```
<div class="col-lg-12 d-flex justify-content-center">
      <!-- <ul id="portfolio-flters">
       data-filter="*" class="filter-active">Overview
       data-filter=".filter-app">Installs
       data-filter=".filter-card">Ratings
       data-filter=".filter-web">Categories
      </div>
    </div>
    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.
my_folders%2FPlaystore%2BStory&closeWindowOnLastView=true&a
mp;ui_appbar=false&ui_navbar=false&shareMode=embedded&a
mp;action=view&sceneId=model000001848123455e_00000002&sce
neTime=33850" width="1150" height="750" frameborder="0"
gesture="media" allow="encrypted-media"
allowfullscreen=""></iframe></section>
  <!-- End Portfolio Section -->
  <!-- ===== Team Section ====== -->
  <section id="team" class="team">
   <div class="container">
    <div class="section-title" data-aos="fade-in" data-aos-delay="100">
     <h2>Data Analytics Team</h2>
    </div>
    <div class="row">
     <div class="col-lg-4 col-md-6">
      <div class="member" data-aos="fade-up">
       <div class="pic"><img src="assets/img/team/pics5.jpeg" class="img-</pre>
```

```
fluid" alt=""></div>
       <div class="member-info">
         <h4>VIKRAMAN</h4>
         <span>Team Leader</span>
         <div class="social">
          <a href=""><i class="bi bi-twitter"></i></a>
          <a href=""><i class="bi bi-facebook"></i></a>
          <a href=""><i class="bi bi-instagram"></i></a>
          <a href=""><i class="bi bi-linkedin"></i></a>
        </div>
       </div>
      </div>
     </div>
     <div class="col-lg-4 col-md-6">
      <div class="member" data-aos="fade-up" data-aos-delay="150">
       <div class="pic"><img src="assets/img/team/pics2.jpeg" class="img-</pre>
fluid" alt=""></div>
       <div class="member-info">
         <h4>VISHVA JAIGANESH</h4>
         <span>Team Member 1</span>
        <div class="social">
          <a href=""><i class="bi bi-twitter"></i></a>
          <a href=""><i class="bi bi-facebook"></i></a>
          <a href=""><i class="bi bi-instagram"></i></a>
          <a href=""><i class="bi bi-linkedin"></i></a>
        </div>
       </div>
      </div>
     </div>
     <div class="col-lg-4 col-md-6">
```

```
<div class="member" data-aos="fade-up" data-aos-delay="300">
       <div class="pic"><img src="assets/img/team/pics3.jpeg" class="img-</pre>
fluid" alt=""></div>
       <div class="member-info">
         <h4>VISHWA</h4>
         <span>Team Member 2</span>
         <div class="social">
          <a href=""><i class="bi bi-twitter"></i></a>
          <a href=""><i class="bi bi-facebook"></i></a>
          <a href=""><i class="bi bi-instagram"></i></a>
          <a href=""><i class="bi bi-linkedin"></i></a>
        </div>
       </div>
      </div>
     </div>
     <div class="col-lg-4 col-md-6">
      <div class="member" data-aos="fade-up" data-aos-delay="300">
       <div class="pic"><img src="assets/img/team/pics4.jpg" class="img-</pre>
fluid" alt=""></div>
       <div class="member-info">
         <h4>SHYAM SUNDAR</h4>
        <span>Team Member 3</span>
         <div class="social">
          <a href=""><i class="bi bi-twitter"></i></a>
          <a href=""><i class="bi bi-facebook"></i></a>
          <a href=""><i class="bi bi-instagram"></i></a>
          <a href=""><i class="bi bi-linkedin"></i></a>
        </div>
       </div>
      </div>
     </div>
```

```
</div>
   </div>
  </section><!-- End Team Section -->
  <!-- ===== Contact Section ====== -->
  <section id="contact" class="contact section-bg">
   <div class="container" data-aos="fade-up">
    <div class="section-title">
     <h2>Contact</h2>
    </div>
    <div class="row">
     <div class="col-lg-6">
      <div class="info-box mb-4">
       <i class="bx bx-map"></i>
       <h3>Our Address</h3>
       RMD Engineering College, Kavaraipettai-Thiruvallur District
601206
      </div>
     </div>
     <div class="col-lg-3 col-md-6">
      <div class="info-box mb-4">
       <i class="bx bx-envelope"></i>
       <h3>Email Us</h3>
       111519104170@smartinternz.com
      </div>
     </div>
     <div class="col-lg-3 col-md-6">
```

```
<div class="info-box mb-4">
       <i class="bx bx-phone-call"></i>
       <h3>Call Us</h3>
       +91 93XXXXXXXXX
      </div>
     </div>
    </div>
    <div class="row">
     <div class="col-lg-6">
      <form action="forms/contact.php" method="post" role="form"</pre>
class="php-email-form">
       <div class="row">
        <div class="col-md-6 form-group">
         <input type="text" name="name" class="form-control"
id="name" placeholder="Your Name" required>
        </div>
        <div class="col-md-6 form-group mt-3 mt-md-0">
         <input type="email" class="form-control" name="email"</pre>
id="email" placeholder="Your Email" required>
        </div>
       </div>
       <div class="form-group mt-3">
        <input type="text" class="form-control" name="subject"</pre>
id="subject" placeholder="Subject" required>
       </div>
       <div class="form-group mt-3">
        <textarea class="form-control" name="message" rows="5"
placeholder="Message" required></textarea>
```

```
</div>
       <div class="my-3">
        <div class="loading">Loading</div>
        <div class="error-message"></div>
        <div class="sent-message">Your message has been sent. Thank
you!</div>
       </div>
       <div class="text-center"><button type="submit">Send
Message</button></div>
      </form>
     </div>
    </div>
   </div>
  </section><!-- End Contact Section -->
 </main><!-- End #main -->
 <!-- ====== Footer ====== -->
 <footer id="footer">
  <div class="footer-top">
   <div class="container">
    <div class="row">
     <div class="col-lg-4 col-md-6">
      <div class="footer-info">
       <h3>IBM PROJECT</h3>
       <em>Retail Store Stock Inventory
Analytics</em>
       >
```

```
Chennai, Tamil Nadu 614403<br>
        <strong>Phone:</strong> +91 936XXXXXXXX<br>
        <strong>Email:</strong> info@smartinternz.com<br>
       <div class="social-links mt-3">
        <a href="#" class="twitter"><i class="bx bxl-twitter"></i></a>
        <a href="#" class="facebook"></i><i class="bx bxl-facebook"></i></a>
        <a href="#" class="instagram"><i class="bx bxl-
instagram"></i></a>
        <a href="#" class="google-plus"><i class="bx bxl-skype"></i></a>
        <a href="#" class="linkedin"><i class="bx bxl-linkedin"></i></a>
       </div>
      </div>
     </div>
     <div class="col-lg-2 col-md-6 footer-links">
      <h4>Useful Links</h4>
      <l
       <i class="bx bx-chevron-right"></i> <a href="#">Home</a>
       <i class="bx bx-chevron-right"></i> <a href="#">About</a>
us</a>
       i class="bx bx-chevron-right"></i> <a
href="#">Services</a>
       <i class="bx bx-chevron-right"></i> <a href="#">Terms of</a>
service</a>
       <i class="bx bx-chevron-right"></i> <a href="#">Privacy</a>
policy</a>
      </div>
     <div class="col-lg-4 col-md-6 footer-newsletter">
      <h4>Our Newsletter</h4>
      Subscribe to avail our latest news and services via a email
```

```
<form action="" method="post">
       <input type="email" name="email"><input type="submit"
value="Subscribe">
      </form>
     </div>
    </div>
   </div>
  </div>
  <div class="container">
   <div class="copyright">
    © Copyright <strong><span>Team ID
PNT2022TMID15458</span></strong>. All Rights Reserved
   </div>
   <div class="credits">
   </div>
  </div>
 </footer><!-- End Footer -->
 <a href="#" class="back-to-top d-flex align-items-center justify-content-
center"><i class="bi bi-arrow-up-short"></i>
 <!-- Vendor JS Files -->
 <script src="assets/vendor/purecounter/purecounter_vanilla.js"></script>
 <script src="assets/vendor/aos/aos.js"></script>
 <script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
 <script src="assets/vendor/glightbox/js/glightbox.min.js"></script>
 <script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
 <script src="assets/vendor/swiper/swiper-bundle.min.js"></script>
 <script src="assets/vendor/php-email-form/validate.js"></script>
```

<!-- Template Main JS File -->
<script src="assets/js/main.js"></script>
</body>
</html>

8.TESTING

8(A)Test Case

-

8(B)User Acceptance Testing:

1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the [ProductName] project at the time of the release to User Acceptance Testing (UAT).

2. Defect Analysis

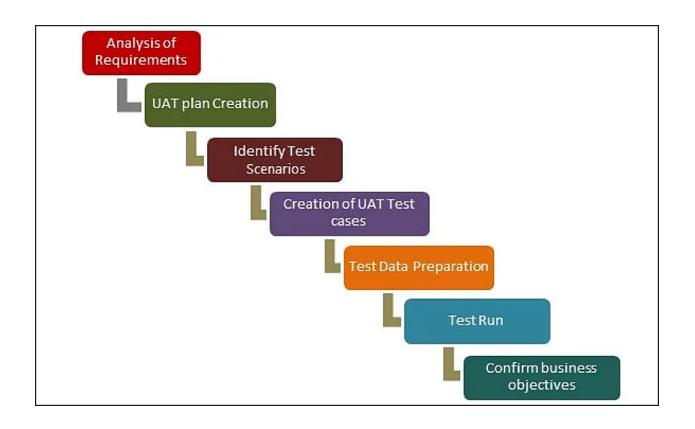
This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resoluti on	Severi ty 1	Severi ty 2	Severi ty 3	Severi ty 4	Subtot al
By Design	5	3	1	0	9
Duplicate	2	1	0	0	3
External	2	2	0	1	5
Fixed	3	2	1	0	6
Not Reproduced	0	0	1	0	1
Skipped	5	2	1	0	8
Won't Fix	3	0	1	0	4
Totals	1 9	10	5	1	3 6

3. Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	5	0	0	5
Client Application	8	0	0	8
Security	1	0	0	1
Outsource Shipping	3	0	0	3
Exception Reporting	2	0	0	2
Final Report Output	1	0	0	1
Version Control		0	0	2



UAT Process

9. RESULT

9(A)Performance Metrics:

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No	Parameter	Values	
1	Dashboard design	No.of Visualization:8 No.Of Graphs:2	
2	Data Responsiveness	Given dataset responding correctly with Correct credentials	
3	Amount of data to rendered DB2 metrices	Loading the Csv files into store data Finalising the loading data process	
4	Utilization of data and filters	Enormous amount of filters were done	
5	Effective use of story	No.Of scene added=1	
6	Descriptive reports	No:Of Visualization-3 No.Of Graphs-1	

10.ADVANTAGES & DISADVANTAGES

ADVANTAGES	DISADVANTAGES		
It helps to maintain the right amount	➤ Bureaucracy		
of stocks			
➤ It leads to a more organized warehouse	➤ Impersonal touch		
➤ It saves time and money	➤ Production problem		
 Improves efficiency and productivity 	➤ Increased space is need to hold the inventory		
➤ A well-structured inventory management system leads to improved customer retention	➤ Complexity		
 Avoid lawsuits and regulatory fines 	➤ Some inventory management systems such as the fixed order period system compels a periodic review of all items. This itself makes the system a bit inefficient.		
➤ Schedule maintenance	➤ High implementation costs		
➤ Reduction in holding costs	➤ Even with an efficient inventory management method, you can control but not eliminate business risk.		
➤ Flexibility	➤ The control of inventory is complex because of the many functions it performs. It should thus be viewed as a shared responsibility.		

11.CONCLUSION

Inventory management has to do with keeping accurate records of goods that are ready for shipment. This often means having enough stock of goods to the inventory totals as well as subtracting the most recent shipments of finished goods to buyers. When the company has a return policy in place, there is usually a sub-category contained in the finished goods inventory to account for any returned goods that are reclassified or second grade quality. Accurately maintaining figures on the finished goods inventory makes it possible to quickly convey information to sales personnel as to what is available and ready for shipment at any given time by buyer.

Inventory management is important for keeping costs down, while meeting regulation. Supply and demand is a delicate balance, and inventory management hopes to ensure that the balance is undisturbed. Highly trained Inventory management and high-quality software will help make Inventory management a success. The ROI of Inventory management will be seen in the forms of increased revenue and profits, positive employee atmosphere, and on overall increase of customer satisfaction.

Retailers can benefit immensely form a structured analytics-driven approach that will help them understand how their customers are using their products and services, how their operations and supply chain are performing, how to manage their workforce and how to identify key risks - insights that they then can then act upon. The pace and the dexterity with which micro data is collected, gives the retailers immediate insights on the shopping trends. This analysis on the move allows them to adjust their prices and add to the lure by announcing on the spot discounts on the sales floor based on their current and previous shopping patterns. This data, often collected through interactive mobile devices in stores, provides the retailer an understanding of the buyers needs and give insights into making smarter decisions about product placement in the store. Data capture and analytics usage certainly have come a long way in the last ten years, and it is interesting to look back on how trends in data analytics have affected the marketplace. As the Internetof Things expandsfurther and our world becomes even more connected, this space will continue to evolve.

12.FUTURE SCOPE

The scope of an inventory system can cover many needs, including valuing the inventory, measuring the change in inventory and planning for future inventory levels. The value of the inventory at the end of each period provides a basis for financial reporting on the balance sheet. Measuring the change in inventory allows the company to determine the cost of inventory sold during the period.

This allows the company to plan for future inventory needs.

Retail management software vendorshould be continually enhancing its product, driven both by its expertise in how it sees the marketplace unfolding and by customer requests. When he does this, the result is significant advantages to its retail customers.

"Future vision" is another important aspect of long-term vendor reliability – the ability to anticipate development needs before their becoming critical.

A good Retail management software vendor should demonstrate enough "future vision" to have already committed substantial resources to support new forms of technology such as data synchronization.

Finally, a Retail management software should be organized in such a fashion that it shoulders the responsibilities of a retailer. Despite the power and scope it must be easy to adapt, learn and use. That means you save money on the training and implementation. You save huge money on manpower and employee turnover can be handled easily.

```
13.APPENDIX
SOURCE CODE:
body {
font-family: "Open Sans", sans-serif;
color: #444444;
}
a {
text-decoration: none;
color: #346a83;
}
a:hover {
 color: #346a83;
text-decoration: none;
}
h1,
h2,
h3,
h4,
h5,
h6 {
font-family: "Raleway", sans-serif;
}
#main {
```

```
margin-top: 90px;
}
/*_____
# Back to top button
*/
.back-to-top {
position: fixed;
visibility: hidden;
opacity: 0;
right: 15px;
bottom: 15px;
z-index: 998;
background: #346a83;
width: 40px;
height: 40px;
border-radius: 50px;
transition: all 0.4s;
}
.back-to-top i {
font-size: 24px;
color: #fff;
line-height: 0;
}
.back-to-top:hover {
```

```
background: #346a83;
color: #fff;
}
.back-to-top.active {
visibility: visible;
opacity: 1;
}
/*_____
# Disable aos animation delay on mobile devices
@media screen and (max-width: 768px) {
[data-aos-delay] {
 transition-delay: 0 !important;
}
}
/*_____
# Header
*/
#header {
transition: all 0.5s;
z-index: 997;
transition: all 0.5s;
padding: 24px 0;
background: rgba(19, 49, 63, 0.8);
```

```
}
#header.header-transparent {
 background: transparent;
}
#header.header-scrolled {
 background: rgba(22, 52, 66, 0.9);
 padding: 12px;
}
#header .logo h1 {
 font-size: 24px;
 margin: 0;
 line-height: 1;
 font-weight: 700;
 letter-spacing: 1px;
 font-family: "Poppins", sans-serif;
 text-transform: uppercase;
}
#header .logo h1 a,
#header .logo h1 a:hover {
 color: #fff;
 text-decoration: none;
}
```

```
#header .logo img {
padding: 0;
margin: 0;
max-height: 40px;
}
@media (max-width: 768px) {
#header.header-scrolled {
 padding: 15px 0;
}
}
/*_____
# Navigation Menu
  */
* Desktop Navigation
*/
.navbar {
padding: 0;
}
.navbar ul {
margin: 0;
padding: 0;
display: flex;
list-style: none;
```

```
align-items: center;
}
.navbar li {
 position: relative;
}
.navbar a,
.navbar a:focus {
 display: flex;
 align-items: center;
 justify-content: space-between;
 padding: 8px 16px;
 margin-left: 10px;
 font-family: "Raleway", sans-serif;
 font-size: 16px;
 font-weight: 700;
 color: #fff;
 white-space: nowrap;
 transition: 0.3s;
}
.navbar a i,
.navbar a:focus i {
 font-size: 12px;
 line-height: 0;
 margin-left: 5px;
```

```
}
.navbar a:hover,
.navbar .active,
.navbar .active:focus,
.navbar li:hover>a {
 background: rgba(255, 255, 255, 0.2);
}
.navbar .dropdown ul {
 display: block;
 position: absolute;
 left: 10px;
 top: calc(100% + 30px);
 margin: 0;
 padding: 10px 0;
 z-index: 99;
 opacity: 0;
 visibility: hidden;
 background: #fff;
 box-shadow: 0px 0px 30px rgba(127, 137, 161, 0.25);
 transition: 0.3s;
}
.navbar .dropdown ul li {
 min-width: 200px;
}
```

```
.navbar .dropdown ul a {
 padding: 10px 20px;
 font-size: 15px;
 text-transform: none;
 font-weight: 600;
 color: #2f4d5a;
}
.navbar .dropdown ul a i {
 font-size: 12px;
}
.navbar .dropdown ul a:hover,
.navbar .dropdown ul .active:hover,
.navbar .dropdown ul li:hover>a {
 color: #346a83;
}
.navbar .dropdown:hover>ul {
 opacity: 1;
 top: 100%;
 visibility: visible;
}
.navbar .dropdown .dropdown ul {
 top: 0;
```

```
left: calc(100% - 30px);
 visibility: hidden;
}
.navbar .dropdown .dropdown:hover>ul {
 opacity: 1;
 top: 0;
 left: 100%;
 visibility: visible;
}
@media (max-width: 1366px) {
 .navbar .dropdown .dropdown ul {
  left: -90%;
 }
 .navbar .dropdown .dropdown:hover>ul {
  left: -100%;
 }
}
/**
* Mobile Navigation
*/
.mobile-nav-toggle {
 color: #fff;
 font-size: 28px;
```

```
cursor: pointer;
 display: none;
 line-height: 0;
 transition: 0.5s;
}
@media (max-width: 991px) {
 .mobile-nav-toggle {
  display: block;
 }
 .navbar ul {
  display: none;
}
.navbar-mobile {
 position: fixed;
 overflow: hidden;
 top: 0;
 right: 0;
 left: 0;
 bottom: 0;
 background: rgba(43, 111, 142, 0.9);
 transition: 0.3s;
}
```

```
.navbar-mobile .mobile-nav-toggle {
 position: absolute;
 top: 15px;
 right: 15px;
}
.navbar-mobile ul {
 display: block;
 position: absolute;
 top: 55px;
 right: 15px;
 bottom: 15px;
 left: 15px;
 padding: 10px 0;
 background-color: #fff;
 overflow-y: auto;
 transition: 0.3s;
}
.navbar-mobile a,
.navbar-mobile a:focus {
 padding: 10px 20px;
 font-size: 15px;
 color: #2f4d5a;
}
.navbar-mobile a:hover,
```

```
.navbar-mobile .active,
.navbar-mobile li:hover>a {
 color: #346a83;
}
.navbar-mobile .getstarted,
.navbar-mobile .getstarted:focus {
 margin: 15px;
}
.navbar-mobile .dropdown ul {
 position: static;
 display: none;
 margin: 10px 20px;
 padding: 10px 0;
 z-index: 99;
 opacity: 1;
 visibility: visible;
 background: #fff;
 box-shadow: 0px 0px 30px rgba(127, 137, 161, 0.25);
}
.navbar-mobile .dropdown ul li {
 min-width: 200px;
}
.navbar-mobile .dropdown ul a {
```

```
padding: 10px 20px;
}
.navbar-mobile .dropdown ul a i {
font-size: 12px;
}
.navbar-mobile .dropdown ul a:hover,
.navbar-mobile .dropdown ul .active:hover,
.navbar-mobile .dropdown ul li:hover>a {
color: #67b0d1;
}
.navbar-mobile .dropdown>.dropdown-active {
 display: block;
}
/*_____
# Hero Section
*/
#hero {
width: 100%;
height: 100vh;
background: linear-gradient(rgba(55, 142, 181, 0.5), rgba(55, 142, 181, 0.2)),
url("assets/img/back2.jpeg") top center;
background-size: cover;
position: relative;
```

```
margin-bottom: -90px;
}
#hero .hero-container {
 position: absolute;
 bottom: 0;
 top: 0;
 left: 0;
 right: 0;
 display: flex;
 justify-content: center;
 align-items: center;
 flex-direction: column;
 text-align: center;
}
#hero h1 {
 margin: 0 0 10px 0;
 font-size: 64px;
 font-weight: 700;
 line-height: 56px;
 text-transform: uppercase;
 color: #fff;
 text-shadow: -1px 0 2px #2f4d5a;
}
#hero h2 {
```

```
color: #fff;
 margin-bottom: 50px;
 font-size: 20px;
 text-transform: uppercase;
 font-weight: 700;
 text-shadow: -1px 0 2px #2f4d5a;
}
#hero .btn-get-started {
 font-size: 36px;
 display: inline-block;
 padding: 4px 0;
 border-radius: 50px;
 transition: 0.3s ease-in-out;
 margin: 10px;
 width: 64px;
 height: 64px;
 text-align: center;
 border: 2px solid #fff;
 color: #fff;
}
#hero .btn-get-started:hover {
 padding-top: 8px;
 background: rgba(255, 255, 255, 0.15);
}
```

```
@media (min-width: 1024px) {
#hero {
 background-attachment: fixed;
}
}
@media (max-width: 768px) {
#hero h1 {
 font-size: 28px;
 line-height: 36px;
}
#hero h2 {
 font-size: 18px;
 line-height: 24px;
 margin-bottom: 30px;
}
}
# Sections General
*/
section {
padding: 60px 0;
overflow: hidden;
}
```

```
.section-bg {
 background-color: #f4f9fc;
}
.section-title {
 text-align: center;
 padding-bottom: 30px;
}
.section-title h2 {
 font-size: 32px;
 font-weight: bold;
 position: relative;
 margin-bottom: 30px;
 color: #2f4d5a;
 z-index: 2;
}
.section-title h2::after {
 content: "";
 position: absolute;
 left: 50%;
 top: 50%;
 transform: translate(-50%, -50%);
 width: 122px;
 height: 66px;
 background: url(../img/section-title-bg.png) no-repeat;
```

```
z-index: -1;
}
.section-title p {
margin-bottom: 0;
}
# Breadcrumbs
*/
.breadcrumbs {
padding: 15px 0;
background-color: #f8fbfd;
min-height: 40px;
}
.breadcrumbs h2 {
font-size: 24px;
font-weight: 300;
}
.breadcrumbs ol {
display: flex;
flex-wrap: wrap;
list-style: none;
padding: 0;
margin: 0;
```

```
font-size: 14px;
}
.breadcrumbs ol li+li {
 padding-left: 10px;
}
.breadcrumbs ol li+li::before {
 display: inline-block;
 padding-right: 10px;
 color: #6c757d;
 content: "/";
}
@media (max-width: 768px) {
 .breadcrumbs .d-flex {
  display: block !important;
 }
 .breadcrumbs ol {
  display: block;
 }
 .breadcrumbs ol li {
  display: inline-block;
 }
}
```

```
/*_____
# About
*/
.about {
background: url("../img/about-bg.jpg") center center no-repeat;
background-size: cover;
padding: 60px 0;
position: relative;
}
.about::before {
content: "";
position: absolute;
left: 0;
right: 0;
top: 0;
bottom: 0;
background: rgba(255, 255, 255, 0.75);
z-index: 9;
}
.about .container {
position: relative;
z-index: 10;
}
```

```
.about .content {
 padding: 30px 30px 30px 0;
}
.about .content h3 {
 font-weight: 700;
 font-size: 34px;
 color: #2f4d5a;
 margin-bottom: 30px;
}
.about .content p {
 margin-bottom: 30px;
}
.about .content .about-btn {
 display: inline-block;
 background: #346a83;
 padding: 6px 44px 8px 30px;
 color: #fff;
 border-radius: 50px;
 transition: 0.3s;
 position: relative;
}
.about .content .about-btn i {
 font-size: 18px;
```

```
position: absolute;
 right: 18px;
 top: 9px;
}
.about .content .about-btn:hover {
 background: #346a83;
}
.about .icon-boxes .icon-box {
 margin-top: 30px;
}
.about .icon-boxes .icon-box i {
 font-size: 40px;
 color: #346a83;
 margin-bottom: 10px;
}
.about .icon-boxes .icon-box h4 {
 font-size: 20px;
 font-weight: 700;
 margin: 0 0 10px 0;
}
.about .icon-boxes .icon-box p {
 font-size: 15px;
```

```
color: #848484;
}
@media (max-width: 1200px) {
.about .content {
 padding-right: 0;
}
}
@media (max-width: 768px) {
.about {
 text-align: center;
}
}
/*_____
# Services
 */
.services .icon-box {
padding: 30px;
position: relative;
overflow: hidden;
background: #fff;
box-shadow: 0 0 29px 0 rgba(68, 88, 144, 0.12);
transition: all 0.3s ease-in-out;
border-radius: 8px;
z-index: 1;
```

```
}
.services .icon-box::before {
 content: "";
 position: absolute;
 background: white;
 right: 0;
 left: 0;
 bottom: 0;
 top: 100%;
 transition: all 0.3s;
 z-index: -1;
}
.services .icon-box:hover::before {
 background: #346a83;
 top: 0;
 border-radius: 0px;
}
.services .icon {
 margin-bottom: 15px;
}
.services .icon i {
 font-size: 48px;
 line-height: 1;
```

```
color: #346a83;
 transition: all 0.3s ease-in-out;
}
.services .title {
 font-weight: 700;
 margin-bottom: 15px;
 font-size: 18px;
}
.services .title a {
 color: #111;
}
.services .description {
 font-size: 15px;
 line-height: 28px;
 margin-bottom: 0;
}
.services .icon-box:hover .title a,
.services .icon-box:hover .description {
 color: #fff;
}
.services .icon-box:hover .icon i {
 color: #fff;
```

```
}
# Cta
*/
.cta {
 background: linear-gradient(rgba(42, 97, 122, 0.8), rgba(103, 176, 209, 0.8)),
url("assets/img/back3.jpeg") fixed center center;
background-size: cover;
padding: 60px 0;
}
.cta h3 {
 color: #fff;
 font-size: 28px;
font-weight: 700;
}
.cta p {
 color: #fff;
}
.cta .cta-btn {
 font-family: "Raleway", sans-serif;
 text-transform: uppercase;
font-weight: 500;
 font-size: 16px;
```

```
letter-spacing: 1px;
display: inline-block;
padding: 8px 28px;
border-radius: 25px;
transition: 0.5s;
margin-top: 10px;
border: 2px solid rgba(255, 255, 255, 0.5);
color: #fff;
}
.cta .cta-btn:hover {
border-color: #fff;
}
/*-----
# Portfolio
*/
.portfolio .portfolio-item {
margin-bottom: 30px;
}
.portfolio #portfolio-flters {
padding: 0;
margin: 0 auto 35px auto;
list-style: none;
text-align: center;
background: #ecf5f9;
```

```
border-radius: 50px;
 padding: 2px 15px;
}
.portfolio #portfolio-flters li {
 cursor: pointer;
 display: inline-block;
 padding: 10px 15px 8px 15px;
 font-size: 14px;
 font-weight: 600;
 line-height: 1;
 text-transform: uppercase;
 color: #2f4d5a;
 margin-bottom: 5px;
 transition: all 0.3s ease-in-out;
}
.portfolio #portfolio-flters li:hover,
.portfolio #portfolio-flters li.filter-active {
 color: #346a83;
}
.portfolio #portfolio-flters li:last-child {
 margin-right: 0;
}
.portfolio .portfolio-wrap {
```

```
transition: 0.3s;
 position: relative;
 overflow: hidden;
 z-index: 1;
}
.portfolio .portfolio-wrap::before {
 content: "";
 background: rgba(255, 255, 255, 0.5);
 position: absolute;
 left: 0;
 right: 0;
 top: 0;
 bottom: 0;
 transition: all ease-in-out 0.3s;
 z-index: 2;
 opacity: 0;
}
.portfolio .portfolio-wrap .portfolio-links {
 opacity: 1;
 left: 0;
 right: 0;
 bottom: -60px;
 z-index: 3;
 position: absolute;
 transition: all ease-in-out 0.3s;
```

```
display: flex;
 justify-content: center;
}
.portfolio .portfolio-wrap .portfolio-links a {
 color: #fff;
 font-size: 28px;
 text-align: center;
 background: rgba(103, 176, 209, 0.75);
 transition: 0.3s;
 width: 50%;
}
.portfolio .portfolio-wrap .portfolio-links a:hover {
 background: rgba(103, 176, 209, 0.95);
}
.portfolio .portfolio-wrap .portfolio-links a+a {
 border-left: 1px solid #8ec4dd;
}
.portfolio .portfolio-wrap:hover::before {
 top: 0;
 left: 0;
 right: 0;
 bottom: 0;
 opacity: 1;
```

```
}
.portfolio .portfolio-wrap:hover .portfolio-links {
opacity: 1;
bottom: 0;
}
/*_____
# Team
*/
.team .member {
text-align: center;
margin-bottom: 80px;
position: relative;
}
.team .member .pic {
overflow: hidden;
}
.team .member .member-info {
position: absolute;
top: 85%;
left: 20px;
right: 20px;
background: #fff;
padding: 20px 0;
```

```
color: #2f4d5a;
 box-shadow: 0px 2px 15px rgba(0, 0, 0, 0.1);
 max-height: 95px;
 overflow: hidden;
 transition: max-height 0.5s ease-in-out;
}
.team .member:hover .member-info {
max-height: 300px;
}
.team .member h4 {
font-weight: 700;
 margin-bottom: 10px;
 font-size: 16px;
 color: #2f4d5a;
 position: relative;
 padding-bottom: 10px;
}
.team .member h4::after {
 content: "";
 position: absolute;
 display: block;
 width: 50px;
height: 1px;
background: #b1cbd7;
```

```
bottom: 0;
 left: calc(50% - 25px);
}
.team .member span {
 font-style: italic;
 display: block;
 font-size: 13px;
}
.team .member .social {
 margin-top: 15px;
}
.team .member .social a {
 transition: color 0.3s;
 color: #52869d;
}
.team .member .social a:hover {
 color: #346a83;
}
.team .member .social i {
 font-size: 16px;
 margin: 0 2px;
}
```

```
@media (max-width: 992px) {
.team .member {
 margin-bottom: 110px;
}
}
# Contact
*/
.contact {
padding-bottom: 80px;
}
.contact .info-box {
color: #444444;
background: #fff;
text-align: center;
box-shadow: 0 0 30px rgba(214, 215, 216, 0.6);
padding: 20px 0 30px 0;
}
.contact .info-box i {
font-size: 32px;
color: #67b0d1;
border-radius: 50%;
padding: 8px;
```

```
border: 2px dotted #f0f7fa;
}
.contact .info-box h3 {
 font-size: 20px;
 color: #777777;
 font-weight: 700;
 margin: 10px 0;
}
.contact .info-box p {
 padding: 0;
 line-height: 24px;
 font-size: 14px;
 margin-bottom: 0;
}
.contact .php-email-form {
 box-shadow: 0 0 30px rgba(214, 215, 216, 0.6);
 padding: 30px;
 background: #fff;
}
.contact .php-email-form .error-message {
 display: none;
 color: #fff;
 background: #ed3c0d;
```

```
text-align: left;
 padding: 15px;
 font-weight: 600;
}
.contact .php-email-form .error-message br+br {
 margin-top: 25px;
}
.contact .php-email-form .sent-message {
 display: none;
 color: #fff;
 background: #18d26e;
 text-align: center;
 padding: 15px;
 font-weight: 600;
}
.contact .php-email-form .loading {
 display: none;
 background: #fff;
 text-align: center;
 padding: 15px;
}
.contact .php-email-form .loading:before {
 content: "";
```

```
display: inline-block;
 border-radius: 50%;
 width: 24px;
height: 24px;
 margin: 0 10px -6px 0;
 border: 3px solid #18d26e;
border-top-color: #eee;
 -webkit-animation: animate-loading 1s linear infinite;
 animation: animate-loading 1s linear infinite;
}
.contact .php-email-form input,
.contact .php-email-form textarea {
 border-radius: 0;
 box-shadow: none;
font-size: 14px;
}
.contact .php-email-form input::focus,
.contact .php-email-form textarea::focus {
 background-color: #346a83;
}
.contact .php-email-form input {
 padding: 10px 15px;
}
```

```
.contact .php-email-form textarea {
padding: 12px 15px;
}
.contact .php-email-form button[type=submit] {
 background: #346a83;
 border: 0;
padding: 10px 24px;
 color: #fff;
transition: 0.4s;
}
.contact .php-email-form button[type=submit]:hover {
 background: #8ec4dd;
}
@-webkit-keyframes animate-loading {
 0% {
  transform: rotate(0deg);
 }
 100% {
  transform: rotate(360deg);
}
}
@keyframes animate-loading {
```

```
0% {
 transform: rotate(0deg);
}
100% {
 transform: rotate(360deg);
}
}
/*_____
# Footer
*/
#footer {
background: #263f49;
padding: 0 0 30px 0;
color: #fff;
font-size: 14px;
}
#footer .footer-top {
padding: 60px 0 30px 0;
}
#footer .footer-top .footer-info {
margin-top: -90px;
margin-bottom: 15px;
background: white;
```

```
color: #2f4d5a;
 border-top: 4px solid #346a83;
 text-align: center;
 padding: 30px 20px;
}
#footer .footer-top .footer-info h3 {
 font-size: 24px;
 margin: 0 0 20px 0;
 padding: 2px 0 2px 0;
 line-height: 1;
 font-weight: 700;
}
#footer .footer-top .footer-info p {
 font-size: 14px;
 line-height: 24px;
 margin-bottom: 0;
 font-family: "Raleway", sans-serif;
}
#footer .footer-top .social-links a {
 font-size: 18px;
 display: inline-block;
 background: #1e4f64;
 color: #fff;
 line-height: 1;
```

```
padding: 8px 0;
 margin-right: 4px;
 border-radius: 50%;
 text-align: center;
 width: 36px;
 height: 36px;
 transition: 0.3s;
}
#footer .footer-top .social-links a:hover {
 background: #346a83;
 color: #fff;
 text-decoration: none;
}
#footer .footer-top h4 {
 font-size: 16px;
 font-weight: 600;
 color: #fff;
 position: relative;
 padding-bottom: 12px;
}
#footer .footer-top .footer-links {
 margin-bottom: 30px;
}
```

```
#footer .footer-top .footer-links ul {
 list-style: none;
 padding: 0;
 margin: 0;
}
#footer .footer-top .footer-links ul i {
 padding-right: 2px;
 color: #b5d9e9;
 font-size: 18px;
 line-height: 1;
}
#footer .footer-top .footer-links ul li {
 padding: 10px 0;
 display: flex;
 align-items: center;
}
#footer .footer-top .footer-links ul li:first-child {
 padding-top: 0;
}
#footer .footer-top .footer-links ul a {
 color: #fff;
 transition: 0.3s;
 display: inline-block;
```

```
line-height: 1;
}
#footer .footer-top .footer-links ul a:hover {
 color: #a2cfe3;
}
#footer .footer-top .footer-newsletter form {
 margin-top: 30px;
 background: #fff;
 padding: 6px 10px;
 position: relative;
 border-radius: 4;
}
#footer .footer-top .footer-newsletter form input[type=email] {
 border: 0;
 padding: 4px;
 width: calc(100% - 110px);
}
#footer .footer-top .footer-newsletter form input[type=submit] {
 position: absolute;
 top: 0;
 right: 0;
 bottom: 0;
 border: 0;
```

```
background: none;
 font-size: 16px;
 padding: 0 20px;
 background: #346a83;
 color: #fff;
 transition: 0.3s;
 border-radius: 4;
}
#footer .footer-top .footer-newsletter form input[type=submit]:hover {
 background: #346a83;
}
#footer .copyright {
 border-top: 1px solid #385b6b;
 text-align: center;
 padding-top: 30px;
}
#footer .credits {
 padding-top: 10px;
 text-align: center;
 font-size: 13px;
 color: #fff;
}
@media (max-width: 575px) {
```

```
#footer .footer-top .footer-info {
  margin: -20px 0 30px 0;
}
```

GitHub Links:

Login page:

https://github.com/IBM-EPBL/IBM-Project-30841-1660191072/tree/main/Final%20Deliverables/login%20page

Main Page:

https://github.com/IBM-EPBL/IBM-Project-30841-1660191072/tree/main/Final%20Deliverables/Main%20page

Registration Page:

https://github.com/IBM-EPBL/IBM-Project-30841-1660191072/tree/main/Final%20Deliverables/Registration

GITHUB LINK:

https://github.com/IBM-EPBL/IBM-Project-30841-1660191072

Project Demo Video Drive Link:

https://drive.google.com/file/d/1Gr7FG-gCho4byy7CE3ohEeCMo39qD1uB/view?usp=share_link