



## **RETAIL STORE STOCK INVENTORY ANALYTICS**



### **NALAIYA THIRAN PROJECT BASED LEARNING PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY, AND ENTREPRENEURSHIP**

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## **ABSTRACT**

The inventory Management system handles the transactions revolving around the consumer's goods. Without the proper inventory control, retail stores may run out of stock on some of the items in the shop. A good Inventory Management System will alert the retailer when it is time to refill the stock or will notify the retailer at the time of the stock when it is in low quantity. This is why integrating the right retail inventory management process is important to achieve smooth retail operations. When a retailer such as a grocery store is caught selling an expired product, they'll have to pay a fine and face legal and compliance issues. Manually counting each pair of stocks is likely to result in an error. An automated inventory management system helps to minimize the risk of error. In retail stores, an Inventory Management System also helps track theft of retail merchandise, providing valuable information about store profits and the need for theft-preventions systems. The primary outcomes of this study are the leading inventory management systems and models, the Key Performance Indicators (KPIs) for their correct management, and the benefits and challenges of choosing or adopting an efficient inventory control and management system. The existing system consists of methods using ABC Analysis and Min-Max Analysis. In the Data Mart, the search for goods classes per subcategory is carried out using the ABC Analysis calculation method. For the future scope Inventory Management Systems have become more real-time, giving retailers more data about demographics, spending habits, shopping preferences, best-selling, etc. Good retail inventory management is essential to the success of any retail business. By putting in place effective systems and processes, businesses can ensure that they have the right level of stock to meet customer demand while also avoiding excessive levels of stock that can tie up valuable resources.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Project Overview**

Inventory Management is a technique through which stocked goods, inventories, and non-capitalized assets are kept properly according to their specific shape and placement. An Inventory can be any item that a business holds to receive the goal of resale or repair. Inventory Management is a process of ordering, storing, and using inventories. This stock management includes generating the lead on raw materials, components, and finished products, alongside warehousing and processing of such items in your company.

#### **1.2 Purpose**

Data analytics initiatives can help businesses increase revenue, improve operational efficiency, optimize marketing campaigns and bolster customer service efforts. Analytics also enables organizations to respond quickly to emerging market trends and gain a competitive edge over business rivals. The ultimate goal of data analytics, however, is boosting business performance. Depending on the particular application, the data that's analyzed can consist of either historical records or new information that has been processed for real-time analytics. In addition, it can come from a mix of internal systems and external data sources. To ensure a continuous supply of materials and stock so that production should not suffer at the time of customer demand. To avoid both overstocking and under-stocking of inventory. To maintain the availability of materials whenever and wherever required in enough quantity.

To maintain minimum working capital as required for operational and sales activities. To optimize various costs indulged with inventories like purchase cost, carrying a cost, storage cost, etc. To keep material costs under control as they contribute to reducing the cost of production. To eliminate duplication in ordering stocks. To minimize loss through deterioration, pilferage, wastage, and damages. To ensure everlasting inventory control so that materials shown in stock ledgers should be physically lying in the warehouse. To ensure the quality of goods at reasonable prices. To facilitate the furnishing of data for short and long-term planning with a controlled inventory. To supply the required material continuously. To maintain a systematic record of inventory. To make stability in price.



## CHAPTER 2

### IMPLEMENTATION & RESULT

#### 2.1 Existing Problems

The existing system consists of methods using ABC Analysis and Min-Max Analysis. In the Data Mart, the search for goods classes per subcategory is carried out using the ABC Analysis calculation method. Furthermore, in the Data Mart, the search for maximum and minimum stock values is based on the Min-Max Analysis calculation method. The resulting maximum and minimum grade and stock values are then implemented into the goods data table in the retail management information system database. The last stage is to arrange the order amount that is allowed in the order module in the retail management information system. Rules are made based on the class of goods along with the minimum and maximum stock values.

#### 2.2 References

1. M Rusănescu 2014 Abc Analysis, Model for Classifying Inventory HIDRAULICA.
2. D Dhoka and Y L Choudary 2013 ABC Classification for Inventory Optimization IOSR J Bus Manage.
3. Funaki, K., "Strategies safety stock placement in supply chain design with due-date based demand," International Journal of Production Economics, vol. 135, pp 4-13, 2012.
4. Grewal, CS, Enns, ST, and Rogers, P., "Dynamic reorder point replenishment strategies for a capacitated supply chain with seasonal demand," Computer, and industrial engineering, vol. .80, pp 97-110, 2015.

#### 2.3 Problem Statement Definition

The main objective of the project is to manage the retail store because it contains large amounts of data and it is difficult for the retailer to keep track all the stocks and sales.



**Fig 2.1 Problem Statement**

## CHAPTER 3

### IDEATION & PROPOSED SOLUTION

#### 3.1 Empathy Map Canvas:

An empathy map is a collaborative tool team can use to gain a deeper insight into their customers. Much like a user persona, an empathy map can represent a group of users, such as a customer segment. An Empathy Map consists of four quadrants. The four quadrants reflect four key traits, which the user demonstrated/possessed during the observation/research stage.



Fig 3.1 Empathy Map

### 3.2 Ideation & Brainstorming:

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

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

**Template**

**Brainstorm & idea prioritization**

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

⌚ 10 minutes to prepare  
⌚ 1 hour to collaborate  
👥 2-8 people recommended

[Share template feedback](#)

**Before you collaborate**

A little bit of preparation goes a long way with this session. Here's what you need to do to get going:

⌚ 10 minutes

- 1. **Team gathering**  
Invite who should participate in the session and send an invite. Share relevant information or pre-work ahead.
- 2. **Set the goal**  
Think about the problem you'll be focusing on solving in the brainstorming session.
- 3. **Learn how to use the facilitation tools**  
Use the facilitation tools to convene to run a happy and productive session.  
[Open article](#)

**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.

⌚ 5 minutes

**PROBLEM**

It is difficult for a Retail Stock Manager to keep in track all the details to know what happening in the Store.

**Key rules of brainstorming**  
To run an smooth and productive session

- Stay on topic
- Encourage wild ideas
- Defer judgment
- Listen to others
- Go for volume
- If possible, be visual

Fig 3.2 Ideation & Brainstorming

## Step-2: Brainstorm, Idea Listing and Grouping

### Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

### Group Ideas

Now time to group your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a name for the idea. If a cluster is large then it is likely better to split and group and break it into two smaller groups.

10 minutes

#### Aswin A S

- Developing up-to-date history of Product
- Showing Relevant Product Details
- Tracking the products in and out
- Generating Accurate Reports
- Developing search through history
- Managing different Stocks in Genes
- Easy Tracking through products

#### Ashwin B

- Onboard Result should be accurate
- Clear Definition of product
- Minimize design
- Various records of Stocks
- Defining the stocks reports accordingly
- Printing out stocks with new quantity
- Review data for relevant stocks
- Generating stocks in table

#### Jaganeeshwar

- Minimize Amount of data
- Providing Required stock details
- Showing accurate analytical data
- Minimize Stock before and after buying time
- Stocks live update
- Generating Statistical data accurately
- Having the user to search for stock details
- Clearing generated stock details

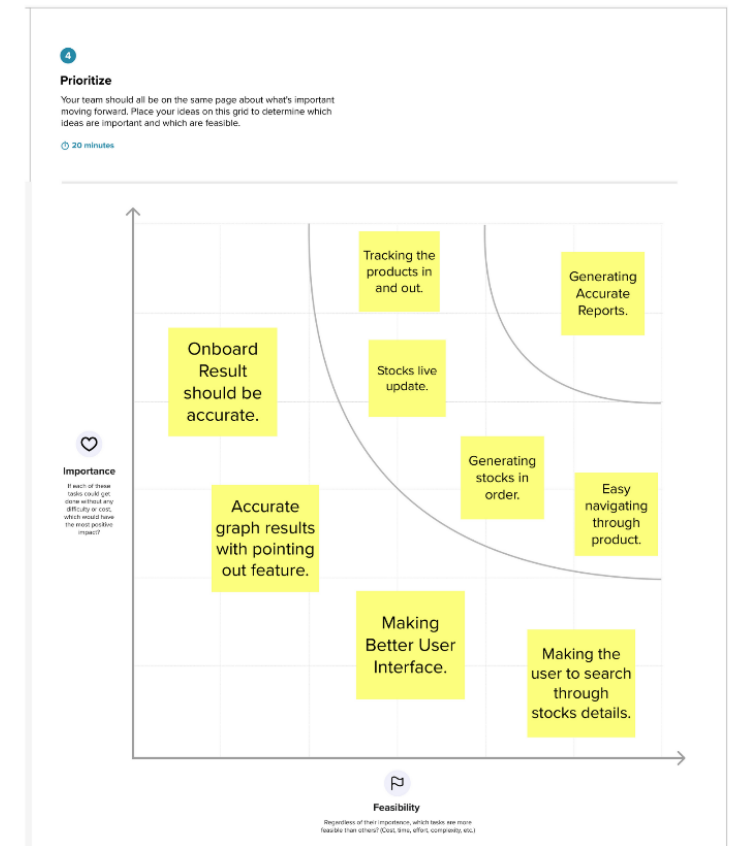
#### Logith

- Providing needed report for stock in low quantity
- Developing stock interface in groups
- Increasing product accuracy
- Showing all relevant stocks
- Sorting different stocks categories
- Adding stock interface using stock graphs
- Additional information of stocks
- Accurate graph results with pointing out feature

- Tracking the products in and out.
- Generating Accurate Reports.
- Easy navigating through product.
- Stocks live update.
- Making the user to search through stocks details.
- Generating stocks in order.
- Making Better User Interface.
- Onboard Result should be accurate.
- Accurate graph results with pointing out feature.

Fig 3.2 Ideation & Brainstorming

### Step-3: Idea Prioritization



**Fig 3.2 Ideation & Brainstorming**

### 3.3 Proposed Solution:

Proposed Solution covers the Project's problem statement, idea description, Novelty, Social impact, Business Model, Scalability.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	It is difficult for a Retail Stock Manager to keep in track all the details to know what happening in the Store.
2.	Idea / Solution description	To create a perfect dashboard to showcase all the inventory stock details.
3.	Novelty / Uniqueness	Dashboard showcases the whole analysis of the inventory stock details to maintain them without manual interpretation.
4.	Social Impact / Customer Satisfaction	The stock manager feels easy to manage the stocks without himself analysing the whole details manually.
5.	Business Model (Revenue Model)	Dashboard by data analysis.
6.	Scalability of the Solution	To add more data analysis by creating more attributes to gain additional information.

**Fig 3.3 Proposed Solution**

### 3.4 Problem Solution fit:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem.

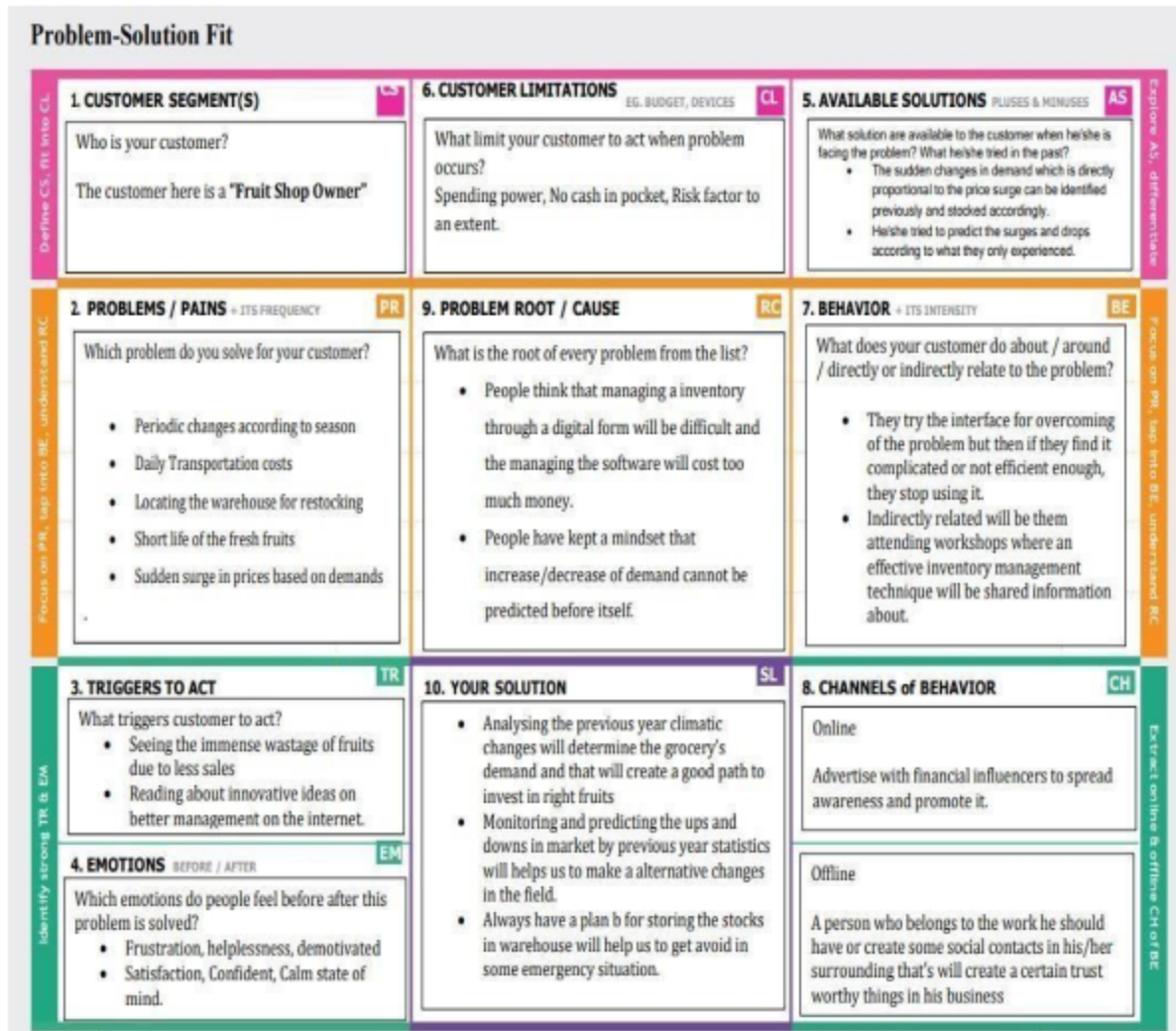


Fig 3.4 Problem Solution Fit

## CHAPTER 4

### REQUIREMENT ANALYSIS

#### 4.1 Functional requirement:

Following are the functional requirements of the proposed solution:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Linked IN Registration through Website Registration through G-mail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login with username Login with password
FR-4	Profile update	Update the user credentials Update the Contact details
FR-5	Uploading Data	Collect the customer details as well as product details Upload the product details This model predicts the best sold products and also it analysis the available stocks
FR-6	Recommendation	User will request for Item Get the Item recommendations
FR-7	Ratings and Reviews	The user i.e retailer of any shop can give their ratings and view of this models

**Fig 4.1 Functional requirement**



## 4.2 Non-Functional Requirements

Following are the non-functional requirements of the proposed solution:

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	They are more likely to have enough inventory to capture every possible sale while avoiding overstock and minimizing expenses. This model can be supported on both desktop and mobile browsers.
NFR-2	Security	This can be used only by the users who have their proper login credentials
NFR-3	Reliability	Avoid over or under stocking Ensure accurate inventory valuation Prevent order delays Reduce dead stock
NFR-4	Performance	In a departmental store, the billing technique is digitalized . The database of the customer that is the name of the customer, mobile number, address and the purchase details of the customer are included in the dataset. From this, the model can predict the dead stocks and highly profitable stocks. The accuracy of this model will be ensured by checking multiple times.
NFR-5	Availability	This model is suitable for all kind of retail stores. It can give retailers real-time visibility into stock levels, avoid stock outs, keep inventory carrying costs low and help meet customer expectations
NFR-6	Scalability	More number of users can be accessed at the same time without any issues. The feedback of the users will be taken and be proceeded further up to the satisfaction of the user.

**Fig 4.2 Non-Functional requirement**

## CHAPTER 5

### PROJECT DESIGN

#### 5.1 Data Flow Diagrams:

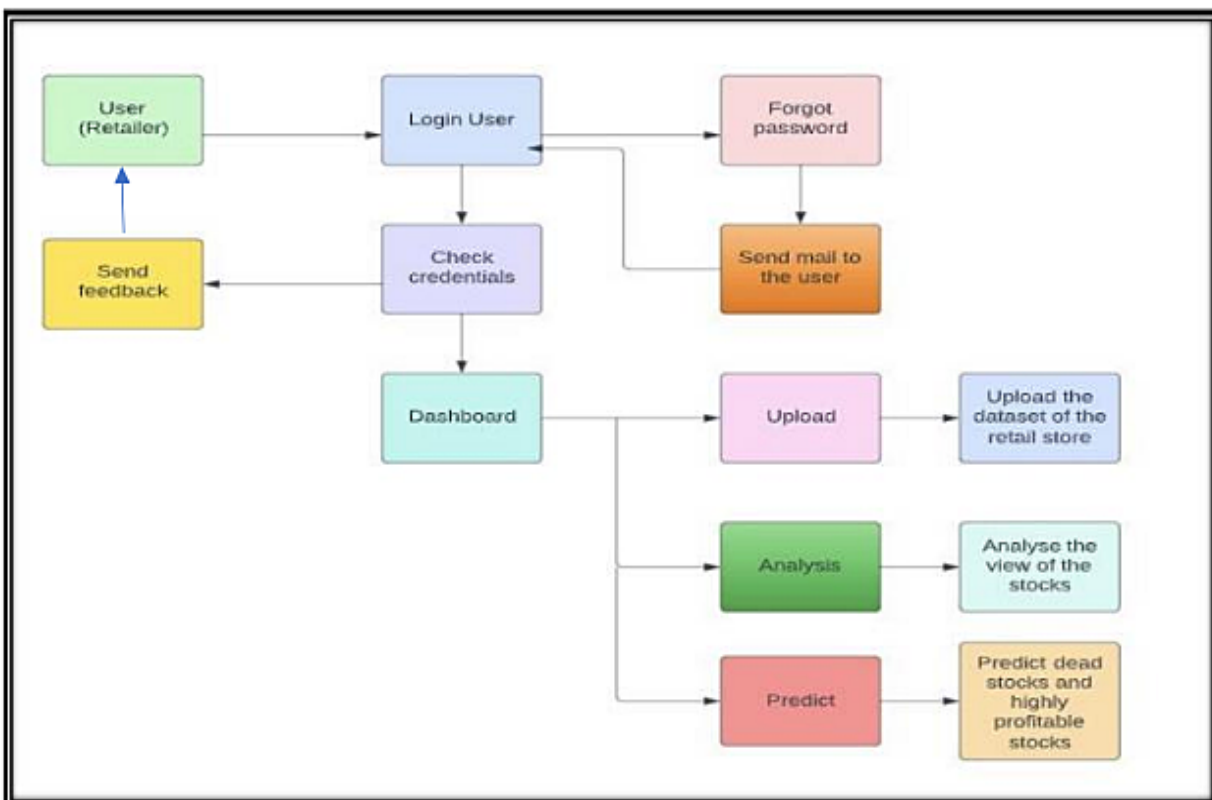
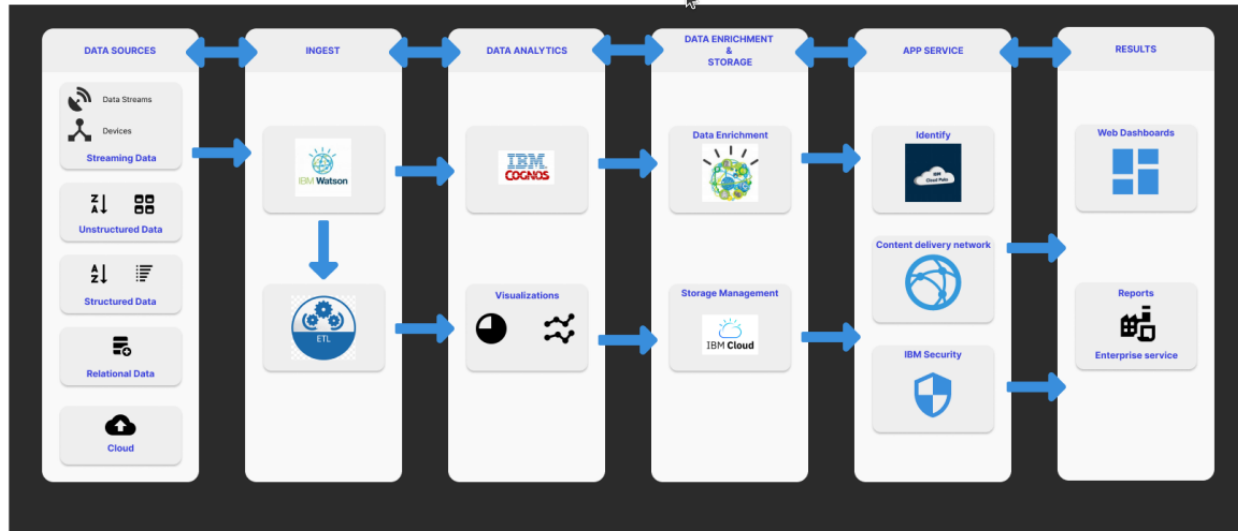


Fig 5.1 Data Flow Diagrams

## 5.2 Solution & Technical Architecture:



**Fig 5.2 Solution & Technical Architecture**

**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	The user interacts with application using Web UI	HTML, CSS, JavaScript etc.
2.	Data Processing	The data from the dataset is pre-processed	IBM Cognos Analytics
3.	Cloud Database	The clean dataset is stored on IBM cloud	IBM cloud
4.	Data visualization	The data is visualized into different forms	IBM Cognos Analytics, Python
5.	Prediction	Algorithm techniques are used to predict the proper way to make the stock in store.	ML algorithm – Logistic Regression, Linear Regression, Random Forest,

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Providing an authentication step for verifying that is the user or not?	Technology of Opensource framework
2.	Security Implementations	Clearing the orders as soon as possible will make the customer satisfied.	Javascript
3.	Scalable Architecture	Making a detailed information about the product could clear the customer doubts and fulfil the expected information	Reach js, Python
4.	Availability	Knowing the availability of product will show the availability of the product based on the customer location	Location-based marketing
5.	Review	For Creating a customer standard will make suggestion data base for future use	Basic web tool

### 5.3 User Stories:

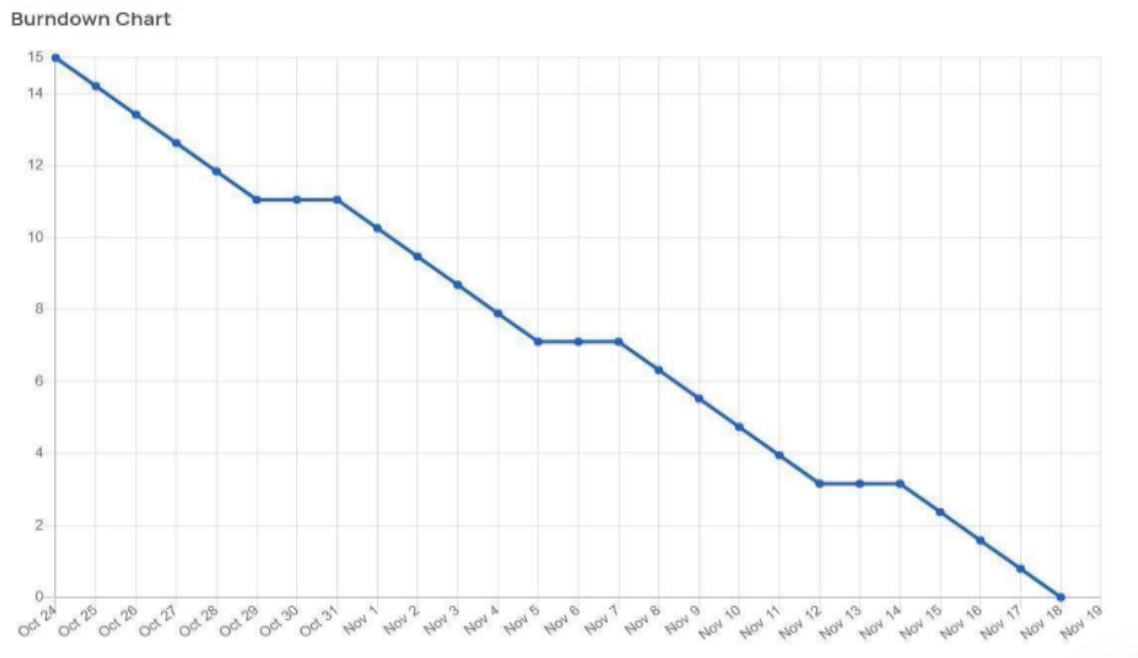
User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
User (Retailer)	Registration	USN-1	As a user, I can register by entering my email, password, and confirming my password and answering security question for password changing purpose	I can log in using the entered credentials	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered	I can receive confirmation email & click confirm	High	Sprint-1
	Login or Forgot password	USN-3	As a user, I can log into the application by entering email & password or send a password changing request	I can access the dashboard or request to change the password	High	Sprint-1
	Password Forget	USN-3	Change password by answering the security question	I can change the password	High	Sprint-1
	Dashboard	USN-4	As a user, after logging in I can access the dashboard containing upload, analysis and predict functions	I can interact with functions present in the dashboard	High	Sprint-2

**Fig 5.3 User Stories**

## CHAPTER 6

### PROJECT PLANNING & SCHEDULING

#### 6.1 Sprint Planning & Estimation:



**Fig 6.1 Sprint Planning & Estimation**

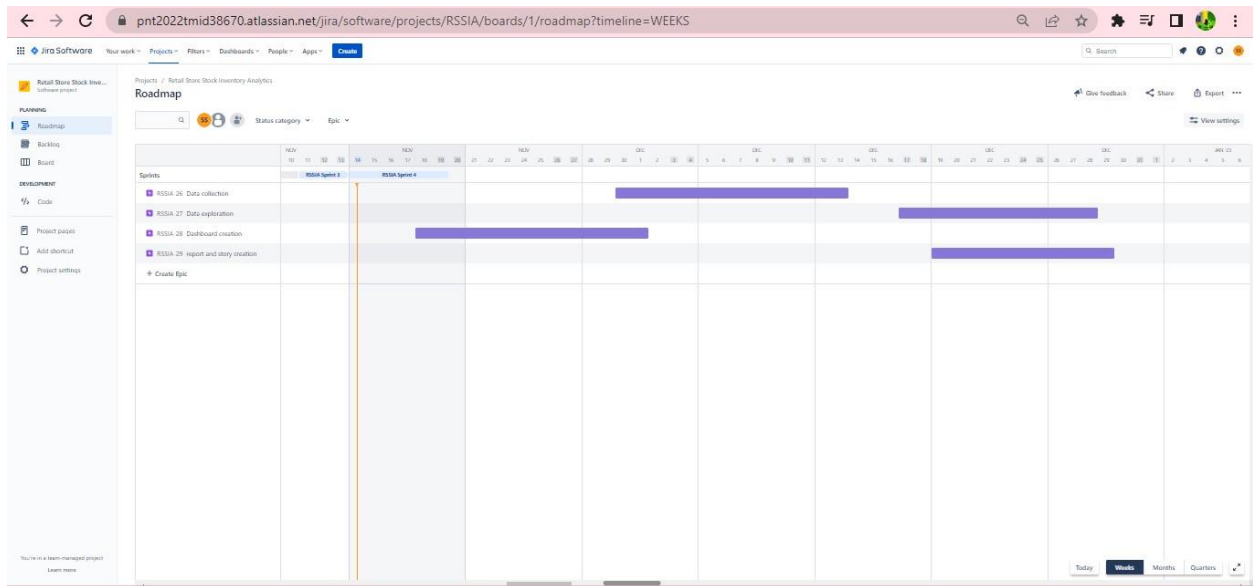
## 6.2 Sprint Delivery Schedule:

Product Backlog, Sprint Schedule, and Estimation

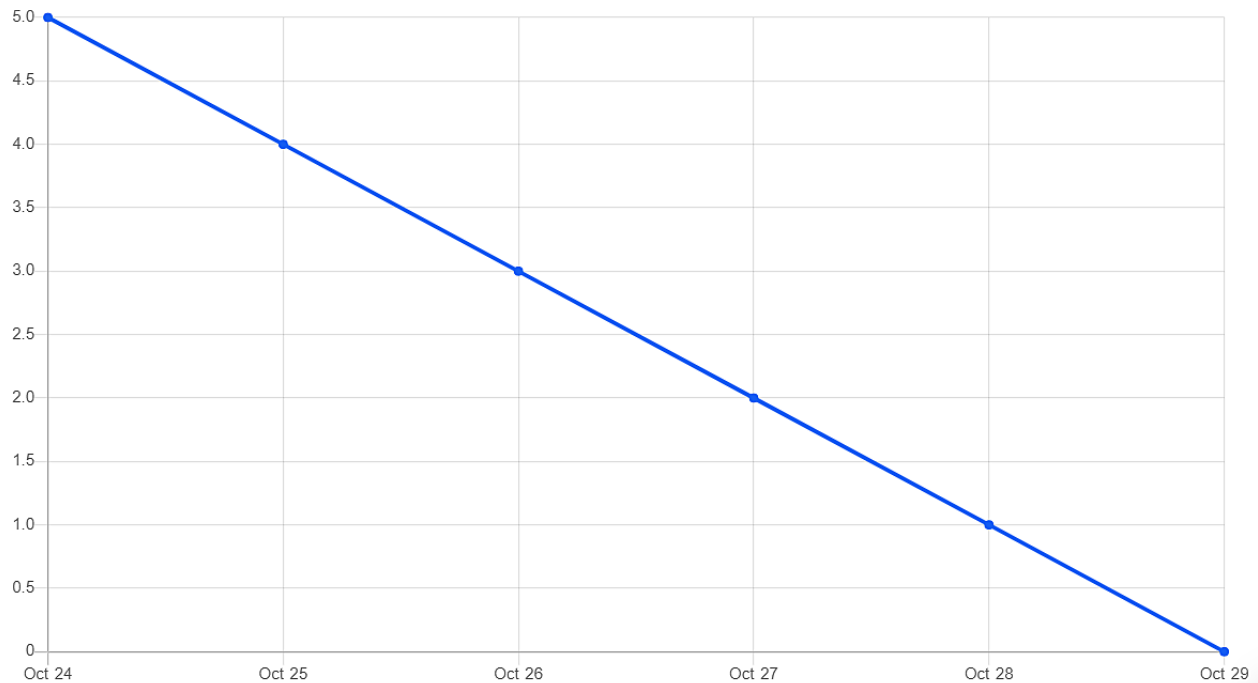
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	Fetching the ds from Kaggle using API	10	High	ASWIN A S
Sprint-1	Database	USN-2	Creating the database in IBM db2	10	High	ASWIN A S
Sprint-2	Data Preparation	USN-3	Uploading the dataset into the database cloud in IBM.	05	Medium	JAGANEESHWAR S
Sprint-2	Data Extraction	USN-4	Connecting the database and fetching the data from IBM db2 database	10	Medium	JAGANEESHWAR S
Sprint-2	Data Preparation	USN-5	Prepare the dataset and doing the relationship	05	High	JAGANEESHWAR S
Sprint-3	Dashboard	USN-6	Creating the dashboard.	10	High	LOGITH N
Sprint-3	Report	USN-7	Creating the report.	05	High	LOGITH N
Sprint-3	Story	USN-8	Creating the story.	05	High	LOGITH N
Sprint-4	Web Application	USN-9	Creating the website using bootstrap.	05	High	ASWIN B
Sprint-4	Web Application	USN-10	Embedding the dashboard into the web application.	05	High	ASWIN B
Sprint-4	Web Application	USN-11	Embedding the report into the web application.	05	High	ASWIN B
Sprint-4	Web Application	USN-12	Embedding the story into the web application.	04	High	ASWIN B
Sprint-4	Tools	USN-13	I can perform analysis by tools (Cognos and with ML)	01	High	ASWIN B

**Fig 6.2 Sprint Delivery Schedule**

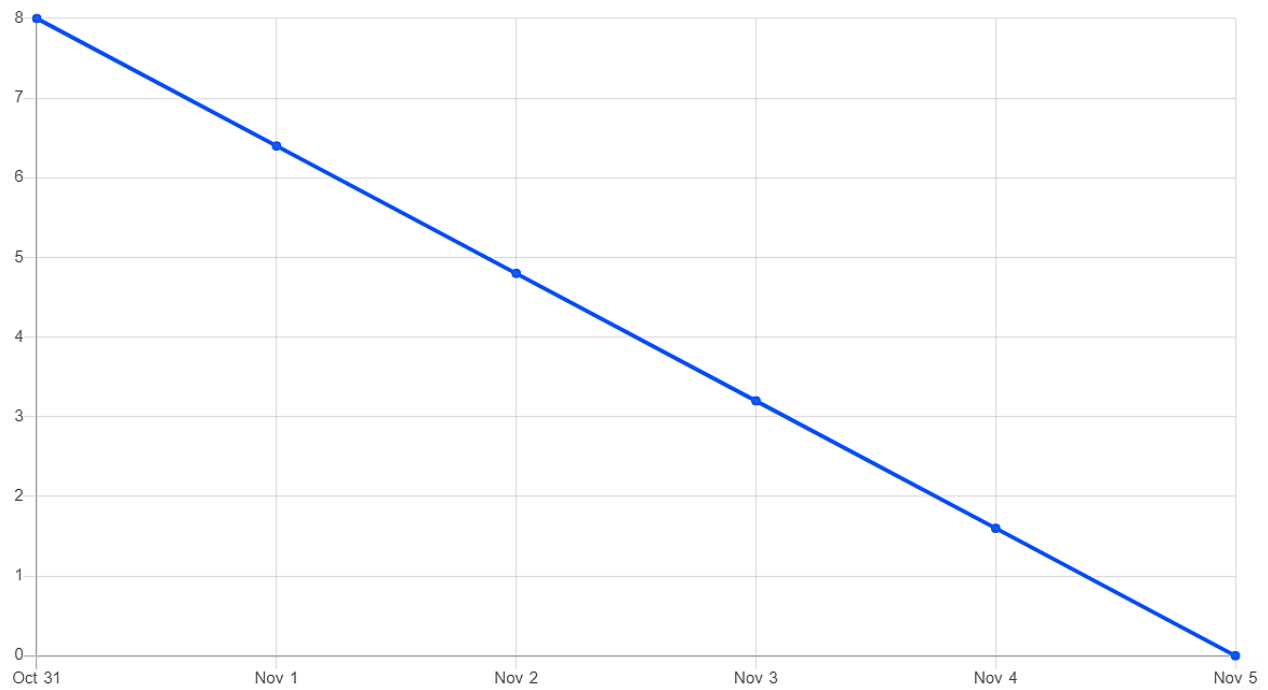
## 6.3 Reports from JIRA:



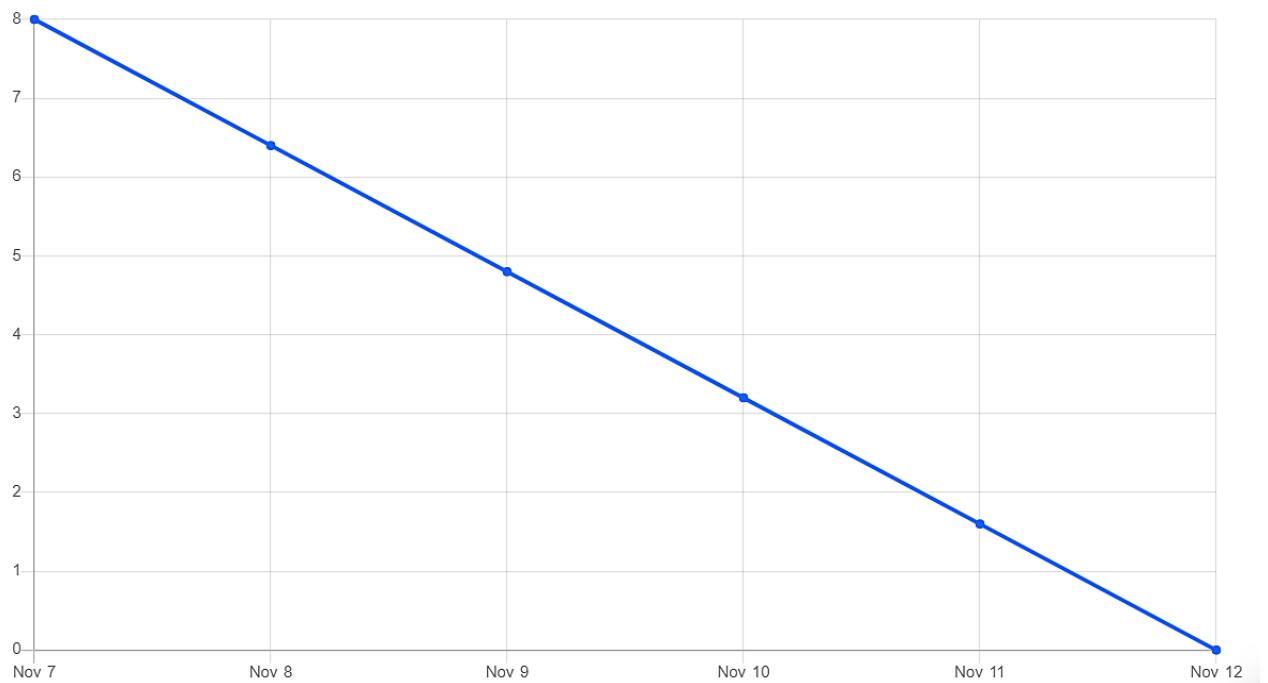
**Fig 6.3.1 Jira Project Planning**



**Fig 6.3.2 Sprint 1**

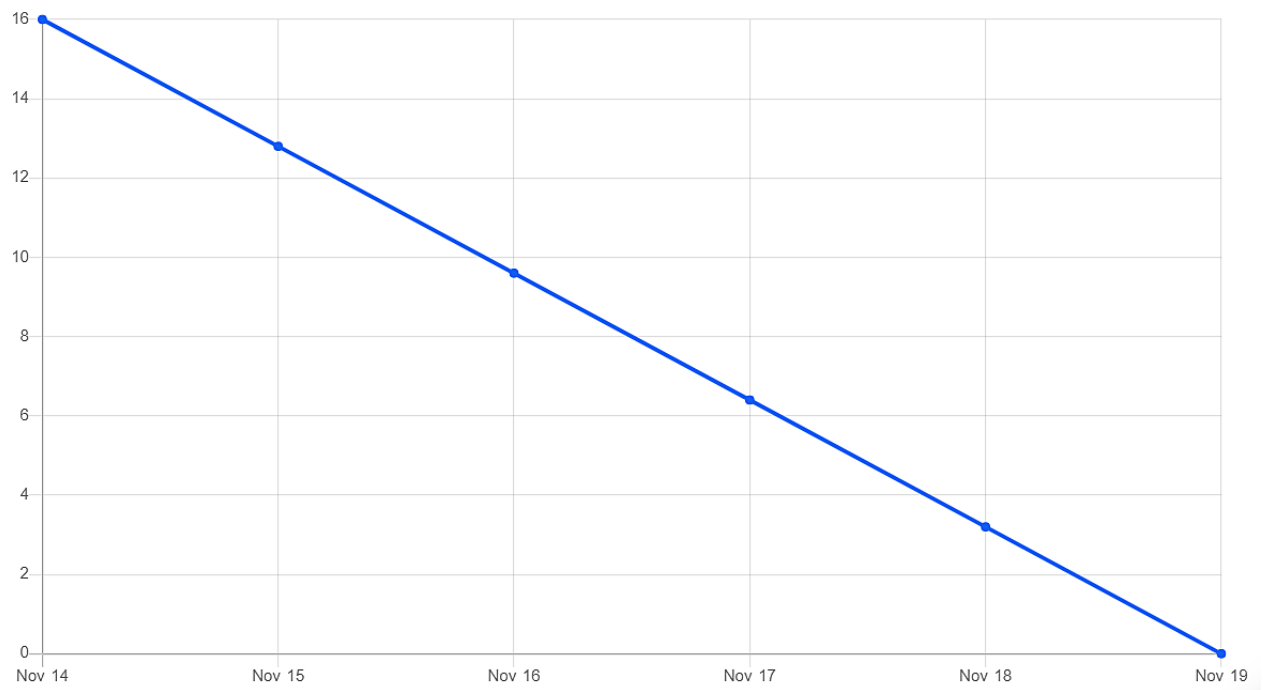


**Fig 6.3.3 Sprint 2**



**Fig 6.3.4 Sprint 3**





**Fig 6.3.5 Sprint 4**

## CHAPTER 7

### CODING & SOLUTIONING

#### 7.1 Feature 1: Login

- Login page consist of Two fields:
  - Username
  - Password
- When a new user fill the username and password and clicks "login now" button available it shows alert message.
- When a registered user fill the username and password and click "login now" button available it redirects the user to the home page with container consisting of a welcome note along with the users name will be displayed.
- The feature which we have implemented in our login page is that, it will count the number of times the user has logged in and stores it in the database.

**Code:**

```
<?php
use Phppot\Member;
if (!empty($_POST["login-btn"])) {
    require_once __DIR__ . '/Model/Member.php';
    $member = new Member();
    $loginResult = $member->loginMember();
}
?>
<HTML>
<HEAD>
<TITLE>Login</TITLE>
<link href="assets/css/phppot-style.css" type="text/css"
rel="stylesheet" />
<link href="assets/css/user-registration.css" type="text/css"
rel="stylesheet" />
<script src="vendor/jquery/jquery-3.3.1.js" type="text/javascript"></script>
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.mi
n.css" integrity="sha384-
BVYiISIFeK1dGmJRAKycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68v
bdEjh4u" crossorigin="anonymous">
<style>
body{
backgroundimage:url("https://media.istockphoto.com/id/913219882/photo/financialgraph-on-
technology-abstractbackground.jpg?b=1&s=170667a&w=0&k=20&c=aFXB_2Bn_T7weuTYIqZAs
8slja9MHcT-u-TIBVftvqo=");
background-position: center; /* Center the image */
background-repeat: no-repeat; /* Do not repeat the image */
```

```

background-size: cover; /* Resize the background image to cover the
entire container */
}
.sign-up-container{
background-image: linear-gradient(to right, #ff0030 , #790975);
}
.form-label{
color:white !important;
}
#login-btn{
color:white;
font-weight:bold;
background: #343a40;
}
</style>
</HEAD>
<BODY>
<div class="phppot-container">
<div class="sign-up-container">
<div class="login-signup">
<a href="user-registration.php"
style="color:white;">Sign up</a>
</div>
<div class="signup-align">
<form name="login" action="" method="post"
onsubmit="return loginValidation()">
<div class="signup-heading"
style="color:white;">Login</div>
<?php if(!empty($loginResult)){?>
<div class="error-msg"><?php echo
$loginResult;?></div>
<?php }?>
<div class="row">
<div class="inline-block">
<div class="form-label">
Username<span
class="required error" id="username-info"></span>
</div>
<input class="input-box-330"
type="text" name="username"
id="username">
</div>
</div>
<div class="row">
<div class="inline-block">
<div class="form-label">

```

```

Password<span
class="required error" id="login-password-info"></span>
</div>
<input class="input-box-330"
type="password"
name="login-password"
id="login-password">
</div>
</div>
<div class="row">
<input class="btn btn-dark"
type="submit" name="login-btn"
id="login-btn" value="Login Now">
</div>
</form>
</div>
</div>
</div>
<script>
function loginValidation() {
var valid = true;
$("#username").removeClass("error-field");
$("#password").removeClass("error-field");
var UserName = $("#username").val();
var Password = $('#login-password').val();
$("#username-info").html("").hide();
if (UserName.trim() == "") {
$("#username-info").html("required.").css("color",
"#ee0000").show();
$("#username").addClass("error-field");
valid = false;
}
if (Password.trim() == "") {
$("#login-password-info").html("required.").css("color",
"#ee0000").show();
$("#login-password").addClass("error-field");
valid = false;
}
if (valid == false) {
$('.error-field').first().focus();
valid = false;
}
return valid;
}
</script>
</BODY>

```

</HTML>

## 7.2 Feature 2: Registration

- Registration page consist of four fields:
  - Username
  - Email
  - Password
- When a new user fill the login and click "login now" button it show a alert message, so that the user should sign up first.
- After that the user fills the registration form and clicks the "Sign up" button the user will be registered.
- Now the user will able to login to view the home page.

### Code:

```
<?php
use Phppot\Member;
if (! empty($_POST["signup-btn"])) {
    require_once './Model/Member.php';
    $member = new Member();
    $registrationResponse = $member->registerMember();
}
?>
<HTML>
<HEAD>
<TITLE>User Registration</TITLE>
<link href="assets/css/phppot-style.css" type="text/css"
rel="stylesheet" />
<link href="assets/css/user-registration.css" type="text/css"
rel="stylesheet" />
<script src="vendor/jquery/jquery-3.3.1.js" type="text/javascript"></script>
</HEAD>
<style>
body{
backgroundimage:url("https://i.pinimg.com/736x/1a/f1/c6/1af1c62ecf24b3d90a9f4f2
05914e27e--business-analyst-data-analytics.jpg");
background-position: center; /* Center the image */
background-repeat: no-repeat; /* Do not repeat the image */
background-size: cover; /* Resize the background image to cover the
entire container */
}
.sign-up-container{
background-image: linear-gradient(to right, #790975,#ff0030);
}
.form-label{
color:white !important;
```

```

}
#signup-btn{
color:white;
font-weight:bold;
background: #343a40;
}
</style>
<BODY>
<div class="phppot-container">
<div class="sign-up-container">
<div class="login-signup">
<a href="index.php" style="color:white">Login</a>
</div>
<div class="">
<form name="sign-up" action="" method="post"
onsubmit="return signupValidation()">
<div class="signup-heading"
style="color:white">Registration</div>
<?php
if (! empty($registrationResponse["status"])) {
?>
<?php
if ($registrationResponse["status"] == "error") {
?>
<div class="server-response error-msg"><?php
echo $registrationResponse["message"]; ?></div>
<?php
} else if ($registrationResponse["status"] == "success") {
?>
<div class="server-response success-msg"><?php echo
$registrationResponse["message"]; ?></div>
<?php
}
?>
<?php
}
?> <div class="error-msg" id="error-msg"></div>
<div class="row">
<div class="inline-block">
<div class="form-label">
Username<span
class="required error" id="username-info"></span>
</div>
<input class="input-box-330"
type="text" name="username"
id="username">

```

```
</div>
</div>
<div class="row">
<div class="inline-block">
<div class="form-label">
Email<span class="required
error" id="email-info"></span>
</div>
<input class="input-box-330"
type="email" name="email" id="email">
</div>
</div>
<div class="row">
<div class="inline-block">
<div class="form-label">
Password<span
class="required error" id="signup-password-info"></span>
</div>
<input class="input-box-330"
type="password"
name="signup-password"
id="signup-password">
</div>
</div>
<div class="row">
<div class="inline-block">
<div class="form-label">
Confirm Password<span
class="required error"
id="confirm-password
info"></span>
</div>
<input class="input-box-330"
type="password"
name="confirm-password"
id="confirm-password">
</div>
</div>
<div class="row">
<input class="btn" type="submit"
name="signup-btn"
id="signup-btn" value="Sign up">
</div>
</form>
</div>
</div>
```

```

</div>
<script>
function signupValidation() {
var valid = true;
$("#username").removeClass("error-field");
$("#email").removeClass("error-field");
$("#password").removeClass("error-field");
$("#confirm-password").removeClass("error-field");
var UserName = $("#username").val();
var email = $("#email").val();
var Password = $('#signup-password').val();
var ConfirmPassword = $('#confirm-password').val();
var emailRegex = /^[a-zA-Z0-9.!#$%&'*/+=?^_`{|}~]+@[a-zA-Z0-9](?:[azA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\.[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)*/$/;
$("#username-info").html("").hide();
$("#email-info").html("").hide();
if (UserName.trim() == "") {
$("#username-info").html("required.").css("color", "#ee0000").show();
$("#username").addClass("error-field");
valid = false;
}
if (email == "") {
$("#email-info").html("required").css("color", "#ee0000").show();
$("#email").addClass("error-field");
valid = false;
} else if (email.trim() == "") {
$("#email-info").html("Invalid email address.").css("color", "#ee0000").show();
$("#email").addClass("error-field");
valid = false;
} else if (!emailRegex.test(email)) {
$("#email-info").html("Invalid email address.").css("color", "#ee0000").show();
$("#email").addClass("error-field");
valid = false;
}
if (Password.trim() == "") {
$("#signup-password-info").html("required.").css("color", "#ee0000").show();
$("#signup-password").addClass("error-field");
valid = false;
}
if (ConfirmPassword.trim() == "") {

```



```

$("#confirm-password-info").html("required.").css("color",
"#ee0000").show();
$("#confirm-password").addClass("error-field");
valid = false;
}
if(Password != ConfirmPassword){
$("#error-msg").html("Both passwords must be same.").show();
valid=false;
}
if (valid == false) {
$('.error-field').first().focus();
valid = false;
}
return valid;
}
</script>
</BODY>
</HTML>

```

### 7.3 Feature 3: Display of Dashboard, Report and Story

- After the user has successfully registered and login the user will be redirected to the home page with welcome note "Welcome toAccount" along with the username.
- The home page consist of 4 buttons
  - Story
  - Report
  - Dashboard
  - Logout
- Based on the user preference they can view the story,report and dashboard by clicking on the respective buttons.
- After viewing the required preferences the user can leave the webpage by clicking the "Logout" button available in the home page.

#### Code:

```

<?php
session_start();
if (isset($_SESSION["username"])) {
$username = $_SESSION["username"];
session_write_close();
} else {
// since the username is not set in session, the user is not-logged-in
// he is trying to access this page unauthorized
// so let's clear all session variables and redirect him to index
session_unset();
session_write_close();
}

```

```

$url = "./index.php";
header("Location: $url");
}
?>
<HTML>
<HEAD>
<TITLE>Welcome</TITLE>
<link href="assets/css/phppot-style.css" type="text/css"
rel="stylesheet" />
<link href="assets/css/user-registration.css" type="text/css"
rel="stylesheet" />
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.mi
n.css" integrity="sha384-
BVYiISIFeK1dGmJRAkycuHAHRg320mUcww7on3RYdg4Va+PmSTsz/K68v
bdEjh4u" crossorigin="anonymous">
<style>
body{
background-image:url("https://img.freepik.com/premiumphoto/magnifying-glass-documents-with-
analytics-data-lying-table_33799-
7624.jpg?w=2000");
background-position: center; /* Center the image */
background-repeat: no-repeat; /* Do not repeat the image */
background-size: cover; /* Resize the background image to cover the
entire container */
}
.dropdown {
position: absolute;
display: inline-block;
}
.dropdown-content {
display: none;
position: absolute;
background-color: #f1f1f1;
min-width: 160px;
z-index: 1;
}
.dropdown-content a {
color: black;
padding: 12px 16px;
text-decoration: none;
display: block;
}
.dropdown-content a:hover {background-color: #ddd}

```

```

dropdown:hover .dropdown-content {
display: block;
}
.btn:hover, .dropdown:hover .btn {
background-color: #6b2139d6;
}
</style>
</HEAD>
<BODY>
<!-- 
<div class="phppot-container">
<a href = "./assets/story.html">
<div class="col btn btn-danger" style="margin-top:45px;right: 0">
Story</div>
</a>
<div class="dropdown">
<div class="col btn btn-danger" style="margin-top:45px;right: 0">
Report</div>
</button>
<div class="dropdown-content">
<a href="./assets/report1.html">Report 1</a>
<a href="./assets/report2.html">Report 2</a>
</div>
</div>
<a href = "./assets/dashboard.html">
<div class="col btn btn-danger" style="margin-left:70px; margintop:45px"> User Dashboard</div><div
class="page-header">
</a>
<!--<div class="col btn btn-danger" style="margin-right:20px;right:0">
Story</div><div class="page-header"> -->
</div>
<div class="page-content jumbotron" style=" background-color:
red;
background-image: linear-gradient(to right, darkgoldenrod , purple);">
<h4 style="color:white; font-weight:bold;">Welcome to Account <?php
echo $username;?></h4></div>
<span class="login-signup btn btn-warning"><a href="logout.php"
style="color:white">Logout</a></span>
</div>
</BODY>
</HTML>

```

## 7.4 Database Schema: MySQL

- Database schema consist of the following field:
  - Id
  - Username
  - Password
  - Email
  - Create\_at
- When the new user registers with their above details, it gets uploaded in the database.
- Now when the user login with username and password it checks whether the user has already registered or not. If it is a registered user it redirects to the home page or it shows the alert message.

### Code:

```
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";
/*!40101 SET
@OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET
@OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET
@OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `signup1`
--
-- -----
--
-- Table structure for table `tbl_member`
--
CREATE TABLE `tbl_member` (
  `id` int(11) NOT NULL,
  `username` varchar(255) NOT NULL,
  `password` varchar(200) NOT NULL,
  `email` varchar(255) NOT NULL,
  `create_at` timestamp NOT NULL DEFAULT current_timestamp() ON
UPDATE current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Indexes for dumped tables
--
-- Indexes for table `tbl_member`
--
ALTER TABLE `tbl_member`
```

```
ADD PRIMARY KEY (`id`);
--
-- AUTO_INCREMENT for dumped tables
--
--
-- AUTO_INCREMENT for table `tbl_member`
--
ALTER TABLE `tbl_member`
MODIFY `id` int(11) NOT NULL AUTO_INCREMENT;
COMMIT;
/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT
*/;
/*!40101 SET
CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET
COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

## CHAPTER 8

### TESTING

#### 8.1 Test Case:

All Major activities of various testing level are described below:

1. Unit Testing
2. Integration Testing
3. Functional Testing
4. System Testing
5. White box Testing
6. Black Box Testing

##### 1. Unit Testing:

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches internal code flow should be validated. It is the testing of individual software units of the application. It is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive.

##### 2. Integration Testing:

Integration tests are designed to test integrated software components to determine if they actually run as one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfactory, as shown by successfully unit testing, the combination of components is correct and consistent.

##### 3. Functional Testing:

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements system documentation, and user manuals.

##### 4. System Testing:

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process description and flows, emphasizing pre-driven process links and integration points.

##### 5. White Box Testing:

White Box Testing is a testing in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is used to test areas that cannot be reached from a black box level.

#### 8.2 User Acceptance Testing:

User Acceptance Testing is a critical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements.

## CHAPTER 9

### RESULTS

#### 9.1 Performance Metrics:

Performance metrics are refined as figures and data representative of an organizations's actions, abilities, and overall quality.

S.NO	Parameter	Screenshot / Values
1	Dashboard design	Dashboard consist of 16 graph in 4 different tabs.
2	Data Responsiveness	Data was responsive for creating dashboard, story and report.
3	Amount Data to Rendered (DB2 Metrics)	Inventory management dataset which consist of 938 data in it.
4	Utilization of Data Filters	Data filters was used to find the top most of the data in form of visualization
5	Effective User Story	Story consist of 4 scenes and 5 graphs.
6	Descriptive Reports	Created 2 reports with 7 graphs.

**Table.9.1 Performance metrics**

## **CHAPTER 10**

### **ADVANTAGES & DISADVANTAGES**

#### **Advantages:**

- Improves Accuracy
- Reduces costs
- Saves Time
- Improves Business Planning
- Improves Customer Service
- Minimized human error

#### **Disadvantages:**

- Set up costs
- Time-consuming process for lesser workforce
- The complexity of the system
- Depreciation, markdowns, product damage and theft can affect the price of the retail inventory.



## **CHAPTER 11**

### **CONCLUSION & FUTURE WORK**

#### **11.1 Conclusions**

Retail store inventory management is critical to efficient operations and effective cash management. It is important that you develop procedures to manage your inventory accurately and effectively. The best method for a particular business will depend on:

- The type of goods being stocked
- The level of customer demand
- The resources available to the business

To make sure that inventory is managed effectively, businesses need to have systems and processes in place to track stock levels and keep accurate records – this can be done manually or with the help of specialized purchase order software. Good retail inventory management is essential to the success of any retail business. By putting in place effective systems and processes, businesses can ensure that they have the right level of stock to meet customer demand while also avoiding excessive levels of stock that can tie up valuable resources.

#### **12.2 Future Scope:**

Inventory management systems have become more real-time, giving retailers more data about demographics, spending habits, shopping preferences, etc.. Stock control for omni channel retailing. Stores doing omni channel retailing are at the top of their game; they attract the 90% of consumers who switch between at least three applications per day to complete specific tasks. Inventories that power experiential retail.

## APPENDIX:

### 1. Source Code :

#### login.php:

```
<?php include('server.php') ?><?php

?>

<!DOCTYPE html>

<html>

<head>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <link          rel="stylesheet"          href="https://stackpath.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">

    <link rel="stylesheet" type="text/css" href="styles.css">

    <title>Login Form</title>

</head>

<body>

    <div class="container">

        <form action="login.php" method="POST" class="login-email">

            <?php include('errors.php'); ?>

            <p class="login-text" style="font-size: 2rem; font-weight: 800;">Login</p>

        </form>

    </div>

</body>

</html>
```

```

        <div class="input-group">
            <input type="text" placeholder="username" name="username"
required>
        </div>

        <div class="input-group">
            <input type="password" placeholder="Password"
name="password" required>
        </div>

        <div class="input-group">
            <button type="submit" class="btn"
name="login_user">Login</button>
        </div>

        <p class="login-register-text">Don't have an account? <a
href="register.php">Register Here</a>.</p>

    </form>

</div>

</body>

</html>

```

#### **register.php:**

```
<?php include('server.php') ?>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <meta charset="utf-8">
```

```

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/font-
awesome/4.7.0/css/font-awesome.min.css">

<link rel="stylesheet" type="text/css" href="styles.css">

<title>Register Form </title>
</head>
<body>
    <div class="container">
        <form action="register.php" method="POST" class="login-email">
            <?php include('errors.php'); ?>
            <p class="login-text" style="font-size: 2rem; font-weight: 800;">Register</p>
            <div class="input-group">
                <input type="text" placeholder="Username" name="username"
value="<?php echo $username; ?>" required>
            </div>
            <div class="input-group">
                <input type="email" placeholder="Email" name="email"
value="<?php echo $email; ?>" required>
            </div>
            <div class="input-group">
                <input type="password" placeholder="Password"
name="password_1" required>

```

```

        </div>

        <div class="input-group">

                                <input    type="password"    placeholder="Confirm    Password"
name="password_2" required>

                                </div>

                                <div class="input-group">

                                <button                type="submit"                class="btn"
name="reg_user">Register</button>

                                </div>

                                <p        class="login-register-text">Have        an        account?        <a
href="index.php">Login Here</a>.</p>

                                </form>

        </div>

</body>

</html>

```

### Report.php:

```

<?php

    session_start();

    if (isset($_GET['logout'])) {

        session_destroy();

        unset($_SESSION['username']);

        header("location: login.php");

    }

```

```
?><!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<meta content="width=device-width, initial-scale=1.0" name="viewport">
```

```
<style>
```

```
.logos{
```

```
margin-left:40rem;
```

```
}
```

```
</style>
```

```
<title>Dashboard</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.gstatic.com" rel="preconnect">
```

```
<link href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i
```

|Nunito:300,300i,400,400i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">

<!-- Vendor CSS Files -->

<link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">

<link 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/quill/quill.snow.css" rel="stylesheet">

<link href="assets/vendor/quill/quill.bubble.css" rel="stylesheet">

<link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">

<link href="assets/vendor/simple-datatables/style.css" rel="stylesheet">

<!-- Template Main CSS File -->

<link href="assets/css/style.css" rel="stylesheet">

</head>

<body>

<!-- ===== Header ===== -->

<header id="header" class="header fixed-top d-flex align-items-center">

<div class="d-flex align-items-center justify-content-between">

```
<i class="bi bi-list toggle-sidebar-btn"></i>
```

```
</div><!-- End Logo -->
```

```
<div class="logos">
```

```
<a href="index.php" class="logo d-flex align-items-center">
```

```
<span class="d-none d-lg-block"> Retail Store Stock Inventory Analytics
```

```
</span>
```

```
</div>
```

```
<nav class="header-nav ms-auto">
```

```
<ul class="d-flex align-items-center">
```

```
<li class="nav-item d-block d-lg-none">
```

```
<a class="nav-link nav-icon search-bar-toggle " href="#">
```

```
<i class="bi bi-search"></i>
```

```
</a>
```

```
</li><!-- End Search Icon -->
```

```
<li class="nav-item dropdown">
```

```
<!-- End Notification Icon -->
```

```
<!-- <ul class="dropdown-menu dropdown-menu-end dropdown-menu-arrow notifications">
```



```
<li class="dropdown-header">
```

```
  You have 4 new notifications
```

```
  <a href="#"><span class="badge rounded-pill bg-primary p-2 ms-2">View all</span></a>
```

```
</li>
```

```
<li>
```

```
  <hr class="dropdown-divider">
```

```
</li>
```

```
<li class="notification-item">
```

```
  <i class="bi bi-exclamation-circle text-warning"></i>
```

```
  <div>
```

```
    <h4>Lorem Ipsum</h4>
```

```
    <p>Quae dolorem earum veritatis oditseno</p>
```

```
    <p>30 min. ago</p>
```

```
  </div>
```

```
</li>
```

```
<li>
```

```
  <hr class="dropdown-divider">
```

```
</li>
```

```
<li class="notification-item">
```

```
  <i class="bi bi-x-circle text-danger"></i>
```

```
<div>

  <h4>Atque rerum nesciunt</h4>

  <p>Quae dolore earum veritatis oditseno</p>

  <p>1 hr. ago</p>

</div>
```

```
</li>
```

```
<li>

  <hr class="dropdown-divider">

</li>
```

```
<li class="notification-item">

  <i class="bi bi-check-circle text-success"></i>

  <div>

    <h4>Sit rerum fuga</h4>

    <p>Quae dolore earum veritatis oditseno</p>

    <p>2 hrs. ago</p>

  </div>

</li>
```

```
<li>

  <hr class="dropdown-divider">

</li>
```

```
<li class="notification-item">

  <i class="bi bi-info-circle text-primary"></i>

  <div>

    <h4>Dicta reprehenderit</h4>

    <p>Quae dolore earum veritatis oditseno</p>

    <p>4 hrs. ago</p>

  </div>

</li>
```

```
<li>

  <hr class="dropdown-divider">

</li>

<li class="dropdown-footer">

  <a href="#">Show all notifications</a>

</li>
```

```
</ul>End Notification Dropdown Items -->
```

```
</li><!-- End Notification Nav -->
```

```
<li class="nav-item dropdown">
```

```
<!-- <a class="nav-link nav-icon" href="#" data-bs-toggle="dropdown">
```

```
<i class="bi bi-chat-left-text"></i>
```

```
<span class="badge bg-success badge-number">3</span>
```

```
</a>End Messages Icon -->
```

```
<ul class="dropdown-menu dropdown-menu-end dropdown-menu-arrow messages">
```

```
<li class="dropdown-header">
```

```
  You have 3 new messages
```

```
  <a href="#"><span class="badge rounded-pill bg-primary p-2 ms-2">View all</span></a>
```

```
</li>
```

```
<li>
```

```
  <hr class="dropdown-divider">
```

```
</li>
```

```
<li class="message-item">
```

```
  <a href="#">
```

```
    
```

```
    <div>
```

```
      <h4>Maria Hudson</h4>
```

```
      <p>Velit asperiores et ducimus soluta repudiandae labore officia est ut...</p>
```

```
      <p>4 hrs. ago</p>
```

```
    </div>
```

```
  </a>
```

</li>

<li>

<hr class="dropdown-divider">

</li>

<li class="message-item">

<a href="#">



<div>

<h4>Anna Nelson</h4>

<p>Velit asperiores et ducimus soluta repudiandae labore officia est ut...</p>

<p>6 hrs. ago</p>

</div>

</a>

</li>

<li>

<hr class="dropdown-divider">

</li>

<li class="message-item">

<a href="#">



<div>

<h4>David Muldon</h4>

<p>Velit asperiores et ducimus soluta repudiandae labore officia est ut...</p>

<p>8 hrs. ago</p>

</div>

</a>

</li>

<li>

<hr class="dropdown-divider">

</li>

<li class="dropdown-footer">

<a href="#">Show all messages</a>

</li>

</ul><!-- End Messages Dropdown Items -->

</li>

<li class="nav-item dropdown pe-3">

<a class="nav-link nav-profile d-flex align-items-center pe-0" href="#" data-bs-toggle="dropdown">



<span class="d-none d-md-block dropdown-toggle ps-2"><?php

```
$_SESSION['username']?></span>
```

```
</a><!-- End Profile Image Icon -->
```

```
<ul class="dropdown-menu dropdown-menu-end dropdown-menu-arrow profile">
```

```
<li class="dropdown-header">
```

```
<h6> <?php echo $_SESSION['username']; ?></h6>
```

```
<span></span>
```

```
</li>
```

```
<li>
```

```
<hr class="dropdown-divider">
```

```
</li>
```

```
<li>
```

```
<a class="dropdown-item d-flex align-items-center" href="users-profile.php">
```

```
<i class="bi bi-person"></i>
```

```
<span>My Profile</span>
```

```
</a>
```

```
</li>
```

```
<li>
```

```
<hr class="dropdown-divider">
```

```
</li>
```

```
<li>
```

```
<a class="dropdown-item d-flex align-items-center" href="<?php
```

```
if($_SESSION['username']){

    echo "login.php";}?>">

    <?php if(!$_SESSION['username']){?>

        <i class="bi bi-box-arrow-right"></i>

        <span>

            <?php echo"Login";?></span>

        <?php }else{?>

            <i class="bi bi-box-arrow-right"></i>

            <?php echo"Logout";

            }?>

        </a>

    </li>

</ul><!-- End Profile Dropdown Items -->

</li><!-- End Profile Nav -->

</ul>

</nav><!-- End Icons Navigation -->

</header><!-- End Header -->
```



```
<!-- ===== Sidebar ===== -->
```

```
<aside id="sidebar" class="sidebar">
```

```
<ul class="sidebar-nav" id="sidebar-nav">
```

```
<li class="nav-item">
```

```
<a class="nav-link " href="index.php">
```

```
<i class="bi bi-grid"></i>
```

```
<span>Dashboard</span>
```

```
</a>
```

```
</li>
```

```
<li class="nav-item">
```

```
<a class="nav-link " href="Report.php">
```

```
<i class="bi bi-book-half"></i>
```

```
<span>Report</span>
```

```
</a>
```

```
</li><!--End Dashboard Nav -->
```

```
<li class="nav-item">
```

```
<a class="nav-link " href="story.php">
```

```
<i class="bi bi-film"></i>
```

```
<span>Story</span>
```

```
</a>
```

```
</li>
```

```
<li class="nav-heading">Pages</li>
```

```
<li class="nav-item">
```

```
  <a class="nav-link collapsed" href="users-profile.php">
```

```
    <i class="bi bi-person"></i>
```

```
    <span>Profile</span>
```

```
  </a>
```

```
</li><!-- End Profile Page Nav -->
```

```
<li class="nav-item">
```

```
  <a class="nav-link collapsed" href="login.php">
```

```
    <i class="bi bi-box-arrow-in-right"></i>
```

```
    <?php if(!$_SESSION['username']){?>
```

```
      <i class="bi bi-question-circle"></i>
```

```
      <span>
```

```
        <?php echo "Login";?></span>
```

```
<?php }else{echo"Logout";

}??>

</a>

</li><!-- End Login Page Nav -->

</ul>

</aside><!-- End Sidebar-->

<main id="main" class="main">

<div class="pagetitle">

<h1>Report</h1>

<nav>

<ol class="breadcrumb">

<li class="breadcrumb-item"><a href="index.html">Home</a></li>

<li class="breadcrumb-item active">Report</li>

</ol>

</nav>

</div><!-- End Page Title -->
```

```

<section class="section dashboard">

  <div class="row">

    <!-- Left side columns -->

    <div class="col-lg-8">

      <div class="row">

        </div>

      </div><!-- End Left side columns -->

    <!--      -->

    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FRetail%2BStore%2BStock%2BAnalysis%2BReport&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=run&format=HTML&prompt=false"
width="1000" height="600" frameborder="0" gesture="media" allow="encrypted-media"
allowfullscreen=""></iframe>

  </section>

</main><!-- End #main -->

  <a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i class="bi bi-arrow-up-short"></i></a>

  <!-- Vendor JS Files -->

  <script src="assets/vendor/apexcharts/apexcharts.min.js"></script>

```

```
<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

<script src="assets/vendor/chart.js/chart.min.js"></script>

<script src="assets/vendor/echarts/echarts.min.js"></script>

<script src="assets/vendor/quill/quill.min.js"></script>

<script src="assets/vendor/simple-datatables/simple-datatables.js"></script>

<script src="assets/vendor/tinymce/tinymce.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>
```

**story.php:**

```
<?php
```

```
    session_start();
```

```
    if (isset($_GET['logout'])) {
```

```
        session_destroy();
```

```
        unset($_SESSION['username']);
```

```
        header("location: login.php");
```

```
    }
```

```
?><!DOCTYPE html>
```

```
<html lang="en">

<head>

<style>

  .logos{

    margin-left:40rem;

  }

</style>

<meta charset="utf-8">

<meta content="width=device-width, initial-scale=1.0" name="viewport">


<title>Dashboard</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.gstatic.com" rel="preconnect">

<link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Nunito:300,300i,400,400i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">
```

0i" rel="stylesheet">

<!-- Vendor CSS Files -->

<link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">

<link 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/quill/quill.snow.css" rel="stylesheet">

<link href="assets/vendor/quill/quill.bubble.css" rel="stylesheet">

<link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">

<link href="assets/vendor/simple-datatables/style.css" rel="stylesheet">

<!-- Template Main CSS File -->

<link href="assets/css/style.css" rel="stylesheet">

<!-- =====

\* Template Name: NiceAdmin - v2.4.1

\* Template URL: <https://bootstrapmade.com/nice-admin-bootstrap-admin-html-template/>

\* Author: BootstrapMade.com

\* License: <https://bootstrapmade.com/license/>

===== -->

</head>

<body>

```
<!-- ===== Header ===== -->
```

```
<header id="header" class="header fixed-top d-flex align-items-center">
```

```
<div class="d-flex align-items-center justify-content-between">
```

```
<i class="bi bi-list toggle-sidebar-btn"></i>
```

```
</div><!-- End Logo -->
```

```
<div class="logos">
```

```
<a href="index.php" class="logo d-flex align-items-center">
```

```
<span class="d-none d-lg-block"> Retail Store Stock Inventory Analytics
```

```
</span>
```

```
</div>
```

```
<nav class="header-nav ms-auto">
```

```
<ul class="d-flex align-items-center">
```

```
<li class="nav-item d-block d-lg-none">
```

```
<a class="nav-link nav-icon search-bar-toggle " href="#">
```

```
<i class="bi bi-search"></i>
```

```
</a>
```



```
</li><!-- End Search Icon-->
```

```
<li class="nav-item dropdown">
```

```
<!-- End Notification Icon -->
```

```
<!-- <ul class="dropdown-menu dropdown-menu-end dropdown-menu-arrow notifications">
```

```
<li class="dropdown-header">
```

```
  You have 4 new notifications
```

```
  <a href="#"><span class="badge rounded-pill bg-primary p-2 ms-2">View all</span></a>
```

```
</li>
```

```
<li>
```

```
  <hr class="dropdown-divider">
```

```
</li>
```

```
<li class="notification-item">
```

```
  <i class="bi bi-exclamation-circle text-warning"></i>
```

```
  <div>
```

```
    <h4>Lorem Ipsum</h4>
```

```
    <p>Quae dolorem earum veritatis oditseno</p>
```

```
    <p>30 min. ago</p>
```

```
  </div>
```

```
</li>
```

<li>

<hr class="dropdown-divider">

</li>

<li class="notification-item">

<i class="bi bi-x-circle text-danger"></i>

<div>

<h4>Atque rerum nesciunt</h4>

<p>Quae dolorem earum veritatis oditseno</p>

<p>1 hr. ago</p>

</div>

</li>

<li>

<hr class="dropdown-divider">

</li>

<li class="notification-item">

<i class="bi bi-check-circle text-success"></i>

<div>

<h4>Sit rerum fuga</h4>

<p>Quae dolorem earum veritatis oditseno</p>

```
<p>2 hrs. ago</p>

</div>

</li>

<li>

  <hr class="dropdown-divider">

</li>

<li class="notification-item">

  <i class="bi bi-info-circle text-primary"></i>

  <div>

    <h4>Dicta reprehenderit</h4>

    <p>Quae dolore earum veritatis oditseno</p>

    <p>4 hrs. ago</p>

  </div>

</li>

<li>

  <hr class="dropdown-divider">

</li>

<li class="dropdown-footer">

  <a href="#">Show all notifications</a>

</li>
```

```
</ul>End Notification Dropdown Items -->
```

```
</li><!-- End Notification Nav -->
```

```
<li class="nav-item dropdown">
```

```
<!-- <a class="nav-link nav-icon" href="#" data-bs-toggle="dropdown">
```

```
<i class="bi bi-chat-left-text"></i>
```

```
<span class="badge bg-success badge-number">3</span>
```

```
</a>End Messages Icon -->
```

```
<ul class="dropdown-menu dropdown-menu-end dropdown-menu-arrow messages">
```

```
<li class="dropdown-header">
```

```
  You have 3 new messages
```

```
  <a href="#"><span class="badge rounded-pill bg-primary p-2 ms-2">View all</span></a>
```

```
</li>
```

```
<li>
```

```
  <hr class="dropdown-divider">
```

```
</li>
```

```
<li class="message-item">
```

```
  <a href="#">
```

```


<div>

  <h4>Maria Hudson</h4>

  <p>Velit asperiores et ducimus soluta repudiandae labore officia est ut...</p>

  <p>4 hrs. ago</p>

</div>

</a>

</li>

<li>

  <hr class="dropdown-divider">

</li>

<li class="message-item">

  <a href="#">

    <div>

      <h4>Anna Nelson</h4>

      <p>Velit asperiores et ducimus soluta repudiandae labore officia est ut...</p>

      <p>6 hrs. ago</p>

    </div>

  </a>

</li>

<li>
```

```
<hr class="dropdown-divider">

</li>

<li class="message-item">

  <a href="#">

    <div>

      <h4>David Muldon</h4>

      <p>Velit asperiores et ducimus soluta repudiandae labore officia est ut...</p>

      <p>8 hrs. ago</p>

    </div>

  </a>

</li>

<li>

  <hr class="dropdown-divider">

</li>

<li class="dropdown-footer">

  <a href="#">Show all messages</a>

</li>

</ul><!-- End Messages Dropdown Items -->
```

</li>

<li class="nav-item dropdown pe-3">

    <a class="nav-link nav-profile d-flex align-items-center pe-0" href="#" data-bs-toggle="dropdown">

        <span class="d-none d-md-block dropdown-toggle ps-2"><?php  
\$\_SESSION['username']?></span>

    </a><!-- End Profile Image Icon -->

<ul class="dropdown-menu dropdown-menu-end dropdown-menu-arrow profile">

<li class="dropdown-header">

    <h6> <?php echo \$\_SESSION['username']; ?></h6>

    <span></span>

</li>

<li>

    <hr class="dropdown-divider">

</li>

<li>

    <a class="dropdown-item d-flex align-items-center" href="users-profile.php">

        <i class="bi bi-person"></i>

        <span>My Profile</span>

```

        </a>

    </li>

    <li>

        <hr class="dropdown-divider">

    </li>

    <li>

        <a class="dropdown-item d-flex align-items-center" href="<?php
if($_SESSION['username']){
    echo "login.php";}?>">

        <?php if(!$_SESSION['username']){?>

            <i class="bi bi-box-arrow-right"></i>

            <span>

                <?php echo"Login";?></span>

            <?php }else{?>

                <i class="bi bi-box-arrow-right"></i>

                <?php echo"Logout";

            }?>

        </a>

    </li>

</ul><!-- End Profile Dropdown Items -->

```



```
</li><!-- End Profile Nav -->
```

```
</ul>
```

```
</nav><!-- End Icons Navigation -->
```

```
</header><!-- End Header -->
```

```
<!-- ===== Sidebar ===== -->
```

```
<aside id="sidebar" class="sidebar">
```

```
<ul class="sidebar-nav" id="sidebar-nav">
```

```
<li class="nav-item">
```

```
<a class="nav-link " href="index.php">
```

```
<i class="bi bi-grid"></i>
```

```
<span>Dashboard</span>
```

```
</a>
```

```
</li>
```

```
<li class="nav-item">
```

```
<a class="nav-link " href="Report.php">
```

```
<i class="bi bi-book-half"></i>
```

```
<span>Report</span>
```

```
</a>

</li><!--End Dashboard Nav -->

<li class="nav-item">

  <a class="nav-link " href="story.php">

    <i class="bi bi-film"></i>

    <span>Story</span>

  </a>

</li>
```

```
<li class="nav-heading">Pages</li>
```

```
<li class="nav-item">

  <a class="nav-link collapsed" href="users-profile.php">

    <i class="bi bi-person"></i>

    <span>Profile</span>

  </a>

</li><!-- End Profile Page Nav -->
```

```
<li class="nav-item">

  <a class="nav-link collapsed" href="login.php">
```

```

        <i class="bi bi-box-arrow-in-right"></i>

        <?php if(!$_SESSION['username']){?>

            <i class="bi bi-question-circle"></i>

            <span>

                <?php echo"Login";?></span>

            <?php }else{echo"Logout";

                }?>

        </a>

    </li><!-- End Login Page Nav -->

</ul>

</aside><!-- End Sidebar-->

<main id="main" class="main">

    <div class="pagetitle">

        <h1>Story</h1>

        <nav>

            <ol class="breadcrumb">

                <li class="breadcrumb-item"><a href="index.html">Home</a></li>

                <li class="breadcrumb-item active">Story</li>

            </ol>

        </nav>

```

```

</div><!-- End Page Title -->

<section class="section dashboard">

  <div class="row">

    <!-- Left side columns -->

    <div class="col-lg-8">

      <div class="row">

        </div>

      </div><!-- End Left side columns -->

    <!--      -->

    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2FRetail%2BStore%2BInventory%2BStory&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&sceneId=model0000018489694ecd_00000007&sceneTime=2000" width="1000" height="600" frameborder="0"
gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

  </section>

</main><!-- End #main -->

  <a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i class="bi bi-arrow-up-short"></i></a>

  <!-- Vendor JS Files -->

```

```
<script src="assets/vendor/apexcharts/apexcharts.min.js"></script>

<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

<script src="assets/vendor/chart.js/chart.min.js"></script>

<script src="assets/vendor/echarts/echarts.min.js"></script>

<script src="assets/vendor/quill/quill.min.js"></script>

<script src="assets/vendor/simple-datatables/simple-datatables.js"></script>

<script src="assets/vendor/tinymce/tinymce.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>
```

## 2. Github Link:

<https://github.com/IBM-EPBL/IBM-Project-8155-1658910217/tree/main/Final%20Deliverables>

## 3. Project Demo Link:

[https://drive.google.com/file/d/1oGpBNpUGz4kKV4yXh0OyS6W4y2LhBLri/view?usp=share\\_link](https://drive.google.com/file/d/1oGpBNpUGz4kKV4yXh0OyS6W4y2LhBLri/view?usp=share_link)