

Global Sales Data Analytics

A PROJECT COMPONENT REPORT

Submitted by

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Project Report

INTRODUCTION

1.1 Project Overview

Shopping online is currently the need of the hour. Because of this COVID, it's not easy to walk in a store randomly and buy anything you want. So, try to understand a few things like, Customer Analysis and Product Analysis of this Global Super Store.

1.2 Purpose

To build a dashboard that helps the customer and company to make decisions on sales of products in the market in particular season/year to maximize the profit. To forecast trends, find growth opportunities, and create a strategic action plan for your business because it offers insights into the past, present, and future performance of a company. Understanding a company's sales performance can be beneficial, especially if the company wants to expand or make changes. It need not be dry paragraphs or uninteresting numbers. It can be represented graphically using charts and bar graphs.

2. LITERATURE SURVEY

2.1 Existing problem

- Big Data application enables these retail organizations to use prior year's data to better forecast and predict the coming year's sales. Analyzed the data sets of world's largest retailers, Walmart Store to determine the business drivers and predict which departments are affected by the different scenarios (such as temperature, fuel price and holidays) and their impact on sales at stores' of different locations. Made use of Scala and Python API of the Spark framework to gain new insights into the consumer behaviors and comprehend Walmart's marketing efforts and their data-driven strategies through visual representation of the analyzed data.
- Using time series data to predict future sales changes of products is of great significance to every retailing company in terms of management and planning of resources. Analyzes the feasibility of traditional time series model, hybrid models based on time series model and machine learning model, and machine learning model in predicting Walmart sales. It indicating that the machine learning model performs well in the sales forecast of retail stores. This provides a new idea for retailers to forecast sales by category and region. The Prophet model which

decomposes trend, season, and holiday and the machine learning model lightGBM model- are used to train and test Walmart supermarket sales data

- Evaluates and compares various machine learning models, namely, ARIMA, Auto Regressive Neural Network (ARNN), XGBoost, SVM, Hybrid Models like Hybrid ARIMA-ARNN, Hybrid ARIMA-XGBoost, Hybrid ARIMA-SVM and STL Decomposition (using ARIMA, Snaive, XGBoost) to forecast sales of a drug store company called Rossmann models is measured by metrics such as MAE and RMSE. Initially, linear model such as ARIMA has been applied to forecast sales. Nonlinear models such as Neural Network, XGBoost and SVM were designed using hybrid technique and decomposition technique. Hybrid ARIMA-ARNN, Hybrid ARIMA-XGBoost, Hybrid ARIMA-SVM were used and all of them performed better than their respective individual models remainder components were forecasted by Snaive, ARIMA and XGBoost
- Forecasting approach based on the idea of demand for sales forecast of new products with no historical data. The result compares the series of machine learning models, The model increases the Forecast performance.
- Inventory backorder prediction is widely recognized as an important component of inventory models. However, backorder prediction is traditionally based on stochastic approximation, thus neglecting the substantial amount of useful information hidden in historical inventory data It can be achieved by integrating the proposed prot-based measure into the prediction model and optimizing the decision threshold to identify the optimal backorder strategy

2.2 References

- Walmart's Sales Data Analysis- A Big Data Analytics Perspective - 2017
- Application of Machine Learning Model and Hybrid Model in Retail Sales Forecast – 2021
- Forecasting of sales by using fusion of Machine Learning techniques - 2017
- A Sales Forecast Method for Products with No Historical Data –2021
- A Profit Function-Maximizing Inventory Backorder Prediction System Using Big Analytics -2020

2.3 Problem Statement Definition

- Sales refers to all activities involved in selling a product or service to a consumer or business. It is important for sales and marketing teams to review their strategies and performance in order to make improvements. One way to measure performance is with sales analytics.
- We use it to identify, optimize, and forecast sales to plan an efficient sales model that generates higher revenue for the business.

Who does the problem affect?	It will affect both the public and the store.
What are the boundaries of the problem?	Low data proficiency among sales will greatly limits the value of analytical insights and inhibits data-driven decision making.
What is the issue?	Cannot identify most profitable products and the ones that aren't moving, most profitable customers, and potential sales opportunities.
When does the issue occur?	Consumers shopping patterns have changed since the pandemic, with more emphasis on e-commerce and contactless payments.
Where does the issue occur?	The issue occurs on online shopping.

Why is it important that we fix the problem?	Data-driven sales organizations now operate more like scientists and strategists, and the results speak for themselves.
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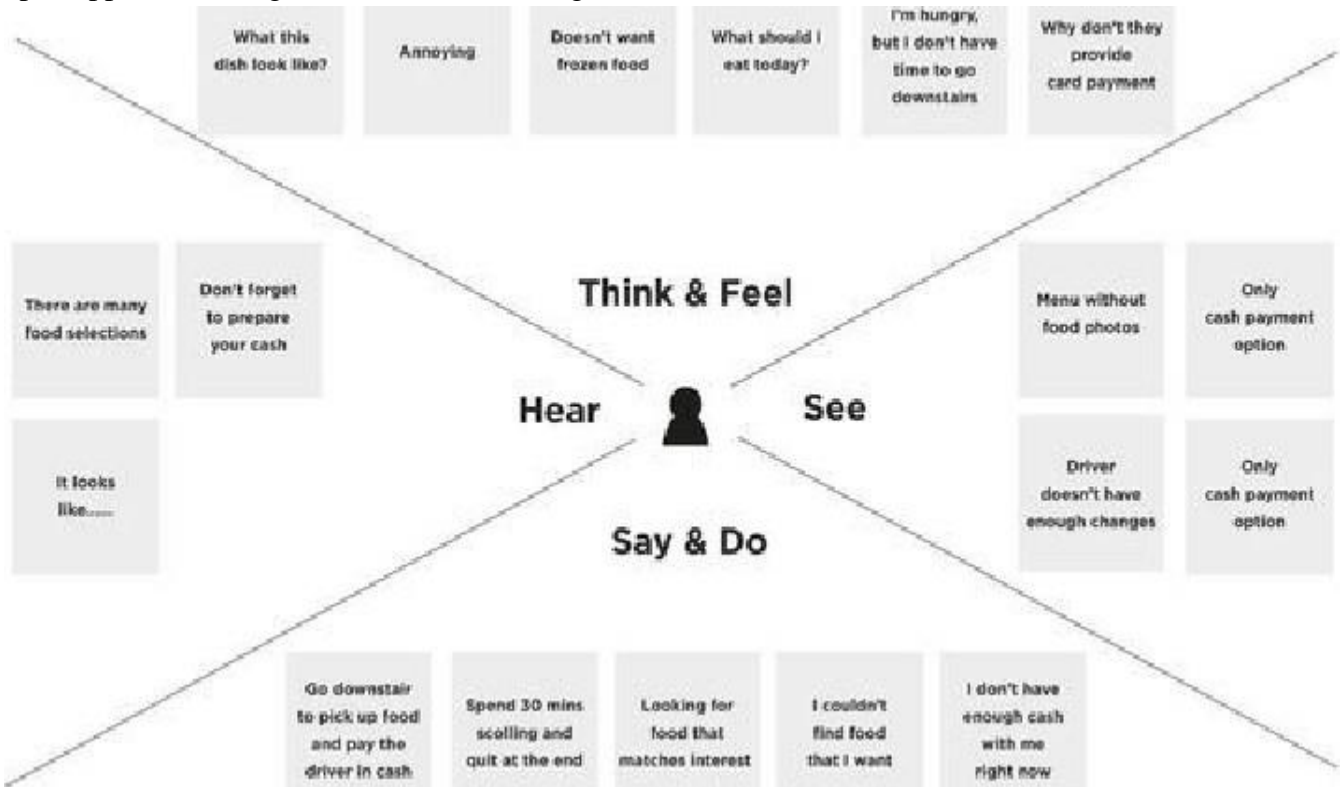
3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

- An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.
- It is a useful tool to help teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it.
- The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

References-

<https://app.mural.co/t/globalsalesdata7036/m/globalsalesdata7036/1663372958151/cb0b>




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 amount of creative solutions.

References-

<https://app.mural.co/t/globalsalesdata7036/m/globalsalesdata7036/1663419453115/5987981e71a32f0d8dc1fd7a291baf82bd41d5b7?sender=ucaeb6b7815c6aa6263ce8788>

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



Brainstorm & idea prioritization

Global sales data analytics

Global Sales covers all activities involved in selling a product or service to a consumer or business. It is important for sales and marketing teams to review their strategies and performance in order to make improvements. One way to measure performance is with sales analytics.

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

2 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

A Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.

C Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#) →

1 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

How might we deliver the analytical results?

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

🗣️ Stay in topic.

🕒 Defer judgment.

🗣️ Go for volume.

💡 Encourage wild ideas.

👂 Listen to others.

🖼️ If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2 Brainstorm

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

⌚ 10 minutes

Dharmeshprasad R

- Dynamic Dashboard
- Interactive
- Customizable
- Real-time information
- Family accessible
- Predefined tools
- Market understanding
- Customer
- Define user specified solutions
- Help and support
- Suggestions
- Understand what customer mean

Aravindhnan P

- Competitor
- Saves time
- Portable device
- Use analytics to get product information
- Understand to customer choice
- To show profit percentage your work
- Real time layout
- Best to produce for a group sales

Tamilvanan N

- To know price of the product
- View graphs given for easy understanding
- Choose what they need
- Notification
- Comfortable for users
- Easy to track your recent product
- Others
- Given suggestions for new products

Suriyaprakash

- Track customer interest
- Use social media
- Make it easy
- Generate the customer needed products

Muthamiselvan

- Use to determine which is an ideal and what is not
- User friendly
- Listen to the customer
- Adapt features

3 Group ideas

Take cards showing your ideas write 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 can break it up into smaller sub-groups.

⌚ 20 minutes

User Interface

- Customize
- Best layout
- Clear user interface
- Convenient for users
- User friendly
- Family accessible

Objectives

- Choose what they need
- Expectations
- Dynamic Dashboard
- Define user specified solutions
- Easy to track your recent product
- Real-time information

Features

- Portfolio ideas
- Help and support
- Others
- Notification
- Given suggestions for new products
- To show profit percentage your work
- To know price of the product

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

Analyze based on time

Analyze the sales by season
Analyze sales by month
Analyze the sales in special occasion
Analyze product on each period of time

Analyze based on Location

Analyze the behaviour of customer by city
Analyze sales by location
Analyze sales in different region

Analyze based on product category

Analyze the type of product got more profit
Analyze sales by size
Analyze the profit for each category of product
Analyze sales by product weight
Analyze category wise sales
Analyze sales by category of product
Analyze sales by product priority

Analyze based on profit

Analyze the profit of products
Analyze the profit
Analyze discount of product
Analyze the cost and profit of product

Analyze based on Customer

Analyze the behaviour of different customers
Analyze the type of customer
Analyze sales by different customer type
Analyze customer category
Analyze customer sales behaviour

Analyze based on Expenditure

Analyze the sales require how cost for advertisement
Analyze the cost to sell product

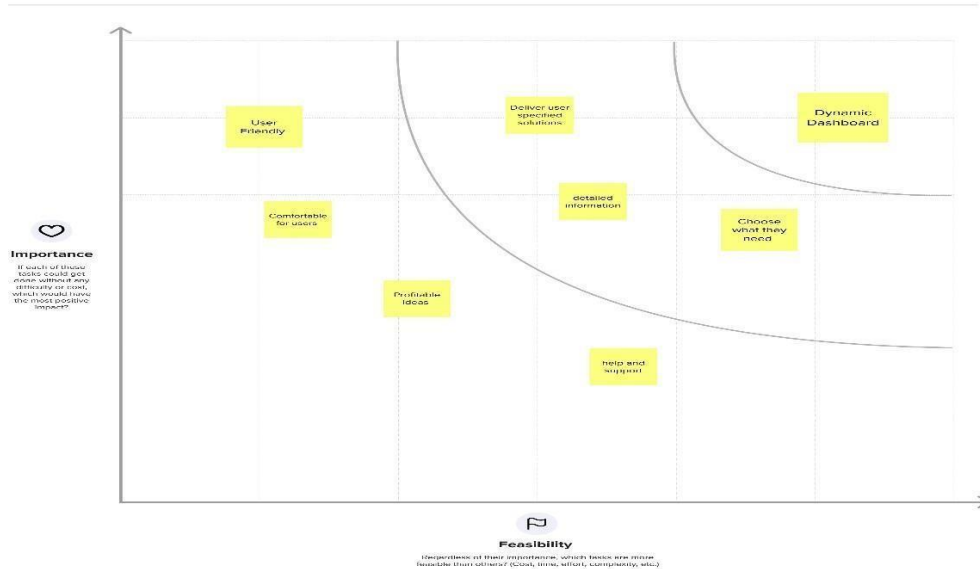
step-3: Idea Prioritization:

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕒 20 minutes



3.3 Proposed Solution

s.no	Parameter	Description
1	Problem Statement (Problem to be solved)	Sales refer to all activities involved in selling a product or service to a consumer or business. It is important for sales and marketing teams to review their strategies and performance in order to make improvements. One way to measure performance is with sales analytics. Sales analytics refers to the use of technology to collect and use sales data to derive actionable insights. It is used to identify, optimize, and forecast sales. It uses different metrics and KPIs to plan an efficient sales model that generates higher revenue for the business.
2	Idea / Solution description	Exploration of sales data gives knowledge about sales trends. Analyzing the processed data, insights gained from it. Using these insights, dashboards will be created to show sales trends for both sales person and customer.
3	Novelty / Uniqueness	New features will be extracted from given data by analyzing. With these new features, more information can be gained and better decision will be taken to increase profit for salesperson
4	Social Impact / Customer Satisfaction	Perception of profit about a particular product. Perception of sales in different location and time
5	Business Model (Revenue Model)	Dashboards will be created to view trends of sales. Better decision will be made by the company.
6	Scalability of the Solution	This solution can be used from small general stores to multinational companies. This solution can be processed with less memory and quickly. The solution can be used as open source so everyone can use it.

3.4 Problem Solution fit

Project Title: Global sales data analytics

Project Design Phase-I - Solution Fit

Team ID: PNT2022TMID17956

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Geographic, demographic, psychographic and behavioral are the four levels of segmentation that can help define business's primary target audience.	6. CUSTOMER CONSTRAINTS CC To pay close attention to first-time buyers, as many of them carry the potential to become repeat customers, lowering your overall all purchase acquisition costs and improving your profit margin. Understanding the behaviours, tastes, preferences, affinities, demographics, and psychology of buyers can help marketing teams of ecommerce sites come up with cross-selling/upselling offers through personalized email marketing campaigns.	5. AVAILABLE SOLUTIONS AS Sales are analyzed by various visualization graphs by customers choice. Fieldproxy and glow websites are used for analytics.	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P 1.To determine the customer to buy product 2.To collect relevant data 3.To select specific time period 4.To manage the sales pipeline 5.To track the sales data	9. PROBLEM ROOT CAUSE RC The sales forecast process is a critical business function for every company, whether you are a start-up or larger enterprise. Whatever the case, you need the right process to accurately forecast company growth and make strategic decisions. The key to successful sales forecasting is to continually improve the methods you use so that the forecasting evolves to fit the unique needs of your business.	7. BEHAVIOUR BE 1.Analyze the findings 2.Identify and act on opportunities 3.Locate buying centers in existing accounts 4.Examine the unique selling point 5.Map white space opportunities 6.Target the new audience	

3. TRIGGERS TR <ul style="list-style-type: none"> Customers having problems with current solution Trying to surpass opponent companies Learning strategies to increase business Heavy loss in business 	10. YOUR SOLUTION SL By using the Regression analysis, it will provides an in-depth, quantitative assessment of factors that might be affecting sales. It also involves calculating the relationships between variables that influence sales. By using the White space analysis is companies can evaluate their existing products, services, and markets to address unmet customer needs. The "white space" is the opportunity itself—the area where a business can innovate, expand, upsell, and cross-sell its products and services. Properly tracking sales data is the foundation of successful sales forecasting. It helps you see which sales tactics work best, which sales reps sell the most, and which marketing channels drive the most growth. By analyzing the order priority and shipment details we can able to know the delivery of the particular item. Aggregating individual metrics for your sources - like AOV, LTV, CAC, and more - can help you determine the best channels for different use cases	8. CHANNELS of BEHAVIOUR CH <ol style="list-style-type: none"> Customer will upload data and view result dashboard in online. Customer can view their download data in offline.
4. EMOTIONS: BEFORE / AFTER EM Customers feel lost, frustrated and incompetent while facing sales problem. But after this customer will be happy and joy		

4. REQUIREMENT ANALYSIS

4.1 Functional requirement

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Login	Login through login page
FR-2	Data partition	Separating customer, product ,geographical and seasonal details.
FR-3	Data analyse	Analyse the targeted region, customer and sales of the product
FR-4	Dashboard	Display the analyse results

4.2 Non-Functional requirements

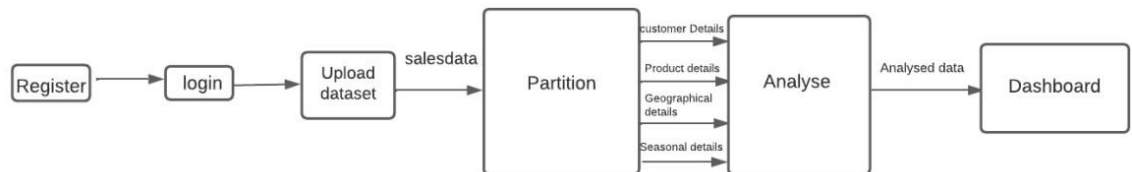
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system is used to analyse the targeted region, customer and sales of the product.
NFR-2	Security	The system provides utmost security and the user details are in a very secured environment under the control of the administrator
NFR-3	Reliability	The dashboard of the system is highly reliable and chances of data loss is low.

NFR-4	Performance	The system is highly interactive and has very small delay. The system is highly consistent.
NFR-5	Availability	The system is available anytime and can be accessed anywhere.
NFR-6	Scalability	the application to handle an increase in workload without performance degradation

5. PROJECT DESIGN

5.1 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.



5.2 Solution & Technical Architecture

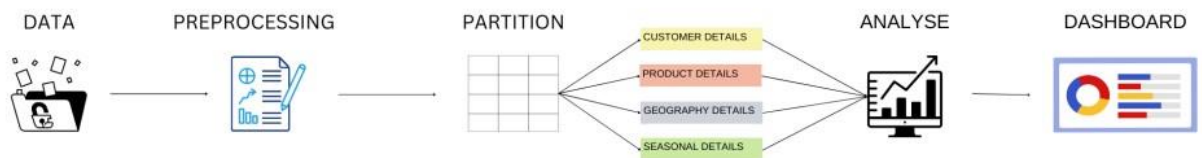


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user will interact through web ui.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Preprocessing	The missing values are handled. New features are extracted.	Python
3.	Partition	The processed data is partitioned by four categories. They are customer details, product details, geography details and seasonal details.	IBM Cognos Analytics with Watson
4.	Analyze	The application analyzes partitioned data.	IBM Cognos Analytics with Watson
5.	Dashboard	Visualize the data graphically.	IBM Cognos Analytics with Watson
6.	Cloud Database	Database service on cloud	IBM Cloud

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	IBM Cognos Analytics tools like dashboard, report are used. Python packages like numpy,pandas, matplotlib and seaborn are used.	IBM Cognos Analytics with Watson, IBM Cloud, Python
2.	Security Implementations	It provides authentication and security.	Python.
3.	Scalable Architecture	Small dataset to large dataset are used.	IBM Cognos Analytics with Watson IBM Cloud, Python
4.	Availability	The dashboard creation will be done at any time. Users can view and analyze data all the time.	IBM Cognos Analytics with Watson

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	Login	USN-1	As a user, I can login to the application by entering email and password	I can access my account's dashboard along with the analysis report	High	Sprint-1
	Dashboard	USN-2	As a user, I can use my account's dashboard to upload my data	I can login to the account to upload the dataset	Medium	Sprint-2
	Exploration	USN-3	As a user, I can explore the data using various charts.	I can prepare data using the result obtained by exploration	High	Sprint-3
	Visualisation	USN-4	As a user, I can view presentations obtained from the exploration result	I can make Inference presentation results	High	Sprint-4
5.	Performance	This application provides high performance by producing analyzed data quickly.	IBM Cognos Analytics with Watson			

5.3 User Stories

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members

Sprint-1	Preparing and exploring the Dataset	USN-1	The user will explore data in the dataset. Using the details, user will create new feature from it	2	High	5
Sprint-2	Visualize the Dataset	USN-2	Users will create various charts for various categories.	2	High	5
Sprint-3	Dashboard Creation	USN-3	Using the charts, users will get insight from it by	1	Low	5
			comparing the charts.			
Sprint-4	Website	USN-4	Interactive and creative dashboard will be created from analyzed data.	2	Medium	5

Project Tracker, Velocity

Velocity:

AV for sprint 1= Total story points/ Sprint Duration =2/6=0.333

AV for sprint 2= Total story points/ Sprint Duration=2/6=0.333

AV for Sprint 3= Total story points/ Sprint Duration =2/6=0.333

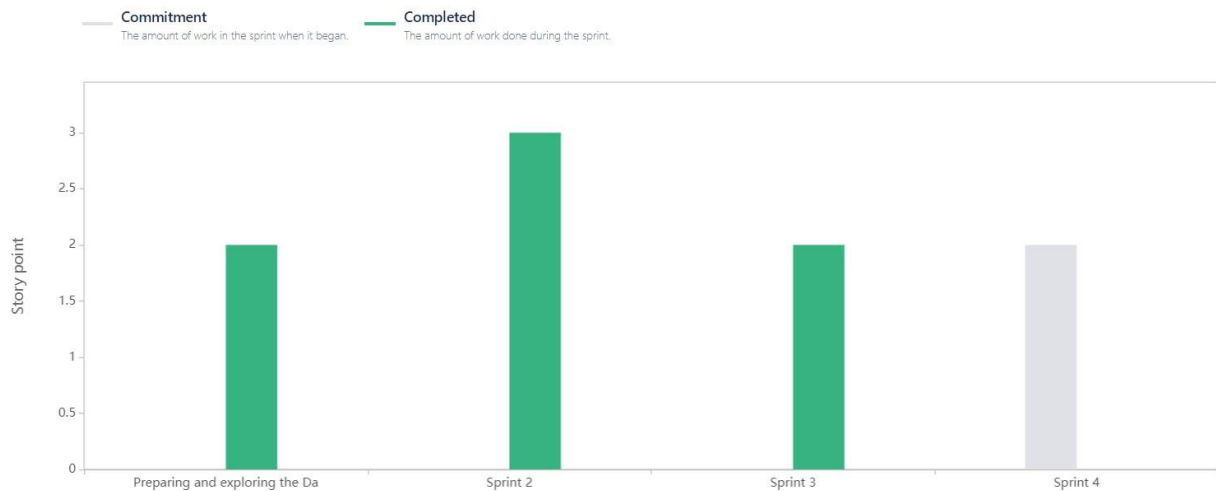
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	0.333	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	0.333	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	0.333	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	0.333	19 Nov 2022

AV for Sprint 4=Total story points/ Sprint Duration =2/6=0.333

[Projects](#) / [Global Sales Data](#) / [Reports](#)

Velocity report

[How to read this report](#)



6.2 Sprint Delivery Schedule

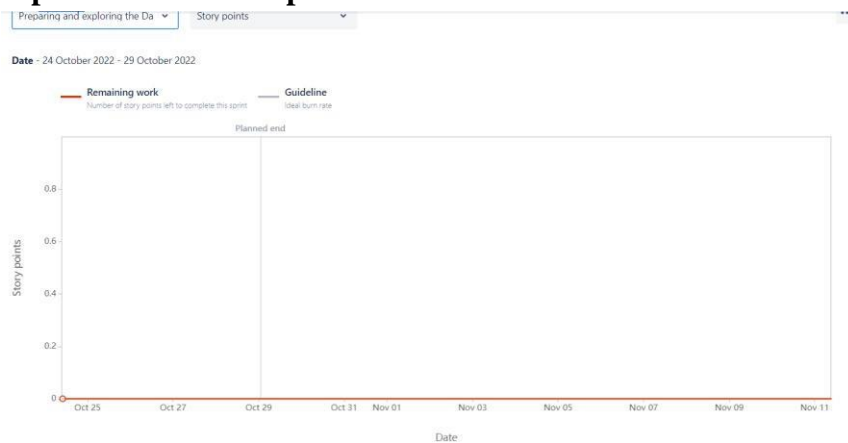
Activity Name	Activity Number	Activity Description	Tasks Assigned	Status
Preparation Phase	1	a) Access the resources in project dashboard b) Explore the dataset provided in workspace c) Create GitHub account & collaborate with Project Repository in project workspace d) Set-up the prerequisites for the project	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Ideation Phase	2	a) Literature survey relevant to the selected project and information gathering. b) Preparation of Empathy Map to identify the user pros and cons	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed

		c) List the ideas by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance		
Project Design Phase-I	3			
Proposed Solution	3.1	Preparation of proposed solution document, which includes the novelty, feasibility of idea, business model, social impact and solution scalability solution	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Problem Solution Fit	3.2	Prepared problem solution fit which provides effective solutions for the problem	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed

Solution Architect ure	3.3	Develop effective architecture for the proposed solution	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Project Design Phase- II	4			
Requirement Analysis	4.1	Identify the Functional and Non- Functional requirements	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Customer Journey	4.2	Preparation of customer journey map to understand the user interactions & experiences with the application from the entry level to exit level	Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Data Flow Diagram and User stories	4.3	Generate Data flow iagram of the project	Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Technical Architect ure	4.4	Develop effective technical architecture for the proposed solution	Manoj Kumar D Mohamed Younush N A	Completed
Project Planning Phase	5			
Milestones & Activity List	5.1	Prepare Milestone and Activity list of the project	Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Sprint Plan	5.2	Prepare Sprint Delivery plan of the project	Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Project Development	6			
Delivery of Sprint-1	6.1	Implement the coding phase of Sprint- 1	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed

Delivery of Sprint-2	6.2	Implement the coding phase of Sprint- 2	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Delivery of Sprint-3	6.3	Implement the coding phase of Sprint- 3	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed
Delivery of Sprint-4	6.4	Implement the coding phase of Sprint- 4	Manoj Kumar D Mohamed Younush N A Monesh Kumar M Thirumalaiboobathi B Vignesh T	Completed

6.3 Reports from JIRA Sprint1:



Sprint 2:

Sprint

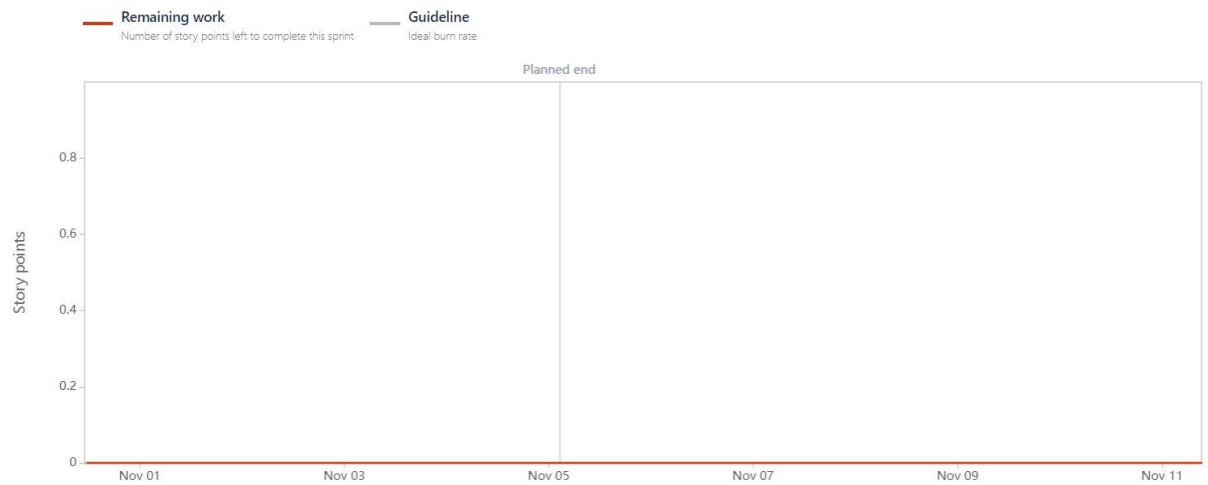
Sprint 2

Estimation field

Story points

...

Date - 31 October 2022 - 5 November 2022



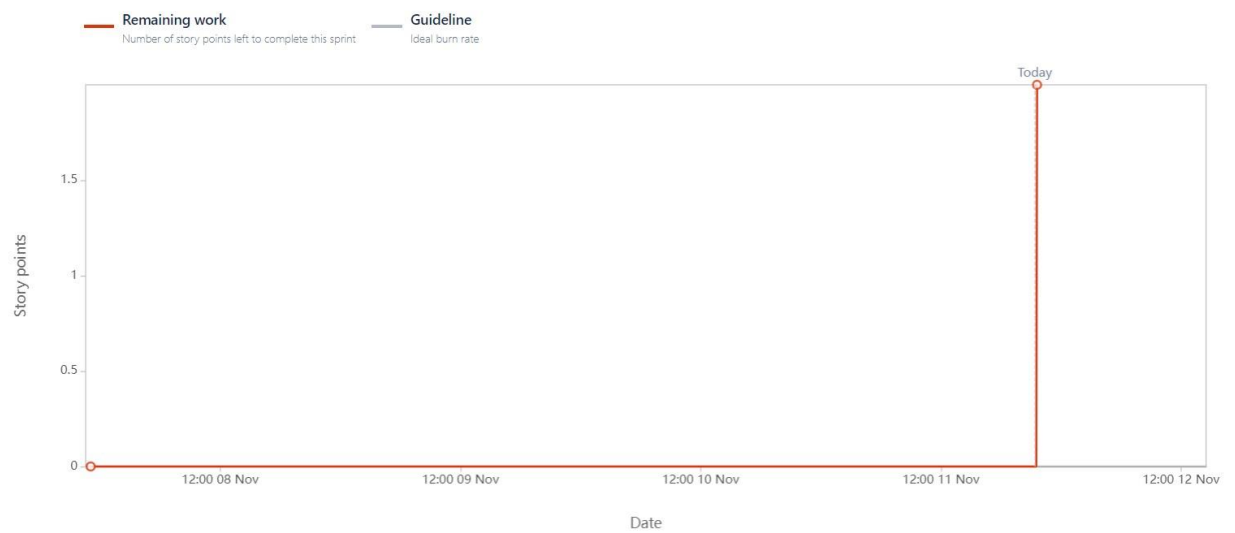
Sprint 3:

Sprint 3

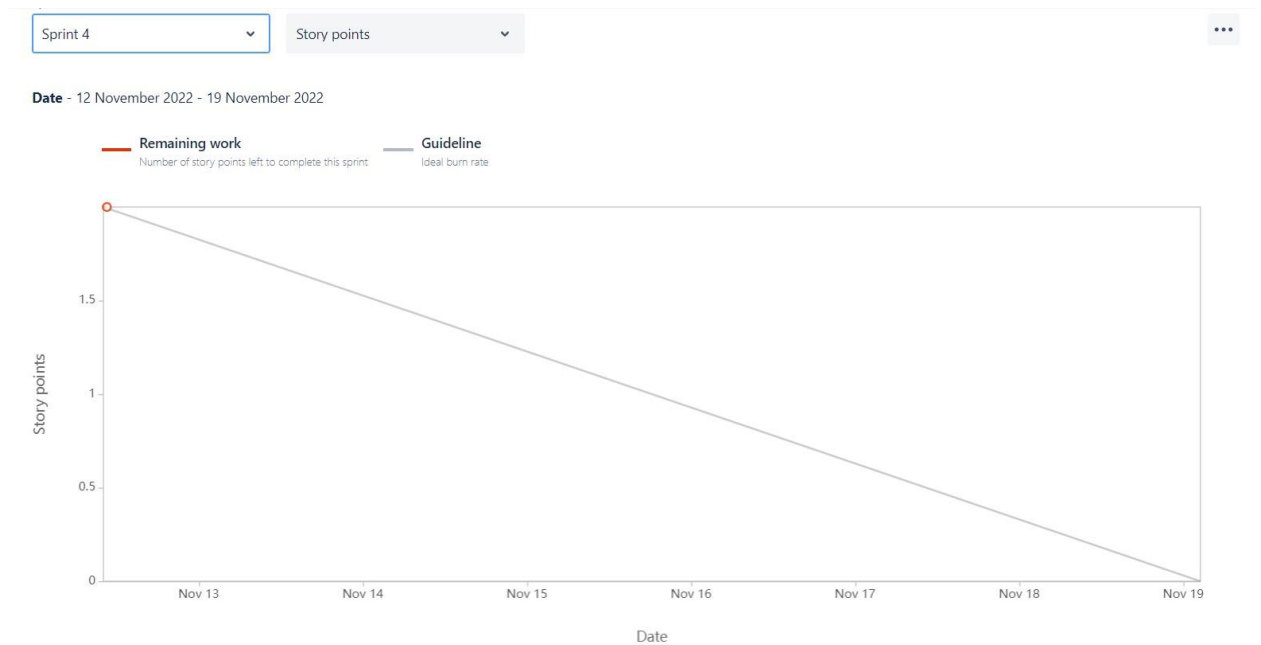
Story points

...

Date - 7 November 2022 - 12 November 2022



Sprint 4:



7. CODING & SOLUTIONING

7.1 Login Page

Only person with authentication can open dash board **Code:**

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-tofit=no">
```

```
<meta name="description" content="">
```

```
<meta name="author" content="">
```

```
<title>Global Sales Data Analytics</title>
```

```
<!-- Custom fonts for this template-->
```

```
<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
```

```
<link
```

```
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,900i"
```

```
rel="stylesheet">
```

```
<!-- Custom styles for this template-->
```

```
<link href="css/sb-admin-2.min.css" rel="stylesheet">
```

```

</head>

<body class="bg-gradient-primary">

  <div class="container">

    <!-- Outer Row -->
    <div class="row justify-content-center">

      <div class="col-xl-10 col-lg-12 col-md-9">

        <div class="card o-hidden border-0 shadow-lg my-5">
          <div class="card-body p-0">
            <!-- Nested Row within Card Body -->
            <div class="row">
              <div class="col-lg-6 d-none d-lg-block bg-login-image"></div>
              <div class="col-lg-6">
                <div class="p-5">
                  <div class="text-center">
                    <h1 class="h4 text-gray-900 mb-4">Welcome!</h1>
                  </div>
                  <form class="user" id="login-form">
                    <div class="form-group">
                      <input type="text" class="form-control form-control-user"
id="username" aria-describedby="emailHelp"
placeholder="Enter Username">
                    </div>
                    <div class="form-group">
                      <input type="password" class="form-control form-
controluser"
                      id="password" placeholder="Password">
                    </div>
                    <a id="login-form-submit" onclick="loginCheck()" class="btn
btn-primary btn-user btn-block">
                      Login
                    </a>
                    <hr>
                  </form>
                </div>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>

```

```

        </div>
    </div>
</div>
</div>
<!-- Bootstrap core JavaScript-->
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<!-- Core plugin JavaScript-->
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>
<!-- Custom scripts for all pages-->
<script src="js/sb-admin-2.min.js"></script>
<script type="text/javascript">    var loginCheck=function(){
const loginForm = document.getElementById("login-form");    const
loginButton = document.getElementById("login-form-submit");    // const
loginErrorMsg = document.getElementById("login-error-msg");
const username = loginForm.username.value;    const password =
loginForm.password.value;    if (username === "admin" && password
=== "admin123") {
        window.location.replace("index.html");
    } else {
        alert("Invalid Username/Password!");
        console.log("login error");
    }
}
</script>
</body>
</html>

```

7.2 Dashboard Page

This Page Contains dashboard about the sales data.

Code:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">
    <title>Global Sales Data Analytics</title>
    <!-- Custom fonts for this template-->

```

```

    <link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
<link

href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,
700i,800,800i,900,900i"
rel="stylesheet">
    <!-- Custom styles for this template-->
    <link href="css/sb-admin-2.min.css" rel="stylesheet">
</head>
<body id="page-top">
    <!-- Page Wrapper -->
    <div id="wrapper">
        <!-- Sidebar -->
        <ul class="navbar-nav bg-gradient-primary sidebar sidebar-dark accordion"
id="accordionSidebar">
            <!-- Sidebar - Brand -->
            <a class="sidebar-brand d-flex align-items-center justify-content-center" href="#">
                <div class="sidebar-brand-icon">
                    <i class="fas fa-fw fa-chart-area"></i>
                </div>
                <div class="sidebar-brand-text mx-3">Global Sales</div>
            </a>
            <!-- Divider -->
            <hr class="sidebar-divider my-0">
            <div class="sidebar-heading">
                Pages
            </div>
            <li class="nav-item active">
                <a class="nav-link" href="index.html">
                    <i class="fas fa-fw fa-tachometer-alt"></i>
                    <span>Dashboard</span></a>
            </li>
            <!-- Divider -->
            <hr class="sidebar-divider">
            <!-- Heading -->
            <!-- Nav Item - Pages Collapse Menu -->
            <li class="nav-item">
                <a class="nav-link" href="report.html">
                    <i class="fas fa-clipboard-list"></i>
                    <span>Report</span></a>
            </li>

```

```

<hr class="sidebar-divider">
<!-- Nav Item - Utilities Collapse Menu -->
<li class="nav-item">
  <a class="nav-link" href="story.html">
    <i class="fas fa-fw fa-table"></i>
    <span>Story</span></a>
  </li>
<!-- Divider -->
<hr class="sidebar-divider">
<li class="nav-item">
  <a class="nav-link" href="about.html">
    <i class="fas fa-fw fa-user"></i>
    <span>About</span></a>
  </li>
<hr class="sidebar-divider d-none d-md-block">
<!-- Sidebar Toggler (Sidebar) -->
<div class="text-center d-none d-md-inline">
  <button class="rounded-circle border-0" id="sidebarToggle"></button>
</div>
</ul>
<!-- End of Sidebar -->

<!-- Content Wrapper -->
<div id="content-wrapper" class="d-flex flex-column">
  <!-- Main Content -->
  <div id="content">
    <!-- End of Topbar -->
    <!-- Begin Page Content -->
    <div class="container-fluid">
      <!-- Content Row -->
      <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%2FProject%2Bdashboard&closeWindowOnLastView=true&ui_appbar=false
&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard
&subView=model000001847c9ea846_000000000" width="1400" height="1000"
frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
      </div>
      <!-- /.container-fluid -->
    </div>
    <!-- End of Main Content -->
    <!-- Footer -->

```


8.2 User Acceptance Testing

8.2.1 Defect Analysis

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	5	0	0	1	6
Duplicate	0	0	2	0	2
External	0	0	0	0	0
Fixed	0	2	0	0	2
Not Reproduced	0	0	1	1	2
Skipped	0	0	1	1	2
Won't Fix	0	0	0	0	0
Totals	5	2	4	3	14

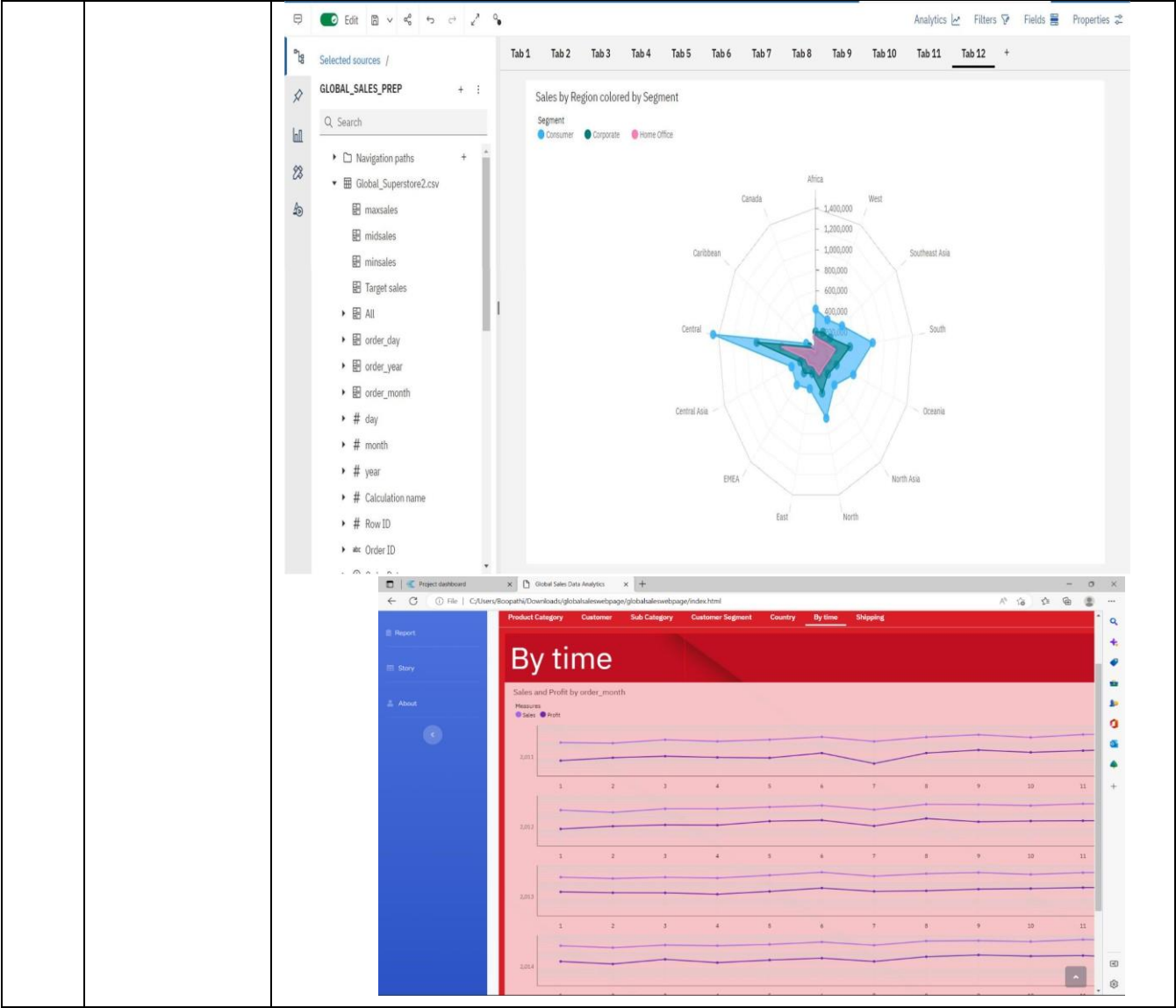
8.2.2 Test Case Analysis

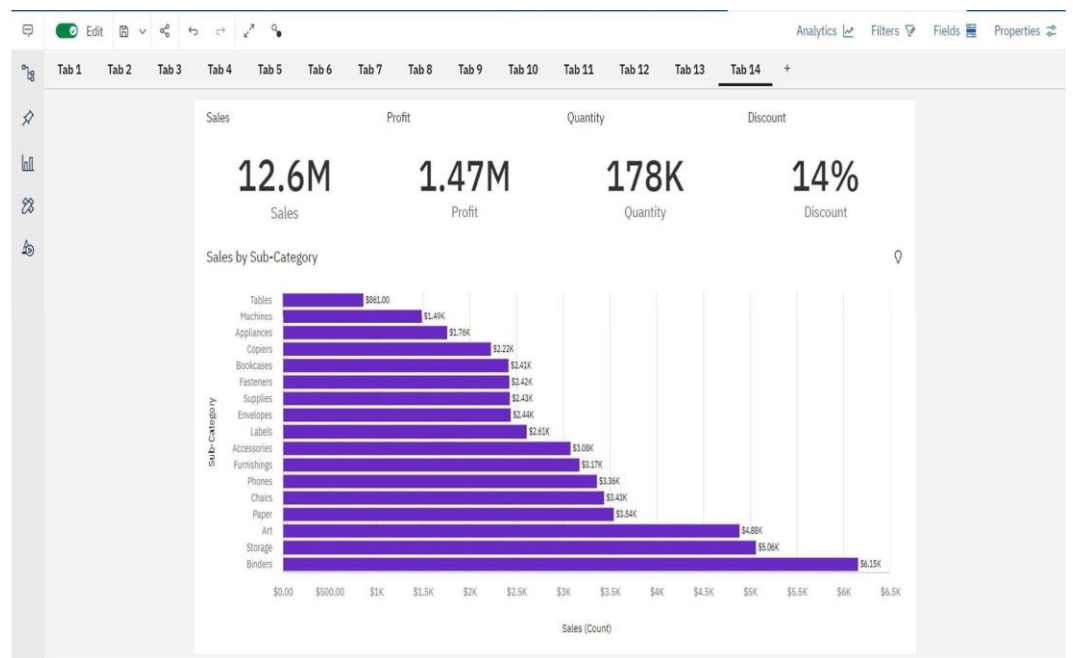
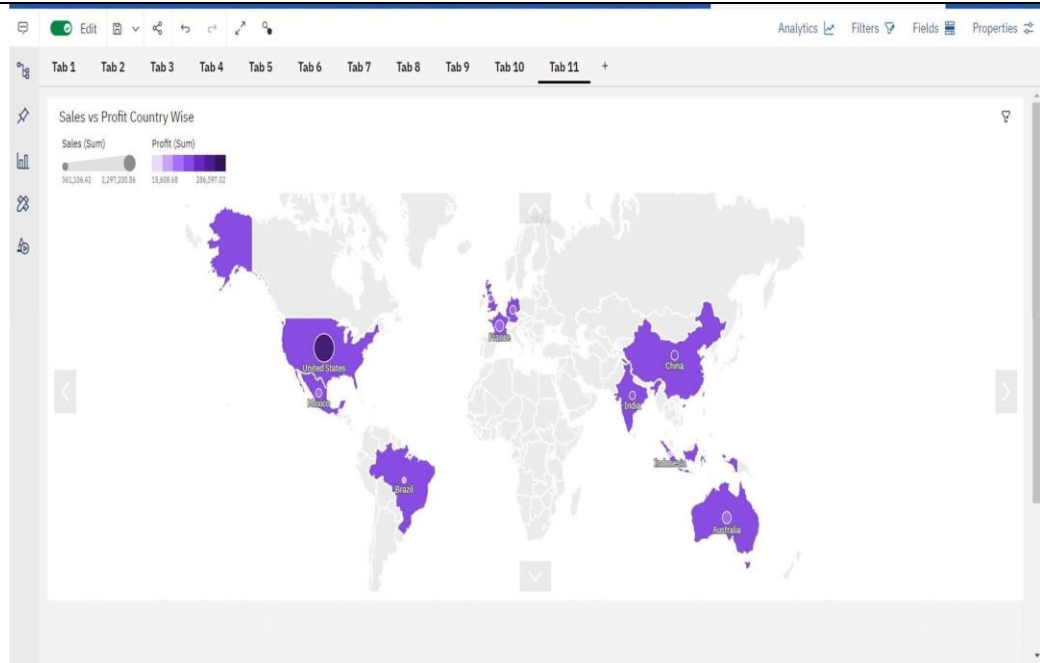
Section	Total Cases	Not Tested	Fail	Pass
Print Engine	0	0	0	0
Client Application	5	0	0	5
Security	1	0	0	1
Outsource Shipping	0	0	0	0
Exception Reporting	0	0	0	0
Final Report Output	4	0	0	4
Version Control	2	0	0	2

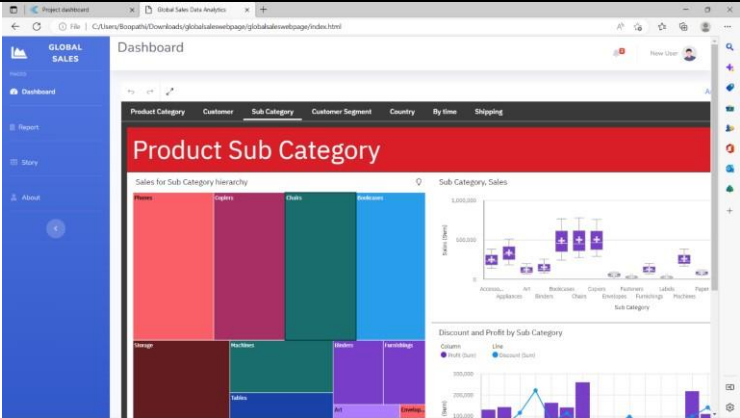
9. RESULTS

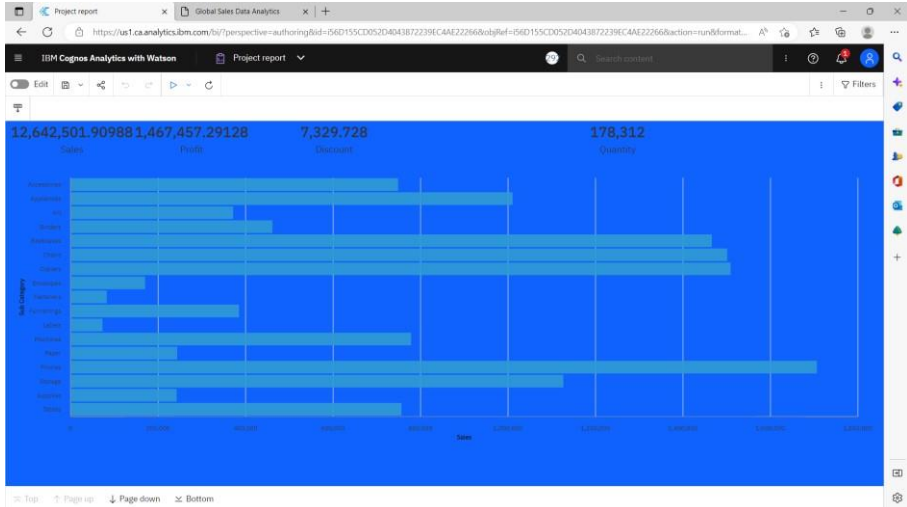
9.1 Performance Metrics

S.No.	Parameter	Screenshot / Values																																																																																																		
1.	Dashboard design	<div>16 Visualizations</div> <div><p>The top screenshot shows a dashboard titled "Project dashboard" with a sidebar containing "Report", "Story", and "About". The main content area has a filter bar with "Product Category", "Customer", "Sub Category", "Customer Segment", "Country", "By time", and "Shipping". Below the filter bar, there are two bar charts. The first chart, "Customer Frequency", shows sales for various customer names. The second chart, "Sales by Customer Name", shows sales for various customer names.</p><table><caption>Customer Frequency</caption><tr><th>Customer Name</th><th>Sales</th></tr><tr><td>Muhammad Ibrahim</td><td>25,000</td></tr><tr><td>Steven Ward</td><td>20,000</td></tr><tr><td>Bill Fjell</td><td>25,000</td></tr><tr><td>Gary Hoang</td><td>20,000</td></tr><tr><td>Patrick O'Brien</td><td>25,000</td></tr><tr><td>Harry Greene</td><td>20,000</td></tr><tr><td>Eric Hendrick</td><td>25,000</td></tr><tr><td>Art Fergo</td><td>20,000</td></tr></table><table><caption>Sales by Customer Name</caption><tr><th>Customer Name</th><th>Sales (Sum)</th></tr><tr><td>Tom Ashbrook</td><td>40,000</td></tr><tr><td>James Olson</td><td>35,000</td></tr><tr><td>Ging Tran</td><td>35,000</td></tr><tr><td>Christopher Conant</td><td>35,000</td></tr><tr><td>Sean Miller</td><td>35,000</td></tr><tr><td>Bert Waters</td><td>30,000</td></tr><tr><td>Natalie Pritikin</td><td>30,000</td></tr><tr><td>Fred Higgins</td><td>30,000</td></tr><tr><td>Tom Fergo</td><td>30,000</td></tr></table></div> <div><p>The bottom screenshot shows a dashboard titled "GLOBAL SALES" with a sidebar containing "Dashboard", "Report", "Story", and "About". The main content area has a filter bar with "Product Category", "Customer", "Sub Category", "Customer Segment", "Country", "By time", and "Shipping". Below the filter bar, there are two bar charts. The first chart, "Product Category", shows sales for various product categories. The second chart, "Sales by Category in top three Region", shows sales for various product categories.</p><table><caption>Product Category</caption><tr><th>Category</th><th>Sub-Category</th><th>Sales</th></tr><tr><td rowspan="4">Technology</td><td>Phones</td><td>1,706,824.54</td></tr><tr><td>Computers</td><td>1,509,436.27</td></tr><tr><td>Peripherals</td><td>979,040.07</td></tr><tr><td>Accessories</td><td>749,237.02</td></tr><tr><td colspan="2">Summary</td><td>4,944,537.90</td></tr><tr><td rowspan="4">Furniture</td><td>Chairs</td><td>1,301,685.79</td></tr><tr><td>Bookshelves</td><td>1,046,572.24</td></tr><tr><td>Tables</td><td>757,041.42</td></tr><tr><td>Furnishings</td><td>265,576.26</td></tr><tr><td colspan="2">Summary</td><td>4,110,875.71</td></tr><tr><td rowspan="4">Storage</td><td>Storage</td><td>1,137,085.86</td></tr><tr><td>Appliances</td><td>1,011,044.31</td></tr><tr><td>Blenders</td><td>445,151.51</td></tr><tr><td>Art</td><td>372,095.97</td></tr></table><table><caption>Sales by Category in top three Region</caption><tr><th>Category</th><th>Region</th><th>Sales (Sum)</th></tr><tr><td rowspan="3">Technology</td><td>North</td><td>1,706,824.54</td></tr><tr><td>South</td><td>1,509,436.27</td></tr><tr><td>Central</td><td>979,040.07</td></tr><tr><td rowspan="3">Furniture</td><td>North</td><td>1,301,685.79</td></tr><tr><td>South</td><td>1,046,572.24</td></tr><tr><td>Central</td><td>757,041.42</td></tr><tr><td rowspan="3">Storage</td><td>North</td><td>1,137,085.86</td></tr><tr><td>South</td><td>1,011,044.31</td></tr><tr><td>Central</td><td>445,151.51</td></tr></table></div>	Customer Name	Sales	Muhammad Ibrahim	25,000	Steven Ward	20,000	Bill Fjell	25,000	Gary Hoang	20,000	Patrick O'Brien	25,000	Harry Greene	20,000	Eric Hendrick	25,000	Art Fergo	20,000	Customer Name	Sales (Sum)	Tom Ashbrook	40,000	James Olson	35,000	Ging Tran	35,000	Christopher Conant	35,000	Sean Miller	35,000	Bert Waters	30,000	Natalie Pritikin	30,000	Fred Higgins	30,000	Tom Fergo	30,000	Category	Sub-Category	Sales	Technology	Phones	1,706,824.54	Computers	1,509,436.27	Peripherals	979,040.07	Accessories	749,237.02	Summary		4,944,537.90	Furniture	Chairs	1,301,685.79	Bookshelves	1,046,572.24	Tables	757,041.42	Furnishings	265,576.26	Summary		4,110,875.71	Storage	Storage	1,137,085.86	Appliances	1,011,044.31	Blenders	445,151.51	Art	372,095.97	Category	Region	Sales (Sum)	Technology	North	1,706,824.54	South	1,509,436.27	Central	979,040.07	Furniture	North	1,301,685.79	South	1,046,572.24	Central	757,041.42	Storage	North	1,137,085.86	South	1,011,044.31	Central	445,151.51
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		 <p>The screenshot shows a web application titled "GLOBAL SALES" with a sidebar menu containing "Dashboard", "Report", "Story", and "About". The main content area is titled "Dashboard" and features a "Product Sub Category" section. This section includes a treemap chart titled "Sales for Sub-Category Hierarchy" and a bar chart titled "Sub-Category Sales". The treemap chart displays sales data for various sub-categories, with "Books" being the largest. The bar chart shows sales for different sub-categories, with "Books" and "Electronics" being the highest. Below these charts is a line chart titled "Discount and Profit by Sub-Category" showing profit and discount trends. The dashboard also includes a top navigation bar with filters for "Product Category", "Customer", "Sub Category", "Customer Segment", "Country", "By time", and "Shipping".</p>
2	Data Responsiveness	Quick
3	Amount Data to Render (DB2 Metrics)	12.09 MB dataset is stored

4	Utilization of Data Filters	For some visualization , top 10 countries or top 3 subcategory are filtered
5	Effective User Story	4
6.	Descriptive Reports	2 <div>  <p>The screenshot shows a web browser window displaying an IBM Cognos Analytics dashboard. The dashboard has a blue header with the title 'Global Sales Data Analytics'. Below the header, there are four summary cards: 'Sales' (12,642,501.90988), 'Profit' (1,467,457.29128), 'Discount' (7,329.728), and 'Quantity' (178,312). The main area of the dashboard features a horizontal bar chart. The y-axis is labeled 'Subcategory' and lists various categories like 'Electronics', 'Clothing', 'Home', etc. The x-axis is labeled 'Sales' and ranges from 0 to 1,500,000. The bars are colored in shades of blue and green. The chart shows that 'Electronics' has the highest sales, followed by 'Clothing' and 'Home'. The dashboard also includes a search bar, a filter icon, and a 'Page report' dropdown menu.</p> </div>

10. ADVANTAGES & DISADVANTAGES

Advantages:

- The application will help the sales person to know about the selling of Product.
- This application will help the company to find the targeted market.
- This application will help to find how the customers are distributed across the countries.

Disadvantages:

- This dashboard can be used for a particular period of time.
- Dashboards contain detail for small amounts of data.

11. CONCLUSION

The Sales sector is of vital importance and plays a major role in the economy of the country . It is undergoing a process of transition to a market economy, with substantial changes in the structural, productive, and supply setups, as is the case with all other sectors of the economy. It Delivers a well-Friendly graphical UI and give a better result about the sales of a product and its profit in the market,

12. FUTURE SCOPE

The application is planned so that future changes can be effectively done. Further, this website can be enhanced as an interacting platform between the customer and machine by making decisions using Artificial Intelligence and making it available in many languages.

13. APPENDIX

Source Code

Dashboard

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">
  <title>Global Sales Data Analytics</title>
  <!-- Custom fonts for this template-->
  <link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
</link>

  href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,
  800i,900,900i"
  rel="stylesheet">
  <!-- Custom styles for this template-->
  <link href="css/sb-admin-2.min.css" rel="stylesheet">
</head>
<body id="page-top">
  <!-- Page Wrapper -->
  <div id="wrapper">
    <!-- Sidebar -->
    <ul class="navbar-nav bg-gradient-primary sidebar sidebar-dark accordion" id="accordionSidebar">
<!-- Sidebar - Brand -->
      <a class="sidebar-brand d-flex align-items-center justify-content-center" href="#">
        <div class="sidebar-brand-icon">
          <i class="fas fa-fw fa-chart-area"></i>
        </div>
        <div class="sidebar-brand-text mx-3">Global Sales</div>
      </a>
      <!-- Divider -->
      <hr class="sidebar-divider my-0">
      <div class="sidebar-heading">
        Pages
      </div>
      <li class="nav-item active">
        <a class="nav-link" href="index.html">
          <i class="fas fa-fw fa-tachometer-alt"></i>
          <span>Dashboard</span></a>
```



```

</li>
<!-- Divider -->
<hr class="sidebar-divider">
<!-- Heading -->
<!-- Nav Item - Pages Collapse Menu -->
<li class="nav-item">
  <a class="nav-link" href="report.html">
    <i class="fas fa-clipboard-list"></i>
    <span>Report</span></a>
</li>
<hr class="sidebar-divider">
<!-- Nav Item - Utilities Collapse Menu -->
<li class="nav-item">
  <a class="nav-link" href="story.html">
    <i class="fas fa-fw fa-table"></i>
    <span>Story</span></a>
</li>
<!-- Divider -->
<hr class="sidebar-divider">
<li class="nav-item">
  <a class="nav-link" href="about.html">
    <i class="fas fa-fw fa-user"></i>
    <span>About</span></a>
</li>
<hr class="sidebar-divider d-none d-md-block">

<!-- Sidebar Toggler (Sidebar) -->
<div class="text-center d-none d-md-inline">
  <button class="rounded-circle border-0" id="sidebarToggle"></button>
</div>
</ul>
<!-- End of Sidebar -->
<!-- Content Wrapper -->
<div id="content-wrapper" class="d-flex flex-column">
  <!-- Main Content -->
  <div id="content">
    <!-- End of Topbar -->
    <!-- Begin Page Content -->
    <div class="container-fluid">
      <!-- Content Row -->
      <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%
2FProject%2Bdashboard&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=fal
se&shareMode=embedded&action=view&mode=dashboard&subView=model0000018
47c9ea846_00000000" width="1400" height="1000" frameborder="0" gesture="media"
allow="encryptedmedia" allowfullscreen=""></iframe>
      </div>
      <!-- /.container-fluid -->
    </div>
    <!-- End of Main Content -->
    <!-- Footer -->
    <footer class="sticky-footer bg-white">
      <div class="container my-auto">

```

```

        <div class="copyright text-center my-auto">
            <span>Copyright &copy;Global Sales Data Analytics 2022</span>
        </div>
    </div>
</footer>
<!-- End of Footer -->

</div>
<!-- End of Content Wrapper -->

</div>
<!-- End of Page Wrapper -->

<!-- Scroll to Top Button-->
<a class="scroll-to-top rounded" href="#page-top">
    <i class="fas fa-angle-up"></i>
</a>
<!-- Bootstrap core JavaScript-->
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<!-- Core plugin JavaScript-->
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>
<!-- Custom scripts for all pages-->
<script src="js/sb-admin-2.min.js"></script>
<!-- Page level plugins -->
<script src="vendor/chart.js/Chart.min.js"></script>

<!-- Page level custom scripts -->
<script src="js/demo/chart-area-demo.js"></script>
<script src="js/demo/chart-pie-demo.js"></script>
</body></html>

```

Login

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">
    <title>Global Sales Data Analytics</title>
    <!-- Custom fonts for this template-->
    <link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
</link>

    href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,900i"
    rel="stylesheet">

```

```

    <!-- Custom styles for this template-->
    <link href="css/sb-admin-2.min.css" rel="stylesheet">
</head>
<body class="bg-gradient-primary">
    <div class="container">
        <!-- Outer Row -->
        <div class="row justify-content-center">
            <div class="col-xl-10 col-lg-12 col-md-9">
                <div class="card o-hidden border-0 shadow-lg my-5">
                    <div class="card-body p-0">
                        <!-- Nested Row within Card Body -->
                        <div class="row">
                            <div class="col-lg-6 d-none d-lg-block bg-login-image"></div>
                            <div class="col-lg-6">
                                <div class="p-5">
                                    <div class="text-center">
                                        <h1 class="h4 text-gray-900 mb-4">Welcome!</h1>
                                    </div>
                                    <form class="user" id="login-form">
                                        <div class="form-group">
                                            <input type="text" class="form-control form-control-user"
id="username" aria-describedby="emailHelp"                                placeholder="Enter
Username">
                                            </div>
                                            <div class="form-group">
                                                <input type="password" class="form-control form-control-user"
id="password" placeholder="Password">
                                                </div>
                                                <a id="login-form-submit" onclick="loginCheck()" class="btn btn-primary btn-user btn-block">
                                                    Login
                                                </a>
                                                <hr>
                                            </form>
                                        </div>
                                    </div>
                                </div>
                            </div>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <!-- Bootstrap core JavaScript-->
    <script src="vendor/jquery/jquery.min.js"></script>
    <script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
    <!-- Core plugin JavaScript-->
    <script src="vendor/jquery-easing/jquery.easing.min.js"></script>
    <!-- Custom scripts for all pages-->
    <script src="js/sb-admin-2.min.js"></script>
    <script type="text/javascript">
var loginCheck=function(){
    const loginForm = document.getElementById("login-form");    const
loginButton = document.getElementById("login-form-submit");    // const
loginErrorMsg = document.getElementById("login-error-msg");

```

```

const username = loginForm.username.value;      const password =
loginForm.password.value;
    if (username === "admin" && password === "admin123") {
        window.location.replace("index.html");
    } else {
        alert("Invalid Username/Password!");
        console.log("login error");
    }
}
</script>

```

```
</body>
```

```
</html>
```

Report

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">
    <title>Global Sales Data Analytics</title>

    <!-- Custom fonts for this template-->
    <link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
</link>

    href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,
    800i,900,900i"
rel="stylesheet">

    <!-- Custom styles for this template-->
    <link href="css/sb-admin-2.min.css" rel="stylesheet">
</head>
<body id="page-top">
    <!-- Page Wrapper -->
    <div id="wrapper">
        <!-- Content Wrapper -->
        <div id="content-wrapper" class="d-flex flex-column">
            <!-- Main Content -->
            <div id="content">
                <!-- Begin Page Content -->
<div class="container-fluid">
    <!-- Content Row -->
    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FProject%2FProject%2Breport&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&a

```

```
mp;action=run&amp;format=HTML&amp;prompt=false" width="1400" height="1000" frameborder="0"
gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
</div>
</body>
</html>
```

About

```
<!DOCTYPE html>
<html lang="en">
<head>

  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">

  <title>Global Sales Data Analytics</title>

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  <link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
  <link

    href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,
    800i,900,900i"
    rel="stylesheet">

  <!-- Custom styles for this template-->
  <link href="css/sb-admin-2.min.css" rel="stylesheet">

</head>

<body id="page-top">

  <!-- Page Wrapper -->
  <div id="wrapper">

    <!-- Content Wrapper -->
    <div id="content-wrapper" class="d-flex flex-column">

      <!-- Main Content -->
      <div id="content">

        <!-- Topbar -->

        <!-- Begin Page Content -->
        <div class="container-fluid">
```

```

<div class="d-sm-flex align-items-center justify-content-between mb-4">
  <h1 class="h3 mb-0 text-gray-800">Team Members</h1>
</div>
<div class="row">
<div class="col-xl-3 col-md-6 mb-4">
  <div class="card border-left-primary shadow h-100 py-2">
    <div class="card-body">
      <div class="row no-gutters align-items-center">
        <div class="col mr-2">
          <div class="h5 font-weight-bold text-primary text-uppercase mb-1">
            Thirumalaiboobathi B</div>
          <div class="text-xs mb-0 font-weight-bold text-gray-800">Team Leader</div>
        </div>
      </div>
    </div>
  </div>
</div>
</div>
</div>

<div class="col-xl-3 col-md-6 mb-4">
  <div class="card border-left-success shadow h-100 py-2">
    <div class="card-body">
      <div class="row no-gutters align-items-center">
        <div class="col mr-2">
          <div class="h5 font-weight-bold text-success text-uppercase mb-1">
            Monesh Kumar M</div>
          <div class="text-xs mb-0 font-weight-bold text-gray-800">Member</div>
        </div>
        <!-- <div class="col-auto">
          <i class="fas fa-dollar-sign fa-2x text-gray-300"></i>
        </div> -->
      </div>
    </div>
  </div>
</div>
</div>

<!-- Tasks Card Example -->
<div class="col-xl-3 col-md-6 mb-4">
  <div class="card border-left-info shadow h-100 py-2">
    <div class="card-body">
      <div class="row no-gutters align-items-center">
        <div class="col mr-2">
          <div class="h5 font-weight-bold text-info text-uppercase mb-1">
            Vignesh T</div>
          <div class="text-xs mb-0 font-weight-bold text-gray-800">Member</div>
        </div>
      </div>
    </div>
  </div>
</div>
</div>

<!-- Pending Requests Card Example -->
<div class="col-xl-3 col-md-6 mb-4">
  <div class="card border-left-warning shadow h-100 py-2">

```

```

        <div class="card-body">
            <div class="row no-gutters align-items-center">
                <div class="col mr-2">
                    <div class="h5 font-weight-bold text-warning text-uppercase mb-1">
                        Manoj Kumar M</div>
                    <div class="text-xs mb-0 font-weight-bold text-gray-800">Member</div>
                </div>
            </div>
        </div>
    </div>
</div>

<div class="col-xl-3 col-md-6 mb-4">
    <div class="card border-left-danger shadow h-100 py-2">
        <div class="card-body">
            <div class="row no-gutters align-items-center">
                <div class="col mr-2">
                    <div class="h5 font-weight-bold text-danger text-uppercase mb-1">
                        Mohamed Younush N A</div>
                    <div class="text-xs mb-0 font-weight-bold text-gray-800">Member</div>
                </div>
            </div>
        </div>
    </div>
</div>
<!-- Content Row -->
</div>
<!-- /.container-fluid -->
</div>
<!-- End of Main Content -->
<!-- Footer -->
<div class="sticky-footer bg-white">
    <div class="container my-auto">
        <div class="copyright text-center my-auto">
            <span>Copyright &copy;Global Sales Data Analytics 2022</span>
        </div>
    </div>
</div>
</footer>
<!-- End of Footer -->
</div>
<!-- End of Content Wrapper →
</div>
<!-- End of Page Wrapper -->
<!-- Scroll to Top Button-->
<a class="scroll-to-top rounded" href="#page-top">
    <i class="fas fa-angle-up"></i>
</a>
</body>
</html>

```

Story

```

<!DOCTYPE html>
<html lang="en">
<head>

  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">

  <title>Global Sales Data Analytics</title>

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  <link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet" type="text/css">
</link>

  href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,900i"
  rel="stylesheet">

  <!-- Custom styles for this template-->
  <link href="css/sb-admin-2.min.css" rel="stylesheet">

</head>

<body id="page-top">

  <!-- Page Wrapper -->
  <div id="wrapper">
    <!-- Content Wrapper -->
    <div id="content-wrapper" class="d-flex flex-column">

      <!-- Main Content -->
      <div id="content">

        <!-- Topbar -->
        <nav class="navbar navbar-expand navbar-light bg-white topbar mb-4 static-top shadow">

          <!-- Sidebar Toggle (Topbar) -->
          <button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle mr-3">
            <i class="fa fa-bars"></i>
          </button>

          <!-- Topbar Search -->

          <div class="d-sm-flex align-items-center justify-content-between mb-4">
            <h1 class="h3 mb-0 text-gray-800">Story</h1>
          </div>

          <!-- Topbar Navbar -->
          <ul class="navbar-nav ml-auto">

```



```

<!-- Nav Item - Alerts -->
<li class="nav-item dropdown no-arrow mx-1">
  <a class="nav-link dropdown-toggle" href="#" id="alertsDropdown" role="button"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    <i class="fas fa-bell fa-fw"></i>
    <!-- Counter - Alerts -->
    <span class="badge badge-danger badge-counter">2</span>
  </a>
  <!-- Dropdown - Alerts -->
  <div class="dropdown-list dropdown-menu dropdown-menu-right shadow animated--grow-in"
aria-labelledby="alertsDropdown">
    <h6 class="dropdown-header">
      Alerts Center
    </h6>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="mr-3">
        <div class="icon-circle bg-primary">
          <i class="fas fa-file-alt text-white"></i>
        </div>
      </div>
      <div class="small text-gray-500">November 19, 2022</div>
      <span class="font-weight-bold">Welcome to Global Sales Data Analytics!</span>
    </a>
    <a class="dropdown-item d-flex align-items-center" href="#">
      <div class="mr-3">
        <div class="icon-circle bg-success">
          <i class="fas fa-donate text-white"></i>
        </div>
      </div>
      <div class="small text-gray-500">November 19, 2022</div>
      Your Dashboard is ready!
    </a>
  </div>
</li>

```

```

<div class="topbar-divider d-none d-sm-block"></div>

```

```

<!-- Nav Item - User Information -->
<li class="nav-item dropdown no-arrow">
  <a class="nav-link dropdown-toggle" href="#" id="userDropdown" role="button"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    <span
class="mr-2 d-none d-lg-inline text-gray-600 small">Admin</span>
    
  </a>
  <!-- Dropdown - User Information -->
  <div class="dropdown-menu dropdown-menu-right shadow animated--grow-in"
labelledby="userDropdown">

```

aria-

```

        <a class="dropdown-item" href="index.htmls">
            <i class="fas fa-tachometer-alt fa-sm fa-fw mr-2 text-gray-400"></i>
            Dashboard
        </a>
        <a class="dropdown-item" href="report.html">
            <i class="fas fa-clipboard-list fa-sm fa-fw mr-2 text-gray-400"></i>
            Report
        </a>
        <a class="dropdown-item" href="story.html">
            <i class="fas fa-table fa-sm fa-fw mr-2 text-gray-400"></i>
            Story
    </a>

    <a class="dropdown-item" href="about.html" data-toggle="modal" datatarget="#logoutModal">
        <i class="fas fa-user fa-sm fa-fw mr-2 text-gray-400"></i>
About

    </a>
    <div class="dropdown-divider"></div>
    <a class="dropdown-item" href="#" data-toggle="modal" data-target="#logoutModal">
        <i class="fas fa-sign-out-alt fa-sm fa-fw mr-2 text-gray-400"></i>
Logout

    </a>
    </div>
</li>

</ul>

</nav>
<!-- End of Topbar -->

<!-- Begin Page Content -->
<div class="container-fluid">

    <!-- Content Row -->
    <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2FProject%2FGlobal%2BSales%2BData%2BAnalytics&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&sceneId=model000001847c9ea846_000000000&sceneTime=0" width="1400" height="1000" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>

    </div>
<!-- /.container-fluid -->

</div>
<!-- End of Main Content -->

<!-- Footer -->
<footer class="sticky-footer bg-white">
    <div class="container my-auto">
        <div class="copyright text-center my-auto">
            <span>Copyright &copy; Global Sales Data Analytics 2022</span>
        </div>

```

```
</div>
</footer>
<!-- End of Footer -->
</div>
<!-- End of Content Wrapper -->
</div>
</body>
</html>
```

GitHub Link <https://github.com/IBM-EPBL/IBM-Project-53967-1668836774>