ESTIMATION OF BUSINESS PROJECT

IBM NAAN MUDHALVAN

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Submitted By

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BONAFIDE CERTIFICATE

Certified that this project report titled **ESTIMATION OF BUSINESS PROJECT** is the bonafide work of **"RAJPRASATH B (611220104112), MOHANASUNDARAM M (611220104087), KAVIYARASAN P (611220104068)**, **NIGESH G (611220104096)"** who carried out the project work under my supervision.

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HOD

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SPOC

ACKNOWLEDGEMENT

At the outset, we express our heartfelt gratitude to **GOD,** who has been our strength to bring this project to light.

At this pleasing moment of having successfully completed our project, we wish to convey our sincere thanks and gratitude to our beloved president **Mr. C. Balakrishnan,** who has provided all the facilities to us.

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ABSTRACT

The "Estimation of Business Project " project represents a pioneering approach to address the persistent challenge of accurate cost estimation in project management. Traditional methods often fall short in adapting to dynamic market conditions and evolving project requirements, leading to budget overruns and financial strain for businesses. This project leverages advanced data analytics and predictive modeling techniques to provide precise and data-driven cost estimates for a wide range of business projects. The solution combines historical project data, industry benchmarks, and external datasets with machine learning algorithms to forecast project costs in real-time. This adaptability to changing conditions sets it apart from conventional static estimation methods. By integrating external data sources and predictive analytics, the project offers a holistic approach to cost projection not commonly found in existing tools. The benefits of this project are multifaceted. It leads to improved financial planning, reduced budget overruns, and enhanced decision-making for businesses. Additionally, it contributes to risk mitigation, higher customer satisfaction, and a competitive advantage in project pricing and bidding. The scalability of the solution allows it to cater to the diverse needs of businesses, from startups to large enterprises.

LIST OF FIGURES

LIST OF ABBREVATIONS

ABBREVATION	EXPANSION
DFD	DATA FLOW DIAGRAM
FR	FUNCTIONAL REQUIREMENT
NFR	NON-FUNCTIONAL REQUIREMENT
PS	PROBLEM STATMENT

CHAPTER - 1

INTRODUCTION

In the ever-evolving landscape of business and project management, the accuracy of cost estimation remains a fundamental pillar of success. The ability to forecast project costs with precision is a paramount concern for organizations across industries. Yet, traditional methods of cost estimation often struggle to keep pace with the dynamic nature of the modern business world. This project, titled "Estimation of Business Project Costs Using Data Analytics," emerges as a beacon of innovation and progress in the realm of project management. Leveraging the power of advanced data analytics and predictive modelling, this initiative introduces a transformative solution that promises to revolutionize the way we approach cost estimation. The project's overarching goal is to develop a cutting-edge data analytics platform that empowers organizations to refine their cost estimation processes. The implications of this project are profound. The benefits it offers are far-reaching, promising not only improved financial planning and budget control but also a heightened capacity for data-driven decision-making. It brings to the table an advanced tool for risk assessment and mitigation. It holds the potential for expansion into diverse industries, including construction, manufacturing, technology, healthcare, agriculture, and retail. It is poised to embrace the emerging technologies of tomorrow, with the integration of artificial intelligence, machine learning, and predictive analytics. As the business landscape continues to evolve, this project presents itself as a cornerstone of a data-driven, adaptable, and precise approach to cost estimation, ensuring that businesses can navigate the dynamic currents of the modern marketplace with confidence and success.

1.1 PROJECT OVERVIEW

The project's core objective is to develop a data analytics platform that enhances the accuracy of cost estimation in the context of business projects. By combining historical project data, industry benchmarks, and external datasets with cutting-edge machine learning algorithms, the platform offers a real-time, adaptable, and holistic approach to cost projection. This sets it apart from static, traditional estimation methods that often fail to account for the changing landscape of project management. The benefits of this project are wide-reaching. It promises improved financial planning, reduced budget overruns, and enhanced decision-making capabilities for businesses. It contributes to risk mitigation, higher customer satisfaction, and a competitive edge in project pricing and bidding. Moreover, the platform's scalability ensures that it can meet the diverse needs of businesses, from small startups to large enterprises. As we look to the future, the project is poised for expansion. Its applications span various industries, including construction, manufacturing, technology, healthcare, agriculture, and retail. Moreover, it is well-positioned to leverage emerging technologies and industry-specific best practices. The "Estimation of Business Project Costs Using Data Analytics" project sets the stage for a data-driven, precise, and adaptable approach to cost estimation, ensuring that businesses can thrive in an ever-changing marketplace.

1.2 PURPOSE

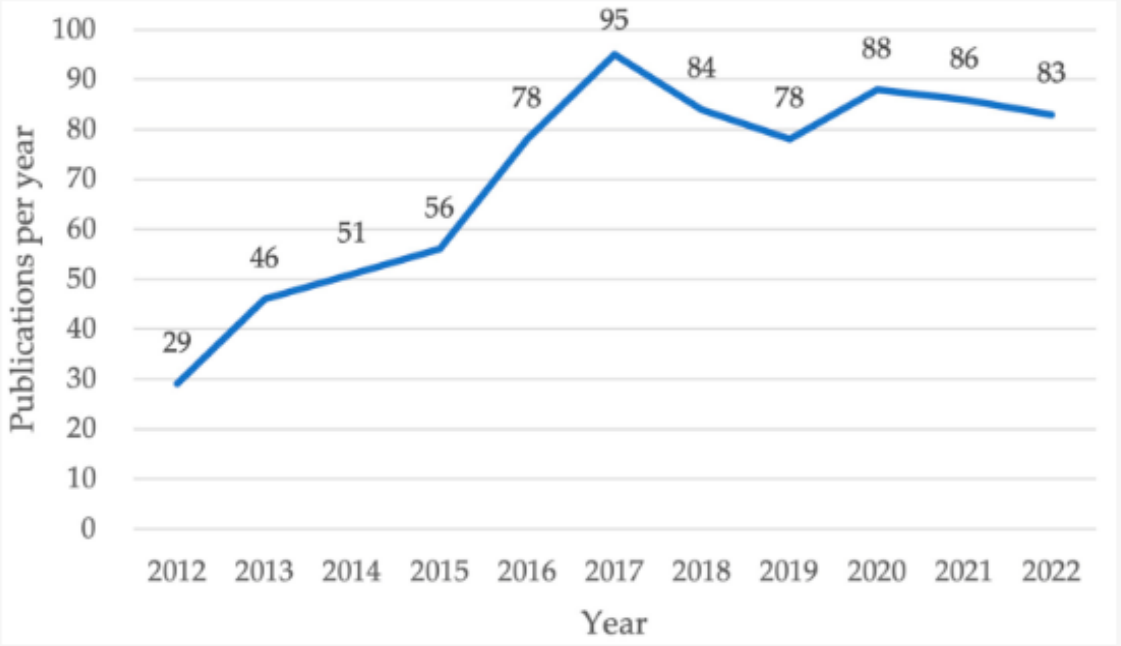
The purpose highlights the use of a data-driven technique to analyze historical participation and performance patterns in Olympic sports. It also mentions the sources of data that will be used, such as historical records, demographic, andsocioeconomic statistics. Additionally, it outlines some of the key findings and insights that the analysis will reveal, including trends in gender diversity,increasing participation from different countries, performance variability among countries, and the influence of socioeconomic factors, athlete age, andexperience on Olympic performance. The ultimate goal of the analysis is to provide valuable information that can be used to improve athlete developmentand promote participation in Olympic sports worldwide.

CHAPTER – 2
LITERATURE SURVEY

2.1 A Study of quantitative analysis on business analytics:

Firstly, we conducted a quantitative analysis on business analytics literature in terms of the publication number per year from 2012 to 2022, which is shown in Figure 2. From 2012 to 2017, the number of publications per year showed a significant upward trend and peaked in 2017. After 2017, the number decreased slightly but still remained at a high level compared to 2012, which means that the research on business analytics continues to attract many scholars now.

Figure 2. Publications per year.



2.2 Development of business analytics applications:

We conducted an analysis of the top ten research directions of academic literature on business analytics in Figure 3. It is clear that computer science is the most popular research direction among published literature about business analytics. It is because computer science is an essential part of business analytics and drives the development of business analytics applications. The second most popular research direction is engineering which implies the application area of business analytics, whereas the third one is business economics showing the value of business analytics on economics. The remaining research directions also all reflect the techniques and applications of business analytics, respectively.

2.3 Process of literature selection:

Based on the methodology, we conducted the process of literature selection. shows the flowchart of the selection process. We researched on the Web of Science with the keyword ‘business analytics’ in the title or abstract, and without other selection rules, and the number of results was 821. After filtering language (English) and publication types (research articles, reviews and book chapters), there were 365 papers left. Then, we constrained the number of citations before and after 2020 and excluded 193 results. Finally, we read the abstract of the selected papers to further filter for relevant articles and there were 76 papers ready for in-depth review.

CHAPTER - 3

IDEATION & PROPOSED SOLUTION

3.1 PROBLEM STATEMENT DEFINITION:

Explain the specific objectives and goals of the project, outlining why estimating business expenses is essential.

Objective: Clearly state the purpose of the project, i.e., to estimate and analyze business expenses.

Rationale:

Explain why accurate expense estimation is crucial for the business's financial health and strategic planning.

Problem Statement (PS)	**I am (Customer)**	**I'm trying to**	**But**	**Because**	**Which makes me feel**
PS-1	Sports player	Improve my performance	Some Important data about my sport are missing	Of there is no good data analytics in my field of sports	Helpless.

Estimation of Business Project

PS-2	Coach	Improve my students performance	Previous year data are missing	Of maintenance of record	Not a good coach because I can not help my students.

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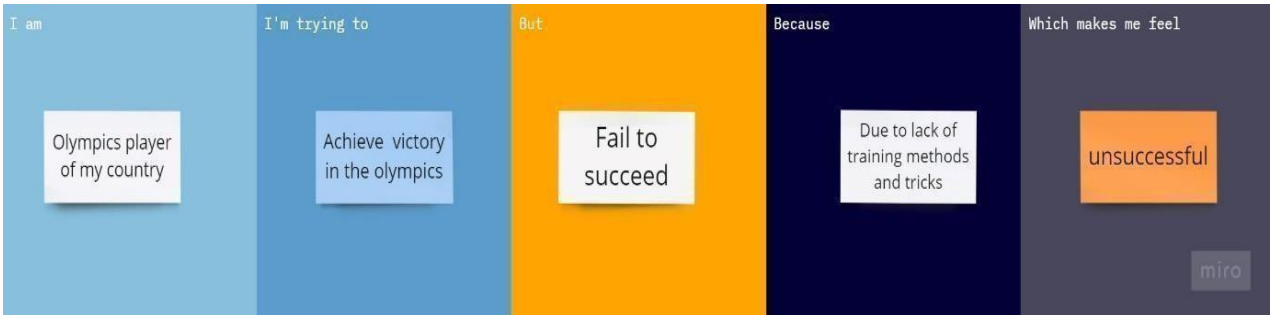
The problem statement for data-driven insights of Olympic sports participation and performance is to analyze and understand the factors that contribute to successful participation in the Olympic Games. This includes identifying patterns and trends in athlete demographics, training methods, and performance metrics across different sports and countries. By leveraging data from past Olympic Games and other relevant sources, the goalis to uncover insights that can inform strategies for improving athlete development, training programs, and overall performance at the Olympic level. Ultimately, this analysis aims to help athletes, coaches, and sports organizations make data-driven decisions that lead to greater success in the Olympic Games.



3.2 EMPHATHY MAP

An empathy map is a collaborative tool teams can use to gain a deeper insightinto their customers. Much like a user persona, an empathy map can representa group of users, such as a customer segment. The empathy map was originally created by Dave Gray and has gained much popularity within the agile community. Have the team members speak about the sticky notes as they place them on the empathy map. Ask questions to reach deeper insights so that they can be elaborated for the rest of the team. To help bring the user to life, you may even wish to sketch out the characteristics this person may have on the center of the face.

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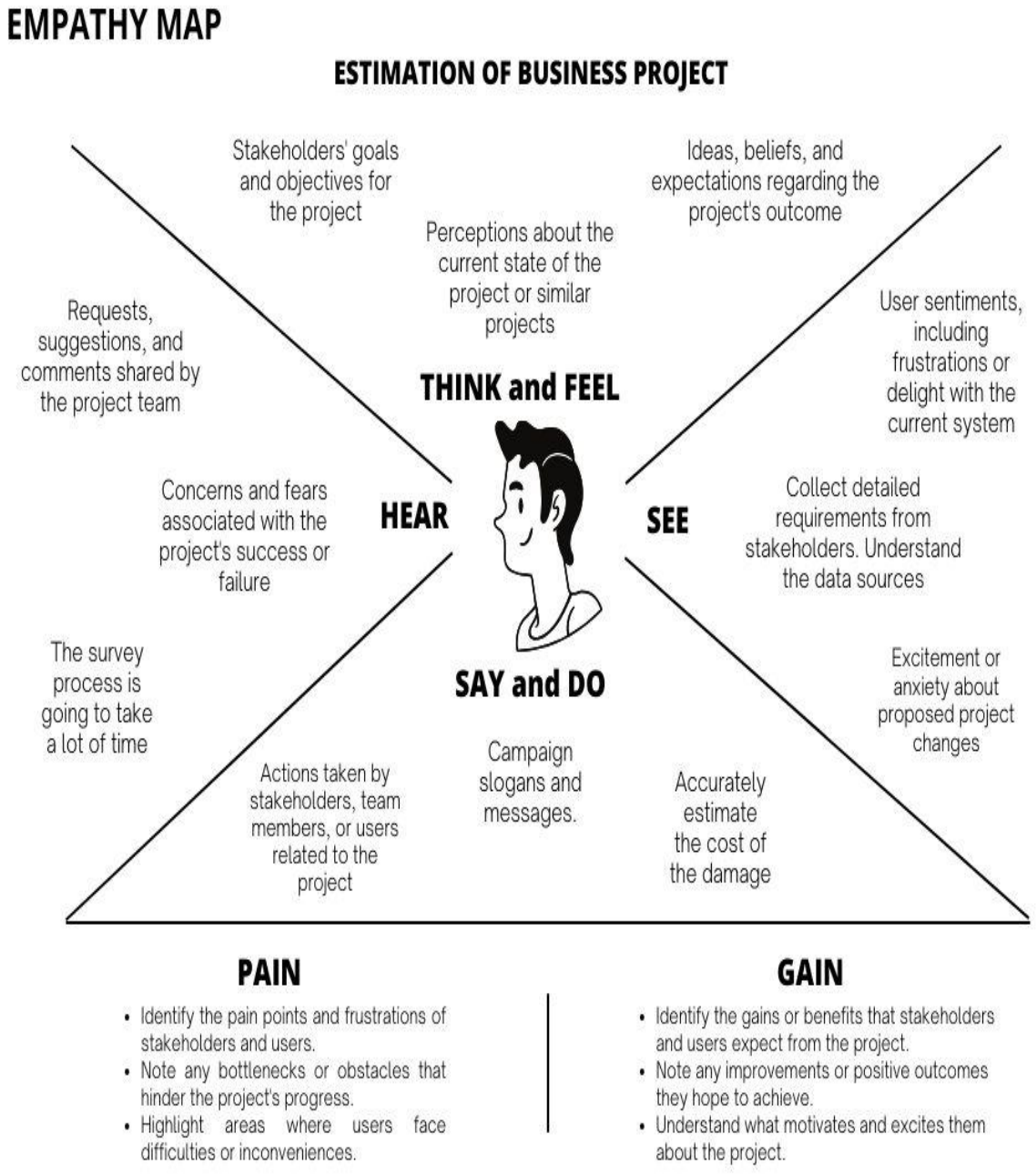
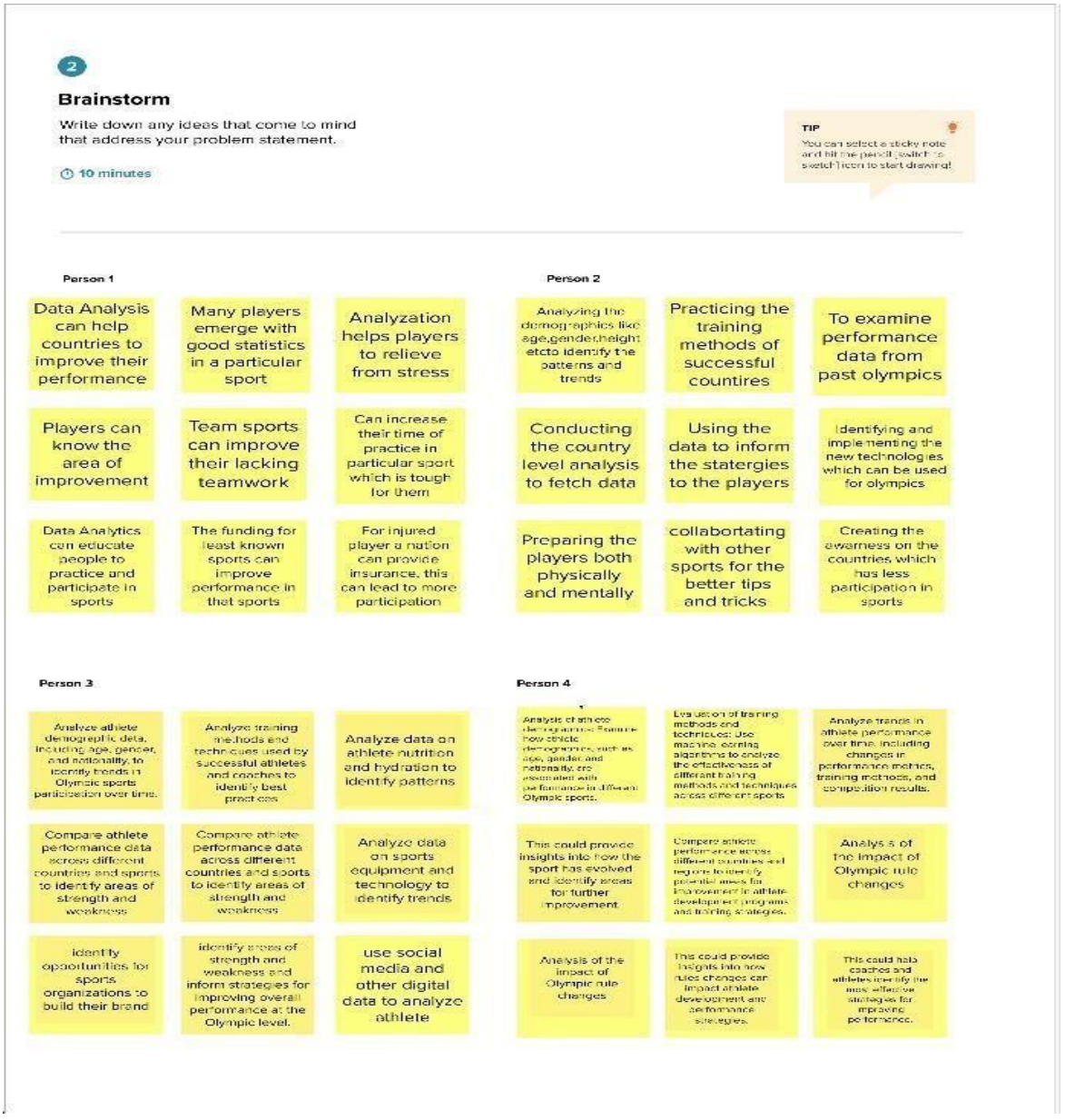
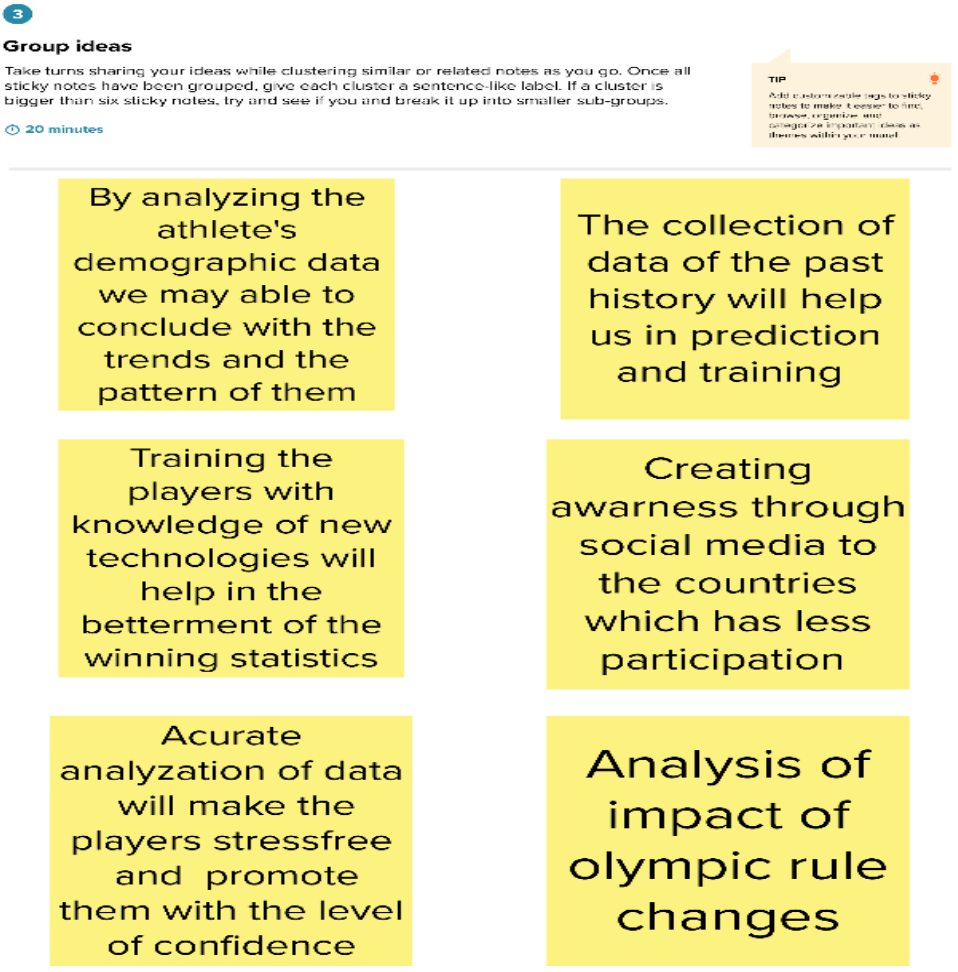


3.3 IDEATION & BRAINSTROMING

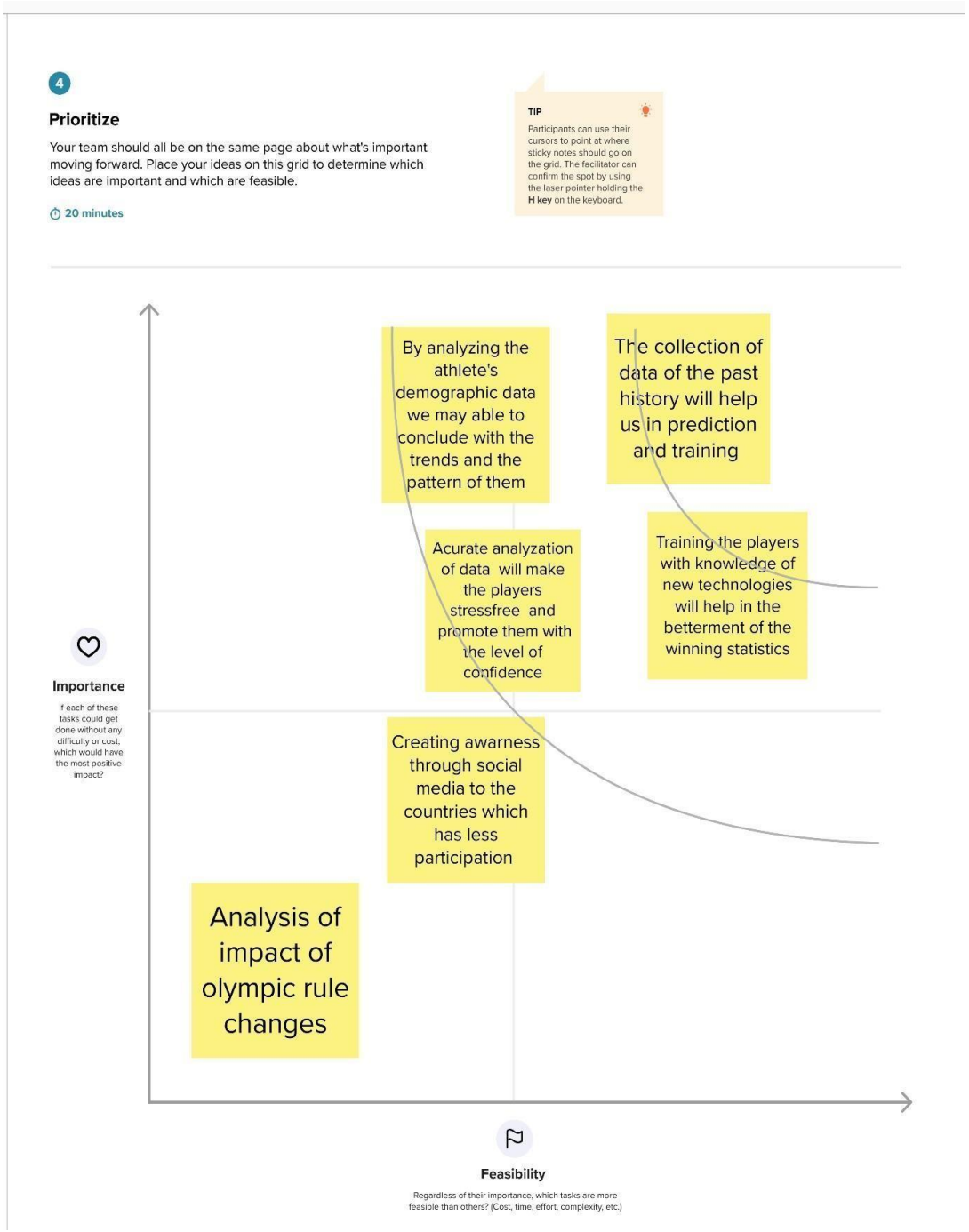


A group idea is a concept or plan formulated by a collective on individuals with a shared vision and objectives. It represents the thoughts and goals that the group seeks to pursue together.

Estimation of Business Project



Estimation of Business Project



3.4 PROPOSED SOLUTION

Proposed Solution Template:

S No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The accurate estimation of costs for business projects is essential for budgeting and financial planning. Many businesses struggle with imprecise cost estimates, leading to financial challenges and project delays.
2.	Idea / Solution description	Our project aims to leverage data analytics to enhance the accuracy of cost estimation for business projects. We will collect historical project data, industry benchmarks, and external datasets, applying predictive modeling techniques to forecast project costs. By utilizing advanced analytics, we will provide more precise and data-driven cost estimates.

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3.	Novelty / Uniqueness	Our solution differentiates itself through its use of advanced predictive modeling and machine learning algorithms. It offers a dynamic and adaptable approach to cost estimation, accommodating changing project requirements and market conditions.
4.	Social Impact / Customer Satisfaction	• Improved cost estimation leads to better financial planning, reduced budget overruns, and more successful project outcomes, contributing to the overall economic health of businesses. • Higher customer satisfaction is achieved as projects are delivered on time and within budget, aligning with customer expectations and trust. • The solution has the potential to positively impact various industries, including construction, manufacturing, technology, and healthcare, by fostering efficiency and cost control.

5.	Business Model (Revenue Model)	• A subscription-based revenue model allows businesses to access our cost estimation platform for a monthly fee, providing a recurring income stream. • Partnerships with industry organizations and consulting firms create additional revenue channels by offering specialized analytics solutions. • Licensing and tiered pricing structures cater to the diverse needs of businesses, ensuring affordability and value for various customers.
6.	Scalability of the Solution	• The solution is highly scalable, accommodating the evolving needs of businesses as they grow and undertake projects of varying scales and complexities. • As the user base expands, our infrastructure can handle increased data processing and analysis requirements, ensuring a seamless experience. • The flexibility to integrate with other project management tools

		and software further enhances scalability and adaptability.

CHAPTER - 4

SOLUTION REQUIREMENTS

4.1 FUNCTIONAL REQUIREMENTS

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	**Data Collection**	Ability to collect comprehensive data about the candidates, including their demographics, political affiliations, educational backgrounds, previous political experiences, criminal records, and financial assets.
FR-2	**Data Cleaning**	Once the data is Collected, it needs to be cleaned to remove any errors or inconsistencies. This may involveremoving duplicates, correcting misspelled words, andstandardizing data format.
FR-3	**Data Preparation**	After cleaning, the data needs to be prepared for analysis. This may involve transforming data into asuitable format for analysis, such as converting categorical data into numerical data.
FR-4	**Data Analysis**	Once the data is Cleaned and Prepared, it can be analyzed using various statistical techniques. This may involve exploratory data analysis, regression analysis, and Clustering analysis to identify patterns and insights.

FR-5	**Data Visualization**	Data visualization techniques can be used to Communicate the insights from the analysis effectively. This may include creating charts, Graphs, and dashboards to visualize the data in a meaningful way.
FR-6	**Reporting**	Finally, A Report can be generated summarizing the data analysis findings. This report may include Visualizations, insights, and recommendations for companies or Job seekers based on the analysis.

NON-FUNCTIONAL REQUIREMENTS:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The System should be easy to use and intuitive for end-users, with a clear and user-friendly interface. Users should be able to access and analyze the job posting data easily without any technical knowledge.
NFR-2	**Security**	The System should be designed with robust security measures to protect the collected and analyzed data. This may include access controls, data encryption, and secure transmission protocols.
NFR-3	**Reliability**	The System should be reliable and available to end-users at all times. The System should have backup and recovery mechanisms to ensure that data is not lost in case of system failure.
NFR-4	**Performance**	The System should be able to provide quick and responsive analysis results for end-users. The System should be able to perform data analysis and generate reports promptly.

NFR-5	**Availability**	It refers to the ability of the data analysis systemto remain operational and accessible to end users. The factors include System Uptime, Performance, Redundancy, Disaster Recovery, Monitoring, and Alerting.
NFR-6	**Scalability**	The system should be capable of scaling storage capacity to accommodate the growing volume of data collected from various sources, including candidate profiles, electoral records, and other relevant information.

CHAPTER 5

PROJRCT DESIGN

5.1 SOLUTION & TECHNOLOGY ARCHITECTURE

Solution architecture refers to the process of designing and describing the structure and behavior of a software solution that addresses specific business requirements. It involves defining the components, relationships, and interactions between various software elements to create a cohesive and functional system.

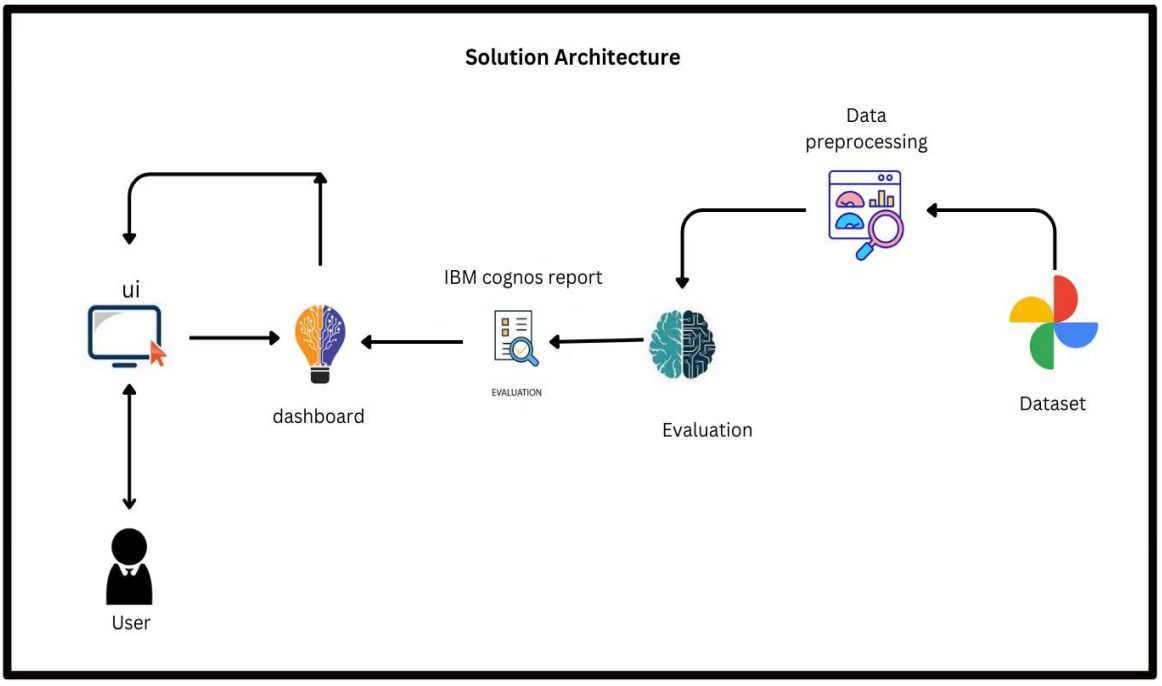

FIG 5.1.1 SOLUTION ARCHITECTURE

Technical architecture refers to the structure and organization of the hardware, software, networks, and other technical components that make up an information system or software application. It defines how these components interact and work together to support the desired functionality and performance of the system**.**

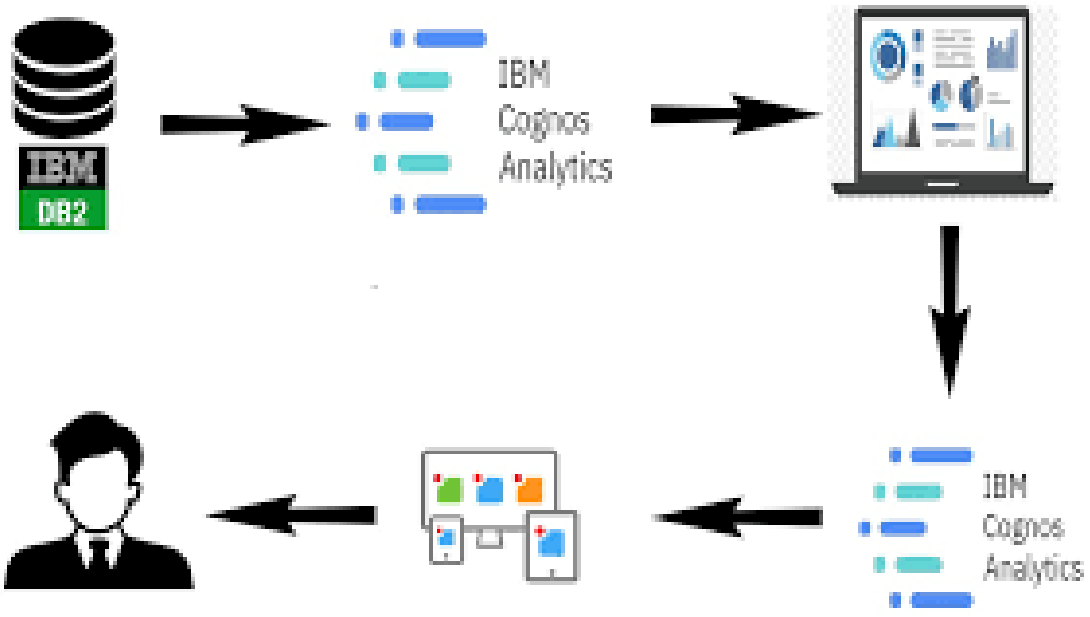

FIG 5.1.2 TECHNICAL ARCHITECTURE

5.2 DATA FLOW DIAGRAM

A data flow diagram (DFD) is a graphical representation that illustrates the flow of data within a system or process. It is commonly used in software engineering and systems analysis to visualize the movement and transformation of data as it moves through different stages or components of a system.

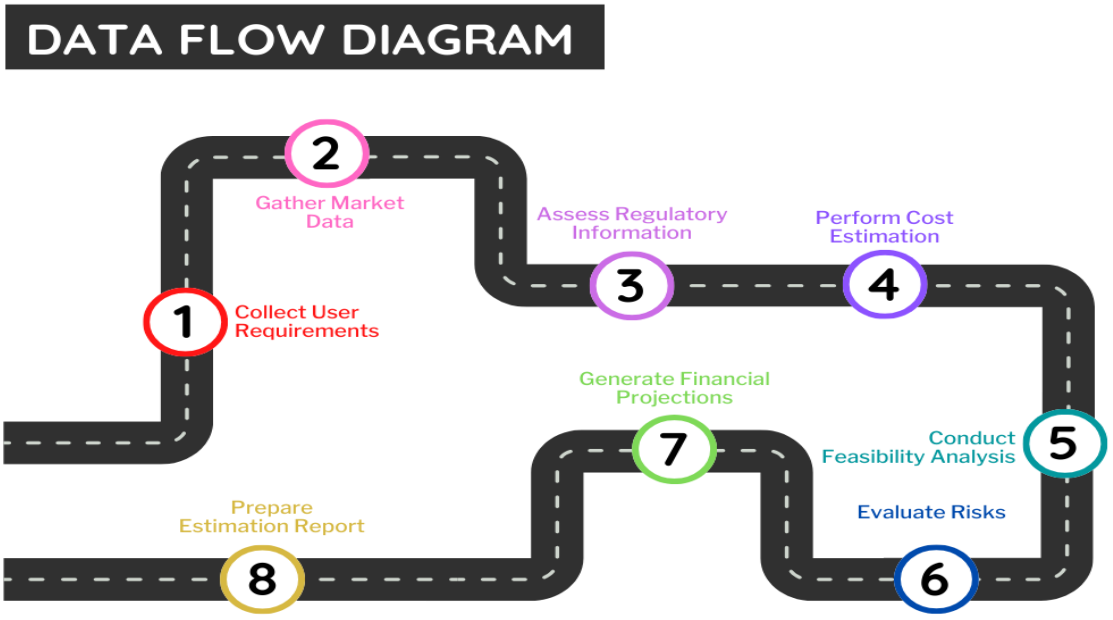

FIG 5.2 DATA FLOW DIAGRAM

5.3 USER STORIES

User story	Functional requirements	Release	User Number story	User Story	Acceptance Criteria	Priority
Hiring Manager	Salary Comparison Tool	Sprint 1	USN-1	As a project stakeholder, I want to provide user require	The tool must provide accurate salary data for different job positions within the user's	High

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				ments so that the project team underst ands my expecta tions and constrai nts effectiv ely.	industry. - The user must be able to compare salaries across different geographic locations and experience levels.	
Job Seeker	Job Listing Filtering	Sprint 1	USN-2	As a job seeker, I want to be able to filter job listings by location and salary range, so that I can easily find jobs	- The tool must allow users to filter job listings by geographic location and salary range. - The tool must provide accurate and up-to-date job listing data.	High

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				that match my preferences.		
Recruiter	Job Listing Search	Sprint 2	USN-3	As a recruiter, I want to be able to search for job listings that match specific criteria, such as industry, job title, and location, so that I can quickly identify potential candidates for open positions.	- The tool must allow users to search for job listings based on multiple criteria, including industry, job title, and location. - The search function must provide accurate and relevant results.	High

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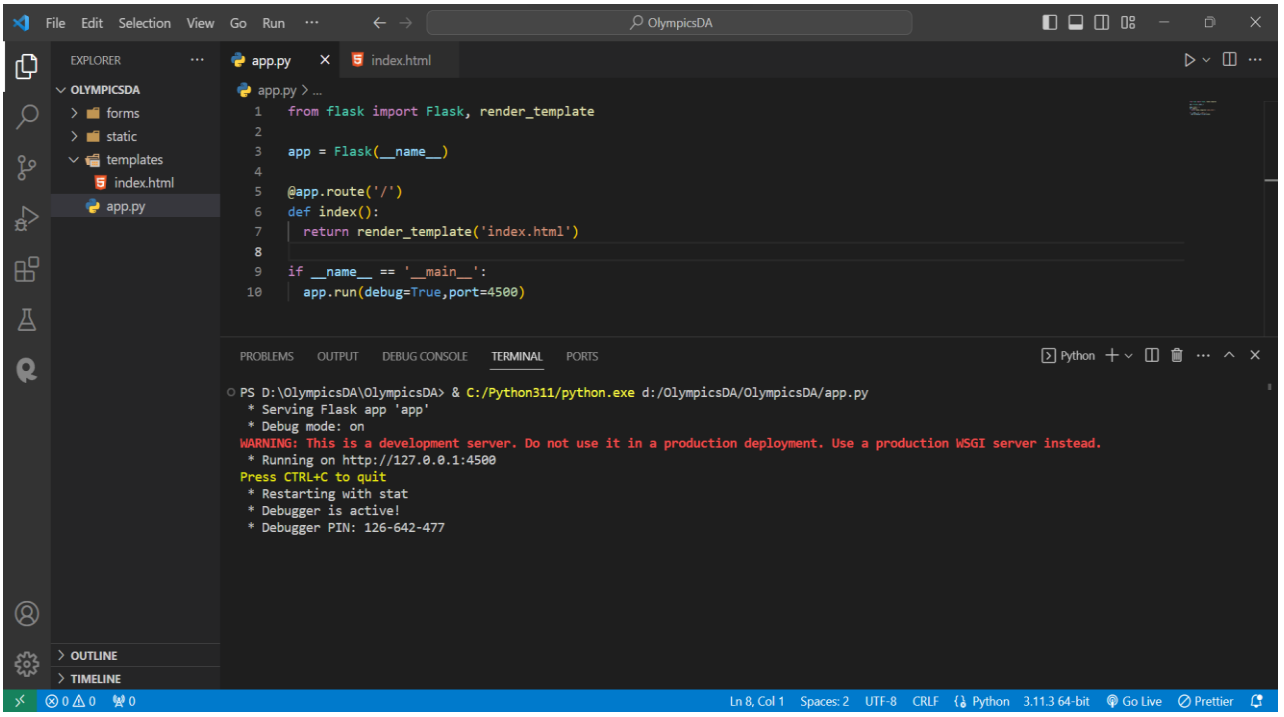
Business Owner	Market Trend Analysis	Sprint 3	USN-4	As a business owner, I want to beable to track the overall trends in the job market, such as the most in-demand skills and the average salaries for different job positions, so that I can make strategic	- The tool must provide up-to-date and comprehensive data on job market trends, including in-demand skills and average salaries. - The tool mustallow users to visualize trends overtime and across different industries.	Medium

CHAPTER - 6

CODING AND SOLUTION

6.1 FEATURE 1

```
from flask import Flask, render_template

app =Flask(__name__)

@app.route('/')

def home():

return render_template('index.html')

if __name__ == "__main__":

app.run(debug=True, port=4500)
```



6.2 FEATURE 2

DASHBOARD

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src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2FOLYMPIC%2Bdashboard&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=model0000018b46151716_00000000" width="1100" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
</section>
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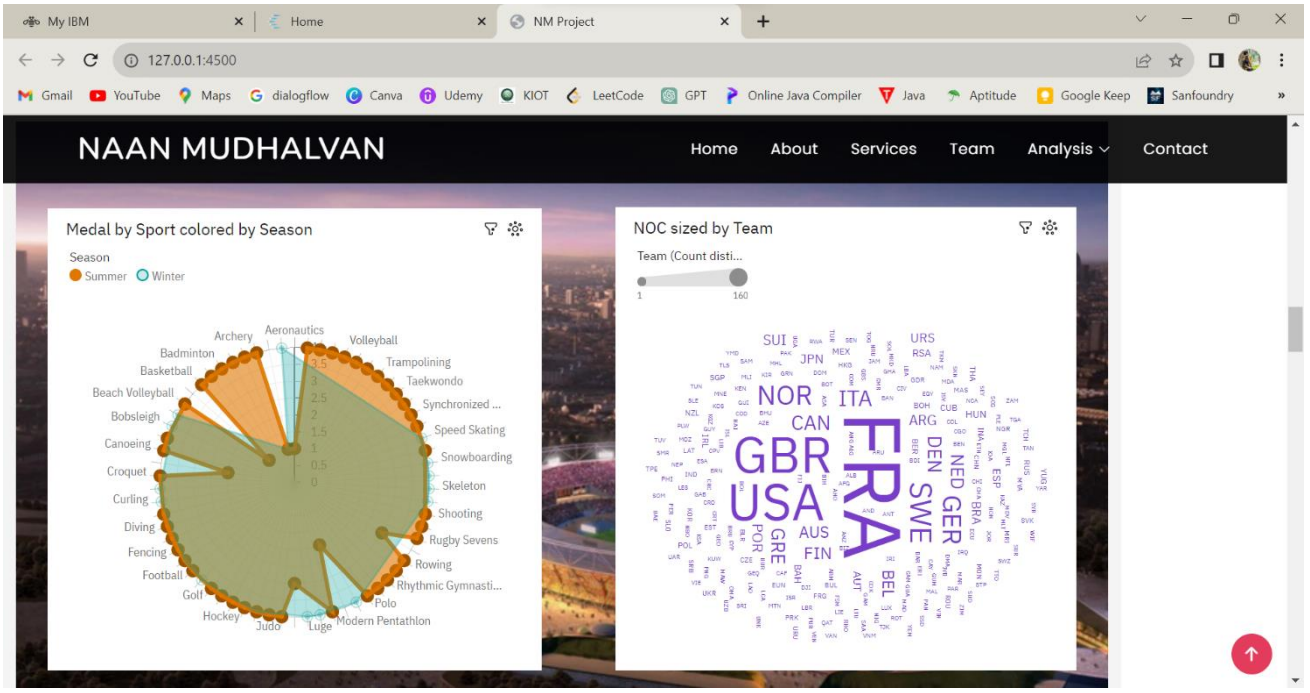

Estimation of Business Project

STORY

```
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     <h2>STORY</h2>
    <div class="container3">
     <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&amp;pathRef=.my
_folders%2FOLYMPIC%2Bstory&amp;closeWindowOnLastView=true&amp;
ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;acti
on=view&amp;sceneId=model0000018b43407087_00000000&amp;sceneTime
=0" width="1100" height="1000" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
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```

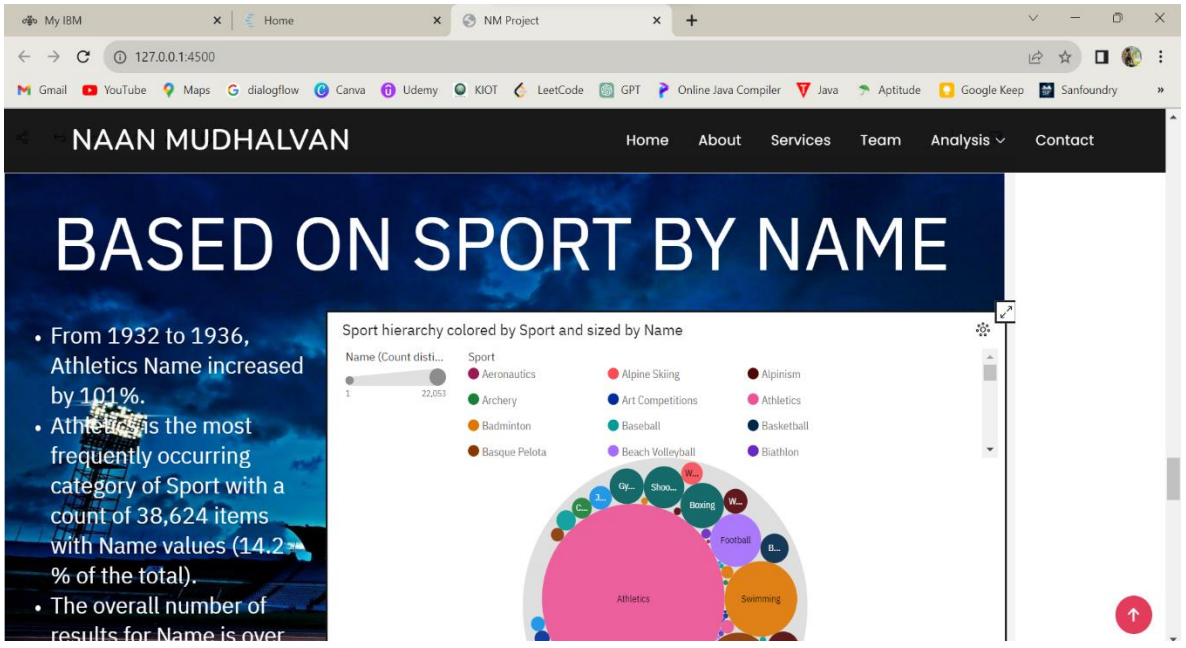

REPORT

```
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%2Breport&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;
ui_navbar=false&amp;shareMode=embedded&amp;action=run&amp;format=
HTML&amp;prompt=false" width="1100" height="1000" frameborder="0"
gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
     </div>
    </section>
```
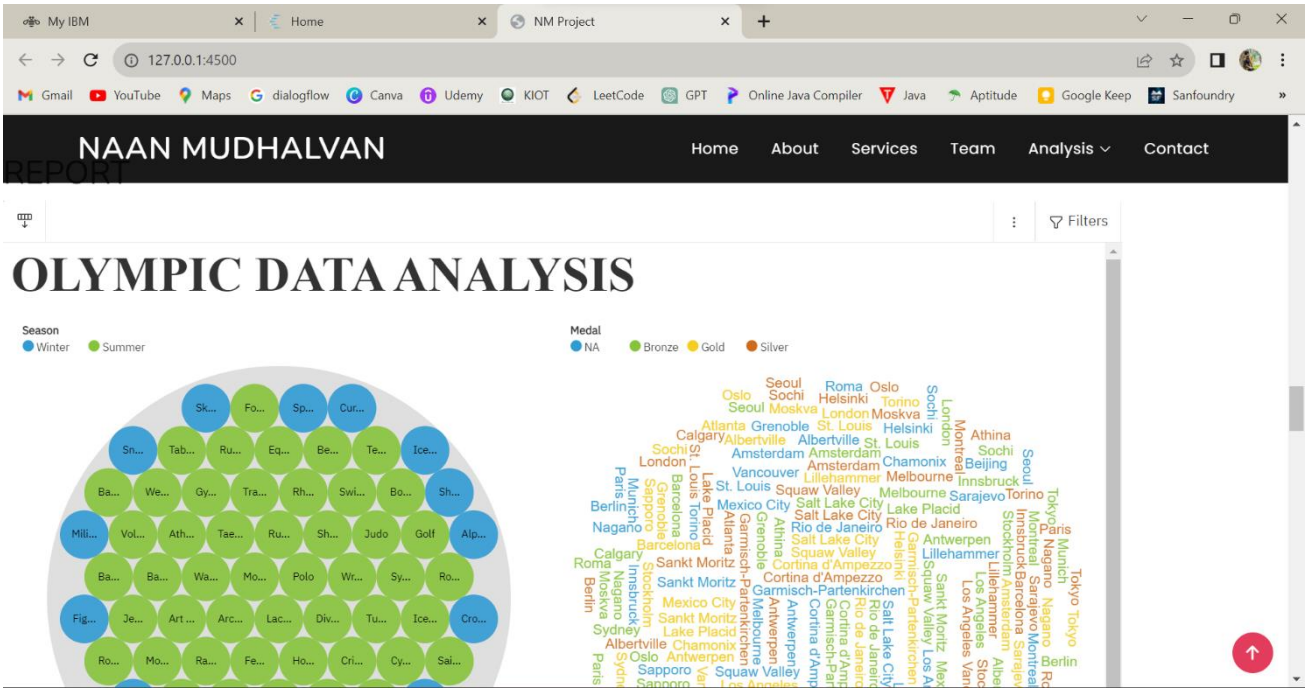
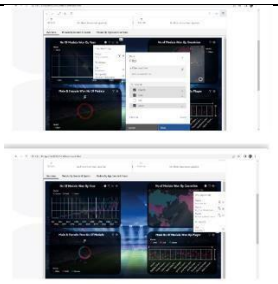

Estimation of Business Project



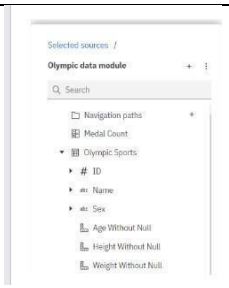
CHAPTER -7

RESULTS

7.1 PERFORMANCE METRICS

S.No	Parameter	Screenshot / Values
1.	Dashboard design	No of Visualizations / Graphs – 1. No Of Medals Won By Year 2. No of Medals Won By Countries 3. Male & Female Won No Of Medals 4. Most No Of Medals Won By Player 5. Top 3 Females Won Most No Of Medals 6. Top 3 Males Won Most No Of Medals 7. Won Gold Medals In Sports 8. Won Silver Medals In Sports 9. Male & Female Players Average Age & Height In Centimeters 10. Medal Count By Events 11. Gold, Silver & Bronze Medals Count by Team 12. Total Medal Counts By Team
2.	Data Responsiveness	

Estimation of Business Project

3.	Utilization of Data Filters	
4.	Effective User Story	No of Scene Added - 3 Scenes
5.	Descriptive Reports	No of Visualizations / Graphs - 12

CHAPTER - 8
ADVANTAGES & DISADVNTAGES

8.1 ADVANTAGES

- Improved Accuracy: Data analytics-driven cost estimation enhances the accuracy of financial projections, reducing the likelihood of budget overruns.
- Real-Time Adaptability: The solution adapts to changing project requirements and market conditions, allowing for dynamic cost updates.
- Better Decision-Making: Businesses can make more informed decisions and allocate resources efficiently, leading to improved project outcomes.
- Risk Mitigation: Advanced analytics helps in identifying and mitigating potential risks, leading to better risk management.
- Customer Satisfaction: Timely and within-budget project delivery enhances customer satisfaction and builds trust.
- Competitive Advantage: Accurate cost estimates give businesses a competitive edge in pricing and bidding on projects.

8.2 DISADVANTAGES

- Complexity: Managing and analyzing extensive data sets can be complex and resource-intensive.
- Skill Requirement: Utilizing data analytics tools and algorithms requires a skilled workforce, which may pose a challenge for some businesses.
- Initial Investment: Implementing data analytics solutions may involve initial investment in software, infrastructure, and training.
- Data Privacy: Ensuring data security and privacy compliance is crucial and may be
- Integration Issues: Integrating the solution with existing project management tools or software can be complex.
- Dependency on Data Quality: The accuracy of cost estimates depends on the quality and reliability of data sources.

CHAPTER – 9
CONCLUSION

In conclusion, "Estimation of Business Project Costs Using Data Analytics" presents a groundbreaking solution to the persistent challenge of accurate cost estimation in project management. With the application of advanced data analytics, predictive modeling, and adaptability to real-time data, the project offers numerous advantages, including enhanced accuracy, better risk management, and customer satisfaction. However, it comes with challenges such as data complexity and the need for skilled personnel.

Looking ahead, the future scope of this project is promising, with potential expansion into various industries and the integration of cutting-edge technologies. The project's applications range from construction and manufacturing to healthcare and agriculture, underscoring its versatility. As the business landscape continues to evolve, accurate cost estimation through data analytics will be a critical component of successful project management

These insights provide valuable information for formulating strategies to enhance athlete development, foster participation, and improve performance in estimation of business project. By understanding the patterns and trends revealed in this analysis, stakeholders can work towards creating more inclusive and supportive sporting environments that enable athletes to reach their full potential.

CHAPTER - 10
FUTURE SCOPE

The future scope of this analysis is vast and holds great potential for further exploration and application. Here are some key areas where this data-driven technique can have a significant impact:

1.Industry Expansion: The application of data analytics in cost estimation is likely to expand to various industries beyond construction and project management.

2. Predictive Analytics: Advanced predictive modeling will play a more prominent role, providing real-time projections and insights.

3. AI and Machine Learning: The integration of artificial intelligence and machine learning will further enhance accuracy and adaptability.

4. Cloud-Based Solutions: Cloud-based platforms will make advanced analytics accessible to smaller businesses.

5. Blockchain Integration: Data security and transparency will be improved through blockchain technology.

6. Regulatory Compliance: Solutions will evolve to meet changing regulatory and compliance requirements.

CHAPTER – 11

APPENDIX

A.1 SOURCE CODE

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

<head>
  <meta charset="utf-8">
  <meta content="width=device-width, initial-scale=1.0" name="viewport">

  <title>NM Project</title>
  <meta content="" name="description">
  <meta content="" name="keywords">

  <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,700,70
0i" rel="stylesheet">
  <!-- Vendor CSS Files -->
  <link href="/static/assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
  <link href="/static/assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">
  <link href="/static/assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
  <link href="/static/assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
  <link href="/static/assets/vendor/remixicon/remixicon.css" rel="stylesheet">
  <link href="/static/assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">

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

```
<body>

  <!-- ======= Header ======= -->
  <header id="header" class="fixed-top ">
    <div class="container d-flex align-items-center justify-content-between">

      <h1 class="logo"><a href="index.html">NAAN MUDHALVAN</a></h1>
      <nav id="navbar" class="navbar">
        <ul>
          <li><a class="nav-link scrollto active" href="#hero">Home</a></li>
          <li><a class="nav-link scrollto" href="#about">About</a></li>
          <li><a class="nav-link scrollto" href="#services">Services</a></li>
          <li><a class="nav-link scrollto" href="#team">Team</a></li>
          <li class="dropdown"><a href="#"><span>Analysis</span> <i class="bi bi-chevron-
down"></i></a>
            <ul>
              <li><a href="#dashboard">Dashboard</a></li>
              <li><a href="#Report">Report</a></li>
              <li><a href="#Story">Story</a></li>
            </ul>
          </li>
          <li><a class="nav-link scrollto" href="#contact">Contact</a></li>
        </ul>
        <i class="bi bi-list mobile-nav-toggle"></i>
      </nav><!-- .navbar -->

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

```
<section id="hero">
  <div class="hero-container">
    <h1>Data-Driven insights on Olympic Sports Participation and Performance</h1>
    <h2>Ensure fair play and integrity in the Olympic Games</h2>
    <a href="#about" class="btn-get-started scrollto">Get Started</a>
  </div>
</section><!-- End Hero -->

<main id="main">

  <!-- ======= About Section ======= -->
  <section id="about" class="about">
    <div class="container">

      <div class="section-title">
        <h2>About</h2>
        <h3>Learn More <span>About Us</span></h3>
        <p>Data-Driven insights on Olympic Sports Participation and Performance</p>
      </div>

      <div class="row content">
        <div class="col-lg-6">
          <p>Data-driven insights on Olympic sports participation and performance involve the collection, analysis, and interpretation of data related to athletes, countries, and sports events in the Olympic Games.
          </p>
          <ul>
            <li><i class="ri-check-double-line"></i> It can also help identify trends in athlete profiles over the years.</li>
            <li><i class="ri-check-double-line"></i> Data can reveal trends in the popularity of different sports over time.</li>
            <li><i class="ri-check-double-line"></i>  Studying historical data on medal counts, records, and rankings for each Olympic event can help identify trends in performance.</li>
          </ul>
        </div>
        <div class="col-lg-6 pt-4 pt-lg-0">
          <p>
            Data-driven insights in Olympic sports participation and performance rely on a combination of historical data, real-time data collection during the games, and advanced analytical techniques. These insights can be used to make informed decisions, improve training and development programs, enhance the overall Olympic experience, and promote fairness and inclusivity in the world of sports.
          </p>
        </div>
      </div>

    </div>
  </section>
```

```
 <section id="services" class="services">
     <div class="container">

       <div class="section-title">
         <h2>Services</h2>
         <h3>We do offer <span>Services</span></h3>
         <p>These insights can provide valuable information for athletes, coaches, sports
organizations, and researchers. </p>
       </div>

       <div class="row">
         <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
           <div class="icon-box">
             <div class="icon"><i class="bx bxl-dribbble"></i></div>
             <h4 class="title"><a href="">Performance Metrics</a></h4>
             <p class="description">Collecting data on athletes' physical attributes, training regimes,
and competition statistics can help identify key performance indicators.</p>
           </div>
         </div>

         <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
           <div class="icon-box">
             <div class="icon"><i class="bx bx-file"></i></div>
             <h4 class="title"><a href="">Injury Analysis</a></h4>
             <p class="description"> Data can help identify common injuries in different sports and
how they affect athletes' performance. </p>
           </div>
         </div>

         <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
           <div class="icon-box">
             <div class="icon"><i class="bx bx-tachometer"></i></div>
             <h4 class="title"><a href="">Economic Impact</a></h4>
             <p class="description"> Studying the economic impact of the Olympics on host cities and
countries can provide insights into the financial aspects of sports participation.</p>
           </div>
         </div>

         <div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">
           <div class="icon-box">
             <div class="icon"><i class="bx bx-world"></i></div>
             <h4 class="title"><a href="">Geographical Analysis</a></h4>
             <p class="description">It highlight the impact of geography on sports participation.</p>
           </div>
         </div>

       </div>

     </div>
   </section><!-- End Services Section -->
```

```
<section id="cta" class="cta">
    <div class="container">

      <div class="text-center">
        <h3>Motive</h3>
        <p> Sharing success stories and profiles of athletes can inspire future generations of Olympians. Knowing the journey and challenges faced by athletes can motivate others to pursue their Olympic dreams.</p>
        <a class="cta-btn" href="#">Return to Home</a>
      </div>

    </div>
  </section><!-- End Cta Section -->

  <!-- ======= Dashboard ========-->
  <section id="dashboard" class="dashboard">
    <h2>DASHBOARD</h2>
    <div class="container1">
      <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2FOLYMPIC%2Bdashboard&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=model0000018b46151716_00000000" width="1100" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
  </section>
  <!-- ======= Report ========-->
  <section id="Report" class="Report">
    <h2>REPORT</h2>
    <div class="container2">
      <iframe
src="https://us3.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FOLYMPIC%2Breport&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=run&amp;format=HTML&amp;prompt=false" width="1100" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
  </section>
<!-- ======= Story ========-->
  <section id="Story" class="Story">
    <h2>STORY</h2>
  <div class="container3">
    <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&amp;pathRef=.my_folders%2FOLYMPIC%2Bstory&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;sceneId=model0000018b43407087_00000000&amp;sceneTime=0" width="1100" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
  </div></section>
```

```
<section id="team" class="team">
    <div class="container">

      <div class="section-title">
        <h2>Team</h2>
        <h3>Our Hardworking <span>Team</span></h3>
        <p>Our team is well-structured, with each member contributing a unique set of skills and expertise that align with the project's needs. This diversity allows us to cover a wide range of tasks and responsibilities efficiently</p>
      </div>

      <div class="row">

        <div class="col-lg-3 col-md-6 d-flex align-items-stretch">
          <div class="member">
            <div class="member-img">
            </div>
            <div class="member-info">
              <h4>MURALIKKRISHNAN S</h4>
              <span>Team Leader</span>
            </div>
          </div>
        </div>

        <div class="col-lg-3 col-md-6 d-flex align-items-stretch">
          <div class="member">
            <div class="member-img">
            </div>
            <div class="member-info">
              <h4>MOHANASUNDARAM S G</h4>
              <span>Team Member</span>
            </div>
          </div>
        </div>
```

```
<div class="col-lg-3 col-md-6 d-flex align-items-stretch">
          <div class="member">
            <div class="member-img">
            </div>
            <div class="member-info">
              <h4>POOPATHIRAJA PERIYASAMY</h4>
              <span>Team Member</span>
            </div>
          </div>
        </div>

        <div class="col-lg-3 col-md-6 d-flex align-items-stretch">
          <div class="member">
            <div class="member-img">
            </div>
            <div class="member-info">
              <h4>OMSRE R</h4>
              <span>Team Member</span>
            </div>
          </div>
        </div>

      </div>

    </div>
  </section><!-- End Team Section -->
```

```
<!-- ======= Contact Section ======= -->
<section id="contact" class="contact">
  <div class="container">

    <div class="section-title">
      <h2>Contact</h2>
      <h3>Contact <span>Us</span></h3>
      <p>For any queries you can contact us by the below credentials</p>
    </div>

      <div class="info">
        <div class="address">
          <i class="bi bi-geo-alt"></i>
          <h4>Location:</h4>
          <p>A108 Adam Street, New York, NY 535022</p>
        </div>

        <div class="email">
          <i class="bi bi-envelope"></i>
          <h4>Email:</h4>
          <p>mailinfo@gmail.com</p>
        </div>

        <div class="phone">
          <i class="bi bi-phone"></i>
          <h4>Call:</h4>
          <p>+91 9876543210</p>
        </div>

      </div>
  </div>
</section><!-- End Contact Section -->

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

```
<!-- ======= Footer ======= -->

 <footer id="footer">


  <div class="footer-top">

   <div class="container">

    <div class="row">


     <div class="col-lg-3 col-md-6 footer-contact">

      <h3>Address</h3>

      <p>

       A108 Adam Street <br>

       New York, NY 535022<br>

       United States <br><br>

       <strong>Phone:</strong> +91 9876543210<br>

       <strong>Email:</strong> mailinfo@gmail.com<br>

      </p>

     </div>
```

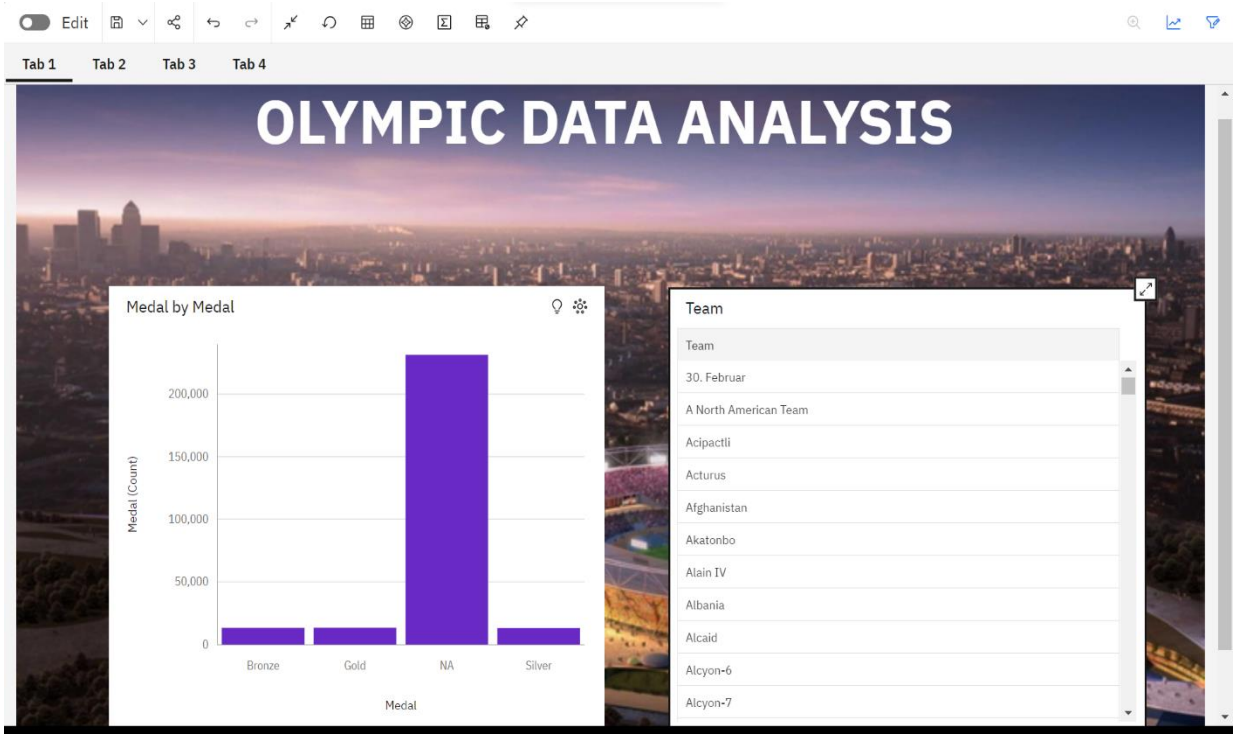
```
<div class="col-lg-2 col-md-6 footer-links">
          <h4>Useful Links</h4>
          <ul>
            <li><i class="bx bx-chevron-right"></i> <a href="#">Home</a></li>
            <li><i class="bx bx-chevron-right"></i> <a href="#about">About
us</a></li>
            <li><i class="bx bx-chevron-right"></i> <a
href="#services">Services</a></li>
            <li><i class="bx bx-chevron-right"></i> <a href="#">Terms of
service</a></li>
            <li><i class="bx bx-chevron-right"></i> <a href="#">Privacy
policy</a></li>
          </ul>
        </div>

      </div>
    </div>
  </div>
```

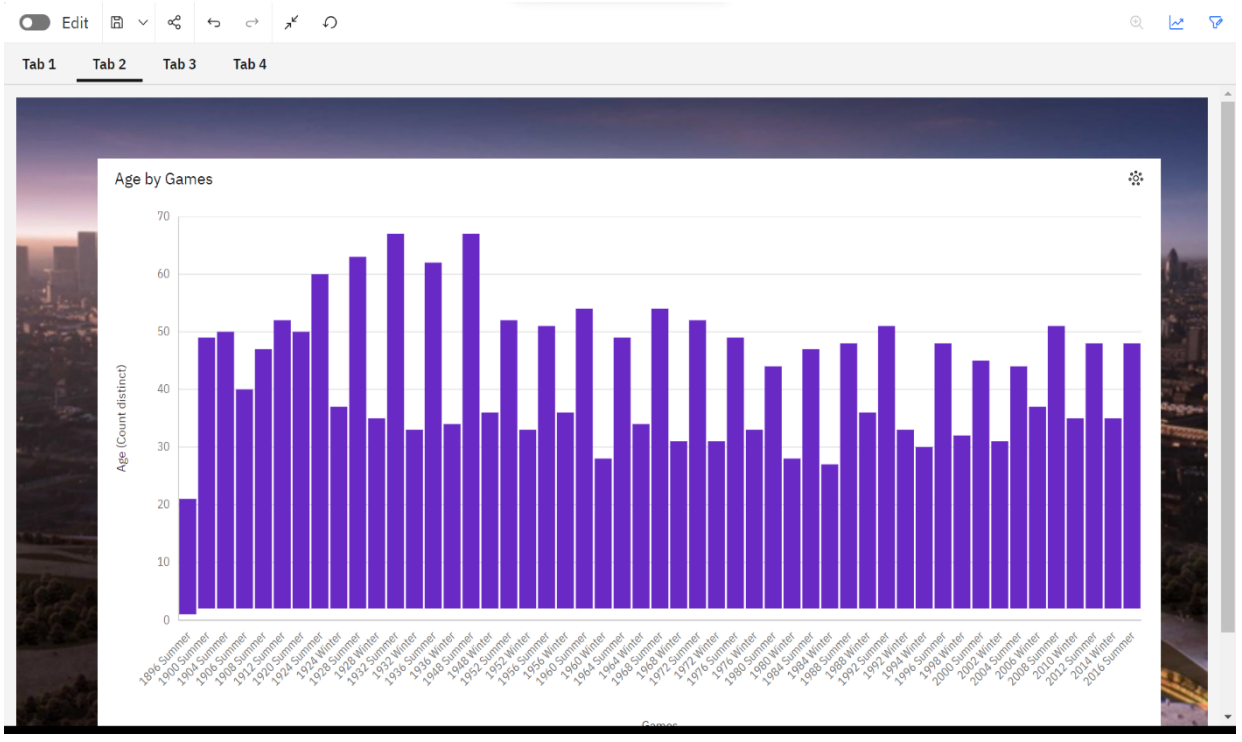
```
<div class="container d-md-flex py-4">

    <div class="me-md-auto text-center text-md-start">
      <div class="copyright">
        &copy; Copyright <strong><span>NM</span></strong>. All Rights Reserved
      </div>
      <div class="credits">
        Designed by <a href="">Murali</a>
      </div>
    </div>
    <div class="social-links text-center text-md-right pt-3 pt-md-0">
      <a href="#" class="twitter"><i class="bx bxl-twitter"></i></a>
      <a href="#" class="facebook"><i class="bx bxl-facebook"></i></a>
      <a href="#" class="instagram"><i class="bx bxl-instagram"></i></a>
      <a href="#" class="google-plus"><i class="bx bxl-skype"></i></a>
      <a href="#" class="linkedin"><i class="bx bxl-linkedin"></i></a>
    </div>
  </div>
</footer><!-- End Footer -->
```

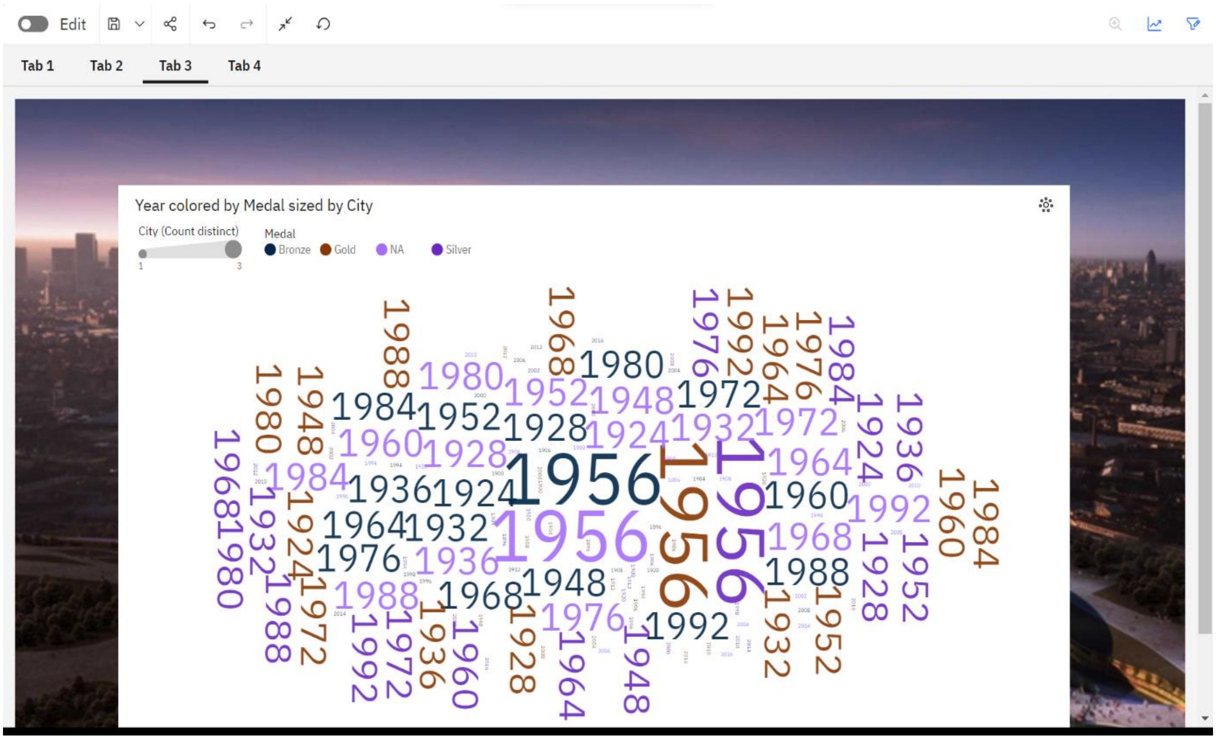
```
 <a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i
class="bi bi-arrow-up-short"></i></a>

  <!-- Vendor JS Files -->
  <script src="/static/assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
  <script src="/static/assets/vendor/glightbox/js/glightbox.min.js"></script>
  <script src="/static/assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
  <script src="/static/assets/vendor/swiper/swiper-bundle.min.js"></script>
  <script src="/static/assets/vendor/php-email-form/validate.js"></script>

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

</body>

</html>
```

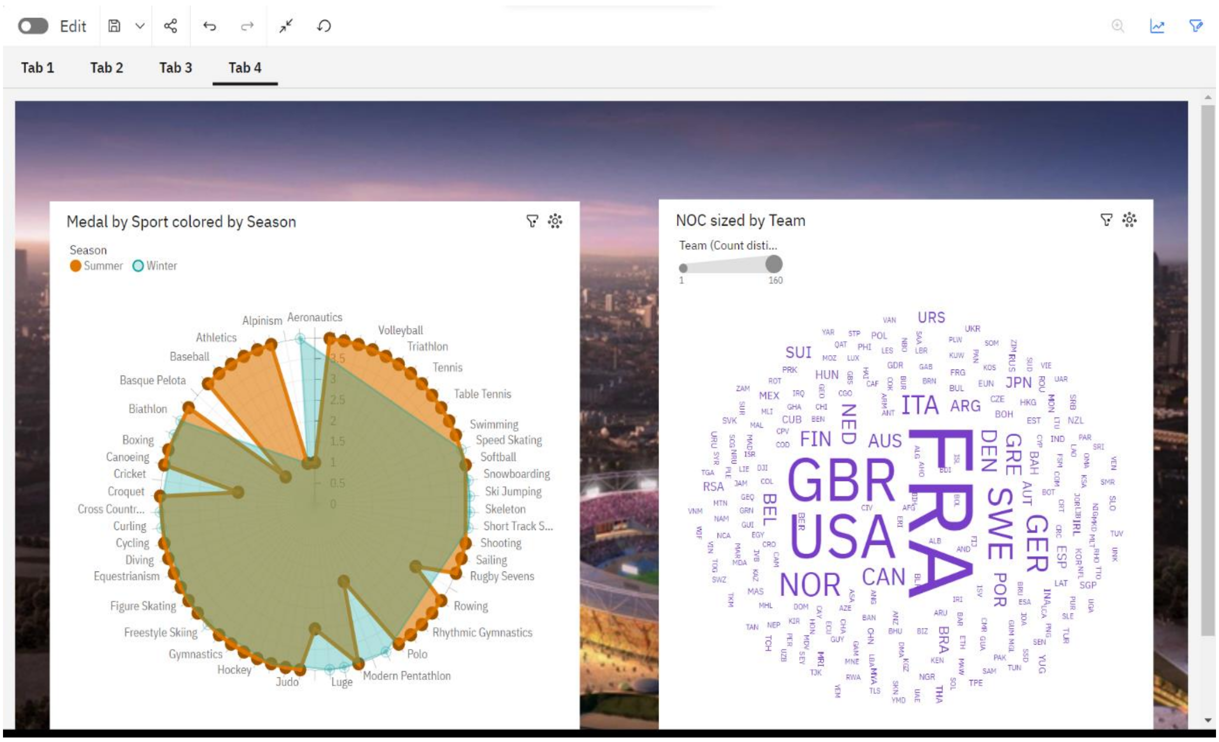
A.1 SCREENSHOT

DASHBOARD

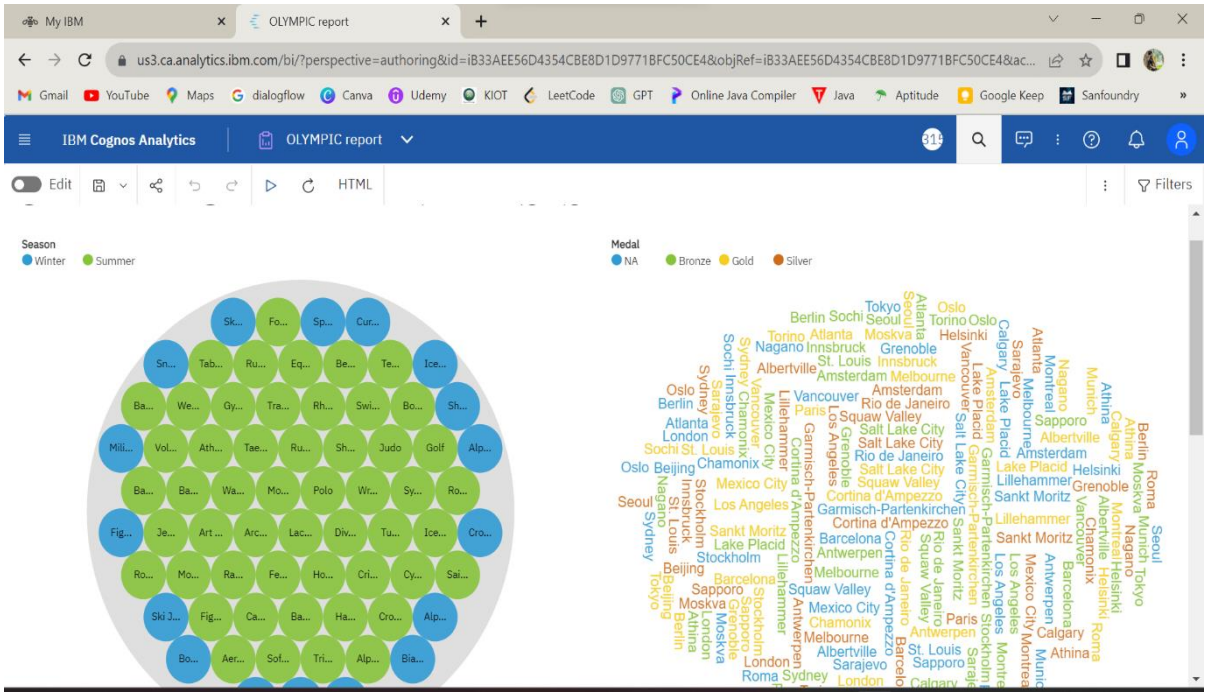





Edit
Tab 1
Tab 2
Tab 3
Tab 4
Year colored by Medal sized by City
City (Count distinct)
1
3
Medal
Bronze
Gold
NA
Silver

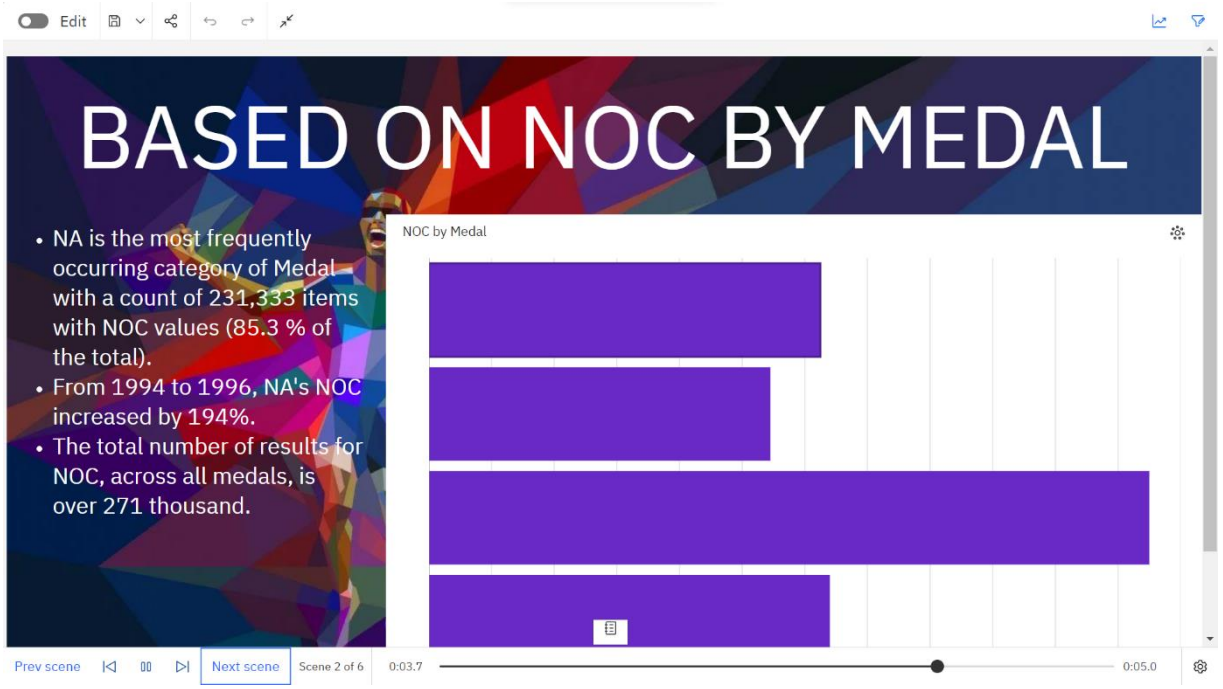

Edit
Tab 1
Tab 2
Tab 3
Tab 4
Medal by Sport colored by Season
Season
Summer
Winter
Alpinism
Aeronautics
Volleyball
Triathlon
Tennis
Table Tennis
Swimming
Speed Skating
Softball
Snowboarding
Ski Jumping
Skeleton
Short Track S...
Shooting
Sailing
Rugby Sevens
Rowing
Rhythmic Gymnastics
Polo
Modern Pentathlon
Luge
Judo
Hockey
Gymnastics
Freestyle Skiing
Figure Skating
Equestrianism
Diving
Cycling
Curling
Cross Countr...
Croquet
Cricket
Canoeing
Boxing
Biathlon
Basque Pelota
Baseball
Athletics
NOC sized by Team
Team (Count disti...
1
160
FRA
USA
GBR
NOR
CAN
SWE
GER
ITA
URS

REPORT

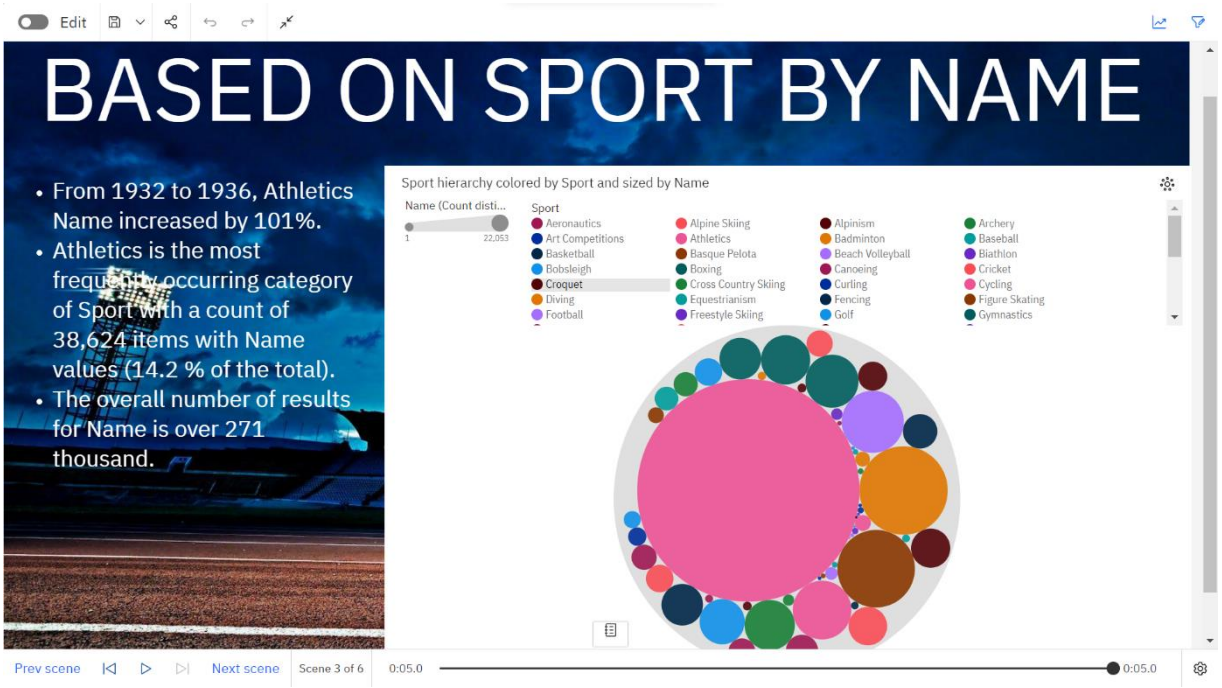

My IBM
OLYMPIC report
us3.ca.analytics.ibm.com/bi/?perspective=authoring&id=iB33AEE56D4354CBE8D1D9771BFC50CE4&objRef=iB33AEE56D4354CBE8D1D9771BFC50CE4&ac...
IBM Cognos Analytics
OLYMPIC report
Edit
HTML
Filters
Season
Winter
Summer
Medal
NA
Bronze
Gold
Silver

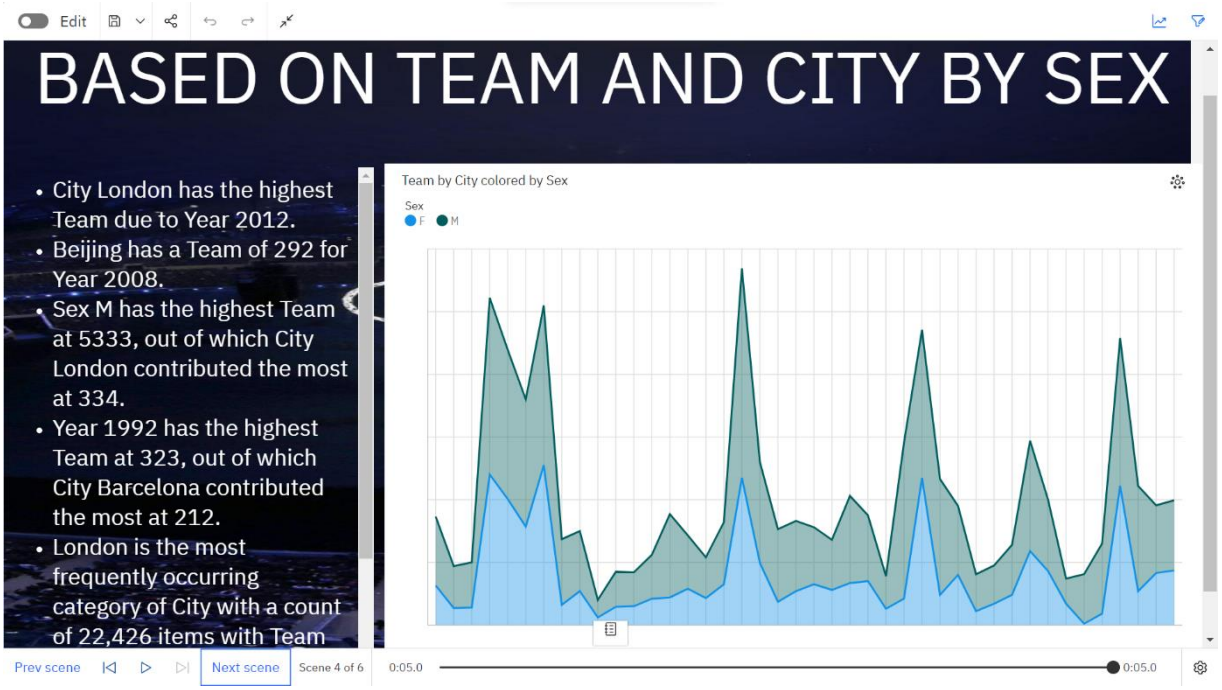
Estimation of Business Project

STORY

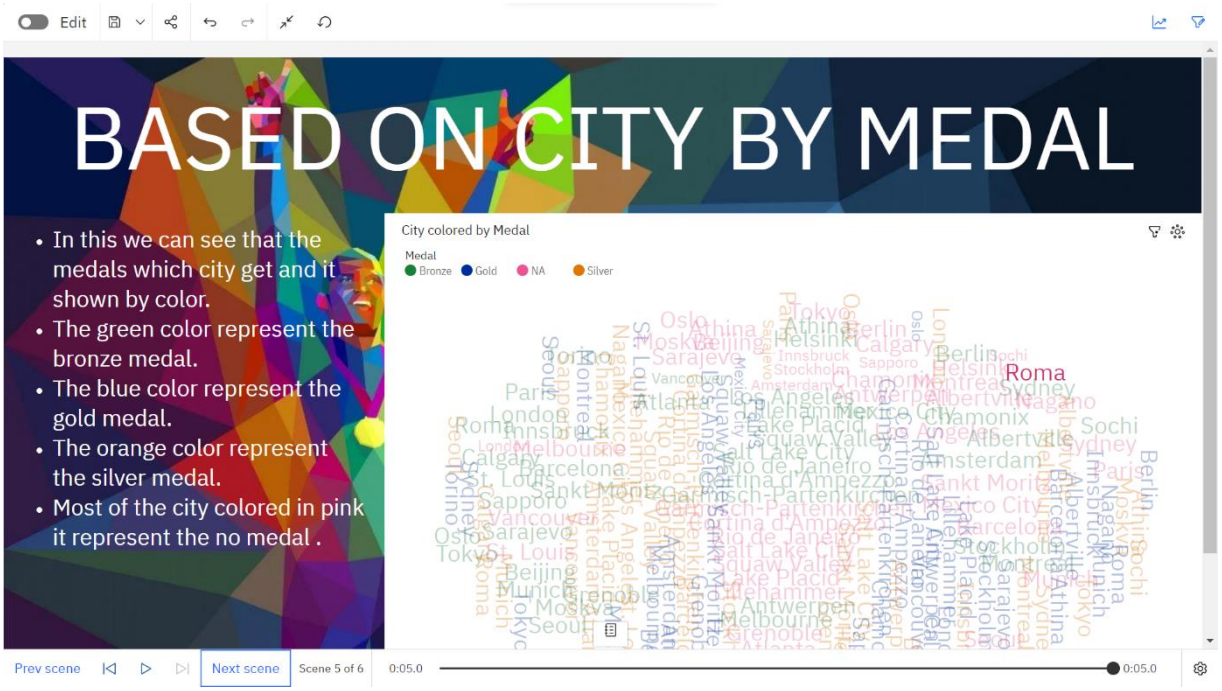


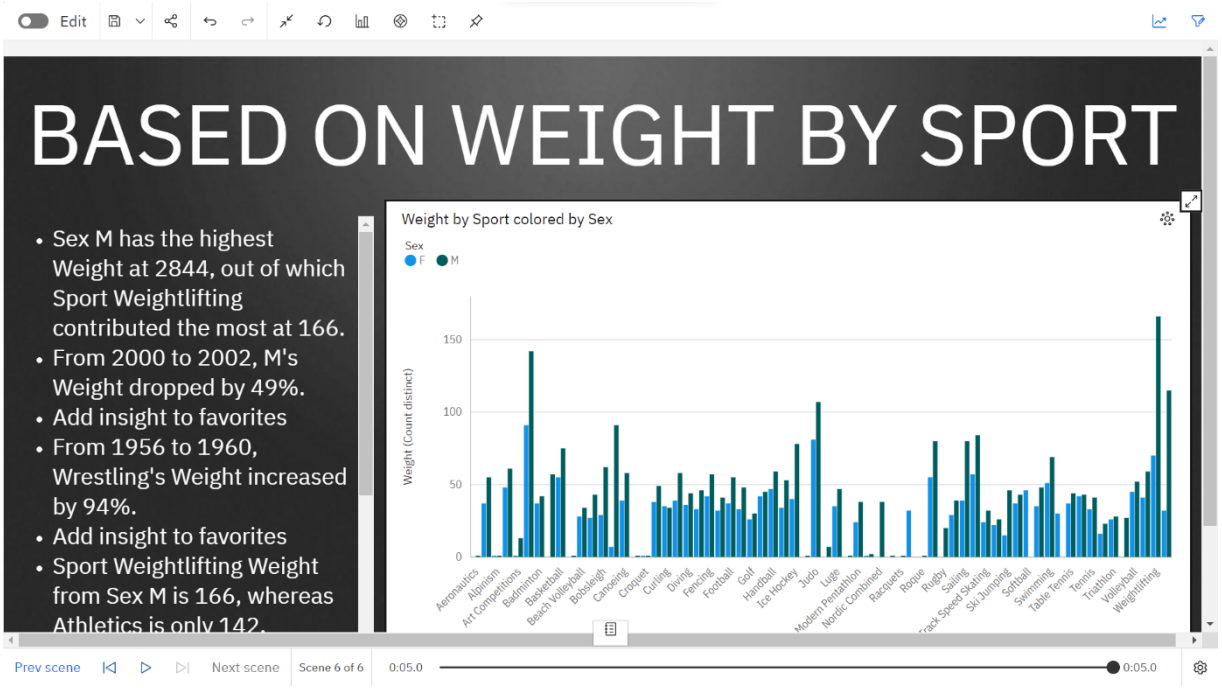
Estimation of Business Project





Estimation of Business Project





A.2 GitHub & Project Video Demo Link

A.2.1 DEMO LINK -
https://drive.google.com/file/d/19hyHV3Z5n55Y0U2tGAy7WZ8V2cK5kfr9/view?usp=drivesd

A.2.2 GITHUB

LINK –

https://github.com/naanmudhalvan-SI/PBL-NT-GP--2837-1680631168