Prince Dr. K. Vasudevan college of engg and tech

ANALYTICS TOOL FOR PLACEMENT

A PROJECT REPORT

Submitted by

Team ID: NM2023TMID09411

Team leader : Manasa G

Team members : Mothini S

Keerthana S

Nivetha P

INDEX

CHAPTER 1

INTRODUCTION

1.1 PROJECT OVERVIEW

The dataset empathize encompasses crucial information related to the placement of students in an institution identified as XYZ campus. This dataset is a valuable resource for understanding the factors that influence student employability and the outcomes of their educational journey. It comprises a diverse range of attributes, including secondary and higher secondary school percentages, which shed light on the academic foundation of the students. Furthermore, the specialization they pursued during these formative years is included, providing insight into their early academic interests. Moving forward in the academic journey, the dataset also records the degree specializations these students pursued, a significant determinant of their future career paths. The data set includes information about the type of degree programs they were enrolled in, which can vary widely in their focus and relevance to the job market. In addition to the educational background, the dataset incorporates details about work experience, a factor that can significantly influence job placement. Finally, the dataset encompasses information about the salary offers extended to these placed students, which is a key indicator of the value of the education they received and their market demand. In summary, this dataset is a comprehensive repository of information that offers a holistic view of the dynamics and outcomes of student placement within the XYZ campus, making it a valuable resource for analysis and insights into the world of education and employment.

1.2 PURPOSE

Choosing the right data analytics tool for placement purposes is crucial for universities, colleges, or recruitment agencies aiming to match students or job seekers with suitable career opportunities. To make an informed decision, you need a tool that offers a comprehensive range of features. An ideal data analytics tool for placement purposes should possess several key characteristics. First and foremost, it should have robust data integration capabilities, allowing it to seamlessly gather and consolidate data from various sources, such as student records, job listings, and industry trends. Moreover, the tool should offer advanced data cleansing and transformation capabilities to ensure data accuracy and consistency.

Data visualization is another critical aspect. The tool should provide interactive and customizable dashboards, charts, and graphs that allow users to gain insights at a glance. These visualizations should be capable of representing placement trends, job market demands, and individual student profiles effectively. Machine learning and predictive

analytics are indispensable components in the context of placements. The tool should be equipped with predictive modeling features that can forecast placement success based on historical data, student performance, and industry dynamics. This enables educational institutions to proactively identify students who may need additional support and guidance.

User-friendliness is key, as many placement professionals may not have a strong background in data analytics. The tool should have an intuitive user interface and easy-to-configure settings, allowing non-technical users to create reports and analyze data effortlessly. Scalability and flexibility are vital, as the tool should adapt to the changing needs of educational institutions and recruitment agencies. It should accommodate a growing volume of data and support customizations to address unique placement scenarios.

data security and privacy are paramount, given the sensitive nature of student and job seeker information. The tool should comply with data protection regulations and ensure that data is encrypted and accessible only to authorized personnel. the ideal data analytics tool for placement purposes should encompass data integration, visualization, predictive analytics, user-friendliness, scalability, and robust security features to effectively match students and job seekers with their desired career paths and foster successful placements. Selecting the right analytics tool for your placement project is a critical decision.

CHAPTER 2

LITRATURE SURVEY

2.1 EXISTING SYSTEM

The existing problems faced by institutions or agencies in the context of placement can be multifaceted and challenging to address effectively. These issues underscore the need for a robust data analytics tool for placement purposes. Here is an extended paragraph discussing the existing problems. One of the primary challenges faced by educational institutions and recruitment agencies in the context of placement is the sheer volume of data. Managing and making sense of vast amounts of information, such as student records, job postings, and industry trends, can be overwhelming without the right tool. The lack of a centralized and integrated data solution often results in data silos, making it difficult to gain holistic insights into placement activities.

Data quality is another significant issue. Inaccurate, incomplete, or outdated information can lead to misguided decisions and hinder the effectiveness of placement initiatives. Traditional manual data management processes are often error-prone and time-consuming, exacerbating the problem. Moreover, without advanced data analytics capabilities, institutions and agencies struggle to derive meaningful insights from the data they collect. They may miss valuable opportunities to identify trends, understand the dynamics of the job market, and predict student success, all of which are vital for successful placements.

The absence of data visualization tools compounds these issues. Without the ability to represent data in a visually comprehensible manner, stakeholders have difficulty understanding the complexities of placement dynamics. This can lead to misinformed decisions and reduced placement success rates. Another major problem is the lack of predictive analytics. Without the ability to leverage historical data and employ predictive models, institutions and agencies are often reactive in their approach to placements. This means they may not identify students who require extra support or anticipate future job market demands effectively.

Furthermore, the complexity and steep learning curve of some existing tools can be a hindrance. Professionals in placement may not have a strong background in data analytics, and tools that are overly complex can deter them from utilizing data to its full potential.

2.2 REFERENCE

[1]. Bishop, C.M. (2006) Pattern Recognition and Machine Learning. Springer. ISBN0-387- 31073- 8.

[2]. Rokach, L and O. Maimon (2008)Data mining with decision trees: theory and applications.World Scientific Pub Co Inc. ISBN 978-98127717711

[3]. Pedregosa, F , G. Varoquax, A. Gramfort, V. Michel, B. Thrion, O. Grisel, M.Blondel, P. Prettenhofer, R. Weiss, V. Dubourg, J. Vanderplas, A. Passos and D.

Cournapeau(2011)Scikit-learn: Machine Learning in Python. Journal of Machine Learning Research 12: 2825-2830
[4]. Abijith Sankar, P. Divya Bharathi, M. Midhun, K. Vijay, and T. Senthil Kumar, "A Conjectural Study on Machine Learning Algorithms," In Advances in Intelligent Systems and Computing published – Springer – from the proceedings of International Conference ICSCS 2015 2016, Vol.397, pp. 105-116.
[5]. Pal, A.K. and S. Pal (2013)Analysis and Mining of Educational Data for Predicting the Performance of Students. (IJECCE) International Journal of ElectronicsCommunication and Computer Engineering, Vol. 4, Issue 5, pp. 1560-1565, ISSN: 2278-4209, 2013.
[6]Ramanathan, L., P. Swarnalathat and G.D. Gopal (2014)Mining Educational Data for Students' Placement Prediction using Sum of Difference Method. International Journal of Computer Applications 99(18): 36-39
[7]. Arora, R.K. and Dr. D. Badal (2014)Placement Prediction Through Data Mining.International Journal of Advanced Research in Computer Science and Software Engineering. Volume 4, Issue 7
[8]. Elayidom, S., S. M. IdikkulaandJ.Alexander(2011)A Generalized Data mining Framework for Placement Chance Prediction Problems. International Journal of Computer Applications(0975– 8887) Volume 31– No.3
[9]. Naik, N. and S. Purohit(2012) Prediction of Final Result and Placement of Students using Classification Algorithm. International Journal of Computer Applications (0975 – 8887) Volume 56- No.12 [11]. Hijazi, S.T. and R. S. M. M. Naqvi (2006)Factors affecting student's performance: A Case of Private Colleges, Bangladesh e-Journal of Sociology, Vol. 3, No

2.3 PROBLEM STATEMENT DEFINITELY

BBBA data analytics tool for the placement problem statement is a comprehensive software solution designed to address the challenges associated with optimizing and enhancing the process of job placement. Such a tool would leverage a variety of data sources and analytical techniques to streamline the entire placement process, from candidate selection to job matching.

Data Integration: The tool should be able to integrate data from multiple sources, including resumes, job listings, candidate profiles, and historical placement data. This data can come in various formats, such as text, structured data, and multimedia, and the tool should be able to process it effectively.

Machine Learning Algorithms: Incorporating machine learning algorithms is crucial for this tool. It should be able to analyze candidate resumes and job descriptions to identify relevant skills, experience, and qualifications, ultimately matching candidates with suitable job openings.

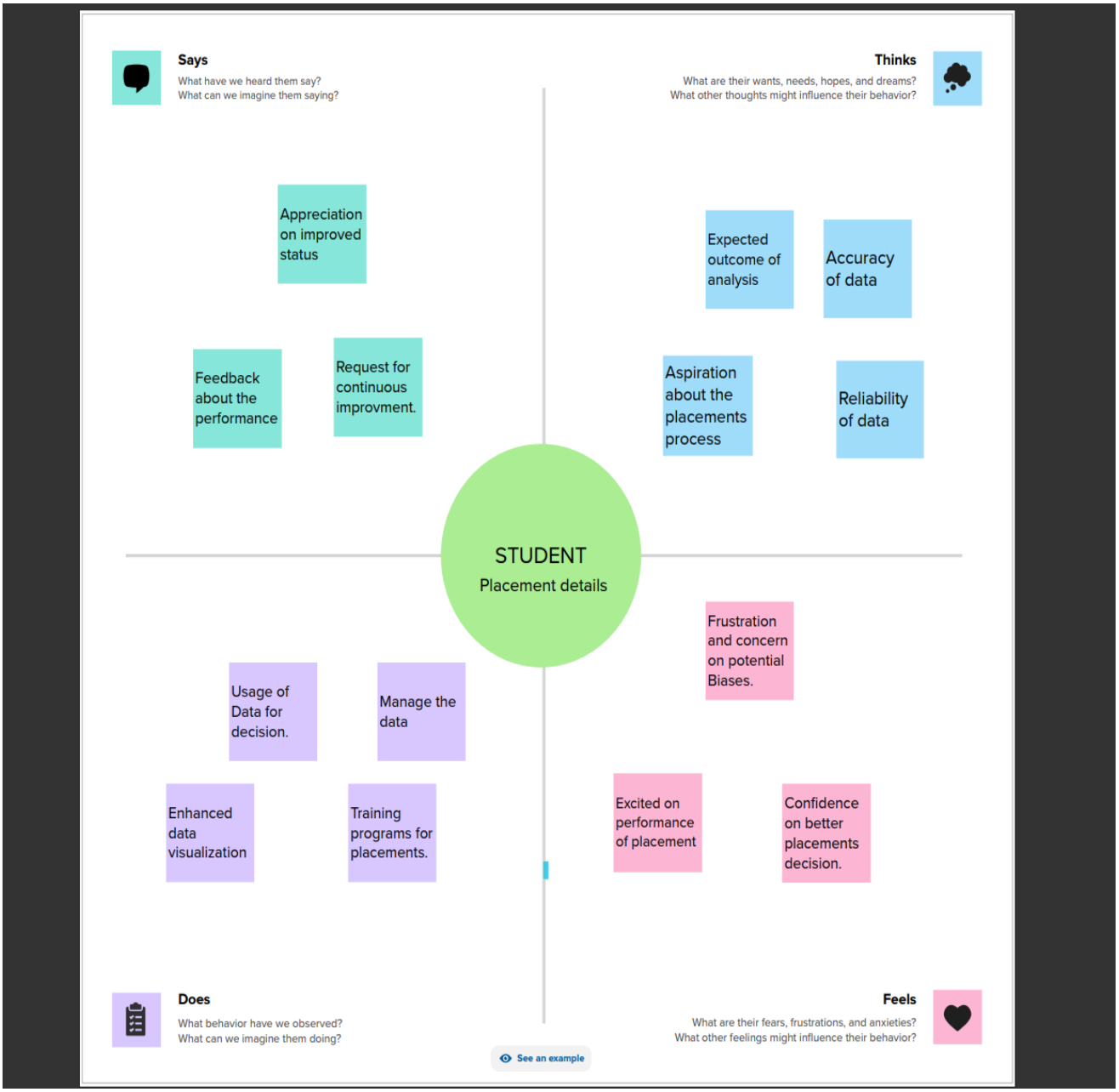
Predictive Analytics: The tool should provide predictive analytics to forecast the success of a particular placement based on historical data and performance metrics. This can help in making more informed placement decisions.

Recommendation Engine: A recommendation engine should be part of the tool, suggesting potential job matches for candidates and suitable candidates for job openings. These recommendations can be based on skills, location, job preferences, and more.
Data Visualization: Data analytics is most effective when it's presented in a user-friendly way. The tool should offer data visualization capabilities, such as interactive dashboards and charts, to help recruiters and HR professionals make sense of the data and trends.
Automation: The tool should automate various aspects of the placement process, such as resume screening, interview scheduling, and even the generation of offer letters. This reduces manual workload and speeds up the placement process.
Customization: Different organizations have unique placement needs. The tool should be customizable, allowing companies to define their own criteria for candidate selection, matching, and scoring**.**
Scalability: The tool should be able to handle a large volume of data and scale with the organization's needs. This is particularly important for companies that have substantial hiring requirements.

CHAPTER 3

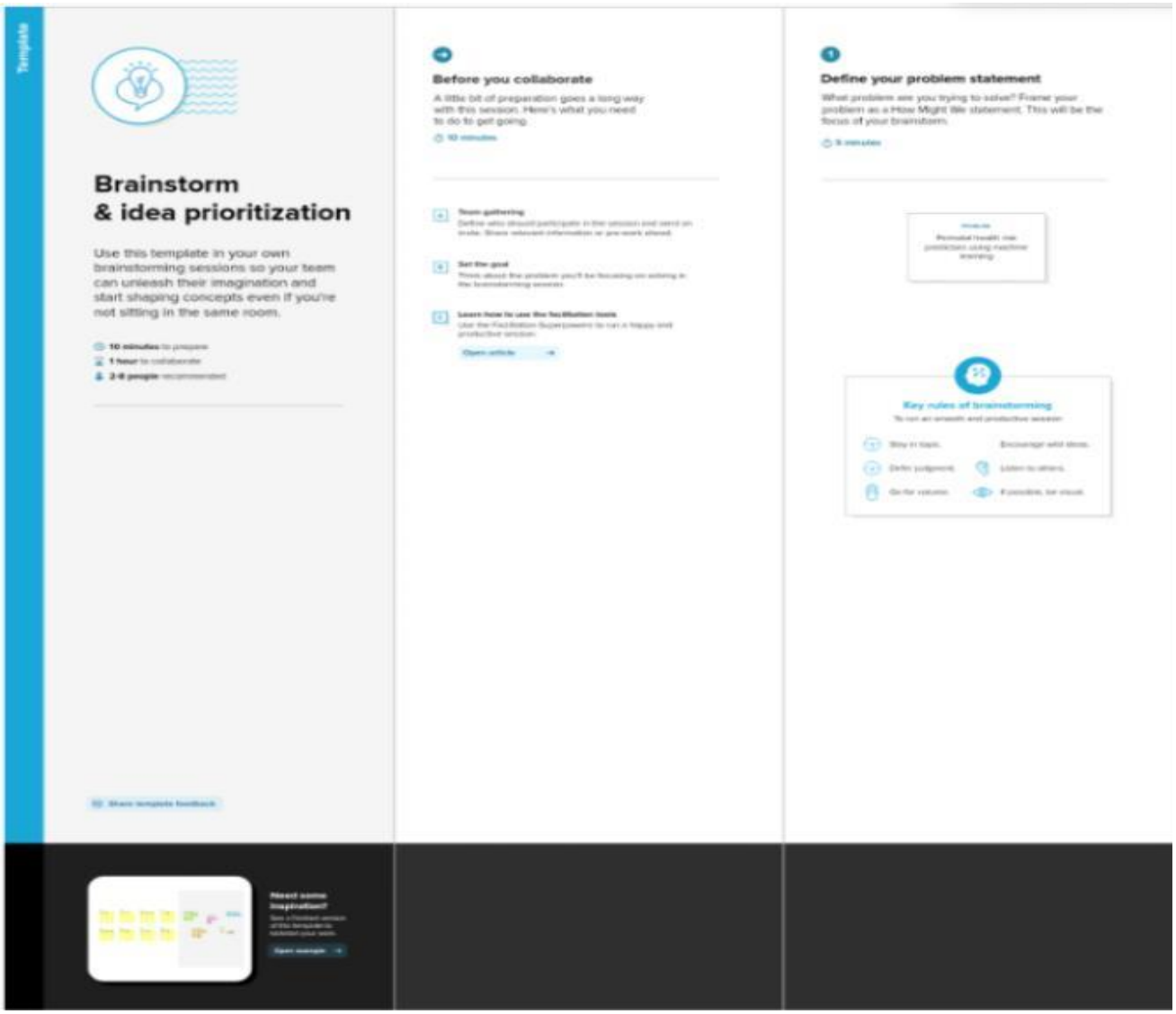
IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP

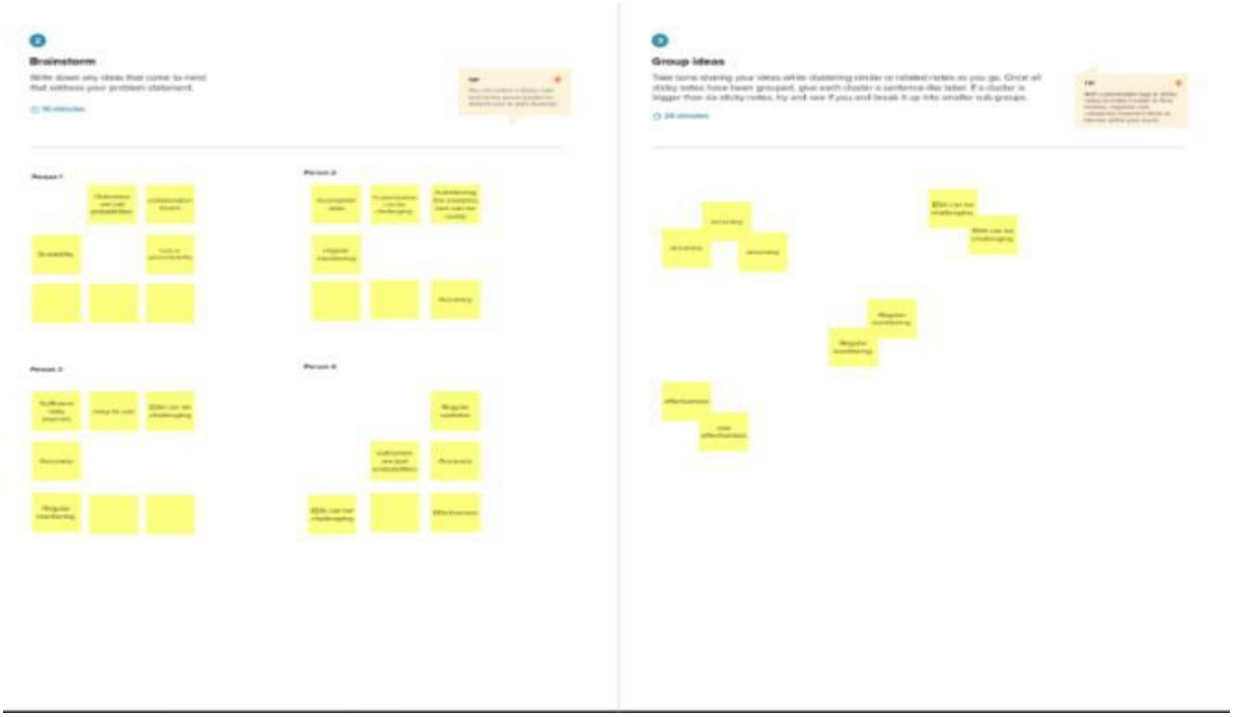


3.2 Ideation & Brainstorm

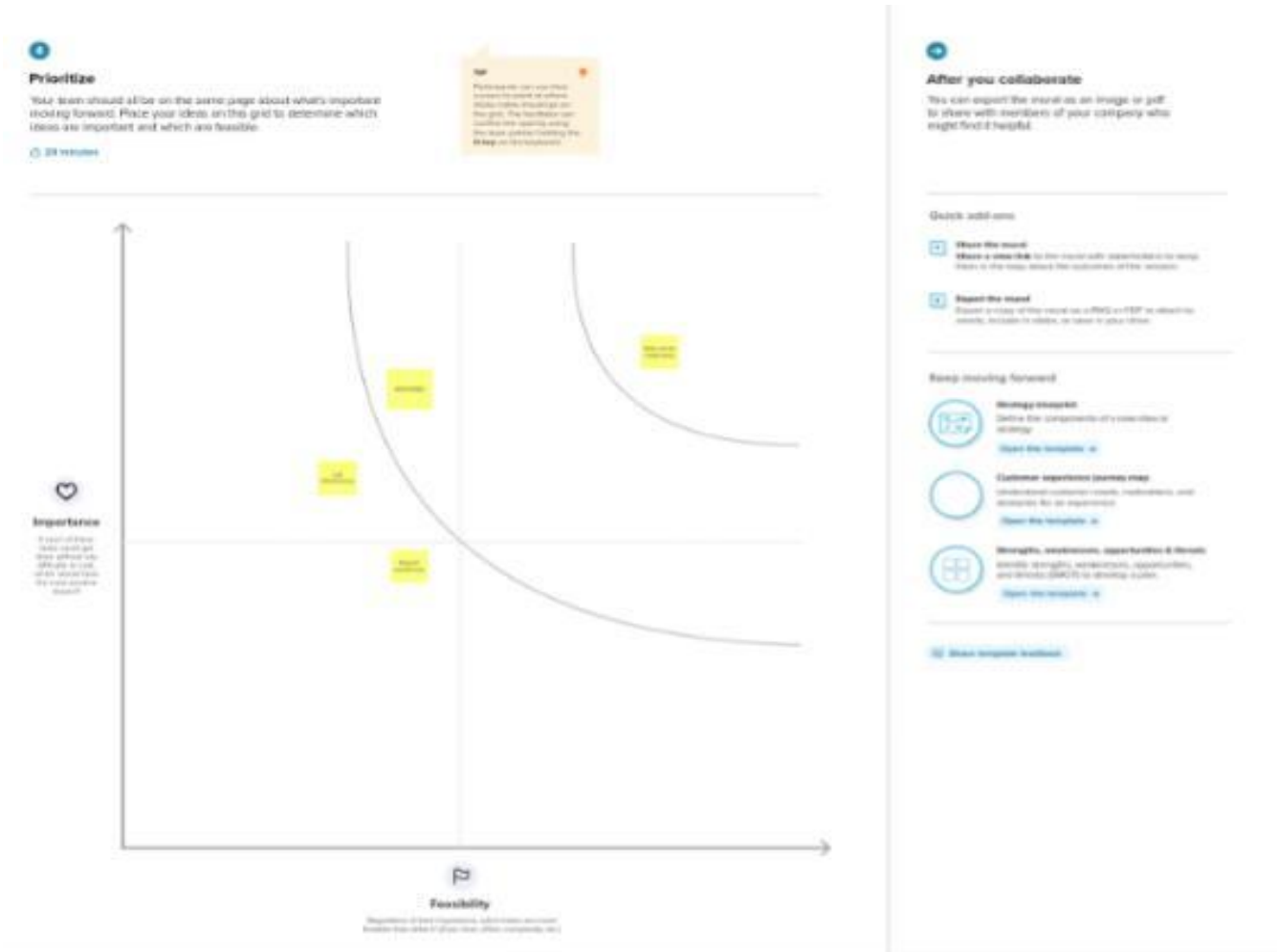
Step-1: Team Gathering, Collaboration and Select the Problem Statement



Step-2: Brainstorm, Idea Listing and Grouping



Step-3: Idea Prioritization



CHAPTER 4

REQUIREMENTS ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

1. **User Management**:
   - User roles and permissions, such as administrator, recruiter, and candidate.
   - User registration and login.
   - Password management and reset.

2**. Data Integration**:
   - Ability to import data from various sources, including file uploads, API integrations, and database connections.
   - Data validation and cleaning to ensure data quality.
   - Real-time or scheduled data updates.

3. **Candidate Management**:
   - Candidate profile creation with fields for personal information, education, work experience, and skills.
   - Resume upload and parsing for automated data entry.
   - Candidate search and filtering options.

4. **Job Posting Management**:
   - Job creation with detailed descriptions, qualifications, and location.
   - Job status tracking, including open, closed, and in-progress positions.
   - Customizable job templates.

5. **Resume Screening and Matching**:
   - Automated screening using machine learning algorithms to match resumes with job criteria.
   - Scoring system to rank candidate-job matches.
   - Keyword-based and skills-based matching.

6. **Recommendation Engine**:
   - Personalized job recommendations for candidates.
   - Algorithms for tracking and improving recommendation accuracy.

7. **Interview Management**:
   - Interview scheduling and coordination.
   - Calendar integration for interviewers and candidates.
   - Interview feedback collection and analysis.

8. **Customized Workflow**:

- Workflow builder to define the recruitment process stages.
- Customizable approval processes and notifications.

9**. Reporting and Analytics**:
- Predefined and custom reports for placement performance.
- Data visualization tools like charts and graphs.
- Exporting reports in various formats (PDF, CSV, etc.).

10. **Data Security and Compliance**:
- Access controls and user authentication.
- Data encryption in transit and at rest.
- Compliance with data protection regulations (e.g., GDPR).

11. **Feedback Mechanisms**:
- Candidate and employer feedback forms.

4.2 NON-FUNCTIONAL REQUIREMENTS

1.**Performance**:
-The chosen analytics tool should be capable of handling large volumes of data efficiently and provide quick response times.
-It should support parallel processing and optimization techniques to ensure that placement recommendations are generated swiftly, especially during peak usage periods.

2.**Security**:
-Data security is paramount, given the sensitive nature of placement-related information.
-The tool should offer robust data encryption, access control, and authentication mechanisms to safeguard candidate and employer data.

3.**Scalability**:
-As the number of candidates and job openings can fluctuate significantly, the analytics tool must be scalable to accommodate growth without compromising performance.
-It should support horizontal and vertical scaling options to handle increasing workloads effectively.

4.**Reliability**:
-Placement is a critical process, and any downtime or data loss can be detrimental.
- The analytics tool should have a track record of high availability and offer data backup and disaster recovery features to ensure the system remains operational even in the face of unexpected issues.

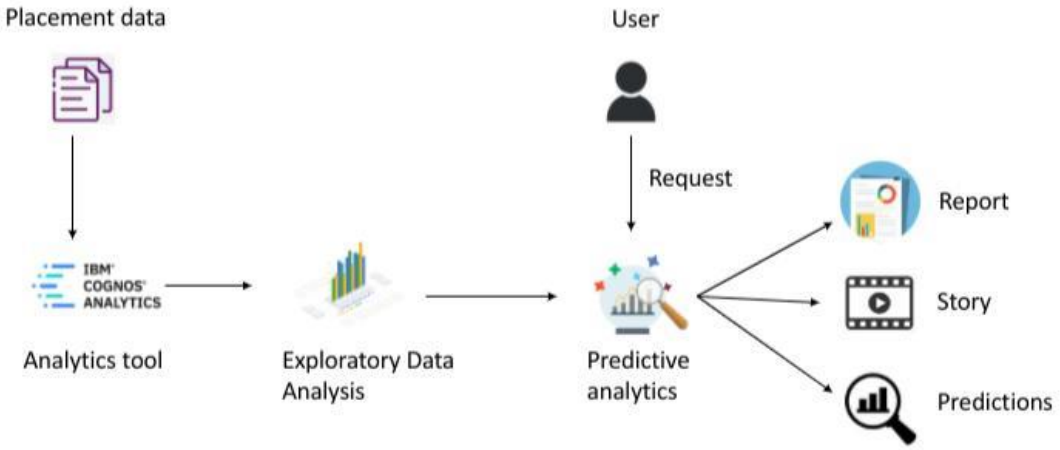
5.**Usability**:
-The tool should be user-friendly for both administrators and end-users, such as placement coordinators and job seekers.

CHAPTER 5

PROJECT DESIGN

5.1 Data Flow Diagrams & user stories

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.



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
Student (Mobile user)	Login	USN-1	Create and manage my profile.	I can create and manage my profile.	High	Manasa
Student (Mobile user)	Visualization	USN-2	View analytics on how my skills match industry requirements.	I can view analytics on how my skills match industry requirements	Medium	Nivetha
Student (Mobile user)	Login	USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Manasa
Student (Mobile user)	Login	USN-4	As a user, I can register for the application through Gmail	I can register & access the dashboard with Gmail	Low	Keerthana
Student (Mobile user)	Notification	USN-5	Receive personalized notifications	I can receive personalized notifications	Low	Mothini
University	Dashboard	USN-6	Provide students with access to valuable career insights and tools.	I can access valuable career insights and tools	High	Mothini
Employer	Usability	USN-7	Access reports on the effectiveness of my recruitment process.	I can acces reports	High	Nivetha
University	Communication	USN-8	Facilitate communication between students and potential employers.	I can communicate with employers	Medium	Keerthana
Administrator	Response	USN-9	Review and respond to user feedback and suggestions.	I can review and respond to user feedback	Medium	Nivetha
Employer	Visualization	USN-10	View analytics on the suitability of candidates.	I can view analytics	High	Mothini
University	Integration	USN-11	Track and improve placement rates and success	I can track and improve placement rates and success	Medium	Keerthana
Administrator	Maintenance	USN-12	Monitor the overall performance of the tool.	I can monitor overall performance of the tool	High	Manasa

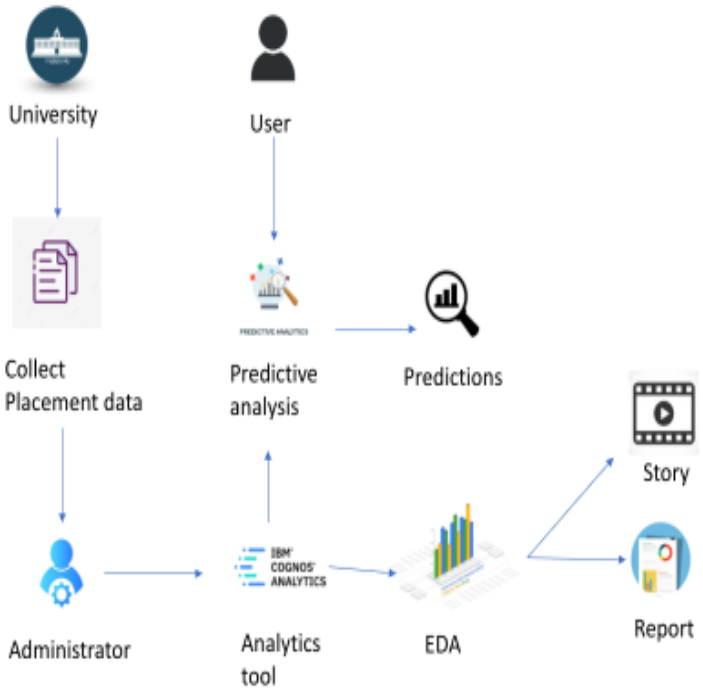
5.2 SOLUTION ARCHITECTURE

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

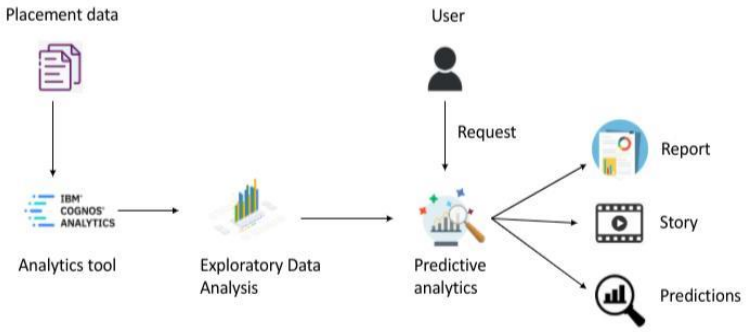
Example - Solution Architecture on Analytical Tool for Placements



CHAPTER – 6

PROJECT PLANNING & SCHEDULING

6.1 Technical architecture :



6.2 Sprint Planning & Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Login	USN-1	As a recruiter, I want to be able to create and manage job listings.	2	High	Keerthana
Sprint-1		USN-2	As a student, I want to upload my resume to the platform.	1	High	Manasa
Sprint-1		USN-3	As an administrator, I want to generate placement reports for different time periods.	2	Low	Nivetha
Sprint-2	Features	USN-4	Resume parsing and analysis functionality.	2	Medium	Mothini
Sprint-2		USN-5	Job listing and application management. Reporting and analytics dashboard.	1	High	Nivetha
Sprint-3	Enhancements	USN-6	Integration with third-party job portals. Notification system for job updates.	2	Medium	Manasa
Sprint-3		USB-7	Machine learning algorithms for resume matching.	3	High	Keerthana

6.3 Sprint Delivery Schedule:

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	8	1 week	23 Oct 2023	29 Oct 2023	13	28 Oct 2023
Sprint-2	10	2 weeks	30 Oct 2023	12 Nov 2023		
Sprint-3	15	2 weeks	13 Nov 2023	25 Nov 2023		
Sprint-4	12	1 week	26 Nov 2023	02 Dec 2023		
Sprint-5	20	2 weeks	03 Dec 2023	15 Dec 2023		

CHAPTER 7

CODING & SOLUTIONING

7.1 Feature 1:

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

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

  <title>Inner Page - Gp Bootstrap Template</title>
  <meta content="" name="description">
  <meta content="" name="keywords">

  <!-- Favicons -->
  <link href="https://inurture.co.in/jagannath-university/jagannath-college-
admissions/imgs/icons/placement%20support.png" rel="icon">
  <link href="https://inurture.co.in/jagannath-university/jagannath-college-
admissions/imgs/icons/placement%20support.png" rel="apple-touch-icon">

  <!-- Google Fonts -->
  <link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,70
0,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i
,500,500i,600,600i,700,700i" rel="stylesheet">

  <!-- Vendor CSS Files -->
  <link href="assets/vendor/aos/aos.css" rel="stylesheet">
  <link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
  <link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">
  <link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
  <link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
  <link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">
  <link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">

  <!-- Template Main CSS File -->
  <link href="assets/css/style.css" rel="stylesheet">

  <!-- =======================================================
  * Template Name: Gp
  * Updated: May 30 2023 with Bootstrap v5.3.0
  * Template URL: https://bootstrapmade.com/gp-free-multipurpose-html-bootstrap-
template/
  * Author: BootstrapMade.com
  * License: https://bootstrapmade.com/l
```

CHAPTER-8

PERFORMANCE TESTING

8.1 Performance Metrics:

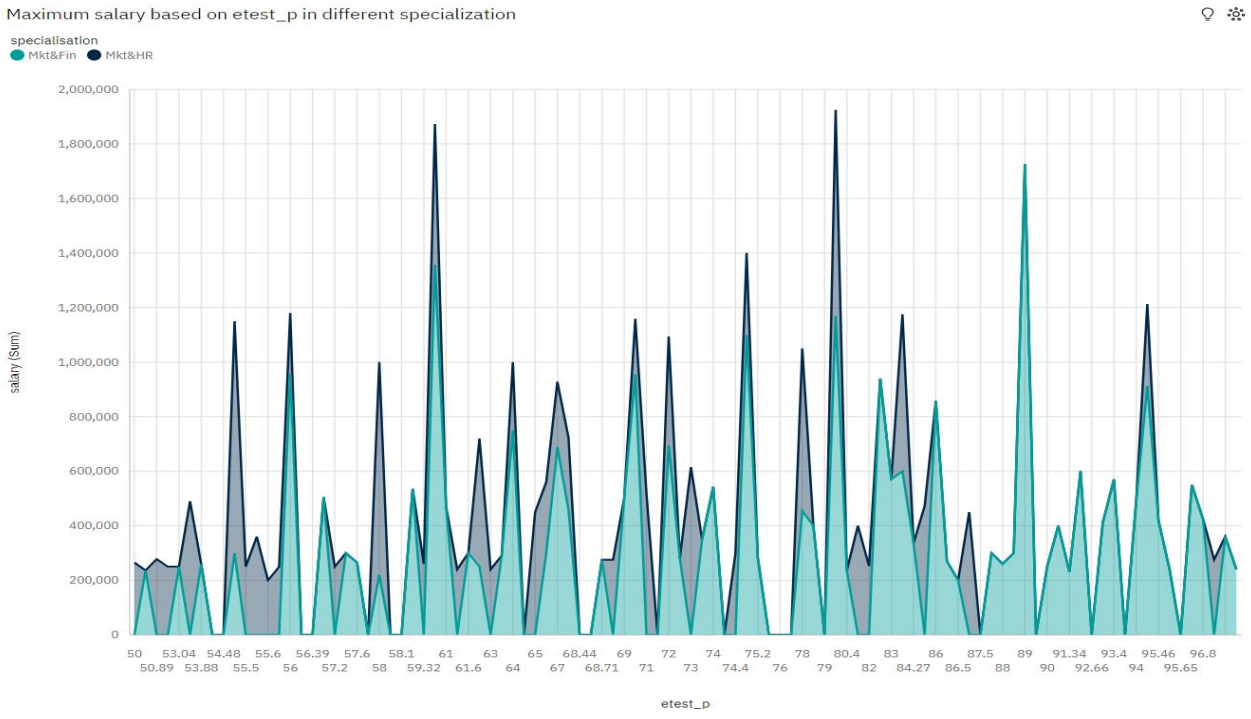
Data visualization:

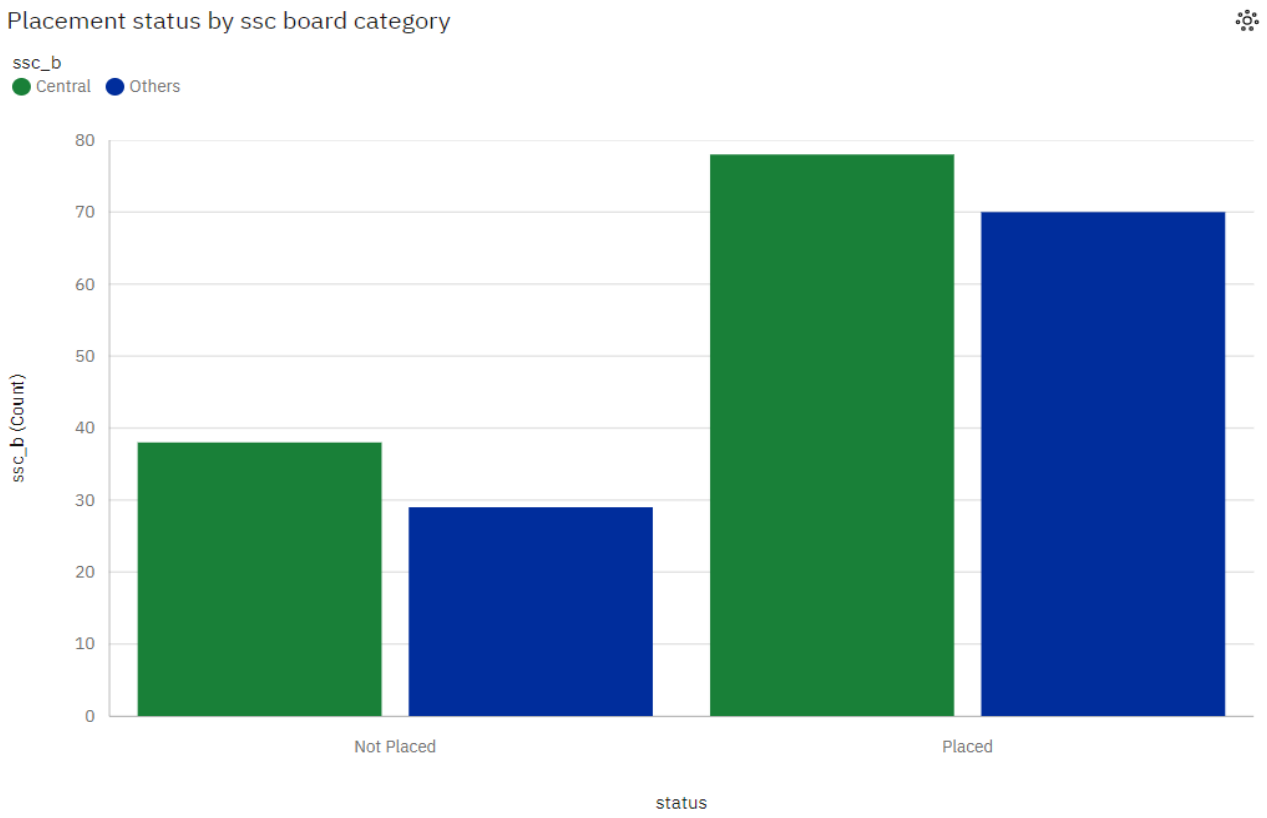
CHAPTER-9

OUTPUT

webpage

Exploration:





Report:

gender	ssc_p	ssc_b	hsc_p	hsc_b	hsc_s	degree_p	degree_t	workex	etest_p	specialisation	mba_p	status	salary
M	124	Central	137	Central	Commerce	132	Comm&Mgmt	Yes	146	Mkt&HR	119.8	Placed	535,000
F	65	Central	75	Central	Commerce	69	Comm&Mgmt	Yes	72	Mkt&Fin	64.66	Placed	200,000
F	153.76	Others	113.8	Others	Science	163.23	Sci&Tech	No	114.85	Mkt&HR	138.52	Placed	620,000
F	87	Others	65	Others	Science	81	Comm&Mgmt	Yes	88	Mkt&Fin	72.78	Placed	260,000
F	75.2	Central	73.2	Central	Science	68.4	Comm&Mgmt	No	65	Mkt&HR	62.98	Placed	200,000
M	342.24	Others	331.83	Others	Science	339.77	Sci&Tech	Yes	381	Mkt&Fin	307.53	Placed	1,890,000
F	84	Others	75	Others	Science	69	Sci&Tech	Yes	62	Mkt&HR	62.36	Placed	210,000
M	128	Central	149	Central	Commerce	137	Comm&Mgmt	No	138	Mkt&HR	122.26	Placed	656,000
F	73	Others	63	Others	Science	66	Comm&Mgmt	No	89	Mkt&Fin	60.5	Placed	216,000
F	64	Central	67	Others	Science	69.6	Sci&Tech	Yes	55.67	Mkt&HR	71.49	Placed	250,000
F	74.9	Others	57	Others	Science	62	Others	Yes	80	Mkt&Fin	60.78	Placed	360,000
M	67	Others	63	Central	Commerce	72	Comm&Mgmt	No	56	Mkt&HR	60.41	Placed	225,000
F	88	Central	72	Central	Science	78	Others	No	82	Mkt&HR	71.43	Placed	252,000
M	67	Others	61	Central	Science	72	Comm&Mgmt	No	72	Mkt&Fin	61.01	Placed	264,000
M	70	Central	63	Central	Science	66	Sci&Tech	No	61.28	Mkt&HR	60.11	Placed	240,000
M	466.8	Central	467.2	Central	Commerce	455.9	Comm&Mgmt	Yes	528.06	Mkt&Fin	427.75	Placed	2,484,000
M	549.68	Others	554.33	Others	Commerce	513.87	Comm&Mgmt	No	574	Mkt&HR	471.49	Placed	2,105,000
M	521.5	Others	519.6	Others	Science	478.36	Sci&Tech	No	594.44	Mkt&Fin	448.57	Placed	2,416,000
M	74	Central	70	Central	Science	72	Comm&Mgmt	Yes	60	Mkt&Fin	57.24	Placed	260,000
F	86.5	Others	64.2	Others	Science	67.4	Sci&Tech	No	59	Mkt&Fin	59.69	Placed	240,000

CHAPTER 10

ADVANTAGES AND DISADVANTAGE s

ADVANTAGES:

1. **Informed Decision-Making**: Data analytics tools provide valuable insights into candidate profiles and job requirements, enabling placement coordinators to make data-driven decisions. This enhances the chances of successful job matches.

2. **Efficiency and Speed**: Automation and advanced algorithms in analytics tools can significantly expedite the placement process, reducing manual efforts and time-to-fill positions, which is crucial in today's competitive job market.

3. **Predictive Analytics**: These tools often employ predictive modeling to forecast future placement trends, helping organizations stay ahead and proactively address talent needs.

4. **Customization**: Many analytics tools offer customization options, allowing organizations to tailor the tool to their specific placement processes and requirements, which can lead to improved outcomes.

5. **Reporting and Visualization**: Analytics tools often provide robust reporting and visualization capabilities, making it easier to communicate insights and track performance, aiding in continuous improvement.

DISADVANTAGES:

1. **Cost**: Implementing and maintaining a data analytics tool can be expensive. Licensing, infrastructure, training, and ongoing support costs can be a significant financial burden for organizations, particularly smaller ones.

2. **Complexity**: These tools can be complex to set up and operate, requiring skilled personnel to manage and interpret the data. Inadequate expertise can lead to underutilization or even incorrect conclusions.

3. **Data Quality**: The accuracy and reliability of insights depend on the quality of the data being fed into the system. Inaccurate or incomplete data can lead to flawed recommendations and placement decisions.

4. **Privacy Concerns**: Handling sensitive candidate and employer data raises privacy and compliance issues, necessitating strict security measures and potential legal considerations, such as GDPR or HIPAA compliance.

5. **Resistance to Change**: Introducing a data analytics tool can face resistance from employees accustomed to traditional placement methods. Managing this change and ensuring user adoption can be a challenge.

6. **Over-Reliance on Data**: While data-driven decisions are valuable, an over-reliance on analytics can neglect the importance of human intuition and interpersonal skills in the placement process, potentially leading to a disconnect with the human element of recruitment.

CHAPTER 11

CONCLUSION

In conclusion, the selection and implementation of a data analytics tool for placement represent a significant opportunity for organizations to transform their recruitment and talent acquisition processes. These tools offer a plethora of advantages, including data-driven decision-making, enhanced efficiency, predictive capabilities, customization, and robust reporting. By harnessing the power of data analytics, organizations can gain a competitive edge in the job market and improve the quality and speed of their placements. However, it's essential to approach this decision with a keen awareness of the potential disadvantages. The costs associated with acquiring, implementing, and maintaining a data analytics tool can be substantial. Furthermore, the complexity of these systems, reliance on high-quality data, and privacy concerns necessitate careful planning and resource allocation. Managing the change that comes with introducing analytics tools and addressing potential resistance from staff should also be a priority.

The success of implementing a data analytics tool for placement hinges on a well-thought-out strategy that aligns with the organization's specific needs and resources. This entails a meticulous evaluation of non-functional requirements, cost-benefit analysis, and a clear roadmap for integration and user adoption. Furthermore, the selection of the right tool should be based on its ability to meet performance, security, scalability, reliability, and usability standards, among other criteria. In the rapidly evolving landscape of talent placement, data analytics tools are undeniably powerful tools to stay competitive and agile. However, organizations must tread carefully, balancing the promise of data-driven insights with the challenges of implementation and operation. By doing so, they can leverage the advantages of analytics tools to revolutionize their placement processes and secure top talent for their workforce

CHAPTER 12

FUTURE SCOPE

The future scope for analytical tools in the context of placements can be expansive, driven by advancements in technology, data analytics, and evolving recruitment trends.

Predictive Analytics for Candidate Performance:

Develop tools that leverage historical placement data, academic performance, and other relevant factors to predict a candidate's success in a particular role.
Use machine learning algorithms to identify patterns and correlations that can aid in predicting candidate performance.

Skills Gap Analysis:

Build tools that analyze industry requirements and job descriptions to identify the skills in demand. Provide recommendations for skill development based on the identified gaps between candidate skills and industry requirement.

Automated Resume Analysis:

Develop tools that use natural language processing (NLP) and machine learning to analyze resumes and highlight relevant skills and experiences. Provide insights to candidates on how to optimize their resumes for specific job roles.

Interview Performance Analytics:

Implement tools that analyze video interviews and assess candidates' non-verbal cues, communication skills, and overall performance.
Offer feedback to candidates and recruiters on areas of improvement.

Diversity and Inclusion Analytics:

Create tools that evaluate and promote diversity and inclusion in recruitment processes. Provide analytics on the diversity of candidate pools and suggest strategies to improve inclusivity.

Remote Recruitment Analytics:

Develop tools that analyze the effectiveness of remote recruitment processes. Provide insights into remote onboarding, team dynamics, and performance metrics for remote hires.

APPENDIX

SOURCE CODE

Index.html

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

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

  <title>PLACEMENT ANALYSIS Bootstrap Template - Index</title>
  <meta content="" name="description">
  <meta content="" name="keywords">

  <!-- Favicons -->
  <link href="https://inurture.co.in/jagannath-university/jagannath-college-
admissions/imgs/icons/placement%20support.png" rel="icon">
  <link href="https://inurture.co.in/jagannath-university/jagannath-college-
admissions/imgs/icons/placement%20support.png" rel="apple-touch-icon">

  <!-- Google Fonts -->
  <link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,70
0,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i
,500,500i,600,600i,700,700i" rel="stylesheet">

  <!-- Vendor CSS Files -->
  <link href="static/assets/vendor/aos/aos.css" rel="stylesheet">
  <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">

  <!-- Template Main CSS File -->
  <link href="static/assets/css/style.css" rel="stylesheet">

  <!-- =======================================================
  * Template Name: Gp
  * Updated: May 30 2023 with Bootstrap v5.3.0
  * Template URL: https://bootstrapmade.com/gp-free-multipurpose-html-bootstrap-
template/
  * Author: BootstrapMade.com
```

```
  * License: https://bootstrapmade.com/license/
  ======================================================== -->
</head>

<body>

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

      <h1 class="logo me-auto me-lg-0"><a href="index.html">PLACEMENT
ANALYSIS<span>.</span></a></h1>
      <!-- Uncomment below if you prefer to use an image logo -->
      <!-- <a href="index.html" class="logo me-auto me-lg-0"><img
src="Static/assets/img/logo.png" alt="" class="img-fluid"></a>-->

      <nav id="navbar" class="navbar order-last order-lg-0">
        <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">DashBoard</a></li>
          <li><a class="nav-link scrollto " href="StoryBoard">StoryBoard</a></li>
          <li><a class="nav-link scrollto" href="team">Team</a></li>
          <li class="dropdown"><a href="#"><span>Drop Down</span> <i class="bi bi-
chevron-down"></i></a>
            <ul>
              <li><a href="#">Drop Down 1</a></li>
              <li class="dropdown"><a href="#"><span>Deep Drop Down</span> <i
class="bi bi-chevron-right"></i></a>
                <ul>
                  <li><a
href="file:///C:/Users/Hariharan/Downloads/New%20report.mhtml">Deep Drop Down
1</a></li>
                  <li><a href="#">Deep Drop Down 2</a></li>
                  <li><a href="#">Deep Drop Down 3</a></li>
                  <li><a href="#">Deep Drop Down 4</a></li>
                  <li><a href="#">Deep Drop Down 5</a></li>
                </ul>
              </li>
              <li><a href="#">Drop Down 2</a></li>
              <li><a href="#">Drop Down 3</a></li>
              <li><a href="#">Drop Down 4</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 -->

      <a href="#about" class="get-started-btn scrollto">Get Started</a>
```

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

  <!-- ======= Hero Section ======= -->
  <section id="hero" class="d-flex align-items-center justify-content-center">
    <div class="container" data-aos="fade-up">

      <div class="row justify-content-center" data-aos="fade-up" data-aos-
delay="150">
        <div class="col-xl-6 col-lg-8">
          <h1>PLACEMENT ANALYSIS <span></span></h1>
          <h2></h2>
        </div>
      </div>



    </div>
  </section><!-- End Hero -->

  <main id="main">

    <!-- ======= About Section ======= -->
    <section id="about" class="about">
      <div class="container" data-aos="fade-up">

        <div class="row">
          <div class="col-lg-6 order-1 order-lg-2" data-aos="fade-left" data-aos-
delay="100">
            <img src="Static/assets/img/about.jpg" class="img-fluid" alt="">
          </div>
          <div class="col-lg-6 pt-4 pt-lg-0 order-2 order-lg-1 content" data-
aos="fade-right" data-aos-delay="100">
            <h3></h3>
            <p class="fst-italic">
            </p>
            <ul>
              <li><i class="ri-check-double-line"></i> Male Placed is the most
frequently occurring category of gender - status with a count of 100 items with
status values (46.5 % of the total)..</li>
              <li><i class="ri-check-double-line"></i> No work experience candidate
has the highest Total hsc_p but is ranked #2 in Maximum salary.</li>
              <li><i class="ri-check-double-line"></i> Females has the highest
average ssc percentage at 68.31.</li>
            </ul>
            <p>
            </p>
          </div>
        </div>
```

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

    <!-- ======= Clients Section ======= -->
    <section id="clients" class="clients">
      <div class="container" data-aos="zoom-in">

        <div class="clients-slider swiper">
          <div class="swiper-wrapper align-items-center">
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
1.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
2.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
3.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
4.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
5.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
6.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
7.png" class="img-fluid" alt=""></div>
            <div class="swiper-slide"><img src="static/assets/img/clients/client-
8.png" class="img-fluid" alt=""></div>
          </div>
          <div class="swiper-pagination"></div>
        </div>

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

    <!-- ======= Features Section ======= -->
    <section id="features" class="features">
      <div class="container" data-aos="fade-up">

        <div class="row">
          <div class="image col-lg-6" style='background-image:
url("https://bestcollegesinindia.in/wp-content/uploads/2021/10/Campus-
placement.jpeg");' data-aos="fade-right"></div>
          <div class="col-lg-6" data-aos="fade-left" data-aos-delay="100">
            <div class="icon-box mt-5 mt-lg-0" data-aos="zoom-in" data-aos-
delay="150">
              <i class="bx bx-receipt"></i>
              <h4></h4>
              <p></p>
            </div>
            <div class="icon-box mt-5" data-aos="zoom-in" data-aos-delay="150">
              <i class="bx bx-cube-alt"></i>
```

```
            <h4></h4>
            <p></p>
          </div>
          <div class="icon-box mt-5" data-aos="zoom-in" data-aos-delay="150">
            <i class="bx bx-images"></i>
            <h4></h4>
            <p></p>
          </div>
          <div class="icon-box mt-5" data-aos="zoom-in" data-aos-delay="150">
            <i class="bx bx-shield"></i>
            <h4></h4>
            <p></p>
          </div>
        </div>
      </div>

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

  <!-- ======= serives Section ======= -->
  <!-- ======= Dashboard Section ======= -->
  <section id="dashboard" class="dashboard">
    <div class="container" data-aos="fade-up">
      <iframe
src="https://ap1.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2Fplacement%2Banalysis&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=model0000018b421b7091_00000000" width="100" height="600" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
    </section><!-- End Dashboard Section -->


  <!-- ======= Cta Section ======= -->
  <section id="cta" class="cta">
    <div class="container" data-aos="zoom-in">
    </div>
  </section><!-- End Cta Section -->

  <!-- ======= portfolio Section ======= -->
  <!-- ======= Storyboard Section ======= -->
  <section id="storyboard" class="storyboard">
    <div class="container" data-aos="fade-up">
      <iframe
src="https://ap1.ca.analytics.ibm.com/bi/?perspective=story&amp;pathRef=.my_folders%2FStory%253A%2Bplacement%2Banalysis&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;sceneId=-1&amp;sceneTime=0" width="100" height="600" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
```

```
    </section><!-- End Storyboard Section -->

    <!-- ======= Your Report Section ======= -->
    <section id="your-report" class="your-report">
      <div class="container" data-aos="fade-up">
        <!-- Insert your embedded code here -->
        <img src="C:\Users\Hariharan\Pictures\Screenshots\Screenshot 2023-10-21
202928.png">
        <iframe
src="https://ap1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FNew%2Breport&amp;amp;closeWindowOnLastView=true&amp;amp;ui_appbar=false&amp;amp;ui_navbar=false&amp;amp;shareMode=embedded&amp;amp;action=run&amp;amp;format=HTML&amp;amp;prompt=false" width="100" height="600"
frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
      </div>
    </section><!-- End Your Report Section -->



    <!-- ======= Counts Section ======= -->
    <section id="counts" class="counts">
      <div class="container" data-aos="fade-up">

        <div class="row no-gutters">
          <div class="image col-xl-5 d-flex align-items-stretch justify-content-
center justify-content-lg-start" data-aos="fade-right" data-aos-delay="100"></div>
          <div class="col-xl-7 ps-4 ps-lg-5 pe-4 pe-lg-1 d-flex align-items-stretch"
data-aos="fade-left" data-aos-delay="100">
            <div class="content d-flex flex-column justify-content-center">
              <h3></h3>
              <p></p>
              </p>
              <div class="row">
                <div class="col-md-6 d-md-flex align-items-md-stretch">
                  <div class="count-box">
                    <i class></i>
                    <span data-purecounter-start="0"
                    <p><strong></strong></p>
                  </div>
                </div>

                <div class="col-md-6 d-md-flex align-items-md-stretch">
                  <div class="count-box">
                    <i class></i>
                    <span data-purecounter-start="0"
                    <p><strong></strong></p>
                  </div>
                </div>

                <div class="col-md-6 d-md-flex align-items-md-stretch">
                  <div class="count-box">
```

```
                  <i class></i>
                  <span data-purecounter-start="0"
                  <p><strong></strong></p>
                </div>
              </div>

              <div class="col-md-6 d-md-flex align-items-md-stretch">
                <div class="count-box">
                  <i class></i>
                  <span data-purecounter-start="0"
                  <p><strong></strong></p>
                </div>
              </div>
            </div>
          </div><!-- End .content-->
        </div>
      </div>

    </div>
  </section><!-- End Counts Section -->
<!-- ======= Footer ======= -->
<footer id="footer">
  <div class="footer-top">
    <div class="container">
      <div class="row">

        <div class="col-lg-3 col-md-6">
          <div class="footer-info">
            <h3>PLACEMENTS ANALYSIS<span>.</span></h3>
            <div class="social-links mt-3">
              <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>
        </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 us</a></li>
            <li><i class="bx bx-chevron-right"></i> <a href="#">DashBoard</a></li>
            <li><i class="bx bx-chevron-right"></i> <a href="#">Story
Board</a></li>
          </ul>
        </div>
```

```
          <div class="col-lg-3 col-md-6 footer-links">
          <div class="col-lg-4 col-md-6 footer-newsletter">
            <h4></h4>
            <p></p>
            <form action="" method="post">
              <input type="email" name="email"><input type="submit"
value="Subscribe">
            </form>

          </div>

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

    <div class="container">
      <div class="copyright">
        &copy; Copyright <strong><span>LS</span></strong>
      </div>
      <div class="credits">
        <!-- All the links in the footer should remain intact. -->
        <!-- You can delete the links only if you purchased the pro version. -->
        <!-- Licensing information: https://bootstrapmade.com/license/ -->
        <!-- Purchase the pro version with working PHP/AJAX contact form:
https://bootstrapmade.com/gp-free-multipurpose-html-bootstrap-template/ -->
        Designed by <a href="https://bootstrapmade.com/">BootstrapMade</a>
      </div>
    </div>
  </footer><!-- End Footer -->

  <div id="preloader"></div>
  <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/purecounter/purecounter_vanilla.js"></script>
  <script src="static/assets/vendor/aos/aos.js"></script>
  <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>
```

app.py

```python
from flask import Flask, render_template

app = Flask(__name__)

@app.route("/")  #decoratar
def index():
    return render_template("index.html")

if __name__ == "__main__":
    app.run(debug=False,port = 4000 )
```

VIDEO LINK

PROJECT DEMO LINK: https://www.youtube.com/watch?v=qhvsVeNTc9E