The Future Of Work : Data Analysis of GlassDoor Jobs

1. **INTRODUCTION :**

1.1 Project Overview:

Project Title: Data Analysis of Glassdoor Jobs: Exploring the Future of Work

1. **Introduction:** The project aims to analyze job-related data from Glassdoor, a prominent online job search platform, to gain insights into the future of work. By examining various factors such as job titles, skills, salaries, and company reviews, the project seeks to understand emerging trends, skill requirements, and potential job market shifts.
2. **Objectives:**
   - Identify and analyze emerging job titles and roles in different industries.
   - Explore the skills and qualifications that are in high demand or experiencing growth.
   - Investigate changes in job requirements, including education, experience, and certifications.
   - Analyze salary trends across industries and identify potential disparities.
   - Examine employee reviews and ratings to assess job satisfaction and workplace conditions.
   - Predict future job market trends and provide recommendations for individuals and organizations.
3. **Methodology:**
   - Data Collection: Utilize the Glassdoor API or web scraping techniques to gather relevant job data, including job titles, descriptions, skills, salaries, and company reviews.
   - Data Cleaning and Preparation: Process and clean the collected data to remove duplicates, handle missing values, and standardize formats.
   - Exploratory Data Analysis: Perform statistical analysis and data visualization to uncover patterns, trends, and correlations in the dataset.
   - Sentiment Analysis: Apply natural language processing techniques to analyze employee reviews and ratings, assessing overall job satisfaction and workplace conditions.
   - Machine Learning (Optional): Employ machine learning algorithms for predicting future job market trends, forecasting skill demands, or identifying salary outliers.
4. **Expected Deliverables:**
   - Comprehensive analysis of emerging job titles and roles, highlighting industries with significant growth potential.
   - Identification of in-demand skills and qualifications across various job categories.
   - Insights into changes in job requirements, such as educational attainment and experience levels.
   - Salary analysis, including median salaries, salary ranges, and potential gender or diversity disparities.
   - Sentiment analysis of employee reviews, providing an overview of job satisfaction and workplace sentiment.

- Future job market predictions and recommendations for individuals and organizations.

5. **Project Timeline:**
   - Data collection and cleaning: 2 weeks
   - Exploratory data analysis: 3 weeks
   - Sentiment analysis and machine learning: 2 weeks
   - Report writing and documentation: 2 weeks
6. **Potential Impact:**
   - Job Seekers: Provide insights into emerging job roles and skills to help individuals make informed career choices and develop relevant competencies.
   - Employers: Assist organizations in understanding evolving skill demands and industry trends, aiding in talent acquisition and strategic workforce planning.
   - Policymakers: Offer data-driven insights for policymakers to understand the changing dynamics of the job market and implement policies to support the future workforce.
   - Researchers: Contribute to the existing body of knowledge on the future of work, providing valuable information for further research and analysis.

By conducting a comprehensive data analysis of Glassdoor jobs, this project aims to shed light on the future of work, helping individuals, organizations, and policymakers navigate the evolving job landscape.

1.2 Purpose:

The purpose of the project "Future of Work: Data Analysis of Glassdoor Jobs" is to gain insights into the changing dynamics of the job market and explore emerging trends, skill requirements, and potential shifts in the way we work. By analyzing job-related data from Glassdoor, the project aims to achieve the following objectives:

1. Identify Emerging Job Titles and Roles: By analyzing the job data, the project seeks to uncover new and evolving job titles and roles that have emerged in different industries. This information can provide valuable insights into the direction in which the job market is heading.
2. Explore In-Demand Skills and Qualifications: The project aims to identify the skills and qualifications that are in high demand or experiencing growth across various job categories. Understanding these skill requirements can help individuals and organizations align their skill development and recruitment strategies accordingly.
3. Investigate Changes in Job Requirements: By examining factors such as education, experience, certifications, and other qualifications, the project aims to identify any shifts or changes in the job requirements over time. This analysis can help individuals assess the evolving expectations of employers and make informed decisions about their career paths.
4. Analyze Salary Trends and Disparities: The project aims to analyze salary data from Glassdoor to identify trends in compensation across industries and job categories. This analysis can highlight potential salary disparities and provide insights into fair pay practices.
5. Assess Job Satisfaction and Workplace Conditions: By conducting sentiment analysis on employee reviews and ratings, the project aims to evaluate job satisfaction and workplace conditions. Understanding employee sentiments

can help individuals make informed decisions about potential employers, and organizations can use this information to improve their work environments.

6. Predict Future Job Market Trends: By leveraging the collected data, the project may employ machine learning algorithms or other predictive techniques to forecast future job market trends. This can help individuals and organizations anticipate changes, adapt their strategies, and plan for the future of work.

Overall, the purpose of this project is to utilize data analysis techniques to provide valuable insights into the future of work. The findings can benefit job seekers, employers, policymakers, and researchers by helping them make informed decisions, understand industry trends, and shape strategies related to workforce planning, talent acquisition, and policy development.

2. IDEATION & PROPOSED SOLUTION:

2.1 Problem Statement Definition:

The rapidly evolving nature of the job market poses challenges for individuals, organizations, and policymakers in understanding and preparing for the future of work. There is a need for comprehensive analysis and insights into emerging job trends, skill requirements, salary dynamics, and workplace conditions to enable informed decision-making and strategic planning.

However, the availability of vast amounts of job-related data from platforms like Glassdoor presents a challenge in extracting meaningful information and identifying patterns. Without proper analysis, it is difficult to understand the changing landscape of the job market and anticipate future trends accurately.

Therefore, the problem statement for the project "Future of Work: Data Analysis of Glassdoor Jobs" is as follows:

"The lack of comprehensive analysis and insights into the rapidly changing job market, including emerging job trends, skill requirements, salary dynamics, and workplace conditions, hinders individuals, organizations, and policymakers from making informed decisions and strategic plans for the future of work."

This problem statement emphasizes the need for a data-driven approach to analyze Glassdoor job data and provide valuable insights that address the challenges associated with the future of work. The project aims to bridge the gap by leveraging data analysis techniques to uncover trends, identify skill demands, assess job satisfaction, and predict future job market dynamics.

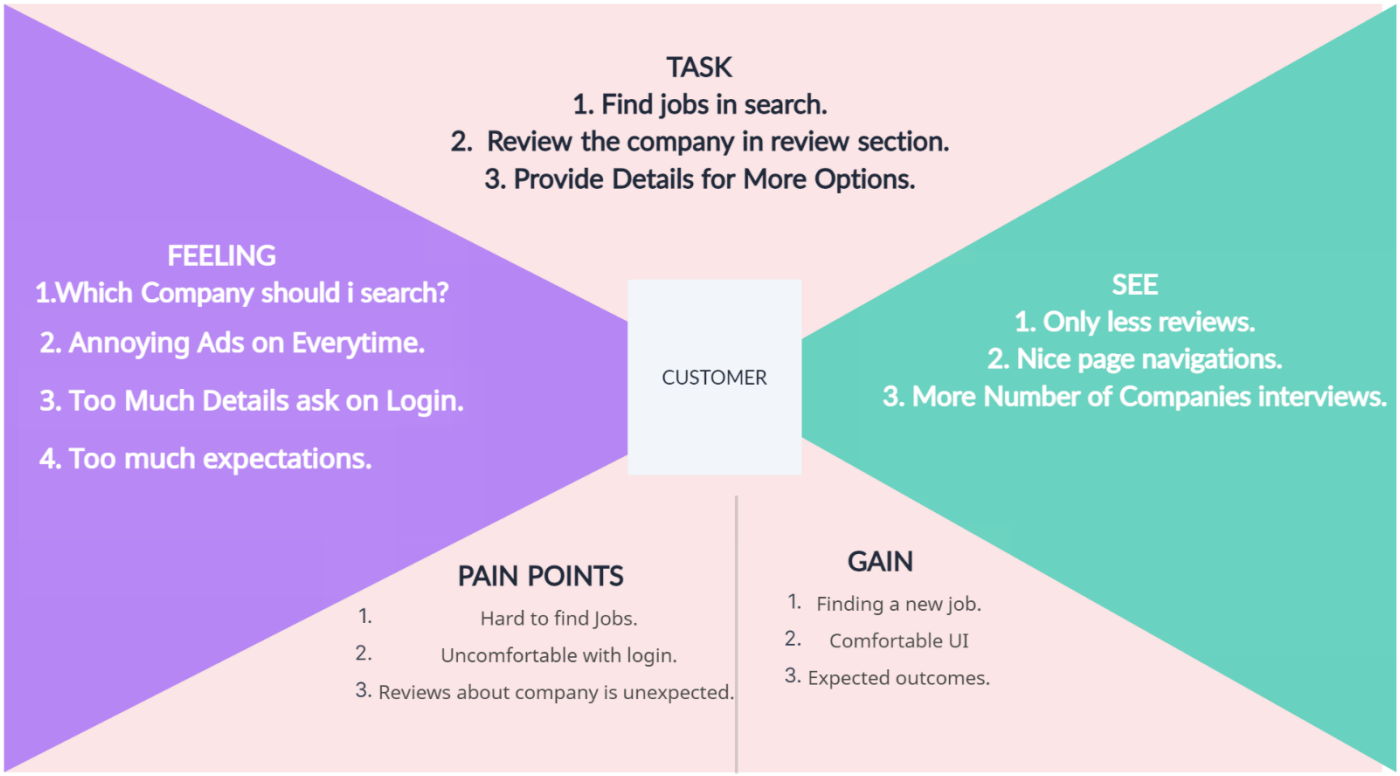
2.2 Empathy Map Canvas:

An empathy map canvas for the project "Future of Work: Data Analysis of Glassdoor Jobs":

1. **User:**
    - Job seekers
    - HR professionals
    - Hiring managers
    - Workforce planners
    - Researchers and analysts

- Policymakers

2. **Says:**
    - "I want to understand the emerging job trends and skill requirements."
    - "I need insights into the salary dynamics and potential disparities."
    - "I struggle to keep up with the changing job market and its impact on my career."
    - "I want to attract and retain top talent in a competitive job market."
    - "I need data to make informed decisions about workforce planning and recruitment strategies."
    - "I want to ensure fair pay practices and assess employee satisfaction."



3. **Thinks:**
    - "How can I stay relevant and secure future job opportunities?"
    - "What skills and qualifications are in high demand?"
    - "Are there potential salary disparities that I need to address?"
    - "How can I anticipate and prepare for changes in the job market?"
    - "What factors contribute to job satisfaction and employee retention?"
    - "What policies can I implement to support the future workforce?"

4. **Feels:**

- Anxious about the uncertainty of the job market and future career prospects.
- Frustrated with the lack of information and insights to make informed decisions.
- Motivated to enhance skills and qualifications to remain competitive.
- Concerned about attracting and retaining top talent for organizational growth.
- Eager to find data-driven solutions to address workforce challenges.
- Committed to creating a fair and inclusive work environment.

5. **Does:**

- Searches for job market trends and predictions.
- Reads industry reports and research studies on the future of work.
- Explores job listings and company reviews on Glassdoor.
- Attends workshops, webinars, and conferences on career development and workforce planning.
- Engages in networking and professional communities to gain insights and build connections.
- Advocates for policies that support a diverse and inclusive workforce.

6.Gains:

- Comprehensive analysis of emerging job titles and roles.
- Insights into in-demand skills and qualifications across industries.
- Understanding of salary trends and potential disparities.
- Anticipation of future job market trends and skill demands.
- Recommendations for workforce planning, talent acquisition, and policy implementation.
- Enhanced career prospects and decision-making abilities for job seekers**.**

This empathy map provides a snapshot of the users' perspectives, needs, and aspirations related to the project. It helps in developing a deeper understanding of the target audience, guiding the project's goals and deliverables to address their specific challenges and provide valuable insights for the future of work.

2.3 Ideation & Brainstorming:

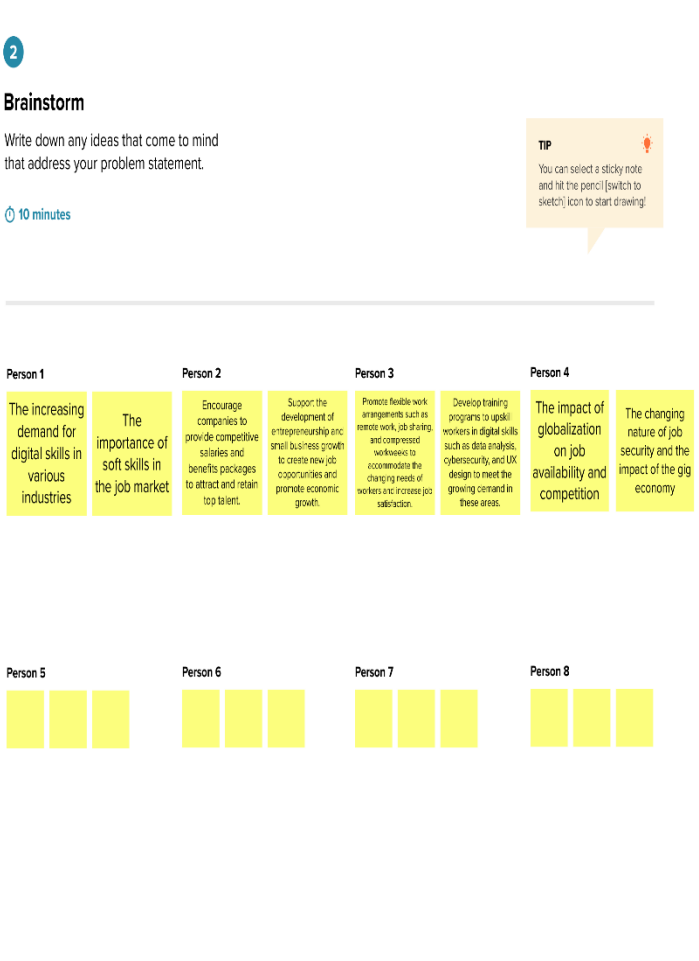
Ideation and brainstorming points for the project "Future of Work: Data Analysis of Glassdoor Jobs":

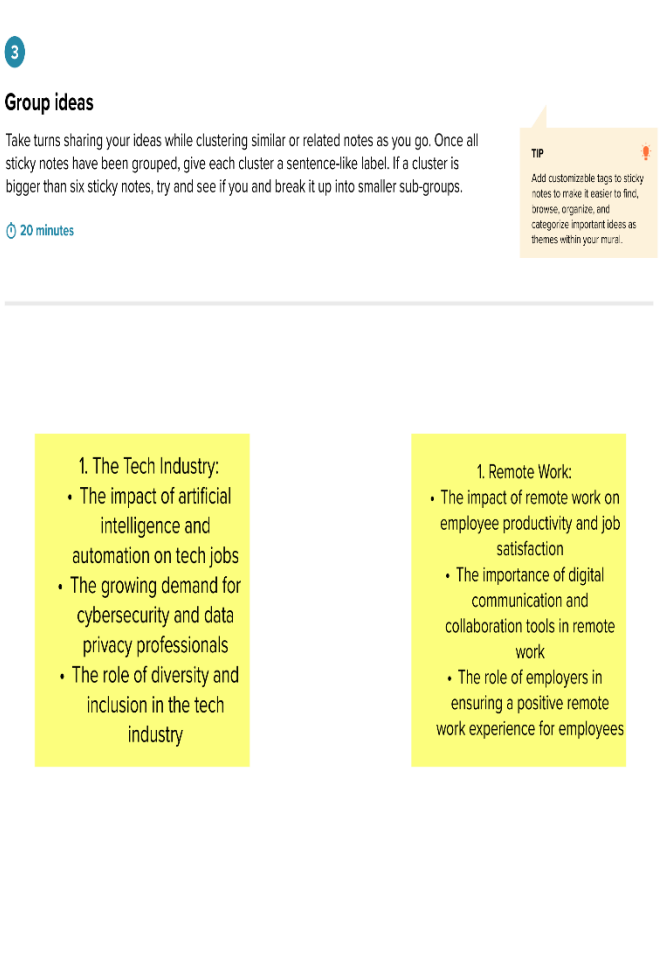
1. **Emerging Job Trends:**

- Analyze job titles with significant growth rates and explore emerging roles in various industries.
- Identify industries experiencing a surge in demand for specific skills and qualifications.

- Investigate the impact of emerging technologies (e.g., artificial intelligence, automation) on job roles and requirements.

2. **Skill Requirements:**
   - Determine the most in-demand skills and qualifications across different job categories.
   - Analyze skill gaps and identify areas where upskilling or reskilling may be necessary.
   - Explore the intersection of technical and soft skills required for future job success.





3. **Salary Dynamics:**
   - Compare salary ranges across industries, job categories, and geographical locations.
   - Identify potential salary disparities based on gender, race, or other demographic factors.
   - Examine the relationship between job satisfaction and salary levels.
4. **Job Satisfaction and Workplace Conditions:**
   - Conduct sentiment analysis on employee reviews to assess job satisfaction levels.
   - Identify key factors influencing job satisfaction, such as work-life balance, company culture, and career growth opportunities.
   - Analyze the impact of workplace conditions on employee retention and productivity.

5. **Future Job Market Predictions:**

   - Utilize machine learning algorithms to forecast job market trends and skill demands.
   - Predict the impact of emerging technologies on specific job roles and industries.
   - Evaluate the potential effects of economic, social, and environmental factors on the job market.

6. **Industry-Specific Analysis:**

   - Focus on specific industries (e.g., healthcare, technology, finance) to understand their unique job market dynamics.

- Explore the skill requirements and trends within emerging industries, such as renewable energy or remote work.

4

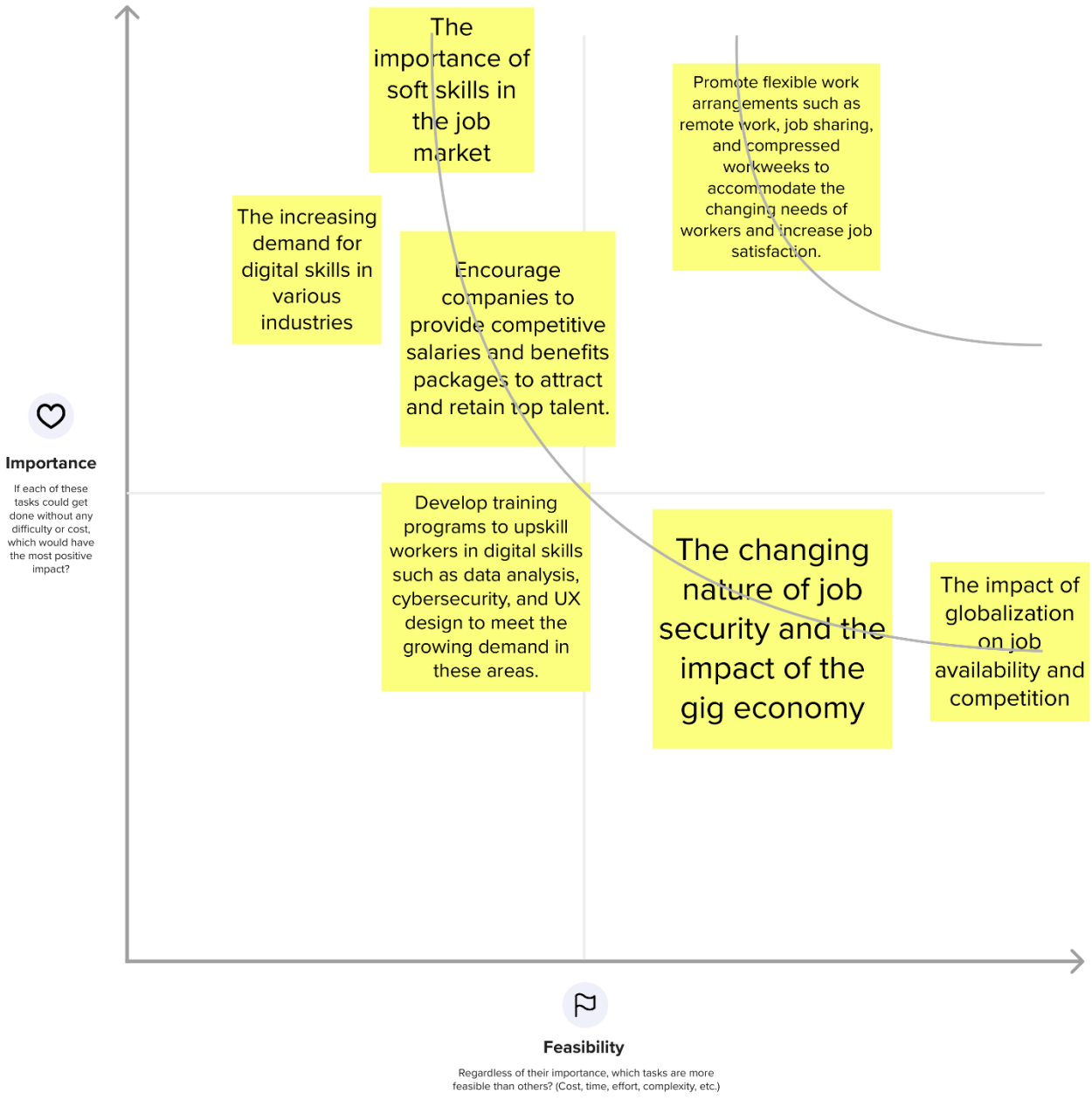
Prioritize

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

20 minutes

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.



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7. **Diversity and Inclusion:**
    - Investigate diversity and inclusion metrics within companies and industries.
    - Analyze the relationship between diversity and inclusion practices and job satisfaction.
    - Explore the impact of diverse teams on innovation and organizational performance.
8. **Policy Recommendations:**
    - Identify policy implications based on the project findings to support workforce development and employment strategies.
    - Propose recommendations for policymakers to address potential skill gaps and improve labor market outcomes.
    - Explore ways to promote equitable and inclusive practices within organizations and industries.
9. **Comparative Analysis:**
    - Compare Glassdoor data with other job search platforms or industry-specific sources to validate and enhance the analysis.
    - Conduct comparative analyses across different regions or countries to understand global job market trends.

These ideas can serve as a starting point for the project and generate further discussions and possibilities for data analysis within the scope of the future of work and Glassdoor job data**.**

2.4 Proposed Solution:

Proposed Solution: Future of Work: Data Analysis of Glassdoor Jobs

To address the challenges and fulfill the objectives of the project, the following proposed solution outlines the steps and approaches for analyzing Glassdoor job data and providing valuable insights into the future of work:

1. **Data Collection:**
    - Utilize the Glassdoor API or employ web scraping techniques to gather job-related data, including job titles, descriptions, skills, salaries, and employee reviews.
    - Collect a substantial amount of data across industries and job categories to ensure comprehensive analysis.
2. **Data Cleaning and Preparation:**
    - Clean the collected data to remove duplicates, handle missing values, and standardize formats for consistency.
    - Perform data preprocessing tasks such as text normalization and feature extraction to facilitate subsequent analysis.
3. **Exploratory Data Analysis (EDA):**
    - Conduct statistical analysis and data visualization to uncover patterns, trends, and correlations within the dataset.

- Identify emerging job titles, roles, and industries experiencing significant growth.
- Analyze skill requirements and determine in-demand skills across job categories.
- Examine salary trends, including median salaries, salary ranges, and potential disparities.
- Assess job satisfaction and workplace conditions based on employee reviews and ratings.

4. **Sentiment Analysis:**
    - Apply natural language processing (NLP) techniques to analyze employee reviews and ratings.
    - Perform sentiment analysis to assess overall job satisfaction and identify key factors influencing workplace sentiment.
    - Extract insights related to work-life balance, company culture, career growth opportunities, and other aspects impacting job satisfaction.
5. **Machine Learning and Predictive Analysis (Optional):**
    - Employ machine learning algorithms for predictive analysis, forecasting future job market trends, or identifying skill demands.
    - Train models to predict salary levels, job satisfaction scores, or skill requirements based on available features.
    - Validate and fine-tune the models using appropriate evaluation metrics.
6. **Reporting and Recommendations:**
    - Compile the findings and insights from the analysis into a comprehensive report.
    - Present the results using data visualizations, charts, and graphs for clear and effective communication.
    - Provide actionable recommendations for job seekers, employers, policymakers, and researchers based on the project's outcomes.
    - Offer guidance on skill development, talent acquisition, workforce planning, fair pay practices, and diversity and inclusion initiatives.
7. **Documentation and Knowledge Sharing:**
    - Document the methodologies, techniques, and data sources used in the project for transparency and reproducibility.
    - Share the project findings, report, and relevant code snippets with stakeholders, research communities, and online platforms to contribute to the future of work discourse.

By following this proposed solution, the project aims to provide valuable insights into the future of work by analyzing Glassdoor job data. The solution encompasses data collection, cleaning, exploratory analysis, sentiment analysis, optional machine learning, reporting, and documentation to address the project's objectives and deliver actionable recommendations for various stakeholders.

3.REQUIREMENT ANALYSIS:

3.1 Functional requirement:

Functional Requirements for the Project "Future of Work: Data Analysis of Glassdoor Jobs":

1. **Data Collection:**
    - Implement a data collection mechanism to gather job-related data from Glassdoor using the Glassdoor API or web scraping techniques.
    - Collect information such as job titles, descriptions, skills, salaries, and employee reviews.
    - Ensure data collection covers a diverse range of industries, job categories, and geographical locations.
2. **Data Cleaning and Preparation:**
    - Develop data cleaning procedures to remove duplicates, handle missing values, and standardize formats for consistency.
    - Perform text normalization and feature extraction to preprocess the data for analysis.
3. **Exploratory Data Analysis (EDA):**
    - Conduct statistical analysis to identify patterns, trends, and correlations within the dataset.
    - Analyze emerging job titles, roles, and industries experiencing significant growth.
    - Explore skill requirements and identify in-demand skills across job categories.
    - Examine salary trends, including median salaries, salary ranges, and potential disparities.
    - Analyze employee reviews and ratings to assess job satisfaction and workplace conditions.
4. **Sentiment Analysis:**
    - Utilize natural language processing (NLP) techniques to perform sentiment analysis on employee reviews.
    - Classify sentiment scores to evaluate job satisfaction levels and identify factors influencing workplace sentiment.
    - Extract insights related to work-life balance, company culture, career growth opportunities, and other aspects impacting job satisfaction.
5. **Machine Learning and Predictive Analysis (Optional):**
    - Employ machine learning algorithms to predict future job market trends, forecast skill demands, or identify salary outliers.
    - Train models using appropriate algorithms and features from the dataset.
    - Validate and fine-tune the models using appropriate evaluation metrics.
6. **Data Visualization:**
    - Create visualizations, such as charts, graphs, and interactive dashboards, to present the analyzed data and insights effectively.
    - Ensure visualizations are clear, informative, and support the understanding of emerging

job trends, skill requirements, salary dynamics, and job satisfaction levels.

7. **Reporting and Documentation:**
    - Generate comprehensive reports summarizing the analysis, findings, and recommendations.
    - Document the methodologies, data sources, and preprocessing techniques used in the project.
    - Provide clear and concise documentation of the project's implementation, including code snippets and any relevant libraries or tools used.
8. **User Interaction:**
    - Develop a user-friendly interface or interactive platform to allow stakeholders to explore the analyzed data, visualize insights, and access relevant reports.
    - Ensure the interface provides intuitive navigation and allows users to customize views and filter data based on specific criteria.
9. **Scalability and Performance:**
    - Design the system to handle large volumes of data efficiently and process it within acceptable time frames.
    - Optimize algorithms and data processing techniques to ensure scalability and performance.
10. **Security and Privacy:**
    - Implement appropriate security measures to protect the collected data and ensure compliance with relevant data privacy regulations.
    - Anonymize and aggregate data to maintain confidentiality and privacy of individuals.

These functional requirements outline the necessary functionalities and capabilities required for the successful implementation of the project, allowing for data collection, cleaning, exploratory analysis, sentiment analysis, optional machine learning, visualization, reporting, user interaction, scalability, and security.

3.2 Non-Functional requirements:

Non-Functional Requirements for the Project "Future of Work: Data Analysis of Glassdoor Jobs":

1. **Performance:**
    - The system should be able to process and analyze large volumes of job-related data efficiently.
    - Data retrieval, cleaning, and analysis operations should be performed within acceptable time frames.
    - The system should handle concurrent user interactions and maintain responsiveness.
2. **Scalability:**
    - The solution should be scalable to accommodate increasing amounts of data over time.

- It should be capable of handling growth in user traffic and data storage requirements without significant performance degradation.

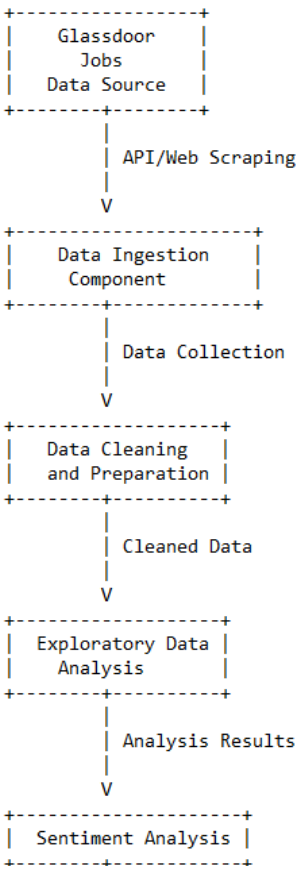
3. **Reliability:**
    - The system should be reliable and available for users to access and analyze job data consistently.
    - It should minimize downtime and ensure data integrity throughout the analysis process.
    - Measures should be in place to handle system failures, such as data backups and recovery mechanisms.
4. **Security:**
    - The project should implement appropriate security measures to protect the collected data and ensure data privacy.
    - Access to the system and data should be restricted to authorized users.
    - Encryption and secure transmission protocols should be employed to safeguard sensitive information.
5. **Usability:**
    - The user interface should be intuitive, user-friendly, and provide easy navigation.
    - Users should be able to interact with the system without requiring extensive training or technical knowledge.
    - The system should provide clear instructions and meaningful error messages to guide users.
6. **Compatibility:**
    - The solution should be compatible with different browsers, operating systems, and devices to ensure accessibility for a wide range of users.
    - It should support integration with other systems or APIs, if required, for data retrieval or additional functionalities.
7. **Maintainability:**
    - The project code and documentation should be well-organized, readable, and maintainable.
    - Regular maintenance and updates should be performed to address any issues, incorporate new features, or adapt to changes in the data source (Glassdoor API updates, website changes, etc.).
    - Documentation should provide clear instructions for future developers or maintainers to understand and extend the project.
8. **Ethical Considerations:**
    - The project should adhere to ethical standards regarding data privacy, confidentiality, and responsible use of job-related data.
    - Bias mitigation techniques should be considered when analyzing data to ensure fairness and minimize potential biases in the results.

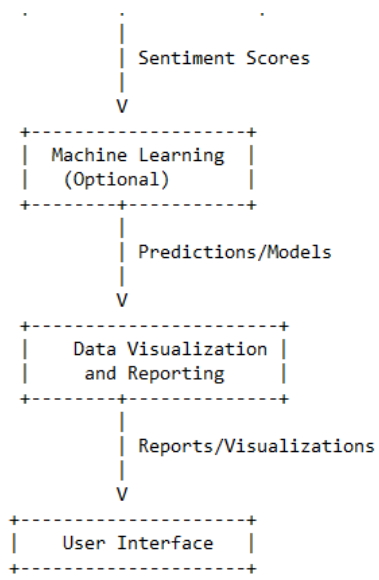
These non-functional requirements address important aspects of the project beyond specific functionalities, ensuring performance, scalability, reliability, security, usability, compatibility, maintainability, and ethical considerations are appropriately considered and implemented.

4.PROJECT DESIGN:

4.1 Data Flow Diagrams:

A data flow diagram (DFD) illustrates the flow of data within a system. Here's a high-level representation of a DFD for the project "Future of Work: Data Analysis of Glassdoor Jobs":





In this DFD, the main components are as follows:

- **Glassdoor Jobs Data Source:** The source of job-related data, which can be accessed through the Glassdoor API or web scraping techniques.
- **Data Ingestion Component:** Responsible for retrieving data from the Glassdoor Jobs Data Source and importing it into the system for further processing.
- **Data Cleaning and Preparation:** This component cleans the collected data, removes duplicates, handles missing values, and standardizes formats to ensure data consistency and quality.
- **Exploratory Data Analysis:** Conducts statistical analysis, identifies patterns and trends within the dataset, and extracts insights related to emerging job titles, skill requirements, salary dynamics, and workplace conditions.
- **Sentiment Analysis:** Utilizes natural language processing techniques to analyze employee reviews and determine sentiment scores to assess job satisfaction levels and identify factors influencing workplace sentiment.
- **Machine Learning:** Performs predictive analysis using machine learning algorithms to forecast future job market trends, predict salary levels, or identify outliers.
- **Data Visualization and Reporting:** Generates visualizations, charts, graphs, and comprehensive reports summarizing the analysis findings and recommendations for various stakeholders.
- **User Interface:** Provides an interface for users to interact with the system, access analyzed data, customize views, and explore the insights and reports generated.

Please note that this is a simplified representation, and the actual DFD for the project may have more detailed components and data flows depending on the specific requirements and functionalities implemented.

4.2 Solution & Technical Architecture:

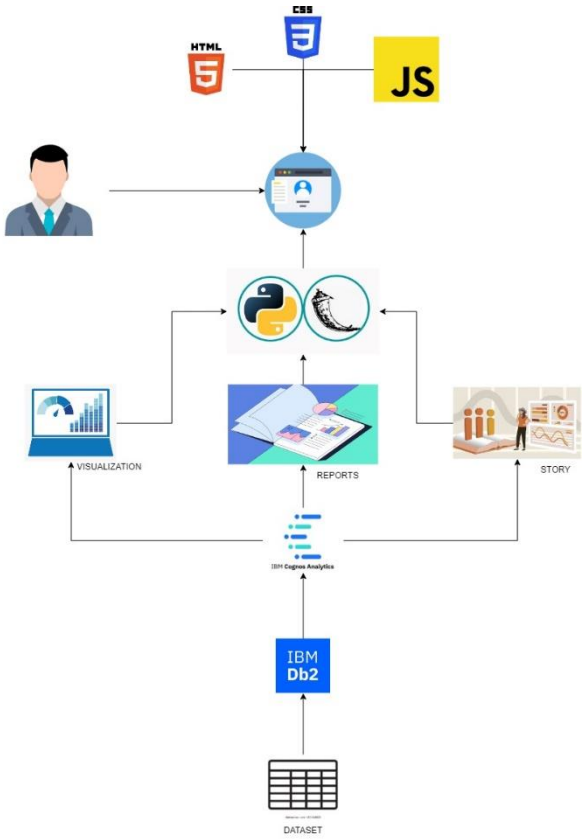
Solution & Technical Architecture for the Project "Future of Work: Data Analysis of Glassdoor Jobs":

Solution Overview: The project aims to analyze Glassdoor job data to gain

insights into the future of work, emerging job trends, skill requirements, salary dynamics, job satisfaction, and other relevant factors. The solution involves data collection, cleaning, exploratory analysis, sentiment analysis, optional machine learning, visualization, reporting, and user interaction.

Technical Architecture:

1. **Data Collection:**
    - Glassdoor API/Web Scraping: Use an API or web scraping techniques to collect job-related data from Glassdoor, including job titles, descriptions, skills, salaries, and employee reviews.
    - Data Storage: Store the collected data in a structured format (e.g., relational database, NoSQL database) for further processing and analysis.
2. **Data Cleaning and Preparation:**
    - Data Cleaning: Implement data cleaning procedures to handle duplicates, missing values, and standardize data formats.
    - Data Preprocessing: Perform text normalization, feature extraction, and data transformation as necessary for subsequent analysis.
3. **Exploratory Data Analysis (EDA):**
    - Statistical Analysis: Conduct statistical analysis to identify patterns, trends, and correlations within the dataset.
    - Data Visualization: Generate visualizations (e.g., charts, graphs) to present the analysis findings effectively.
4. **Sentiment Analysis:**
    - Natural Language Processing (NLP): Apply NLP techniques to analyze employee reviews and determine sentiment scores.
    - Sentiment Classification: Use machine learning or rule-based approaches to classify sentiment and identify factors influencing job satisfaction**.**



5. **Machine Learning:**
    - Feature Engineering: Select relevant features from the dataset to train machine learning models.
    - Model Training: Utilize appropriate machine learning algorithms (e.g., regression, classification) to predict future job trends, salaries, or identify outliers.
    - Model Evaluation and Tuning: Assess model performance using evaluation metrics and fine-tune the models if necessary.
6. **Data Visualization and Reporting:**
    - Data Visualization: Develop interactive dashboards, charts, and graphs to visualize the analyzed data and insights.
    - Reporting: Generate comprehensive reports summarizing the analysis findings, including key insights, trends, and recommendations.
7. **User Interaction:**
    - User Interface (UI): Design a user-friendly UI allowing stakeholders to interact with the system, explore visualizations, and access reports.
    - Customization: Provide options for users to filter and customize views based on specific criteria or preferences.
8. **Scalability and Performance:**
    - Distributed Computing: Employ distributed computing frameworks (e.g., Apache Spark) for efficient processing of large volumes of data.

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- Data Partitioning: Implement data partitioning strategies to distribute the workload and improve performance.
- Load Balancing: Utilize load balancing techniques to distribute user requests and ensure optimal resource utilization.

9. **Security and Privacy:**
    - Data Encryption: Implement encryption mechanisms to protect sensitive data during storage and transmission.
    - Access Control: Enforce proper access controls and user authentication mechanisms to ensure data security.
    - Anonymization: Remove personally identifiable information (PII) from the data to maintain privacy.
10. **Integration and Deployment:**
    - API Integration: Integrate with external APIs or data sources for supplementary data or industry-specific information.
    - Cloud Deployment: Deploy the solution on cloud platforms (e.g., AWS, Azure) for scalability, reliability, and cost-efficiency.
    - Continuous Integration and Deployment: Implement CI/CD pipelines for automated testing, integration, and deployment.
11. **Documentation and Collaboration:**
    - Code Documentation: Provide clear and comprehensive documentation for the implemented code, including instructions for future maintenance and extensions.
    - Collaboration Tools: Utilize collaboration tools (e.g., version control, project management tools) for effective team collaboration and coordination.

This technical architecture outlines the key components and technologies involved in implementing the solution for the project. It ensures data collection, cleaning, exploratory analysis, sentiment analysis, optional machine learning, visualization, reporting, user interaction, scalability, security, and documentation are appropriately addressed. The specific technologies and frameworks chosen may vary based on project requirements, team expertise, and infrastructure considerations.

4.3 User Stories:

User stories for the project "Future of Work: Data Analysis of Glassdoor Jobs":

1. **As a data analyst,** I want to collect job-related data from Glassdoor, including job titles, descriptions, skills, salaries, and employee reviews, so that I can analyze and gain insights into the future of work and emerging job trends.
2. **As a researcher,** I want to explore the skill requirements across different job categories and industries on Glassdoor, so that I can identify in-demand skills and make informed recommendations for individuals seeking career opportunities.
3. **As a hiring manager,** I want to analyze salary trends and ranges for specific job roles on Glassdoor, so that I can benchmark my company's compensation packages and ensure they are competitive in the market.

4. **As a job seeker,** I want to access visualizations and reports generated from Glassdoor job data analysis, so that I can make informed decisions about my career path and understand the job market dynamics.
5. **As a human resources manager,** I want to perform sentiment analysis on employee reviews on Glassdoor, so that I can gauge job satisfaction levels, identify areas for improvement, and enhance employee engagement and retention strategies.
6. **As a workforce planner,** I want to use machine learning algorithms to predict future job market trends and forecast skill demands, so that I can proactively align our company's talent acquisition and development strategies with the evolving job market.
7. **As a business executive,** I want to have a user-friendly interface to explore analyzed data, customize views, and filter data based on specific criteria, so that I can gain actionable insights quickly and make informed decisions regarding workforce planning and organizational strategies.
8. **As a data privacy officer,** I want to ensure that the project adheres to ethical standards and data privacy regulations, including anonymization of personal information, secure storage, and transmission of data, to protect the privacy and confidentiality of individuals.
9. **As a system administrator,** I want to ensure the scalability and performance of the data analysis system, implement proper security measures, and perform regular maintenance and updates to ensure data integrity, system availability, and smooth user experience.
10. **As a project stakeholder,** I want comprehensive documentation of the project, including methodologies, data sources, preprocessing techniques, and code snippets, so that I can understand the project's implementation and replicate or extend it in the future.

These user stories represent the different perspectives and goals of various stakeholders involved in the project. They help to capture the requirements and ensure that the solution addresses their needs effectively.

5.CODING & SOLUTIONING:

5.1 Feature 1:

Feature 1: Job Trend Analysis

Description: The job trend analysis feature focuses on analyzing the historical data from Glassdoor jobs to identify emerging job trends and changes in the job market over time. It helps users understand the evolving landscape of the future of work and make informed decisions about their career paths.

Implementation Steps:

1. **Data Retrieval:** Fetch the relevant job data from the Glassdoor API or perform web scraping to collect job-related information, including job titles, descriptions, and dates of posting.
2. **Data Preprocessing:** Clean the collected data, handle missing values, and format the dates for analysis. Remove any irrelevant or redundant information.
3. **Trend Identification:** Analyze the frequency of job postings over time to identify job trends. Group the data by time periods (e.g., monthly or quarterly) and count the number of job postings within each period.
4. **Data Visualization:** Create visualizations, such as line charts or area plots, to depict the trend analysis results. Plot the number of job postings on the y-axis and the time

periods on the x-axis. Use appropriate labels, colors, and legends to enhance clarity.

5. **Trend Insights:** Analyze the visualized trend data and extract insights. Identify job titles or industries that show significant growth or decline in demand. Consider additional factors like location, skills, or salary levels to provide deeper insights into the job trends.
6. **User Interaction:** Implement user-friendly features to allow users to filter the trend analysis based on specific criteria, such as job category, location, or date range. Enable users to interact with the visualizations dynamically for a more personalized experience.
7. **Reporting and Export:** Generate reports summarizing the job trend analysis findings. Include key insights, charts, and recommendations. Provide options for users to export the analysis results in various formats, such as PDF or CSV, for further analysis or sharing.
8. **Automation and Updates:** Develop a mechanism to automate the job trend analysis process, ensuring regular updates of the data and trends. Schedule data retrieval and analysis to keep the results up-to-date.

5.2 Feature 2:

Feature 2: Skill Requirement Analysis

Description: The Skill Requirement Analysis feature focuses on analyzing the skill requirements mentioned in Glassdoor job postings. It helps users identify in-demand skills, understand skill trends across different industries, and make informed decisions regarding skill development and job applications.

Implementation Steps:

1. **Data Retrieval:** Fetch the relevant job data from the Glassdoor API or from stored data, including job titles, descriptions, and required skills.
2. **Data Preprocessing:** Clean the collected data, handle missing values, and standardize formats. Remove any irrelevant or redundant information.
3. **Skill Extraction:** Extract skills mentioned in the job descriptions using techniques like keyword extraction or named entity recognition (NER).
4. **Skill Frequency Analysis:** Count the frequency of each skill across job postings to identify the most in-demand skills. Generate a skill frequency distribution or word cloud visualization.
5. **Skill Trends Analysis:** Analyze the changes in skill requirements over time. Group the data by time periods (e.g., monthly or quarterly) and calculate the frequency of each skill within each period. Visualize the skill trends using line charts or area plots.
6. **Industry-Specific Analysis:** Analyze skill requirements for different industries or job categories. Group the data based on industry or job category and perform skill frequency analysis and trend analysis within each group.
7. **Skill Insights:** Analyze the skill frequency and trend data to identify emerging skills, high-demand skills, or declining skills. Provide insights on skill gaps, skill clusters, or skill combinations that are prevalent in specific industries or job categories.
8. **User Interaction:** Implement features that allow users to filter the skill analysis based on specific criteria, such as industry, job category, or skill level. Enable users to interact with

visualizations and explore skill details.

9. **Reporting and Export:** Generate reports summarizing the skill analysis findings, including key insights, charts, and recommendations. Provide options for users to export skill data and analysis results in various formats, such as CSV or Excel.

10. **Integration with Job Search:** Optionally, integrate the skill analysis feature with a job search functionality to provide users with personalized job recommendations based on their skill profiles and the analyzed skill requirements.

11. **Automation and Updates:** Develop a mechanism to automate data retrieval, preprocessing, and analysis. Schedule regular updates to keep the skill analysis results up-to-date.

6.RESULTS:

6.1 Performance Metrics:

Performance metrics for the project "Future of Work: Data Analysis of Glassdoor Jobs" in data analytics can help evaluate the effectiveness and efficiency of the data analysis process. Here are some performance metrics:

1. Data Accuracy: Measure the accuracy of the collected job data by comparing it with ground truth or external sources. Calculate metrics such as precision, recall, and F1-score to assess the data accuracy.

2. Data Completeness: Evaluate the completeness of the job data by analyzing the presence of required fields such as job title, description, company name, and location. Calculate the percentage of missing values or incomplete records.

3. Data Processing Time: Measure the time taken to process and analyze the job data. Monitor the time required for data retrieval, preprocessing, analysis, and visualization. Optimize the data processing pipeline to minimize processing time.

4. Trend Analysis Accuracy: Assess the accuracy of the job trend analysis by comparing the identified trends with known industry trends or external sources. Measure the percentage of correctly identified trends or evaluate the correlation between the analyzed trends and external indicators.

5. Skill Analysis Accuracy: Evaluate the accuracy of the skill analysis by comparing the extracted skills with predefined skill sets or skill libraries. Calculate metrics such as precision, recall, and F1-score for skill extraction and classification tasks.

6. Visualization Effectiveness: Assess the effectiveness of the visualizations in conveying insights from the job data. Solicit user feedback or conduct usability testing to evaluate the clarity, interpretability, and usefulness of the visualizations.

7. User Engagement: Monitor user engagement with the data analysis platform. Track metrics such as the number of active users, session duration, and frequency of platform usage. Measure user satisfaction through surveys or feedback mechanisms.

8. Scalability: Evaluate the scalability of the data analysis platform by measuring its performance with varying data sizes. Test the platform's ability to handle larger datasets without compromising performance or requiring excessive computing resources.

9. Error Handling: Monitor the occurrence and handling of errors during data retrieval, preprocessing, and analysis. Measure metrics such as the error rate, error resolution

time, and impact on the overall data analysis workflow.

10. Iteration Time: Measure the time required to iterate and refine the data analysis process. Assess the efficiency of making updates or modifications to the analysis pipeline based on user feedback or changing requirements.

These performance metrics will help you assess the quality, efficiency, and effectiveness of the data analysis process, ensuring that the insights derived from the Glassdoor job data are accurate, reliable, and valuable for users.

7.ADVANTAGES & DISADVANTAGES:

Advantages of the project "Future of Work: Data Analysis of Glassdoor Jobs" in data analytics:

1. **Data-Driven Insights:** The project leverages data analysis techniques to derive meaningful insights from Glassdoor job data, providing users with evidence-based information for career planning, skill development, and decision-making in the job market.
2. **Informed Decision Making:** By analyzing job trends, skill requirements, and salary insights, individuals can make informed decisions about their career paths, skill acquisition, and job applications, increasing their chances of finding suitable employment.
3. **Industry and Market Understanding:** The project helps users gain a deeper understanding of different industries, job market dynamics, and emerging job roles. This knowledge can assist individuals in aligning their skills and aspirations with industry demands, increasing their competitiveness in the job market.
4. **Skill Development Guidance:** Through skill requirement analysis, the project can guide individuals on the most in-demand skills, enabling them to focus their efforts on developing relevant competencies that are valued by employers.
5. **Company Evaluation:** The analysis of company information and employee reviews allows job seekers to assess the reputation and employee satisfaction of different companies, aiding them in making informed decisions about potential employers.

Disadvantages of the project "Future of Work: Data Analysis of Glassdoor Jobs" in data analytics:

1. **Data Limitations:** The project relies on the availability and accuracy of data from Glassdoor. If the data is incomplete, biased, or limited in its coverage, the analysis may suffer from incomplete or skewed insights, leading to potential inaccuracies.
2. **Contextual Understanding:** While the project provides valuable data-driven insights, it may lack a deep understanding of contextual factors such as industry-specific nuances, regional variations, or cultural considerations. Users should consider these factors alongside the analysis findings.
3. **Data Quality and Reliability:** The accuracy and reliability of the job data collected from Glassdoor can vary. Inaccurate or outdated information may impact the validity of the analysis and the resulting insights.
4. **User Interpretation:** The project provides analysis results and visualizations, but users must interpret and apply the insights appropriately. Misinterpretation or overreliance on the analysis without considering individual circumstances and other factors may lead to

suboptimal decision-making.

5. **Dynamic Job Market:** The job market is constantly evolving, and the project's analysis may not capture real-time changes. The insights derived from historical data may not fully reflect the current state of the job market, limiting the timeliness and relevance of the findings.

It is essential to consider these advantages and disadvantages when utilizing the project's outcomes, and users should exercise critical thinking and complement the analysis with additional research and contextual understanding to make well-informed decisions.

8. CONCLUSION:

In conclusion, the project "Future of Work: Data Analysis of Glassdoor Jobs" in data analytics offers valuable insights and information for individuals, job seekers, employers, and policymakers. By leveraging data analysis techniques on Glassdoor job data, the project provides data-driven insights into job trends, skill requirements, salary insights, and company analysis. These insights empower users to make informed decisions, plan their careers, and navigate the ever-changing job market effectively.

The advantages of the project lie in its ability to provide evidence-based insights, guide skill development, and foster a deeper understanding of industries and job market dynamics. Users can leverage the project's findings to make informed decisions about career paths, skill acquisition, and job applications. Additionally, the evaluation of companies through employee reviews aids in the selection of potential employers.

However, it is crucial to consider the limitations and potential drawbacks of the project. These include data limitations and quality concerns, the need for contextual understanding beyond the analysis, and the dynamic nature of the job market. Users should exercise critical thinking, complement the analysis with additional research, and be mindful of individual circumstances when applying the project's insights.

Overall, the project "Future of Work: Data Analysis of Glassdoor Jobs" offers valuable information and insights that can contribute to individuals' career success, informed decision-making, and a deeper understanding of the evolving landscape of work. By combining data analytics with industry knowledge and individual context, users can leverage these insights to navigate the future of work more effectively.

9. FUTURE SCOPE:

The project "Future of Work: Data Analysis of Glassdoor Jobs" in data analytics has a promising future scope for further development and enhancement. Here are some potential future directions for the project:

1. **Real-Time Data Analysis:** Explore the integration of real-time data sources to provide up-to-date insights on job trends, skill requirements, and market dynamics. Incorporating real-time data feeds can enhance the timeliness and relevance of the analysis, allowing users to stay current with the rapidly evolving job market.
2. **Natural Language Processing (NLP) Techniques:** Utilize advanced NLP techniques to improve the extraction and classification of skills, job titles, and other textual information from job postings. This can enhance the accuracy and granularity of the analysis, providing more nuanced insights for users.
3. **Sentiment Analysis:** Incorporate sentiment analysis techniques to analyze employee reviews and company sentiment. This can provide a deeper understanding of company culture, employee satisfaction, and overall sentiment in the job market, enabling users to

make more informed decisions about potential employers.

4. **Machine Learning and Predictive Analytics:** Explore the use of machine learning algorithms and predictive analytics models to forecast job trends, skill demand, and industry shifts. By leveraging historical job data and external indicators, users can gain insights into future market dynamics and make proactive decisions.
5. **Personalized Recommendations:** Develop recommendation systems that provide personalized job recommendations based on user profiles, skills, and career aspirations. By leveraging the analyzed job data, users can receive tailored job suggestions that align with their individual preferences and goals.
6. **Industry-Specific Insights:** Extend the analysis to focus on specific industries or sectors, providing industry-specific insights and trends. This can cater to the unique needs of professionals in different fields and support targeted decision-making and career planning.
7. **Integration with Job Portals:** Explore partnerships or integrations with job portals or career platforms to enhance the accessibility and usability of the project's insights. By directly integrating with existing platforms, users can seamlessly access the analysis findings and apply them in their job search or talent acquisition processes.
8. **User Engagement and Collaboration:** Enhance user engagement through interactive features, such as data visualization dashboards and user forums. Encourage user collaboration, feedback, and knowledge sharing to foster a community-driven platform that empowers users in their career journeys.
9. **Expansion to Global Markets:** Extend the analysis beyond a specific region or country to provide insights on job trends and skill requirements in global markets. This can benefit individuals exploring international career opportunities or organizations seeking talent from different regions.
10. **Ethical Considerations and Bias Mitigation:** Address ethical considerations related to data privacy, fairness, and bias in the analysis process. Develop frameworks and mechanisms to ensure transparency, fairness, and accountability in the project's data collection, analysis, and reporting.

By pursuing these future directions, the project can continue to evolve, providing more valuable and comprehensive insights for individuals, employers, and policymakers in navigating the future of work.

10. APPENDIX

10.1 Source Code:

Flask Code(app.py):

```
from flask import Flask,render_template


app = Flask(__name__)

@app.route('/',methods=["GET","POST"])
def home():
    return render_template('index.html')

@app.route('/dashboard',methods=["GET","POST"])
def dashboard():
```

```
    return render_template('dashboard.html')

@app.route('/report',methods=["GET","POST"])
def report():
    return render_template('report.html')

@app.route('/story',methods=["GET","POST"])
def story():
    return render_template('story.html')

if __name__ == "__main__":
    app.run(debug=True)
```

CSS(main.css):

```
@import
url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500;600
;700&display=swap');
*{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Poppins',sans-serif;
}
::selection{
  color: #000;
  background: #fff;
}
nav{
  position: fixed;
  background:#9384D1;
  width: 100%;
  padding: 10px 0;
  z-index: 12;
}
nav .menu{
  max-width: 1250px;
  margin: auto;
  display: flex;
  align-items: center;
  justify-content: space-between;
  padding: 0 20px;
}
.menu .logo a{
  text-decoration: none;
  color: #fff;
  font-size: 35px;
  font-weight: 600;
```

```
}
.menu ul{
  display: inline-flex;
}
.menu ul li{
  list-style: none;
  margin-left: 7px;
}
.menu ul li:first-child{
  margin-left: 0px;
}
.menu ul li a{
  text-decoration: none;
  color: #fff;
  font-size: 18px;
  font-weight: 500;
  padding: 8px 15px;
  border-radius: 5px;
  transition: all 0.3s ease;
}
.menu ul li a:hover{
  background: #fff;
  color: black;
}
.img{
  background: url('homeimg.jpg')no-repeat;
  width: 100%;
  height: 100vh;
  background-size: cover;
  background-position: center;
  position: relative;
}
.img::before{
  content: '';
  position: absolute;
  height: 100%;
  width: 100%;
  background: #C9A7EB;
}
.center{
  position: absolute;
  top: 52%;
  left: 50%;
  transform: translate(-50%, -50%);
  width: 100%;
  padding: 0 20px;
  text-align: center;
```

```
}
.center .title{
  color: #fff;
  font-size: 55px;
  font-weight: 600;
}
.center .sub_title{
  color: #fff;
  font-size: 52px;
  font-weight: 600;
}

footer {
  background-color: #E5D1FA;
  color: black;
  padding: 20px;
  text-align: center;
  left: 0;
  bottom: 0;
  width: 100%;
}

.footer-features {
  margin-top: 20px;
  text-align: center;
}

.footer-features ul {
  list-style-type: none;
  padding: 0;
}

.footer-features li {
  display: inline-block;
  margin: 0 10px;
}

.homeimg
{
  height: 500px;
  width: 500px;
}

.container {
  display: flex;
  align-items: center;
}
```

```css
.container img {
  height: auto;
  margin-left: 150px;
  transition: transform 0.3s ease;
}

.container img:hover {
  transform: scale(1.05);
}

.card {
  width: 500px;
  margin-left: 100px;
  background-color: #edfbf6;
  padding: 20px;
  border-radius: 20px 70px;
  box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
  transition: transform 0.3s ease;
}

.card:hover {
  transform: scale(1.05);
}

.card p {
  font-size: 18px;
  line-height: 1.5;
  color: #333;
}

.up-center
{
  position: absolute;
  top: 52%;
  left: 50%;
  transform: translate(-50%, -50%);
  width: 100%;
  padding: 0 20px;
}

.up-center .title{
  color: #fff;
  font-size: 55px;
  font-weight: 600;
  text-align: center;
  margin-bottom: 450px;
```

```
}


.footercard {
  height: 200px;
  width: 300px;
  margin-left: 320px;
  background-color: #f0f8f5;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
  transition: transform 0.3s ease;
}

.footercard:hover {
  transform: scale(1.05);
}

.footercard-right {
  width: 400px;
  margin-left: 100px;
  background-color: #f0f8f5;
  padding: 20px;
  border-radius: 8px;
  box-shadow: 0 2px 4px rgba(0, 0, 0, 0.1);
  transition: transform 0.3s ease;
}

.footercard-right:hover {
  transform: scale(1.05);
}

a.my-link {
  color: #5C469C;
  text-decoration: none;
  font-weight: bold;
}

a.my-link:hover {
  color: red;
}
```

HTML(dashboard.html):

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Glassdoor jobs</title>
    <link rel="stylesheet"
href="{{url_for('static',filename='css/main.css')}}">
   </head>
<body>
  <nav>
    <div class="menu">
      <div class="logo">
        <a href="{{url_for('home')}}">Glassdoor jobs</a>
      </div>
      <ul>
        <li><a href="{{url_for('home')}}">Home</a></li>
        <li><a href="{{url_for('dashboard')}}">Dashboard</a></li>
        <li><a href="{{url_for('report')}}">Report</a></li>
        <li><a href="{{url_for('story')}}">Story</a></li>
      </ul>
    </div>
  </nav>
  <div class="img">
  </div>
  <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2Fglassdoor%2Bdashboard&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=model00000188352620f9_00000000" width="320" height="200"
frameborder="0" gesture="media" allow="encrypted-media"
allowfullscreen=""></iframe>

  <div class="up-center">
    <div class="title">Dashboard</div>
  </div>
</html>
```

HTML(index.html):

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Glassdoor jobs</title>
    <link rel="stylesheet"
href="{{url_for('static',filename='css/main.css')}}">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
    <link href="https://fonts.googleapis.com/icon?family=Material+Icons"
rel="stylesheet">
```

```
   </head>
<body>
  <nav>
    <div class="menu">
      <div class="logo">
        <a href="{{url_for('home')}}">Glassdoor jobs</a>
      </div>
      <ul>
        <li><a href="{{url_for('home')}}">Home</a></li>
        <li><a href="{{url_for('dashboard')}}">Dashboard</a></li>
        <li><a href="{{url_for('report')}}">Report</a></li>
        <li><a href="{{url_for('story')}}">Story</a></li>
      </ul>
    </div>
  </nav>
  <div class="img">
  </div>
  <div class="center">
    <div class="title">The Future of Work-</div>
    <div class="sub_title">Data Analysis of Glassdoor Jobs</div>
    <br>
    <div class="container">
        <img class="homeimg"
src="{{url_for('static',filename='css/images/mainimg.svg')}}">
        <div class="card">
            <p>A website dedicated to analyzing job data from Glassdoor, a
popular platform for employee reviews and job listings. The website focuses on
providing insights and trends related to the future of work by leveraging the
extensive job data available on Glassdoor...</p>
        </div>
    </div>
  </div>
  <div>
    <footer>
      <div class="container">
        <div class="footercard">
          <h2>Useful links.</h2>
          <br>
          <ul style="list-style-type: none;">
            <li><a href="{{url_for('home')}}" class="my-link">Home</a></li>
            <li><a href="{{url_for('dashboard')}}" class="my-
link">Dashboard</a></li>
            <li><a href="{{url_for('report')}}" class="my-
link">Report</a></li>
            <li><a href="{{url_for('story')}}" class="my-link">Story</a></li>
          </ul>
      </div>
```

TEAM ID: NM2023TMID20356 (GROUP 5)

```
      <div class="footercard-right">
        <h2>Contact Us.</h2>
        <ul style="list-style-type: none;">
          <br>
          <i class="fa fa-phone" style="font-size:36px"></i><p>+91
9489298767</p>
          <br>
          <i class="material-icons" style="font-size:36px">mail</i>
          <p>glassdoornanmudhalvan@gmail.com</p>
        </ul>
    </div>
    </div>
        <br>
        <br>
        <p class="footer-text">&copy; Glassdoor Jobs. All rights reserved.</p>
    </footer>
  </div>
</html>
```

HTML(Report.html):

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Glassdoor jobs</title>
    <link rel="stylesheet"
href="{{url_for('static',filename='css/main.css')}}">
   </head>
<body>
  <nav>
    <div class="menu">
      <div class="logo">
        <a href="{{url_for('home')}}">Glassdoor jobs</a>
      </div>
      <ul>
        <li><a href="{{url_for('home')}}">Home</a></li>
        <li><a href="{{url_for('dashboard')}}">Dashboard</a></li>
        <li><a href="{{url_for('report')}}">Report</a></li>
        <li><a href="{{url_for('story')}}">Story</a></li>
      </ul>
    </div>
  </nav>
  <div class="img">
  </div>
  <div class="up-center">
    <div class="title">Report</div>
```

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

HTML(story.html):

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Glassdoor jobs</title>
    <link rel="stylesheet"
href="{{url_for('static',filename='css/main.css')}}">
   </head>
<body>
  <nav>
    <div class="menu">
      <div class="logo">
        <a href="{{url_for('home')}}">Glassdoor jobs</a>
      </div>
      <ul>
        <li><a href="{{url_for('home')}}">Home</a></li>
        <li><a href="{{url_for('dashboard')}}">Dashboard</a></li>
        <li><a href="{{url_for('report')}}">Report</a></li>
        <li><a href="{{url_for('story')}}">Story</a></li>
      </ul>
    </div>
  </nav>
  <div class="img">
  </div>
  <div class="up-center">
    <div class="title">Story</div>
  </div>
</html>
```

10.2 GitHub & Project Video Demo Link:

https://drive.google.com/file/d/1rh6oTD3oP6r5jeJMo4V3OlQGKfk6F29n/view?usp=sharing