## **Salesforce Bit**

A PROJECT REPORT for

Project (KC451) Session (2023-24)

Submitted by Alok Singh

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**Submitted in partial fulfillment of the Requirements for the Degree of** 

# MASTER OF COMPUTER APPLICATION



Under the Supervision of Ms. Divya Singhal (Assistant Professor)

## **Submitted to**

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(MAY 2024)

**CERTIFICATE** 

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"Salesforce Bit" (Project-KCA451) for Master of Computer Application from Dr.

A.P.J. Abdul Kalam Technical University (AKTU) (formerly UPTU), Lucknow under my

supervision. The project report embodies original work, and studies are carried out by the

student himself/herself and the contents of the project report do not form the basis for the

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## **ABSTRACT**

Salesforce Bit is a groundbreaking project aimed at transforming recruitment processes for HR professionals. By harnessing the power of Salesforce, this innovative platform offers a centralized solution to the fragmented nature of current recruitment practices. With features such as centralized position management, automated job postings, candidate database management, streamlined interview scheduling, and comprehensive feedback collection, Salesforce Bit revolutionizes the recruitment landscape. Through customizable workflows and seamless integration with external systems, Salesforce Bit empowers organizations to optimize their talent acquisition efforts, attract top candidates, and drive organizational growth.

Through automation, customization, and insightful reporting capabilities, Salesforce Bit provides HR professionals with the tools they need to efficiently manage the recruitment process. By eliminating manual tasks, reducing errors, and offering data-driven insights, Salesforce Bit streamlines recruitment workflows and enhances the overall candidate experience. With its user-friendly interface and mobile accessibility, Salesforce Bit ensures that HR professionals can easily navigate the platform and make informed decisions to support their organization's recruitment objectives.

### **ACKNOWLEDGEMENTS**

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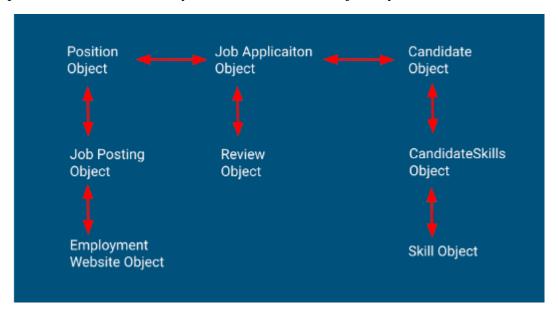
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### **CHAPTER 1**

#### Introduction

#### 1.1 OVERVIEW

In the competitive realm of talent acquisition, the recruitment process stands as a cornerstone for organizational growth. However, traditional approaches often fall short, burdened by disjointed systems and manual workflows that hinder efficiency and effectiveness. Enter "Salesforce Bit" - a pioneering solution poised to redefine recruitment management. Leveraging the robust capabilities of Salesforce, Salesforce Bit offers a unified platform to streamline every facet of the recruitment journey.



#### 1.2 BACKGROUND

Traditional recruitment methods often involve multiple platforms and manual processes, leading to inefficiencies and inconsistencies. From managing job positions to tracking candidate details and scheduling interviews, HR professionals face numerous challenges that impede their ability to attract and secure top talent. The need for an integrated, automated solution has become increasingly evident as organizations strive to stay competitive in a dynamic job market.

## 1.2.1 Brief History of CRM

Customer Relationship Management (CRM) systems originated in the late 1980s as simple database marketing tools designed to help businesses store and manage customer information. By the early 1990s, these systems evolved into contact management systems like Act! and GoldMine, which facilitated the organization of sales leads and customer interactions. The mid-1990s marked the advent of more comprehensive CRM solutions, such as those developed by Siebel Systems, which integrated sales force automation and other business processes. The late 1990s brought a significant shift with Salesforce's introduction of a cloud-based CRM platform, revolutionizing the accessibility and scalability of CRM systems. Today, CRM systems have further evolved to integrate advanced analytics, artificial intelligence (AI), and machine learning, playing a crucial role in enhancing customer engagement, personalizing customer experiences, and driving strategic business growth.

### 1.2.2 Types of Salesforces

#### 1. Operational CRM

- Focuses on automating and streamlining business processes related to customer interactions.
- Includes sales force automation, marketing automation, and service automation to enhance efficiency and manage day-to-day operations.
- Examples: Managing customer data, sales processes, and service requests to improve overall operational efficiency.

#### 2. Analytical CRM

- Analyses customer data to gain insights into customer behavior and preferences.
- Utilizes data mining, customer segmentation, and predictive analytics to inform datadriven decisions and improve business performance.
- Examples: Identifying trends, understanding customer lifetime value, and predicting customer behaviour to tailor marketing strategies.

#### 3. Collaborative CRM

- Emphasizes communication and collaboration between different departments and stakeholders.
- Integrates various communication channels and manages customer interactions across the organization to provide a unified customer experience.
- Examples: Sharing customer information across sales, marketing, and support teams to ensure consistent and coordinated customer interactions.

#### 4. Social CRM

- Leverages social media platforms to engage with customers and manage relationships.
- Integrates social media data with traditional CRM data to enhance customer insights and foster direct interactions through social media.
- Examples: Monitoring social media conversations, responding to customer inquiries, and leveraging social media analytics to inform marketing strategies.

## 1.2.3 Why Salesforce?

Salesforce is a leading CRM platform renowned for its robust, cloud-based solutions that enhance business efficiency and scalability. Its user-friendly interface and comprehensive feature set streamline sales, marketing, and customer service processes. Salesforce offers numerous advantages, making it a preferred choice for businesses looking to optimize their operations and drive growth:

- 1. **Cloud-Based Flexibility:** Salesforce's cloud-based nature ensures accessibility from anywhere, facilitating remote work and collaboration. This cloud infrastructure eliminates the need for complex on-premises hardware and software installations, reducing IT overheads and allowing for seamless updates and scalability.
- 2. **Integration Capabilities:** Salesforce integrates effortlessly with a wide range of applications and third-party systems. This interoperability allows businesses to create a

- unified ecosystem where data flows seamlessly between different tools, enhancing overall efficiency and data accuracy. Popular integrations include marketing automation platforms, ERP systems, and social media channels.
- 3. Advanced Analytics and AI: Salesforce's powerful analytics tools and AI capabilities provide deep insights into business processes. With features like Einstein Analytics, users can leverage predictive analytics to forecast trends, identify opportunities, and make data-driven decisions. This capability is particularly valuable in recruitment, where predictive analytics can help identify the best candidates and streamline hiring processes.
- 4. **Customization and Extensibility:** Salesforce offers extensive customization options through its AppExchange marketplace and robust API support. Businesses can tailor the platform to their specific needs, creating custom applications and workflows that align with their unique processes. This flexibility ensures that Salesforce can adapt as business requirements evolve.
- 5. **User-Friendly Interface:** The platform's intuitive and user-friendly interface reduces the learning curve for new users, ensuring quick adoption and minimal disruption to business operations. Its drag-and-drop tools, visual dashboards, and customizable reports make it easy for users to navigate and utilize the platform effectively.
- 6. **Community and Support:** Salesforce boasts a strong community of users and developers, providing a wealth of resources for support and innovation. This community-driven approach fosters continuous improvement and sharing of best practices. Additionally, Salesforce offers comprehensive training and certification programs through Trailhead, empowering users to maximize the platform's potential.

### 1.3 OBJECTIVE

The project aims to develop Salesforce Bit, a comprehensive recruitment management solution designed to streamline HR processes and enhance overall recruitment efficiency. The primary objectives of Salesforce Bit are to centralize job position management, candidate tracking, and skills alignment within the Salesforce platform. By automating repetitive tasks and providing insightful analytics, the solution seeks to improve candidate sourcing and selection processes, reducing the time-to-fill and improving the quality of hires. Salesforce Bit will empower HR professionals with efficient tools for informed decision-making, enabling them to focus on strategic activities and enhance recruitment outcomes. Ultimately, Salesforce Bit aims to transform the recruitment process into a more efficient, data-driven, and candidate-centric operation, helping organizations attract and retain top talent in a competitive job market.

#### **CHAPTER 2**

#### RELEVANT TOOLS AND TECHNOLOGIES

In this chapter, we delve into the tools and technologies essential for the development and implementation of Salesforce Bit, our recruitment management solution. Each tool plays a crucial role in enhancing functionality, scalability, and user experience. The following are the key tools and technologies identified for this project.

#### 2.1 Salesforce Platform

The Salesforce Platform serves as the cornerstone for Salesforce Bit, offering a robust and scalable framework for building and deploying cloud-based applications. The platform's multi-tenant architecture ensures that all users benefit from the same high-performance infrastructure while maintaining data security and privacy. Key components of the Salesforce Platform that are leveraged include:

Salesforce CRM: This core component provides powerful customer relationship management capabilities, which we extend to manage recruitment workflows. By utilizing Salesforce CRM, we can track interactions, automate communications, and maintain comprehensive records of candidate engagements.

Salesforce App Cloud: This environment facilitates the creation of custom applications tailored to specific business needs. With Salesforce App Cloud, developers can build, test, and deploy applications rapidly, taking advantage of built-in services such as security, user management, and mobile accessibility.

Salesforce Einstein AI: Integrating Salesforce Einstein AI allows Salesforce Bit to leverage advanced analytics and machine learning capabilities. Einstein AI can provide predictive insights, recommend actions, and automate routine tasks, thereby enhancing the efficiency and effectiveness of the recruitment process.

The Salesforce Platform's inherent flexibility and extensibility make it an ideal foundation for developing a sophisticated recruitment management system like Salesforce Bit.

### **2.2 Apex**

Apex is Salesforce's proprietary programming language, designed specifically for developing robust and scalable applications within the Salesforce ecosystem. Apex is used extensively in Salesforce Bit to implement custom business logic, automate complex workflows, and enforce data integrity. Key features of Apex include:

Object-Oriented Programming: Apex supports classes, interfaces, and inheritance, enabling the development of modular and reusable code.

Database Integration: Apex provides seamless integration with Salesforce's database, allowing developers to perform complex data manipulations, execute queries, and handle database transactions directly within the application.

Triggers and Asynchronous Processing: Apex supports the creation of triggers that execute in response to specific database events, such as record insertions or updates. Additionally, Apex allows for asynchronous processing, enabling long-running operations to be executed in the background without impacting user experience.

Built-in Testing Framework: Apex includes a comprehensive testing framework, allowing developers to write and execute unit tests to validate their code. This ensures high-quality, reliable applications.

By leveraging Apex, Salesforce Bit can deliver highly customized and efficient recruitment workflows, tailored to the specific needs of HR professionals and recruiters.

## 2.3 Lightning Web Components (LWC)

Lightning Web Components (LWC) is Salesforce's modern framework for building dynamic web applications. LWC enables developers to create responsive and interactive user interfaces that provide a seamless user experience. Key advantages of using LWC in Salesforce Bit include:

Standards-Based Development: LWC is built on modern web standards such as ES6, HTML5, and CSS3, ensuring that components are compatible with contemporary web technologies and practices.

Performance Optimization: LWC is designed for high performance, with a lightweight framework that minimizes overhead and maximizes rendering speed. This results in fast and responsive user interfaces.

Reusability and Modularity: LWC promotes the creation of reusable and modular components, allowing developers to build complex user interfaces by combining simple, self-contained elements. This modularity also facilitates easier maintenance and updates.

Integration with Salesforce Data and Services: LWC components can seamlessly interact with Salesforce data and services, leveraging the platform's powerful APIs and security model to ensure data integrity and protection.

Utilizing LWC, Salesforce Bit can provide an engaging and intuitive user interface that enhances the overall user experience for HR professionals and candidates alike.

### 2.4 Database Technologies

Effective data management is crucial for the success of Salesforce Bit. The platform relies on Salesforce's native database capabilities to store and manage data related to job positions, candidates, interviews, and more. Salesforce's database technologies offer several key features:

Structured Data Storage: Salesforce databases use a relational model to store structured data, allowing for efficient querying and reporting. Custom objects and fields can be defined to capture specific data points relevant to the recruitment process.

Data Security and Access Control:Salesforce provides robust security features, including field-level encryption, role-based access controls, and audit trails. These features ensure that sensitive recruitment data is protected and only accessible to authorized users.

Scalability: Salesforce's multi-tenant architecture ensures that the database can scale to accommodate growing amounts of data without compromising performance. This scalability is essential for supporting the recruitment needs of large organizations.

Integration with External Databases: For advanced analytics and reporting, Salesforce Bit can integrate with external databases or data warehouses. Tools such as Salesforce Connect and MuleSoft enable seamless data integration, allowing for comprehensive data analysis and business intelligence.

By leveraging Salesforce's database technologies, Salesforce Bit ensures that all recruitment data is stored securely, accessed efficiently, and managed effectively.

In summary, the Salesforce Platform, Apex, Lightning Web Components, and Salesforce's database technologies form the backbone of Salesforce Bit, enabling it to deliver a powerful, scalable, and user-friendly recruitment management solution. These tools and technologies work together to enhance the functionality, performance, and overall user experience of the system, making it a valuable asset for any organization looking to optimize its recruitment processes and makes it useful fo the general user experience.

#### **CHAPTER 3**

#### FEASIBILITY STUDY

#### 3.1 TECHNICAL FEASIBILITY

The technical feasibility of Salesforce Bit hinges on its compatibility with existing technology infrastructure, scalability, integration capabilities, security measures, and resource availability. Leveraging the robust framework provided by the Salesforce Platform, Salesforce Bit is poised to seamlessly integrate with existing Salesforce instances, enabling efficient recruitment management through extensive customization and development. Furthermore, scalability and performance are pivotal for the project's success, with Salesforce's scalable infrastructure and multi-tenant architecture ensuring optimal resource utilization, supporting scalability without significant infrastructure overhead.

Integration with external systems and data sources is paramount to enhance functionality and user experience. Salesforce Bit must seamlessly integrate with third-party applications, databases, and APIs, leveraging Salesforce's robust set of APIs to facilitate interoperability across multiple platforms. Additionally, stringent security measures are imperative to protect data confidentiality, integrity, and availability. By leveraging Salesforce's built-in security features and adherence to industry-leading security certifications and compliance standards, Salesforce Bit can maintain a robust security posture. Ultimately, ensuring resource availability is essential, with Salesforce offering a comprehensive ecosystem of resources and third-party support to facilitate the development and implementation of Salesforce Bit.

#### 3.2 OPERATIONAL FEASIBILITY

Operational feasibility of Salesforce Bit centers on its seamless integration within the organization's recruitment processes, ensuring alignment with existing workflows and systems. Understanding the nuances of the recruitment lifecycle, from job requisition to candidate onboarding, is pivotal for determining how effectively Salesforce Bit can augment and streamline these operations. Furthermore, assessing user readiness and willingness to adopt Salesforce Bit is crucial, necessitating comprehensive training and support mechanisms to facilitate smooth user adoption. User feedback and involvement throughout the development and implementation phases are vital for identifying potential hurdles and ensuring that Salesforce Bit meets user expectations.

Moreover, operational feasibility encompasses the cultural impact of introducing Salesforce Bit, gauging the organization's readiness for change and its capacity to embrace new technologies. Effective change management strategies, including communication and leadership support, play a pivotal role in fostering a culture of innovation and facilitating the integration of Salesforce Bit into daily operations. Additionally, ongoing maintenance and support requirements, as well as scalability considerations, are crucial for ensuring the long-term viability of Salesforce Bit within the organizational context. By carefully evaluating these factors, organizations can ascertain the operational feasibility of Salesforce Bit and maximize its potential to enhance recruitment management efficiency.

#### 3.3 BEHAVIORAL FEASIBILITY

Behavioral feasibility of Salesforce Bit relies heavily on the willingness of individuals within the organization to adopt the new system and incorporate it into their daily routines. Understanding user attitudes and perceptions towards technology adoption is paramount for anticipating potential challenges and devising effective strategies for user engagement. Surveys, interviews, and focus groups can provide valuable insights into user sentiments, enabling targeted approaches to address concerns and highlight the benefits of Salesforce Bit. Moreover, organizational culture plays a pivotal role in shaping behavioral feasibility. A culture that fosters innovation, open communication, and collaboration is more likely to embrace new technologies like Salesforce Bit. Leadership support and effective change management practices are instrumental in cultivating a positive environment where users are encouraged to embrace the new system and actively participate in its implementation and utilization.

#### 3.4 ECONOMICAL FEASIBILITY

Economical Evaluating the economic feasibility of Salesforce Bit entails a meticulous analysis of both the costs associated with its development, implementation, and maintenance, as well as the potential returns and cost-saving benefits it offers. Initial cost considerations encompass software development, customization, integration, training, and infrastructure upgrades, alongside ongoing expenses like licensing fees and support services. However, the true economic viability lies in the return on investment (ROI) that Salesforce Bit promises. By quantifying benefits such as reduced time-to-fill, improved candidate quality, and enhanced productivity, organizations can assess the projected ROI and make informed decisions about the implementation of Salesforce Bit.

Moreover, Salesforce Bit may not only generate direct cost savings but also open avenues for revenue generation and competitive advantage. Streamlining recruitment processes can help organizations attract top talent more efficiently, potentially leading to increased revenue opportunities. Additionally, the improved candidate tracking and

analytics capabilities offered by Salesforce Bit may empower organizations to develop more effective talent acquisition strategies, further enhancing their competitiveness and revenue potential. These additional economic benefits contribute to the overall feasibility of Salesforce Bit and justify the investment required for its implementation.

However, economic feasibility analysis must also consider potential risks and uncertainties that could impact the success of Salesforce Bit. Conducting a comprehensive risk analysis helps in identifying and mitigating factors such as technology obsolescence, market changes, regulatory compliance, and implementation challenges. By proactively addressing these risks, organizations can safeguard the economic feasibility of Salesforce Bit and ensure a positive return on investment over the long term.

#### **CHAPTER 4**

### **Core Functionalities and Capabilities**

### **Job Position Management**

Salesforce Bit empowers HR professionals to manage job positions seamlessly. Users can create, edit, and archive both open and closed positions effortlessly. Each job position is accompanied by comprehensive details such as title, description, required skills, hiring manager, and position status, facilitating efficient position tracking and management.

- Create Job Positions: Users can easily create new job positions by filling out a structured form that captures all necessary details. This includes the job title, a detailed description of the role, the skills required, and the hiring manager responsible for the position. By standardizing the creation process, Salesforce Bit ensures consistency across all job postings.
- Edit Job Positions: Modifying existing job positions is straightforward. HR professionals can update any aspect of the job position details as requirements change or evolve, ensuring that job postings remain accurate and up to date.
- Archive Positions: Once a position is filled or no longer needed, it can be archived. Archived positions are not deleted but stored in the system for historical reference and reporting purposes. This feature helps maintain an organized and clutter-free job position database.

## **Candidate Tracking and Management**

With Salesforce Bit, tracking and managing candidate details becomes a breeze. Users can add new candidates, view detailed candidate profiles, update application statuses, and schedule interviews seamlessly within the platform. Candidate profiles include essential information such as resumes, contact details, application history, and interview feedback, providing HR professionals with a comprehensive overview of each candidate.

- Add New Candidates: HR professionals can input new candidate information into the system, including uploading resumes and other relevant documents. This feature ensures that all candidate data is centrally stored and easily accessible.
- **View Candidate Profiles:** Detailed candidate profiles offer a 360-degree view of each candidate. Profiles include personal details, resumes, cover letters, application history, and interview feedback. This holistic view aids in making informed decisions about candidate suitability.
- Update Application Statuses: As candidates move through the recruitment process, their

application statuses can be updated to reflect their current stage, such as 'Applied', 'Interviewed', 'Offered', or 'Hired'. This feature provides clear visibility into the recruitment pipeline.

• Schedule Interviews: Salesforce Bit includes a robust interview scheduling feature that allows users to coordinate interview times, send invitations, and manage interview logistics. This streamlines the interview process and ensures that all stakeholders are informed and prepared.

### **Skills Alignment and Candidate Matching**

Salesforce Bit offers robust functionality to align candidate qualifications with job requirements effectively. Users can filter candidates based on specific skills and experience criteria, enabling more accurate candidate matching for open positions. This feature streamlines the candidate selection process, ensuring that only the most qualified candidates are considered for each position.

- **Filter Candidates:** The system allows users to filter the candidate pool based on specific criteria such as skills, years of experience, education, and certifications. This filtering capability helps narrow down the list to the most relevant candidates.
- **Skills Matching:** Salesforce Bit can automatically match candidate skills with job requirements, highlighting those who are the best fit for the position. This automated matching reduces the time spent manually reviewing resumes and enhances the accuracy of candidate selection.
- Candidate Recommendations: The system can generate a list of recommended candidates for a particular job position based on their qualifications and previous performance in similar roles. This feature leverages machine learning to continuously improve the accuracy of recommendations.

## **Position-Candidate Alignment**

Users can effortlessly align candidates with suitable job positions based on their qualifications and interview performance within Salesforce Bit. This feature simplifies the candidate sourcing and selection processes, allowing HR professionals to match candidates with relevant positions efficiently.

- Candidate Matching: By aligning candidates' skills and qualifications with the requirements of job positions, HR professionals can quickly identify the best matches. This alignment ensures that candidates are not only qualified but also a good fit for the role.
- **Interview Performance:** Candidates' interview feedback and performance ratings are factored into the alignment process. This ensures that decisions are based on a comprehensive assessment of each candidate's potential.

• **Sourcing Efficiency:** The system provides tools to streamline candidate sourcing, making it easier to manage large volumes of applications and quickly identify top talent.

#### **Interview Review and Feedback**

After conducting interviews, users can provide feedback and review notes for each candidate within Salesforce Bit. They can rate candidates based on predefined criteria, provide comments, and submit their assessments, ensuring thorough candidate evaluation and informed decision-making throughout the recruitment process.

- Structured Feedback Forms: The system includes standardized feedback forms that interviewers can use to evaluate candidates. These forms ensure consistency in feedback and help in comparing candidates objectively.
- **Rating System:** Candidates can be rated on various criteria such as technical skills, cultural fit, communication abilities, and overall impression. This quantitative data aids in making data-driven decisions.
- **Feedback Storage:** All feedback is stored within the candidate's profile, providing a historical record that can be referenced during final decision-making and for future considerations.

### **Candidate Review Summary**

Salesforce Bit facilitates the generation of comprehensive summary reports compiling candidate reviews for each job application. These summaries offer HR professionals valuable insights into candidate performance, strengths, areas for improvement, and recommendations for further action, facilitating efficient decision-making and candidate selection.

- **Summary Reports:** The system can compile all feedback and ratings into a consolidated summary report for each candidate. This report provides a clear overview of the candidate's strengths and weaknesses.
- Comparative Analysis: HR professionals can compare multiple candidates side-by-side using the summary reports, aiding in identifying the best fit for the position.
- Actionable Insights: The summary reports include recommendations for next steps, such as whether to proceed with an offer, conduct further interviews, or reject the application. These insights streamline the decision-making process.

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### **Employment Website Integration**

Salesforce Bit seamlessly integrates with various employment websites, allowing users to manage and track open positions posted on external platforms. This integration ensures consistent and accurate job postings across multiple channels, enhancing visibility and reach for job vacancies.

- Automatic Posting: Job positions created in Salesforce Bit can be automatically posted to external job portals such as LinkedIn, indeed, and Glassdoor. This automation ensures that job postings are consistent across all platforms.
- **Tracking and Updates:** The system tracks the status of job postings on external sites and updates them as needed. For instance, if a position is filled or modified within Salesforce Bit, these changes are reflected on the external platforms.
- **Application Import:** Applications received from external job portals are automatically imported into Salesforce Bit, ensuring that all candidate data is centralized and easily accessible.

### .

### **Reporting and Analytics**

Users can leverage robust reporting and analytics tools within Salesforce Bit to track key recruitment metrics such as time-to-fill, candidate sourcing effectiveness, and interview success rates. Customizable reports and dashboards provide valuable insights for optimizing recruitment strategies and processes, enabling HR professionals to make data-driven decisions and drive recruitment success.

- **Recruitment Metrics:** The system tracks a variety of key performance indicators (KPIs) such as time-to-fill, cost-per-hire, and source-of-hire. These metrics provide a clear view of the efficiency and effectiveness of the recruitment process.
- **Customizable Dashboards:** HR professionals can create personalized dashboards that display real-time data on recruitment activities. These dashboards help in monitoring progress and identifying areas for improvement.
- **Data Visualization:** Salesforce Bit includes advanced data visualization tools that transform raw data into easy-to-understand charts and graphs. This visual representation aids in quickly grasping trends and patterns.
- **Analytical Reports:** Detailed reports can be generated to analyze specific aspects of the recruitment process, such as the performance of different sourcing channels or the success rate of various interview stages. These reports provide deep insights that inform strategic decision-making.

By integrating these comprehensive features, Salesforce Bit not only enhances the efficiency of recruitment processes but also ensures a high level of accuracy, consistency, and data-driven decision-making. This makes it an invaluable tool for HR professionals seeking to optimize their recruitment strategies and achieve better hiring outcomes.

#### **CHAPTER 5**

### SYSTEM ARCHITECTURE AND DESIGN

#### **5.1 FLOW CHART DIAGRAM**

A flowchart is a visual representation of the sequence of steps and decisions needed to perform a process. Each step in the sequence is noted within a diagram shape. Steps are linked by connecting lines and directional arrows. This allows anyone to view the flowchart and logically follow the process from beginning to end. A flowchart is a powerful business tool. With proper design and construction, it communicates the steps in a process very effectively and efficiently.

| Symbol | Name         | Function   |
|--------|--------------|--|
|        | Start/end    | An oval represents a start or end point  |
|        | Arrows       | A line is a connector that shows relationships between the representative shapes |
|        | Input/Output | A parallelogram represents input or output                                       |
|        | Process      | A rectagle represents a process  |
|        | Decision     | A diamond indicates a decision   |

Fig 5.1: Flowchart Symbols

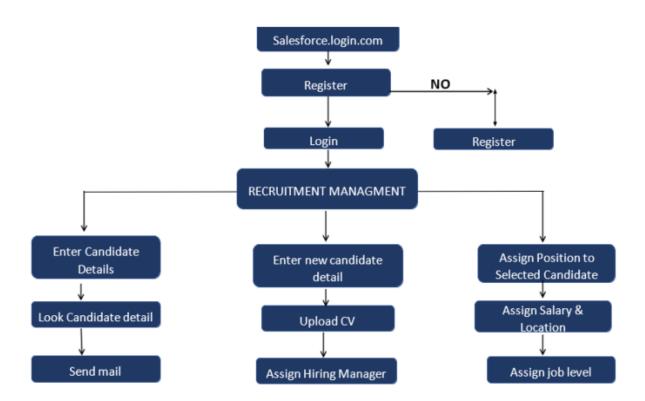


Fig 5.2: Flowchart Diagram

### 5.2 ENTITY RELATIONSHIP DIAGRAM

Entity-Relationship model stands for an ER model. It is a high-level data model. This model is used to define the data elements and relationship for a specified system. It develops a conceptual design for the database. It also develops a very simple and easy to design view of data. In ER modelling, the database structure is portrayed as a diagram called an entity relationship diagram.

## **Recruiting App**

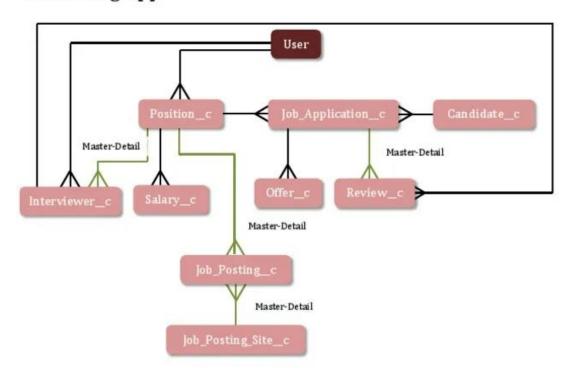


Fig 5.3: ER-Diagram

## **5.3 USE CASE DIAGRAM**

Creating a use case diagram for Salesforce Bit involves identifying the primary actors (users or systems) and their interactions with the system. Here's a textual representation of the use case diagram for Salesforce Bit, detailing the main functionalities and user interactions.

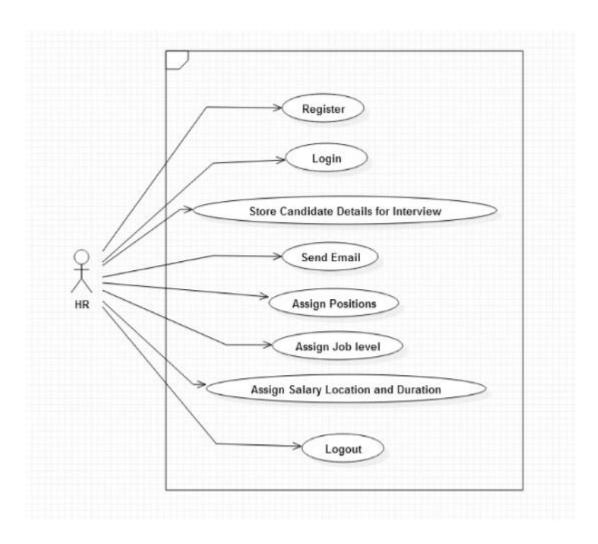


Fig 5.4: Use Case Diagram

### **5.4 CLASS DIAGRAM**

A class diagram depicts the classes in a software system and how they interact with each other. Also, the class attributes and functions are illustrated in a class diagram. The class diagram for this application. It shows the relationships between classes in the application and constraints applied to these relationships.

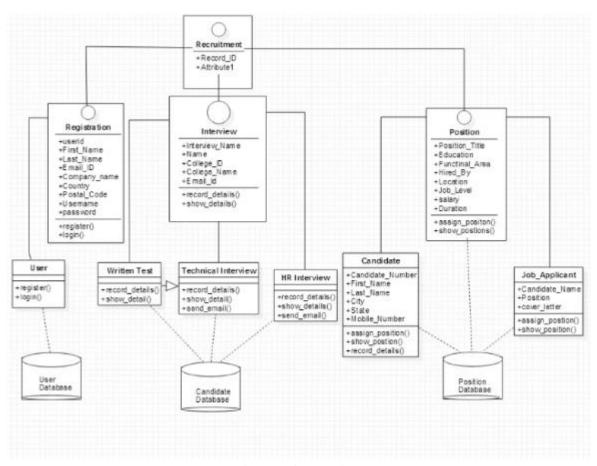


Fig 5.5: Class Diagram

## 5.5 SEQUENCE DIAGRAM

The sequence diagram (SD) represents the flow of messages in the system and is also termed as an event diagram. It helps in envisioning several dynamic scenarios. It portrays the communication between any two lifelines as a time-ordered sequence of events, such that these lifelines took part at the run time. In UML, the lifeline is represented by a vertical bar, whereas the message flow is represented by a vertical dotted line that extends across the bottom of the page. It incorporates the iterations as well as branching.

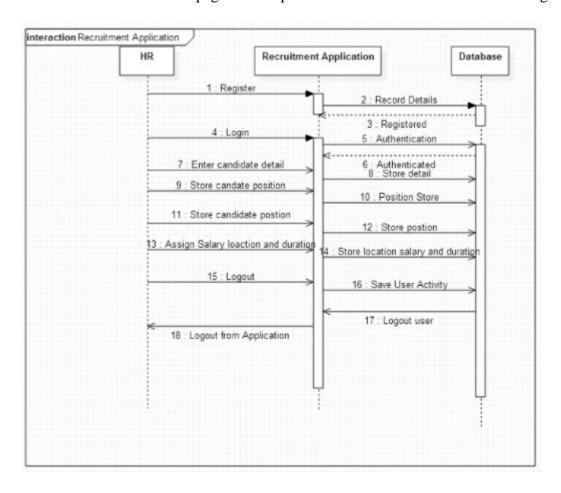


Fig 5.6: SEQUENCE DIAGRAM

## **5.6 OBJECT RELATIONSHIP DIAGRAM**

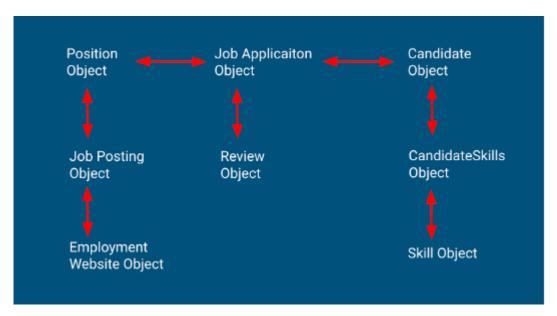


Fig 5.7: Objects Relationship Diagram

### **CHAPTER 6**

## IMPLEMENTATION AND RESULT

### **6.1 HOME PAGE**

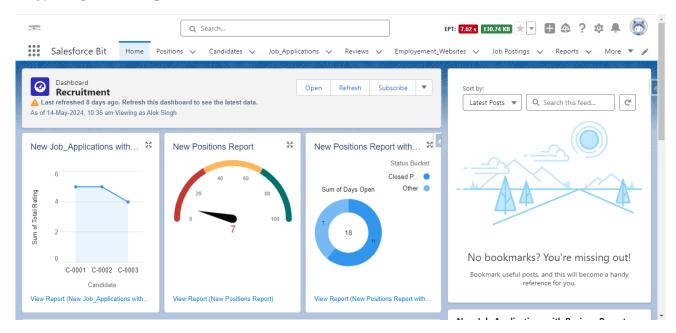


Fig 6.1: Home Pages

## **6.2 ADMIN SIGN UP**

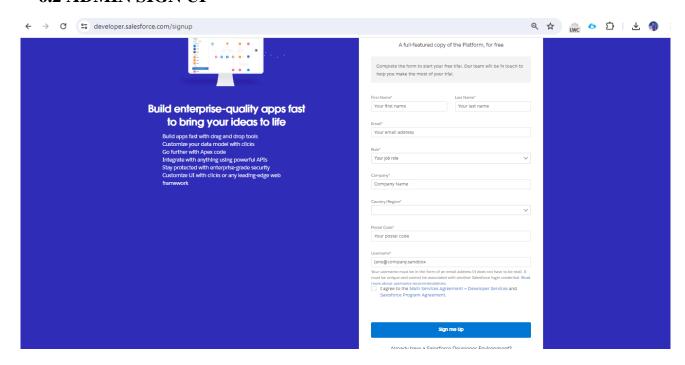


Fig 6.2: Admin Sign up

## **6.3 ADMIN SIGN IN**

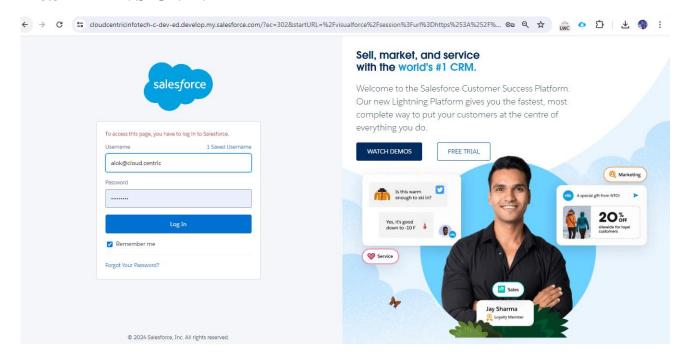


Fig 6.3: Admin Sign In

# **6.4 Position Object**

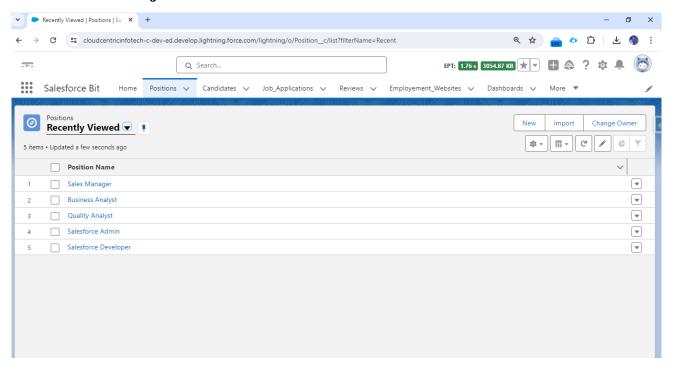


Fig 6.4: Position Object

## 6.5 Candidates

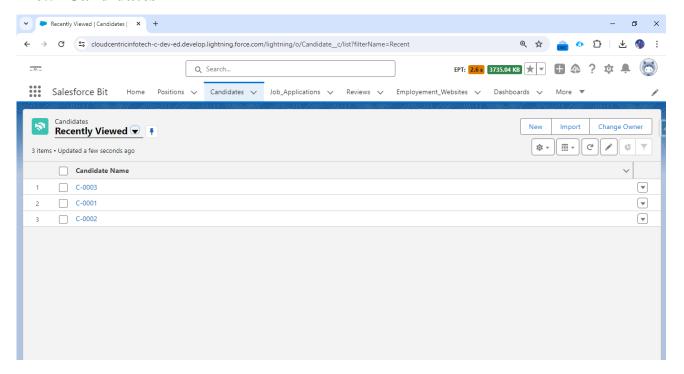


Fig 6.5: Candidates

# **6.6 Job Applications**

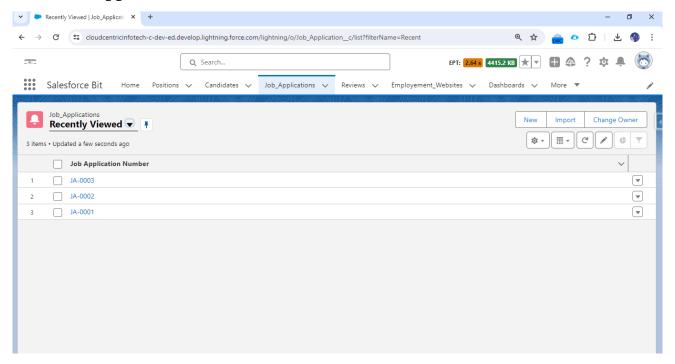


Fig 6.6: Job Applications

## 6.7 Reviews

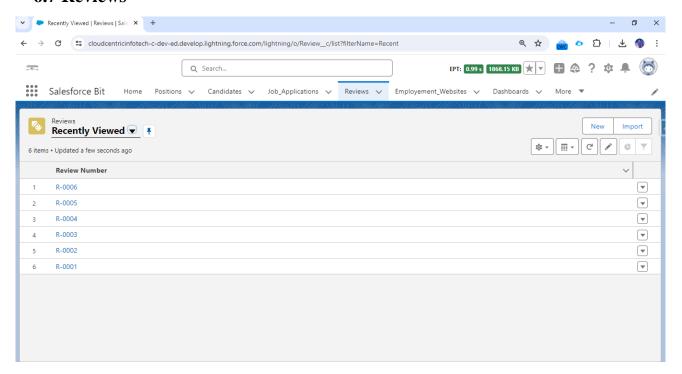


Fig 6.7: Reviews

## 6.8 Dashboards

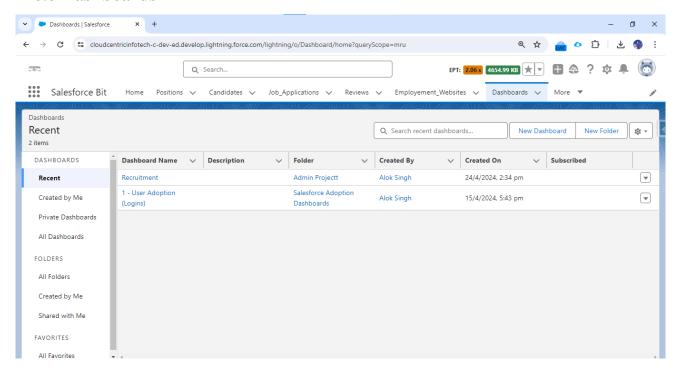


Fig 6.8: Dashboards

# **6.9 Creating Fields**

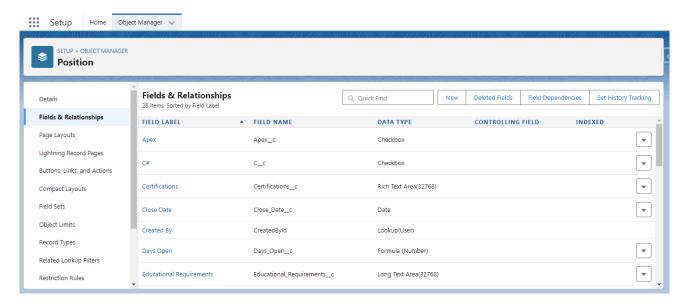


Fig 6.9: Creating Fields

# **6.10 Creating Record types**

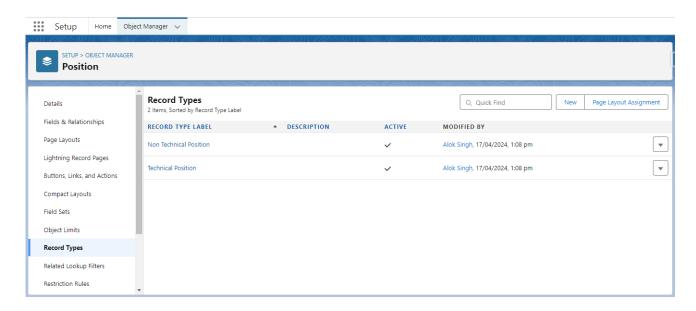


Fig 6.10: Creating Record types

# **6.11 Creating Validation Rules**

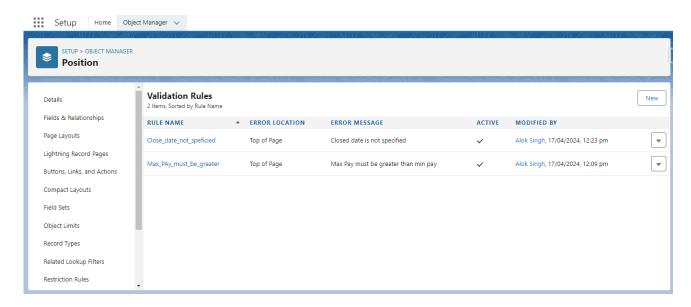


Fig 6.11.1: Validation Rules



Fig 6.11.2: Close Date Validation Rule

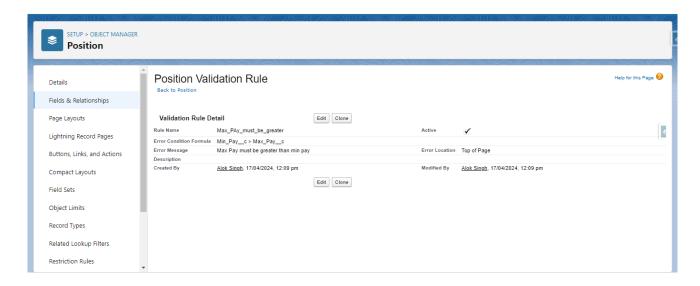


Fig 6.11.3: Min Pay and Max Pay Validation rule.

## **6.12 Creating Permission sets**

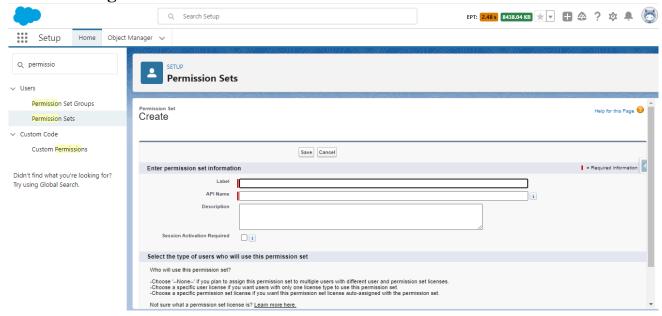


Fig 6.12: Creating Permission set.

## **6.13** Creating Profiles

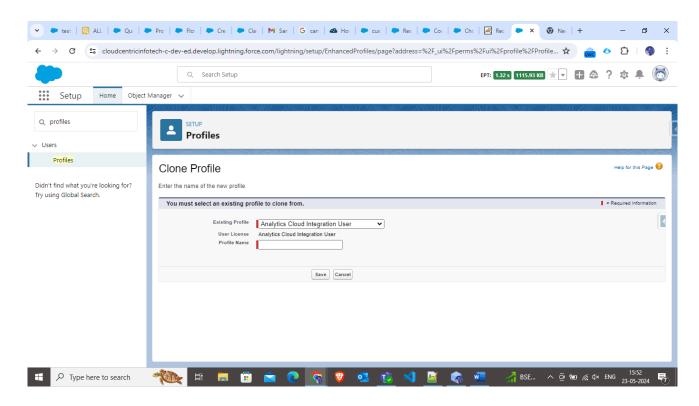


Fig 6.13: Creating Profiles

#### **CHAPTER 7**

#### **TESTING**

Testing is a critical phase in the development and implementation of Salesforce Bit, ensuring that the system functions as intended and meets the needs of its users. Comprehensive testing involves various strategies and methodologies to identify and rectify issues, guaranteeing a robust and reliable recruitment management solution. This chapter outlines the key testing approaches and phases employed for Salesforce Bit.

#### **5.1 Unit Testing**

Unit testing involves verifying individual components or modules of Salesforce Bit to ensure they function correctly in isolation. Each unit, such as a specific function or feature, is tested for correctness by the development team. Unit tests are typically automated, allowing for rapid and repeatable testing of code changes. This phase helps identify and fix bugs at an early stage, ensuring that each component works as expected before integration.

The primary objectives of unit testing are to validate that each module performs its intended function and to identify any errors in the code that could cause unexpected behavior. Unit tests are often written in parallel with the code itself, using frameworks such as JUnit for Java or Apex testing for Salesforce-specific code. Automated unit tests provide a safety net for developers, allowing them to refactor code with confidence, knowing that any introduced errors will be quickly detected.

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## **5.2 Integration Testing**

Integration testing focuses on verifying the interactions between different modules and components within Salesforce Bit. This phase ensures that integrated units work together seamlessly and that data flows correctly between them. By testing the integration points, we can identify issues related to interface mismatches, data exchange errors, and interaction failures, ensuring that the system operates cohesively.

Integration testing involves combining individual modules and testing them as a group. This type of testing is essential for uncovering issues that may not be apparent when testing modules in isolation. For example, while a module might perform correctly on its own, it may fail when it needs to interact with another module due to differences in expected data formats or communication protocols. Tools such as Selenium and integration testing frameworks in Salesforce can be used to automate this process and simulate various user interactions and data flows.

# 5.3 System Testing

System testing involves evaluating the complete and integrated Salesforce Bit application to ensure it meets the specified requirements. This phase tests the system as a whole, covering all functionalities and features. System testing includes functional testing, which verifies that the system performs the desired functions, and non-functional testing, which assesses performance, scalability, security, and

usability.

During system testing, test cases are derived from the functional and non-functional requirements of the system. Functional testing ensures that all user interactions and business processes work as expected, while non-functional testing evaluates how well the system performs under various conditions. Performance aspects such as load handling, response times, and system stability are tested using tools like LoadRunner or JMeter. Security testing involves vulnerability assessments and penetration testing to identify potential threats and ensure data protection.

#### **5.4 User Acceptance Testing (UAT)**

User Acceptance Testing (UAT) is conducted by the end-users, typically HR professionals and recruiters, to validate that Salesforce Bit meets their needs and expectations. During UAT, users test the system in real-world scenarios to ensure it supports their recruitment processes effectively. Feedback from UAT is crucial for identifying any issues or gaps in functionality that need to be addressed before the final deployment.

UAT is the final phase of testing before the system goes live. It ensures that Salesforce Bit not only works correctly according to the specifications but also meets the actual needs and workflows of its users. Users execute predefined scenarios that mimic their daily tasks and provide feedback on the system's usability, performance, and overall user experience. Any identified issues are documented, and necessary changes are made to ensure the system is user-friendly and efficient.

#### **5.5 Performance Testing**

Performance testing evaluates the responsiveness, stability, and scalability of Salesforce Bit under varying loads. This testing phase includes load testing, stress testing, and endurance testing to ensure that the system can handle high volumes of users and data without performance degradation. Performance testing helps identify bottlenecks and optimize the system for better performance.

- Load Testing: Simulates normal user activity to assess how the system performs under typical conditions. It helps identify how many users the system can handle before performance starts to degrade.
- **Stress Testing:** Pushes the system beyond its normal operational capacity to identify its breaking points. This helps to understand how the system behaves under extreme conditions and ensures that it can recover gracefully from failures.
- **Endurance Testing:** Evaluates the system's performance over an extended period to identify potential memory leaks or performance degradation issues that may occur over time.

Tools such as Apache JMeter, LoadRunner, and Salesforce's built-in performance monitoring tools are used to conduct these tests and gather data on response times, throughput, and resource utilization.

# **5.6 Security Testing**

Security testing focuses on identifying vulnerabilities and ensuring that Salesforce Bit is protected against potential threats. This phase includes testing for common security issues such as SQL injection, cross-site scripting (XSS), and unauthorized access. Security testing ensures that sensitive

data, such as candidate information, is securely stored and transmitted, maintaining data confidentiality and integrity.

Security testing involves a combination of automated tools and manual techniques to uncover vulnerabilities. Automated tools like OWASP ZAP and Burp Suite can scan for common security flaws, while manual testing involves techniques such as penetration testing and code reviews to identify and address more complex security issues. Ensuring robust security measures are in place is critical for protecting sensitive recruitment data and maintaining user trust.

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#### **5.7 Regression Testing**

Regression testing is performed after code changes, updates, or enhancements to ensure that existing functionalities remain unaffected. Automated regression tests are run to verify that new changes do not introduce new bugs or disrupt existing features. This phase is crucial for maintaining the stability and reliability of Salesforce Bit throughout its lifecycle.

Regression testing involves re-running previous tests on the modified software to ensure that changes have not negatively impacted existing functionality. Automated regression testing tools, such as Selenium and TestNG, help streamline this process, allowing for efficient and consistent testing after every change. Maintaining a comprehensive suite of regression tests ensures that the system remains stable and reliable over time.

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### 5.8 Beta Testing

Beta testing involves releasing Salesforce Bit to a limited group of users outside the development team for real-world testing. Beta testers use the system in their everyday recruitment activities and provide feedback on its performance, usability, and functionality. This phase helps uncover any issues that may not have been identified during previous testing phases and provides valuable insights for further improvements.

# 5.9 Test Documentation and Reporting

Throughout the testing process, detailed documentation and reporting are maintained. Test plans, test cases, and test results are recorded to track the progress and outcomes of each testing phase. Documentation ensures transparency and accountability, providing a comprehensive overview of the testing efforts and facilitating communication among stakeholders.

Test documentation includes detailed descriptions of the testing objectives, strategies, and methodologies, as well as specific test cases and their expected outcomes. Reporting involves compiling the results of testing activities, highlighting any issues encountered, and providing recommendations for resolution. This documentation serves as a valuable reference for future testing cycles and helps ensure that all testing activities are thoroughly planned and executed.

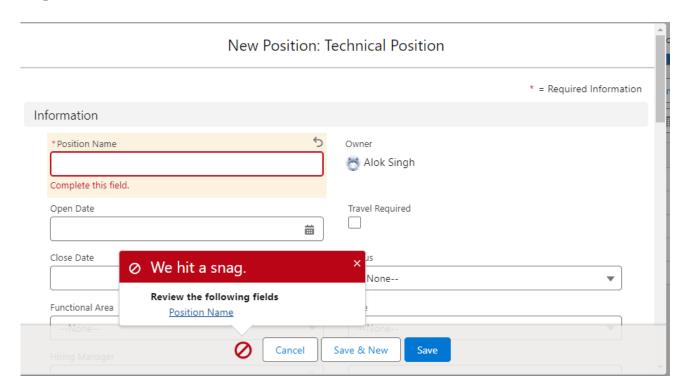
By implementing a thorough and multi-faceted testing approach, Salesforce Bit is ensured to be a reliable, secure, and efficient recruitment management solution, ready to meet the demands of modern HR professionals and recruiters.

# **Test Cases for login.**

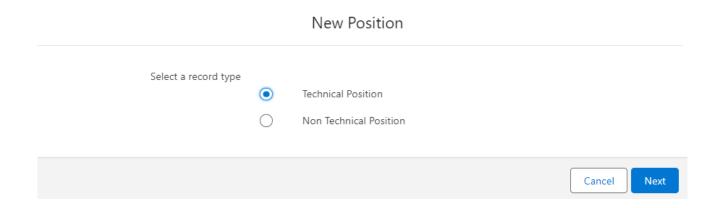
| S no. | Test Case   | Input  | Action   |
|-------|---|--|--|
| 1.    | Test Case for<br>Login.                                       | Correct Username and Password. Incorrect Username or password or both of them. | User login Successfully.  Msg: Your login attempt has failed. The username or password may be incorrect. |
| 2.    | Test Case for<br>Written Test,<br>Technical, HR<br>Interview. | Same Student ID.  Same Email ID.   | Error: Duplicate value on record: (Record Name).  Error: Duplicate value on record: (Record Name).       |
| 3.    | Test Case for Position, Candidate, Job Application.           | Same Email ID.  Same Mobile Number.  | Error: Duplicate value on record: (Candidate ID, Applicant ID).  Message: Mobile Number Already Exist.   |
| 4.    | Test cases for mandatory fields.                              | If you left the field blank. If email address has no @ symbol.                 | Error: You must enter a value. Error: Invalid Email Address.   |

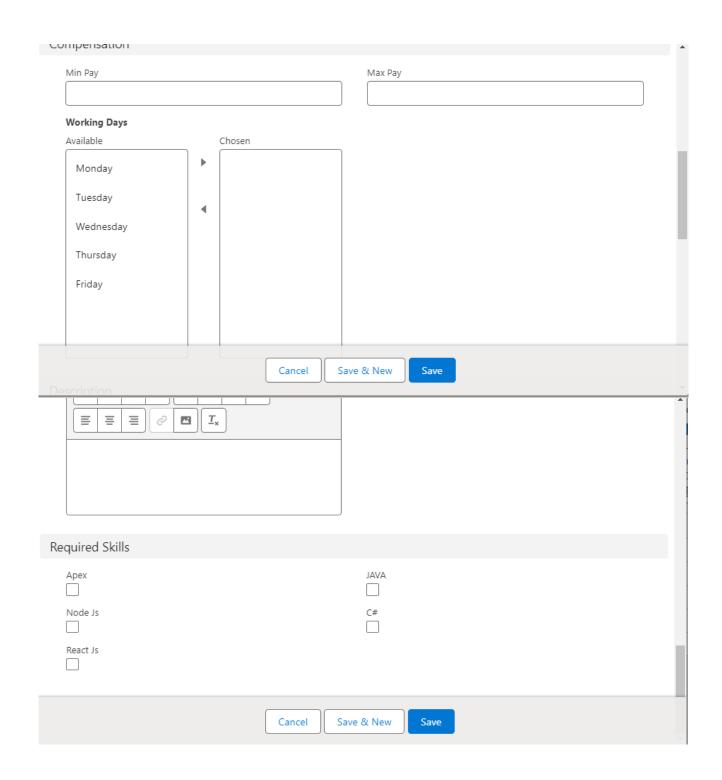
# **Software Testing:**

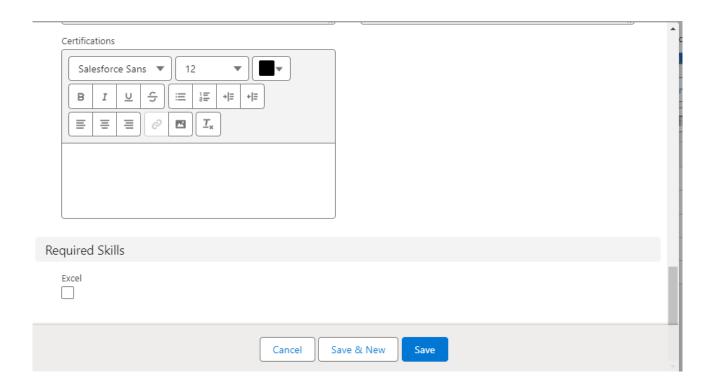
## Required fields-



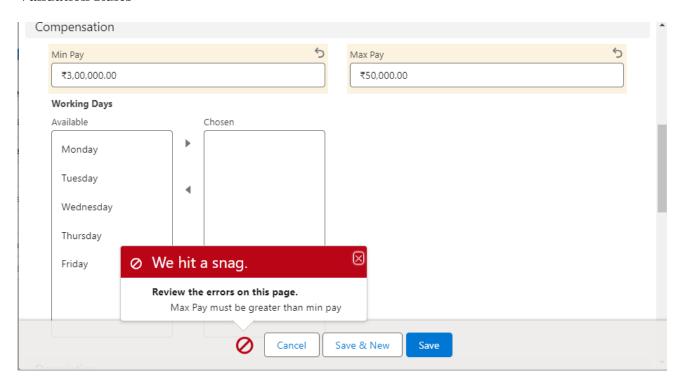
## Fields as per Record Types-

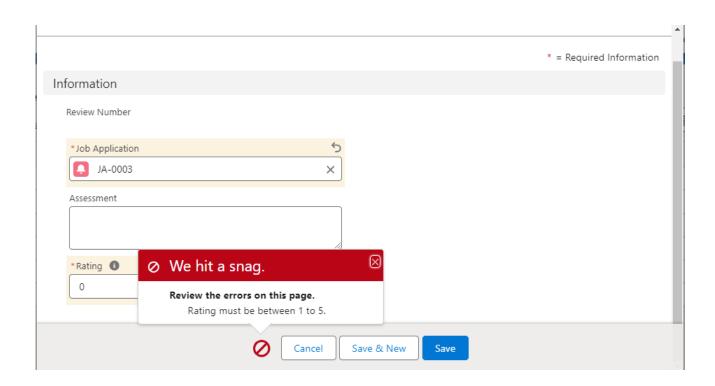




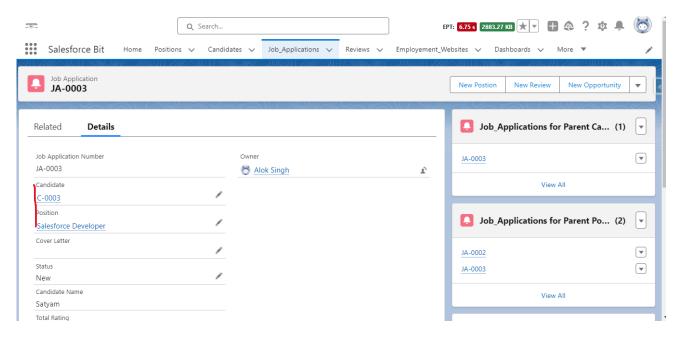


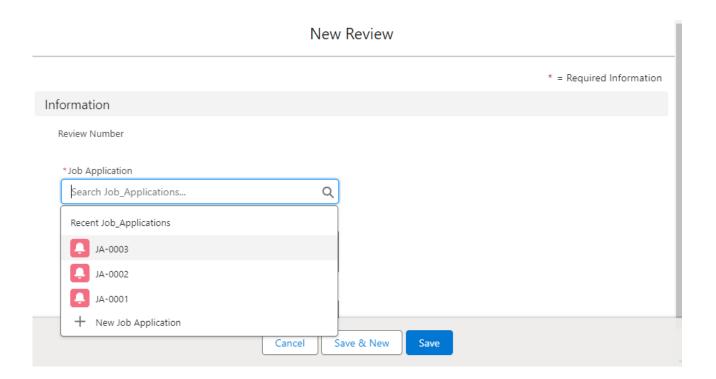
#### Validation Rules-

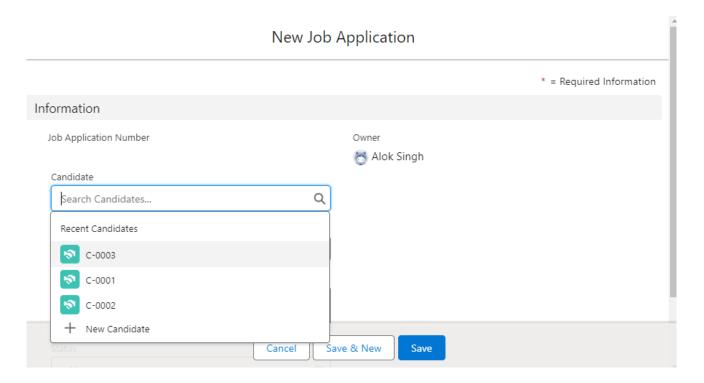




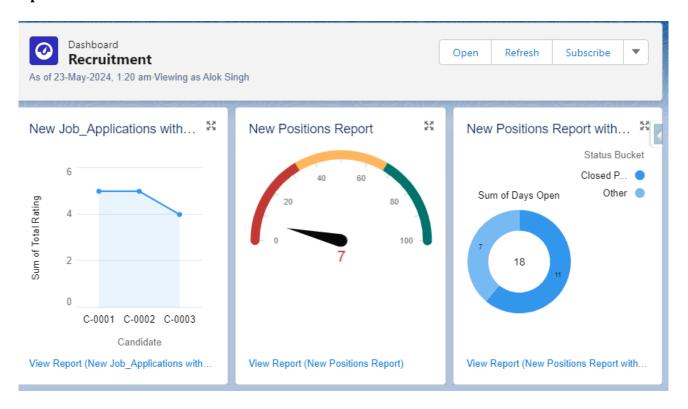
## Valid Relationships-



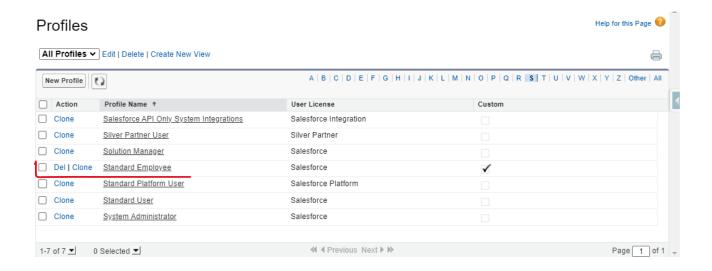




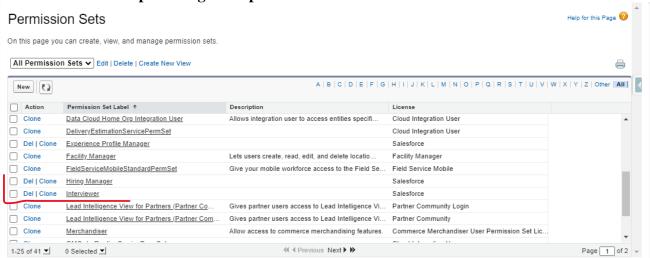
#### **Update Dashboards-**



Profiles as per requirements so that that it can be assigned to users for access of objects, fields and records



Permissions sets for providing extra permissions to the users:



#### **CHAPTER 8**

#### CONCLUSION

In the fast-paced and competitive landscape of talent acquisition, the need for an efficient and integrated recruitment management solution is more pressing than ever. Salesforce Bit emerges as a transformative tool designed to address these needs by leveraging the powerful capabilities of Salesforce to streamline and enhance every aspect of the recruitment process. From job position management to candidate tracking, skills alignment, and interview feedback, Salesforce Bit provides a comprehensive platform that significantly improves the efficiency and effectiveness of HR professionals and recruiters.

The implementation of Salesforce Bit offers numerous benefits that extend beyond traditional recruitment systems. By automating repetitive tasks and centralizing recruitment data, Salesforce Bit enables HR teams to focus on strategic decision-making and candidate engagement. The system's robust analytics and reporting capabilities provide actionable insights, allowing organizations to refine their recruitment strategies, improve time-to-fill metrics, and ensure a higher quality of candidate selection. These improvements not only enhance the overall candidate experience but also contribute to the organization's ability to attract and retain top talent in a highly competitive market.

Furthermore, Salesforce Bit's seamless integration with external job portals and its user-friendly interface ensure that job postings reach a wider audience, and that the recruitment process remains smooth and efficient. The ability to manage job positions, track candidates, and generate detailed reports from a single platform simplifies the recruitment workflow and reduces administrative burdens. This integrated approach supports better communication and collaboration among HR teams, hiring managers, and candidates, fostering a more cohesive and effective recruitment process.

In conclusion, Salesforce Bit represents a significant advancement in recruitment management technology. Its comprehensive feature set, coupled with the robust infrastructure of Salesforce, positions it as an asset for organizations aiming to optimize their recruitment efforts. By enhancing operational efficiency, providing deep insights into recruitment metrics, and improving the overall candidate experience, Salesforce Bit empowers organizations to stay ahead in the talent acquisition game and achieve their hiring goals with greater precision and success. As the workforce continues to evolve, Salesforce Bit stands ready to adapt and support the dynamic needs of modern recruitment practices, ensuring sustained organizational growth and competitive advantage.

Moreover, the implementation of Salesforce Bit not only revolutionizes recruitment processes but also fosters a culture of innovation and agility within organizations. By

embracing cutting-edge technology and automation, companies demonstrate their commitment to staying ahead in the ever-evolving landscape of talent acquisition. Salesforce Bit serves as a catalyst for digital transformation, encouraging organizations to leverage data-driven insights and streamlined workflows to make informed decisions and drive strategic growth.

Beyond its technical capabilities, Salesforce Bit embodies a commitment to enhancing the human aspect of recruitment. By providing tools for personalized candidate engagement, insightful feedback, and collaborative decision-making, Salesforce Bit fosters stronger connections between employers and candidates. This emphasis on relationship-building and candidate experience not only improves recruitment outcomes but also enhances employer branding and organizational reputation in the eyes of potential hires.

In essence, Salesforce Bit represents more than just a software solution—it embodies a paradigm shift in how organizations approach recruitment. By aligning technology with human-centric values, Salesforce Bit empowers organizations to unlock their full potential and achieve greater success in attracting, assessing, and onboarding top talent. As organizations continue to adapt to changing market dynamics and workforce trends.

#### **CHAPTER 9**

#### REFERENCES

- 1. Salesforce Developer Documentation:
  - URL: https://developer.salesforce.com/docs/
- This documentation covers various aspects of Salesforce development, including Apex, Visualforce, Lightning Web Components, APIs, and more.
- 2. Salesforce Administrator Documentation:
  - URL: https://help.salesforce.com/s/articleView?id=sf.admin\_setup.htm&type=5
- This documentation provides comprehensive guidance for Salesforce administrators, covering topics such as user management, security, customization, and data management.
- 3. Trailhead Salesforce's Official Learning Platform:
  - URL: https://trailhead.salesforce.com/
- Trailhead offers a variety of modules and trails for learning Salesforce skills, ranging from beginner-level concepts to advanced topics such as app development, data modeling, and integration.
- 4. Trailhead Module Introduction to Salesforce:
  - URL: https://trailhead.salesforce.com/en/content/learn/modules/introduction-to-salesforce
- This Trailhead module provides a foundational understanding of Salesforce, including its core features, architecture, and benefits for businesses.
- 5. Trailhead Module Build Your Salesforce Career:
  - URL: https://trailhead.salesforce.com/en/content/learn/modules/salesforce-career-path
- This Trailhead module offers guidance on building a career in Salesforce, covering topics such as certification paths, job roles, and professional development opportunities.