

BUILD AN EMPLOYEE TRAVEL APPROVAL APPLICATION FOR CORPORATES

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1. INTRODUCTION

Overview:

The Travel Application for Corporate using Salesforce is a project that involves developing a customized solution for managing corporate travel using the Salesforce platform. It includes features such as booking management, travel itinerary management, expense tracking, and reporting, all integrated within the Salesforce CRM. This system can be used by corporate travelers to simplify their travel booking and management processes, and help them stay organized while on the go. The application can also provide companies with data and analytics to optimize their travel policies and reduce expenses, all within the Salesforce environment.

Purpose:

- Real-Time Salesforce Project
- Object & Relationship in Salesforce

2. LITERATURE SURVEY

Existing problem:

The existing problem in managing employee travel approval within corporates is the lack of a streamlined and efficient process. Many organizations still rely on manual methods such as paper-based forms, emails, or spreadsheets, which are time-consuming, prone to errors, and difficult to track. This often leads to delays in approvals, miscommunication, and a lack of transparency in the process. Additionally, there is a need for better integration with existing systems and data sources to ensure accurate information and reporting.

Existing approaches or method to solve this problem:

Some organizations have attempted to address this problem by developing custom applications on platforms like Salesforce. However, these applications often require significant development efforts, expertise, and maintenance. Other solutions include adopting off-the-shelf travel management software, but these may lack flexibility, customization options, or integration capabilities. Overall, existing approaches have limitations in terms of efficiency, user experience, and adaptability to changing business requirements.

Proposed solution:

- To address the existing problem, I propose developing an Employee Travel Approval Application on the Salesforce platform. This solution leverages the power and flexibility of Salesforce to provide a comprehensive and user-friendly travel approval process for corporates. The key features and functionalities of the proposed solution are as follows:
- Customized Travel Request Form: Design a user-friendly travel request form that captures all necessary details, including travel dates, destinations, purpose, budget, and any special requirements. The form can be easily customized to align with the organization's specific



policies and guidelines.

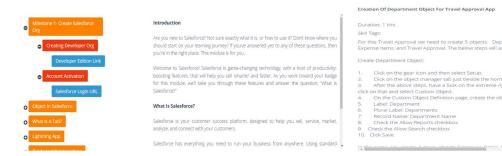
- Approval Workflow Automation: Implement an automated workflow that routes travel requests to the appropriate approvers based on predefined rules and hierarchies. This ensures efficient and timely approvals, eliminating the need for manual intervention and reducing processing time.
- Integration with Existing Systems: Integrate the Employee Travel Approval Application
 with existing systems, such as HR databases or financial systems, to fetch relevant
 employee and budget information. This integration ensures data accuracy, reduces
 duplication of effort, and enables seamless reporting.
- Real-time Notifications and Reminders: Enable real-time notifications and reminders to keep all stakeholders informed about the progress of travel requests. Approvers and employees can receive notifications via email, mobile push notifications, or within the Salesforce platform, ensuring prompt action and reducing communication gaps.
- Analytics and Reporting: Implement robust analytics and reporting capabilities to provide insights into travel patterns, approval cycle times, and overall travel expenses. This enables data-driven decision-making, identifies process bottlenecks, and facilitates continuous process improvement.
- Mobile Accessibility: Develop a mobile-responsive interface or a dedicated mobile application, allowing employees and approvers to access and manage travel requests on the go, enhancing convenience and productivity.
- Compliance and Security: Ensure compliance with relevant regulations, such as data protection and privacy laws, and implement appropriate security measures to protect sensitive travel and employee information.

By implementing this proposed solution, organizations can achieve the following benefits:

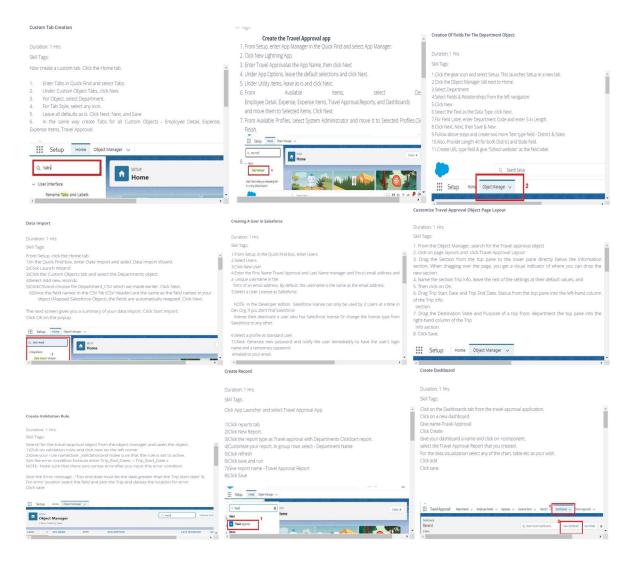
- Streamlined and efficient travel approval process.
- Reduced administrative burden and processing time.
- Improved transparency and visibility into travel requests.
- Enhanced employee experience and satisfaction.
- o Better compliance with corporate policies and guidelines.
- o Accurate and insightful reporting for informed decision-making.

3. THEORITICAL ANALYSIS

Block diagram:







Hardware / Software designing:

The Hardware requirements are minimal as most of the infrastructure is managed by Salesforce itself. The hardware requirements would typically involve standard computer systems or devices with internet connectivity to access the Salesforce platform.

For Software requirements Salesforce platform and associated development tools for software development and integration is enough, it comes with the inbuilt organizations and software packages used in making of the project.

4. EXPERIMENTAL INVESTIGATIONS

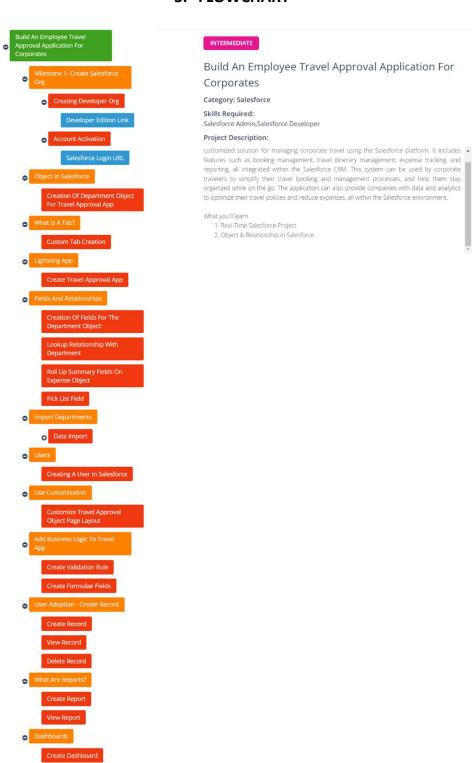
During the process of working on the Employee Travel Approval Application solution. The following major aspects were considered:

- Requirements Analysis: Thoroughly understanding the requirements of the corporates for travel approval processes was a crucial step analyzing provided manual processes and pain points helped identify the necessary features and functionalities for the application.
- Integration Analysis: The analysis helped in determining the data mapping, and any data transformation requirements.



 Security and Compliance Analysis: Analysis of security and compliance requirements was crucial to safeguard sensitive employee and travel information. This is taken care by the salesforce platform features itself.

5. FLOWCHART



6. RESULT

Objects and their Field Creation:

We have created several objects along with their respective fields and relationships. These objects include **Department**, **Employee Details**, **Expense**, **Expense Item**, **and Travel Approval**.

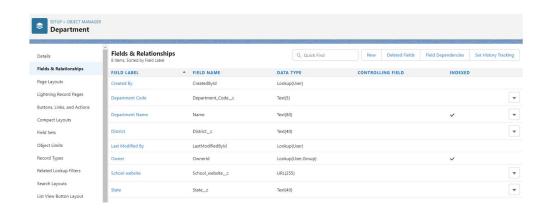
For Department Object

- We focused on the Department object and its creation process. By navigating to the
 Object Manager tab next to Home, we were able to select the Department object and access the Fields & Relationships section.
- o For Field Label, enter Department Code and enter 5 in Length.
- Additionally, we created two more text fields, namely District and State, with both fields set to a length of 40 characters.
- These fields provide relevant information and contribute to the comprehensive representation of the Department object within our system.

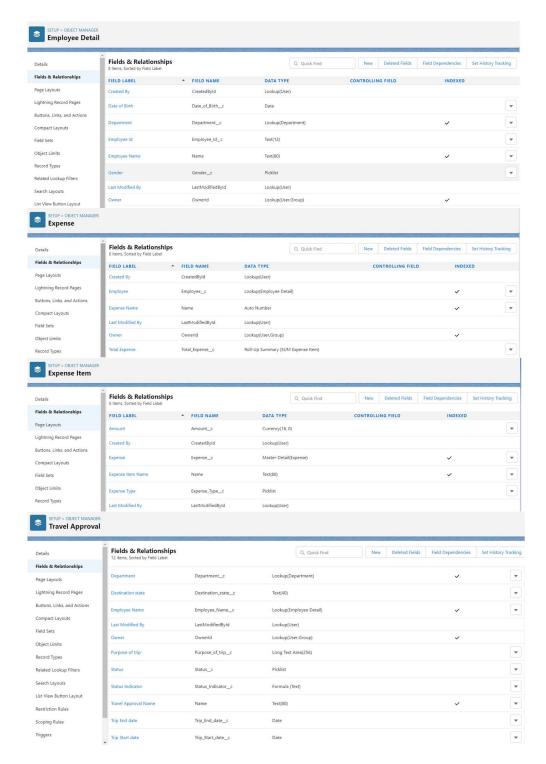
❖ For Employee Details, Expense, Expense Item, Travel Approval Object

By following the above steps we have created following

Object Name	Field Name	Data Type
	Date of Birth	Date
Employee Detail	Gender	Picklist (Male, Female)
	Department	Lookup (Department)
	Employee Id	Text (Length - 12)
		Lookup (Employee Detail)
Expense	Employee	Rollup summary (Expense Item)
	Total Item	
Expense Item		Master
	Expense	Detail (Expense)
	Expense Type	Pick List (Values are- Transport,
	Amount	Hotel, Meal, Others)
		Currency
	Employee Name	Lookup (Employee Detail)
	Department	Lookup (Department)
	Destination state	Text (Length – 40)
Travel Approval	Purpose of trip	Text (Length – 256)
	Trip start date	Date
	Trip end date	Date
	Status	Picklist (Values are- Approved,
		Rejected)







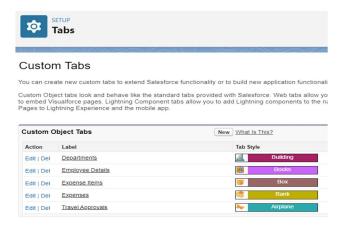
> Tab Creation:

Next, we proceeded with the creation of tabs for the previously mentioned objects. To achieve this, we followed the steps outlined below:

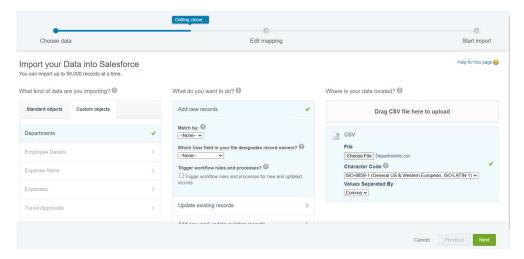
- We began by searching for "Tabs" in the Quick Find search bar and selecting the corresponding option.
- O Under the section labeled "Custom Object Tabs," we clicked on the "New" button.
- o For the first tab, we selected the "Department" object.



- o In the "Tab Style" field, we chose an appropriate icon for the tab.
- Afterward, we clicked "Next" twice and then selected "Save" to finalize the creation of the tab for the Department object.
- We repeated the same process for the remaining custom objects, namely Employee
 Detail, Expense, Expense Items, and Travel Approval, creating individual tabs for each one
- By creating tabs for these objects, we made it easier to navigate and access their respective records within the system. This enhances the overall user experience and facilitates efficient management of the various custom objects we have implemented.



- Importing Data: After tab creation we have imported the data from provided department.csv file
 - We began by entering "Data Import" in the Quick Find search box and selecting the Data Import Wizard option.
 - Once in the wizard, we clicked on the "Launch Wizard!" button to initiate the data import process.

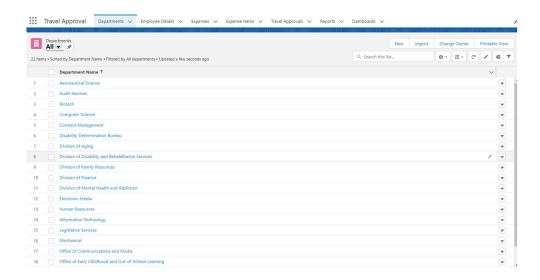


> Travel Approval App Creation:

To facilitate the data import process for the Department object, we utilized the Data Import Wizard and followed the steps outlined below:

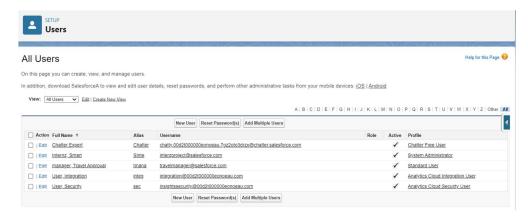


- o In the subsequent screen, we navigated to the Custom Objects tab and specifically selected the Departments object.
- o To add new records, we chose the "Add new records" option.
- o For the import file, we opted for the CSV format by clicking on the CSV option.
- o Finally, we selected the previously prepared Department_CSV file as the source for importing the data.
- By following these steps, we successfully imported the data from the Department_CSV file into the
 Department object. This process ensured that the relevant information was accurately transferred
 and made available within our system for further utilization and analysis.

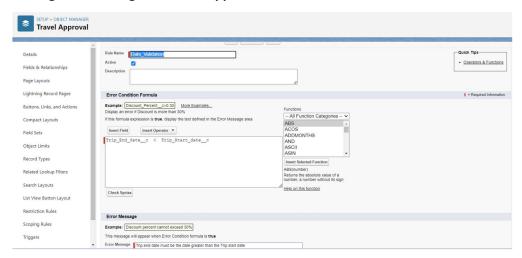


Creating User:

- Once the data was successfully imported into the Department object, we proceeded to create a user account for the Travel Approval manager.
- This user required access to the company's records for efficient management and decisionmaking
- By creating a dedicated user account for the Travel Approval manager and granting them the necessary access privileges, we enabled them to effectively manage and oversee the company's records.
- This allowed the manager to make informed decisions and streamline the travel approval process based on the available data within the system.

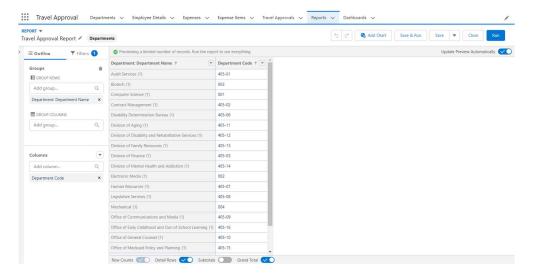


Adding Business Logic to Travel App:



Report Creation:

- We clicked on the App Launcher and selected the Travel Approval App. Within the app, we navigated to the reports tab.
- o Clicking on the "New Report" button, we proceeded to create a new report.
- We selected the report type as "Departments" and clicked on "Start Report" to begin customizing the report.
- o In order to group the rows effectively, we selected "Department Name" as the desired grouping criteria.
- To provide a descriptive name for the report, we entered "Travel Approval Report" in the designated field.
- By following these steps, we were able to generate a customized report within the Travel
 Approval App. The report was specifically tailored to display information about departments,
 with the rows grouped based on department names. This allowed for clear and organized
 presentation of data, enabling users to analyze and gain insights into the travel approval
 process within the company.



Dashboard Creation:

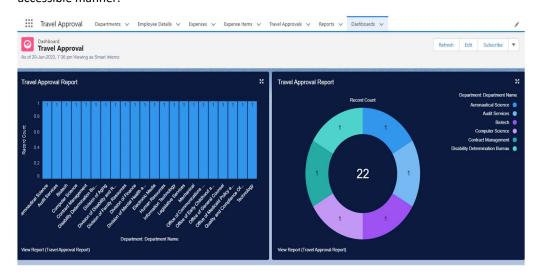
o To create a dashboard within the Travel Approval application, we completed the following



steps:

- We accessed the Travel Approval application and clicked on the Dashboards tab.
- Within the Dashboards tab, we clicked on the option to create a new dashboard.
- We provided a suitable name for the dashboard, such as "Travel Approval," in the designated field.
- Finally, we clicked on the "Create" button to initiate the creation of the dashboard

The dashboard serves as a visual representation of key metrics, reports, and data related to the travel approval process. It provides a consolidated view of important information, allowing users to monitor and analyze the performance and progress of travel approvals in a centralized and easily accessible manner.



7. ADVANTAGES & DISADVANTAGES

Advantages:

- Streamlined Process: The proposed Employee Travel Approval Application offers a streamlined and efficient travel approval process. It eliminates manual paperwork, reduces processing time, and automates approval workflows, leading to faster decisionmaking and improved productivity.
- Enhanced User Experience: The application provides a user-friendly interface, making it easier for employees to submit travel requests and approvers to review and approve them. Intuitive navigation, automated notifications, and mobile accessibility for verification enhance the overall user experience and satisfaction.
- Integration Capabilities: The solution integrates with existing systems. This integration eliminates data duplication, enhances data accuracy, and simplifies reporting and reconciliation processes.
- Real-time Notifications and Reminders: The application sends real-time notifications and reminders to user(admin), keeping them informed about the progress of travel requests.
 This improves communication, reduces delays, and fosters transparency in the approval process.
- Analytics and Reporting: The solution provides robust analytics and reporting capabilities, enabling organizations to gain insights into travel patterns, and travel expenses. Datadriven decision-making becomes possible, allowing for continuous process improvement



and cost optimization.

 Customization and Scalability: The Employee Travel Approval Application can be customized to align with specific corporate policies, guidelines, and approval hierarchies. Additionally, it can scale with the organization's growth, accommodating a higher volume of travel requests and expanding functionalities as needed.

Disadvantages:

- Implementation Effort: Developing and implementing Employee Travel Approval Application requires an initial investment of time, resources, and expertise. Customization, integration, and configuration may require technical skills or external assistance, resulting in additional costs.
- Adoption and Training: Introducing a new application requires employee training and change management efforts. Some employees may initially resist the transition from familiar manual processes to the new digital system. Adequate training and support are essential to ensure smooth adoption and user acceptance.
- Dependency on Salesforce Platform: As the solution is built on the Salesforce platform, organizations become dependent on Salesforce for ongoing support, maintenance, and updates. This dependency may involve licensing costs and reliance on third-party service providers for any platform-related issues.
- Security and Data Privacy Concerns: Storing sensitive employee and travel information
 within the application raises security and data privacy concerns. Adequate measures must
 be implemented to protect the confidentiality, integrity, and availability of the data,
 complying with relevant regulations and internal policies.
- Potential Integration Challenges: Integrating the application with existing systems may
 present technical challenges, especially if the systems have complex data structures or
 limited integration capabilities. Ensuring seamless data synchronization and addressing
 any integration issues may require additional development efforts.
- Cost Considerations: While the proposed solution offers efficiency gains and cost savings
 in the long run, organizations must consider the initial investment, licensing costs,
 ongoing maintenance, and potential customization needs. Conducting a comprehensive
 cost-benefit analysis is crucial to evaluate the financial implications.

8. APPLICATIONS

The application for the Employee Travel Approval Application on Salesforce can be applied in various areas where corporates require an efficient and streamlined travel approval process. Some of the key areas where this solution can be implemented include:

- Corporate Travel Management: Organizations with a significant volume of employee travel, such as multinational companies or companies with frequent business trips, can benefit from this solution. It helps automate and streamline the travel approval process, ensuring timely approvals, better visibility into travel expenses, and adherence to corporate travel policies.
- Finance and Accounting: The solution can be applied in finance and accounting departments to ensure accurate tracking of travel expenses, budget control, and reconciliation with financial systems. It enables seamless integration with financial software and provides real-time insights into travel expenditures for budgeting and



financial reporting purposes.

- Technology: In organizations where project-based travel is common, project managers
 can utilize the Employee Travel Approval Application to efficiently manage and track
 travel requests and expenses associated with specific projects. It helps in project cost
 management, resource allocation, and project planning.
- Compliance and Audit: Implementing the solution facilitates compliance with corporate policies, travel regulations, and audit requirements. The application provides a transparent audit trail, enabling internal and external auditors to easily review and validate travel approvals, expenses, and compliance with regulations.
- Travel Agencies and Travel Service Providers: Travel agencies and service providers
 catering to corporate clients can leverage this solution to streamline their own travel
 approval processes. By customizing the application to meet the specific requirements of
 their clients, travel agencies can offer a seamless and efficient travel approval experience,
 enhancing their service offerings.
- Healthcare: Healthcare companies often have employees who travel to visit patients or attend conferences. The travel approval application can help these companies to track the travel expenses of their employees and ensure that they are staying within budget.
- The solution is versatile and adaptable, making it suitable for a wide range of industries and organizations that require an effective and automated travel approval process.

9. CONCLUSION

The Employee Travel Approval Application for Corporates on Salesforce offers a comprehensive solution to address the challenges associated with manual and inefficient travel approval processes. Throughout the development and analysis of the solution, several key findings and benefits have emerged. The theoretical analysis provided a detailed understanding of the project, presenting a block diagram that showcased the various components of the application and their interactions. Additionally, the analysis of hardware and software requirements highlighted the minimal hardware needs and the reliance on the Salesforce platform and associated development tools

The proposed solution offers numerous advantages, including a streamlined process, enhanced user experience, integration capabilities, real-time notifications, analytics, and customization. However, potential challenges such as implementation effort, adoption and training, platform dependency, security, integration, and cost considerations were also identified.

Overall, the Employee Travel Approval Application has widespread applicability across various areas, including corporate travel management, finance and accounting, technology, compliance and audit, travel agencies or service providers and healthcare. By implementing the Employee Travel Approval Application for Corporates on Salesforce, organizations can significantly enhance their travel approval processes, leading to increased efficiency, cost savings, improved compliance, and better employee experiences. However, it is crucial to address the identified challenges and tailor the solution to specific organizational needs.

10. FUTURE SCOPE

While the proposed Employee Travel Approval Application for Corporates on Salesforce offers significant improvements to the travel approval process, there are several potential



enhancements that can be considered for future development and iterations. These enhancements aim to further optimize the application and address evolving needs and industry trends. Some possible enhancements include:

- Mobile Application: Developing a dedicated mobile application can provide employees and approvers with on-the-go access to the travel approval system. This mobile app can offer streamlined functionality, push notifications, and a user-friendly interface optimized for smartphones and tablets.
- Machine Learning and Artificial Intelligence: Integrating machine learning and artificial
 intelligence capabilities into the application can bring advanced features such as
 intelligent routing of travel requests, automated approval recommendations based on
 historical data, or fraud detection algorithms for identifying suspicious travel patterns or
 expense claims.
- Advanced Analytics and Predictive Insights: Enhancing the analytics and reporting capabilities of the application can enable organizations to gain deeper insights into travel trends, optimize travel budgets, and predict future travel expenses. Predictive analytics can help identify cost-saving opportunities, anticipate approval bottlenecks, and optimize travel policies.
- Voice and Natural Language Processing: Integrating voice commands and natural language processing capabilities into the application can offer hands-free and intuitive interaction for users. Employees can submit travel requests or inquire about approval status using voice commands, making the process more efficient and user-friendly.
- Third-Party Integrations: Expanding the integration capabilities of the application to include third-party travel management systems, booking platforms, or expense management tools can provide a more comprehensive end-to-end travel management solution. This allows for seamless data exchange, reducing manual data entry and enhancing the accuracy of travel-related information.
- Advanced Workflow Customization: Offering advanced customization options for approval
 workflows can enable organizations to tailor the application to their unique hierarchies,
 approval processes, and business rules. This flexibility allows for better alignment with
 organizational structures and specific travel approval requirements.
- These potential enhancements showcase the possibilities for future development of the Employee Travel Approval Application. Organizations can prioritize these enhancements based on their specific requirements, technological advancements, and industry trends, ensuring the application remains up-to-date and continually delivers value to users.



11. BIBILOGRAPHY

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