

PROJECT DOCUMENT

➤ **Project Title:** A CRM Application For Banquet Hall Booking

- **College Name:** GATES Institute Of Technology

TEAM

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- **Team Size :** 4
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1. INTRODUCTION

A CRM Application For Banquet Hall Booking

Building a Centralized CRM for Banquet Hall Booking Management

1.1 Project Overview – Transforming Event Operations through CRM Technology

In an age where customer experience and operational efficiency are key to business success, banquet hall businesses must deliver seamless, personalized, and reliable event services. However, many still rely on fragmented systems or manual processes to manage bookings, event planning, and service coordination. These challenges often result in double bookings, mismanaged services, and limited visibility into business performance.

To address these issues, this project introduces a custom-built CRM application using the Salesforce platform. Designed specifically for banquet hall operations, the solution digitizes and automates core processes such as hall booking, service selection, customer management, and revenue tracking.

It leverages Salesforce's automation tools, custom object modeling, and analytics capabilities to deliver a smart, scalable, and user-friendly system.

Key Features of the Solution:

- Customized object model supporting banquet halls, bookings, customers, services, themes, and menus
 - Automated flows to prevent double bookings and ensure data integrity
 - Formula fields for real-time calculations of event costs, service charges, and booking durations
 - Interactive dashboards and reports for tracking revenue, service usage, and booking trends
 - Centralized control with accurate data relationships and validations for seamless operations
-

1.2 Purpose – Solving Operational Inefficiencies in Banquet Hall Management

The purpose of this project is to eliminate the inefficiencies caused by manual workflows and disconnected service management in banquet hall businesses. By implementing a centralized CRM system using Salesforce, the project aims to:

- Streamline the entire booking lifecycle through automated flows
- Improve data accuracy with validation rules and structured relationships
- Enable data-driven decisions with real-time dashboards and reports
- Build a flexible, scalable, and intuitive system ready for future enhancements

2. IDEATION PHASE

The Ideation Phase serves as the foundation of any successful project. It blends creativity, user empathy, and structured thinking to identify the core challenges, generate meaningful ideas, and prioritize solutions that bring tangible value to all users involved. This dynamic phase combines imagination with insight to ensure every feature addresses real-world needs.

As our project titled: “A CRM Application for Banquet Hall Booking,” the ideation process was essential to tailor the system to the specific needs of venue managers, event organizers, service vendors, and customers. By deeply understanding their workflows and challenges, we focused on creating a solution that streamlines bookings, improves client communication, and enhances overall event planning efficiency

2.1 Brainstorming & Idea Prioritization Template

Step 1: Team Gathering, Collaboration, and Selecting the Problem Statement

Our team convened with the goal of identifying inefficiencies in the current banquet hall booking process and proposing a tech-enabled solution using Salesforce. Through collaborative brainstorming sessions, digital whiteboards, and real-world scenario mapping, we collectively analyzed the operational challenges faced by banquet hall managers, event organizers, and support staff. We examined existing workflows and discovered that most banquet halls still rely on fragmented and manual systems for managing:

- Booking and scheduling of halls
- Customer communications and inquiries
- Payment tracking and invoice generation
- Event coordination and vendor assignment

After several discussions and stakeholder reviews, we clearly articulated the core issue:

Problem Statement:

“Banquet hall operators lack a centralized digital platform to manage bookings,

customer data, payments, and vendor coordination in real time. The current manual processes are inefficient, prone to conflicts, and limit visibility into business performance.”

This statement became the cornerstone of our project scope and set the direction for developing a tailored, CRM-powered platform that would streamline operations and elevate the customer experience.

Step 2: Brainstorm, Idea Listing, and Grouping

We conducted a collaborative brainstorming session using a digital whiteboard where each team member contributed raw ideas based on industry research and user needs. The ideas were then reviewed and grouped into major themes:

- **Booking & Scheduling:** centralized calendar for multiple halls, real-time conflict detection
- **Customer Relationship Management:** client profiles, preferences, event history
- **Communication & Notifications:** automated email/SMS/WhatsApp reminders and confirmations
- **Analytics & Reporting:** dashboards showing revenue trends, hall utilization, peak booking seasons
- **Access Control & Security:** role-based permissions for managers, vendors, and staff

From a pool of 25–30 ideas, we clustered and shortlisted those that directly improved efficiency, reduced manual work, and elevated the customer experience. These formed the foundation for our product roadmap.

Step 3: Idea Prioritization

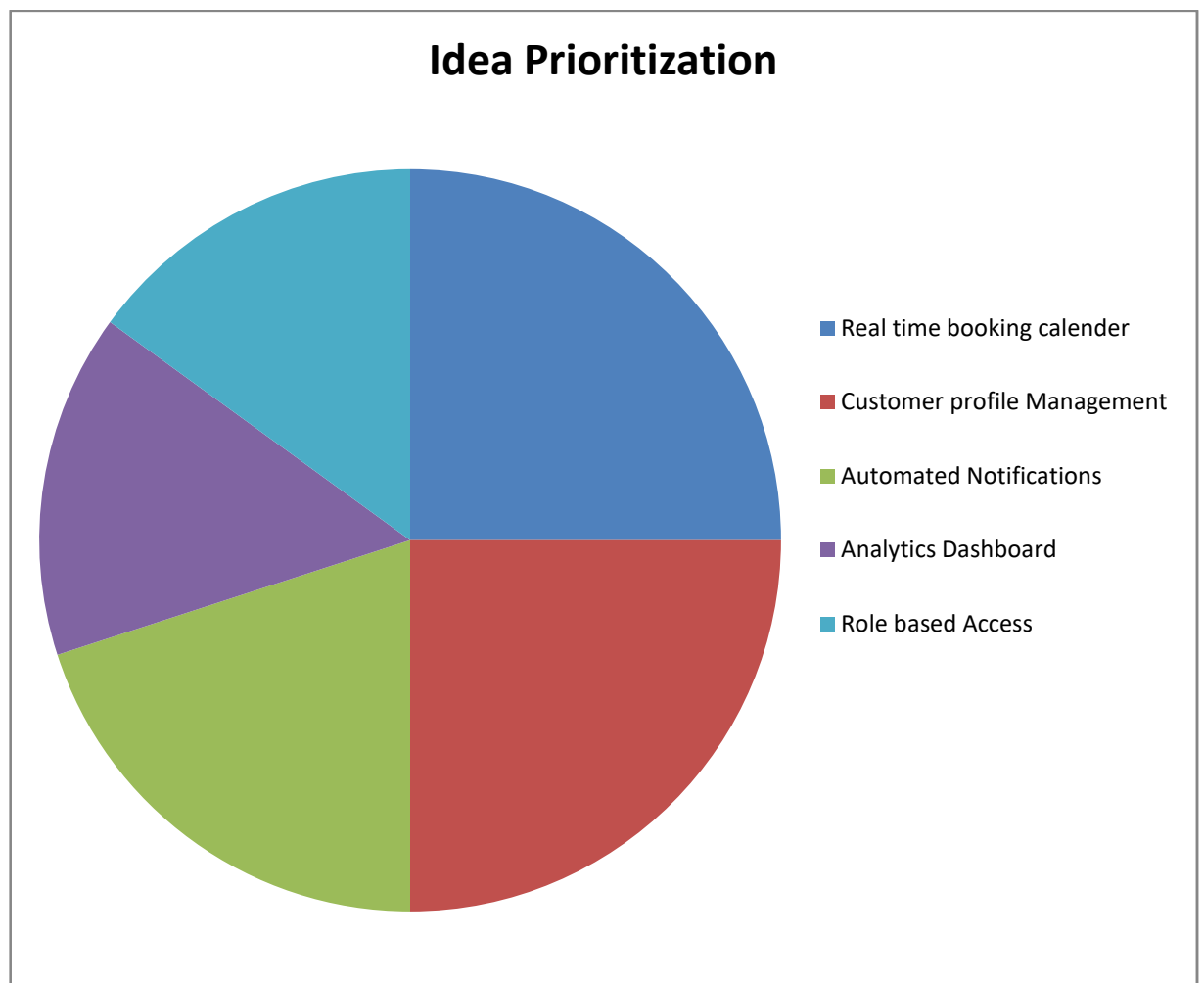
Each clustered idea was carefully evaluated against three key criteria:

- **Feasibility** – Ease of implementation using Salesforce’s capabilities
- **Impact** – How significantly the feature would improve venue operations
- **Urgency** – Whether the idea addressed an immediate operational or user-facing challenge

To narrow down the MVP (Minimum Viable Product) scope, we used a decision matrix that helped surface the highest-value features.

- **Top Priority Features:**
 - Real-time booking calendar with conflict prevention
 - Customer profile management and event history tracking
 - Automated reminders and confirmations (via SMS/Email/WhatsApp)
 - Interactive dashboards showing hall utilization, revenue, and peak demand times
 - Secure, role-based access for admins, coordinators, and vendors

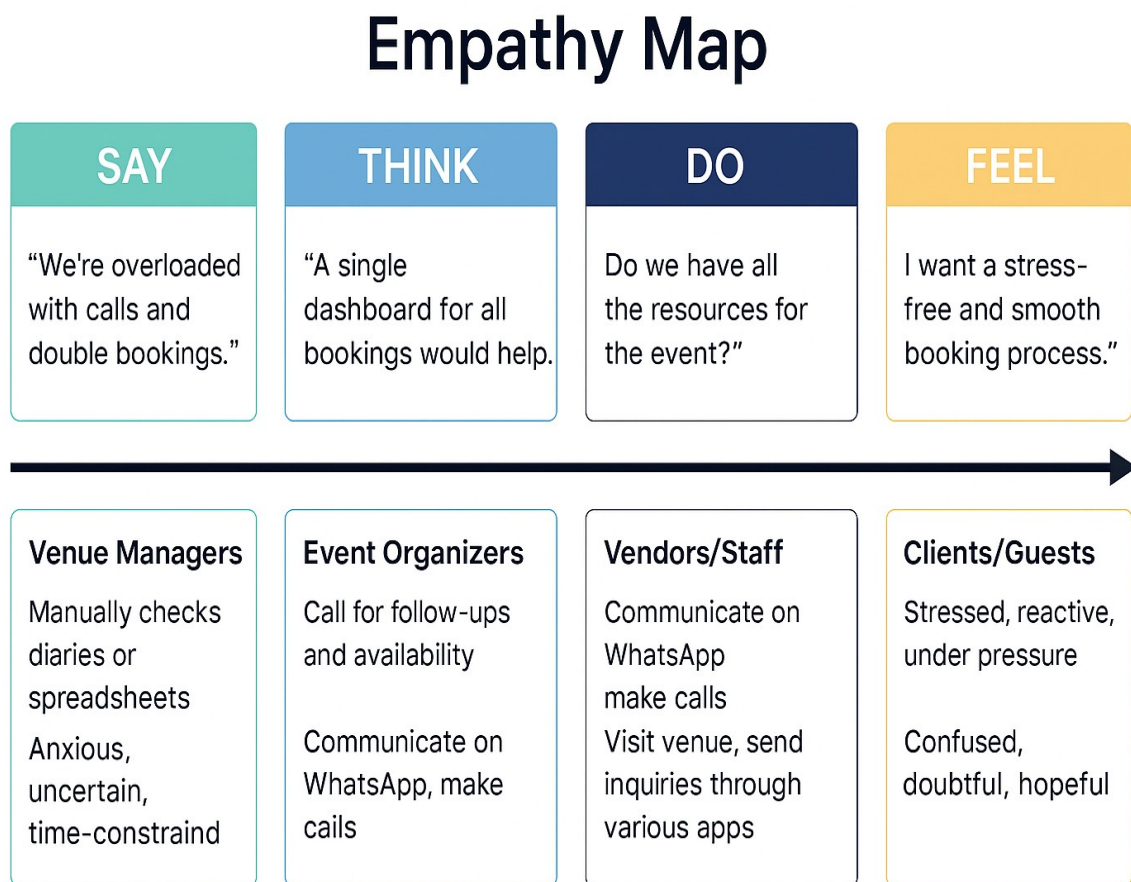
These features were prioritized for their direct impact on streamlining operations



2.2 Empathy Mapping- Empathize & Discover

Empathy Map Canvas

An **empathy map** is a visual tool that helps teams develop a deeper understanding of users' experiences, frustrations, and aspirations. We used this tool to map the daily journey of key banquet hall booking stakeholders—including **venue managers, event coordinators, vendors, and customers**—to surface the emotional and operational realities they face.



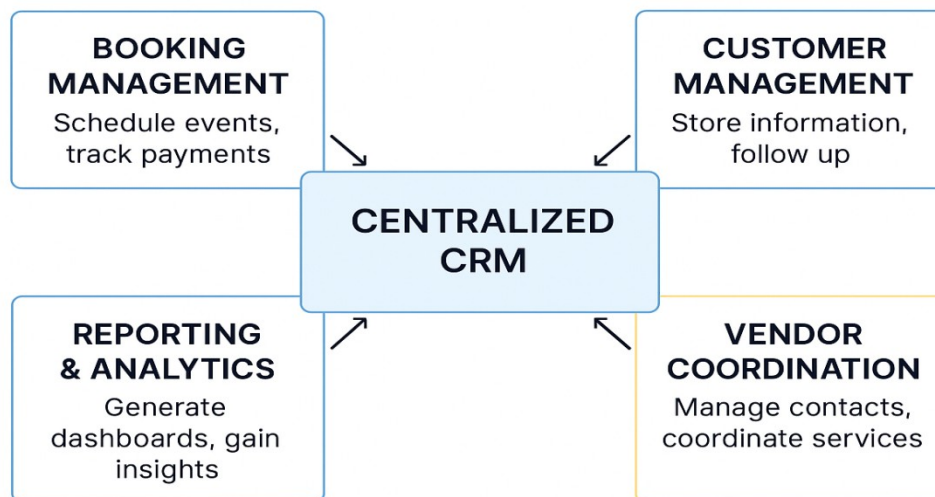
By stepping into the user's shoes, we ensured that our Salesforce CRM features (formulas, flows, triggers, dashboards) directly addressed their key frustrations.

2.3 Define the Problem Statements

Customer Problem Statement Template

Banquet hall operators and event managers currently manage bookings, customer interactions, and vendor coordination through fragmented and often manual processes. This results in scheduling conflicts, missed follow-ups, payment tracking errors, and lack of visibility into overall business performance. A centralized Salesforce CRM system can streamline booking workflows, manage customer data efficiently, automate communications, and provide real-time insights through dashboards, flows, and automation. This statement reflects the expectations of venue managers and clients and served as a guiding reference for our object models, data validations, process automations, and reporting configurations.

Centralized CRM for Banquet Hall Booking



3.REQUIREMENT ANALYSIS

The **Requirement Analysis Phase** focuses on gathering, structuring, and validating all essential system needs to ensure a clear roadmap for development. It ensures that the solution is not only technically robust but also directly aligned with what key stakeholders—such as banquet hall managers, event coordinators, vendors, and clients—actually require.

In our project, “**A CRM Application for Banquet Hall Booking,**” this phase acted as the bridge between identifying booking-related challenges and shaping an intelligent system design. Through detailed user journeys, workflow analysis, and functional requirement gathering, we outlined critical needs such as real-time scheduling, customer data handling, vendor assignment, and seamless communication.

3.1 Customer Journey Map-Understanding User Experience Flow

Purpose: The Customer Journey Map visualizes how key stakeholders in the banquet hall ecosystem—such as Venue Managers, Event Coordinators, Clients, and Service Vendors—interact with the booking and event management process on a daily basis. It highlights core actions, common pain points, emotional highs and lows, and potential areas of improvement. This real-world perspective informs the CRM design to ensure it aligns seamlessly with user behaviors, eliminates manual inefficiencies, and enhances the overall event planning experience.

Journey steps:



3.2 Data Flow Diagram:

Purpose: Mapping Information Flow Between Objects

The **Data Flow Diagram (DFD)** models how information moves between Salesforce objects and components in the banquet hall CRM system. It helped us structure relationships between:

- **Customer, Booking, Venue, Event Details, Vendor, and Payment**

Level 1 DFD Overview

1. Admin & Staff Inputs:

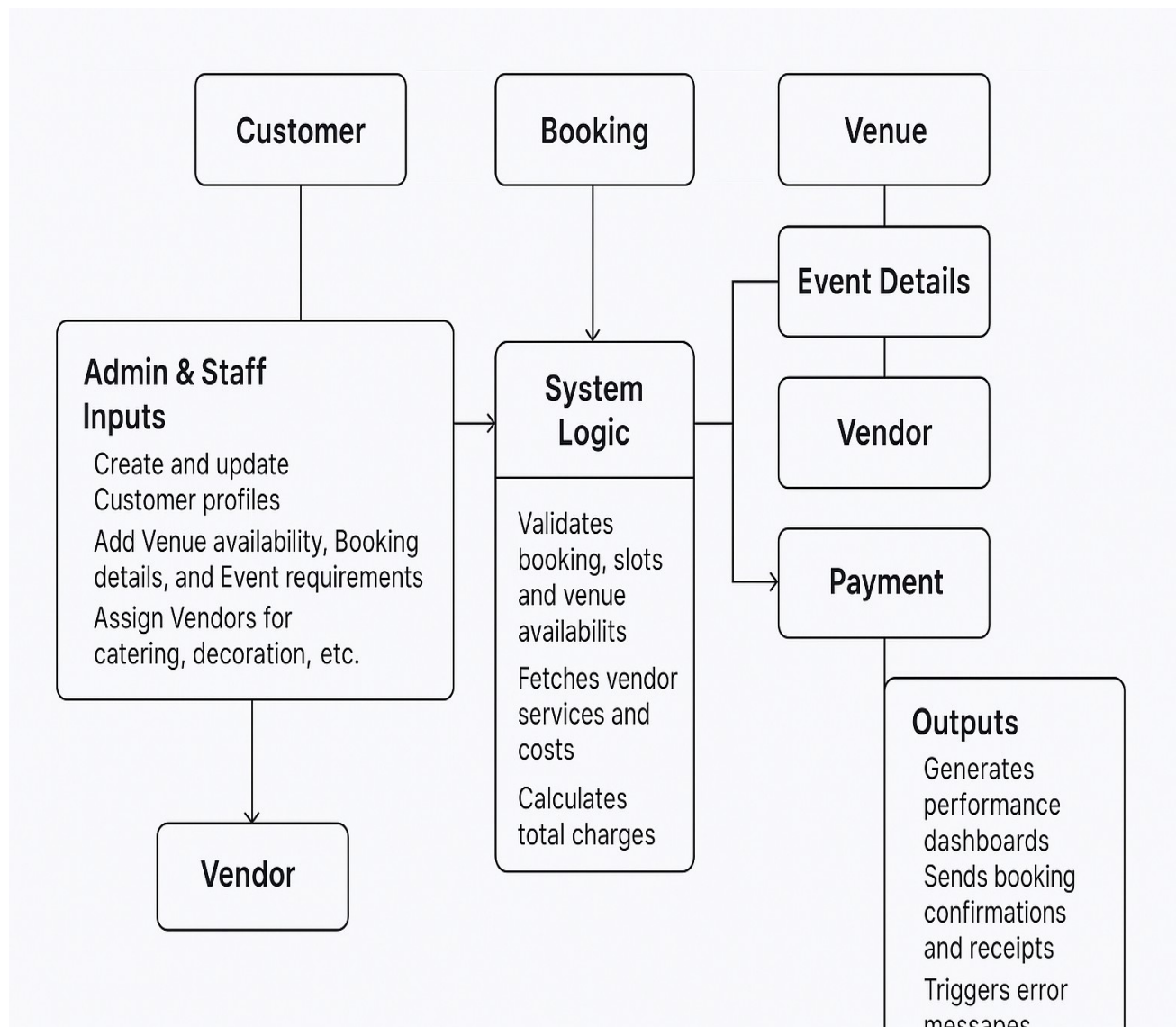
- Create and update **Customer** profiles
- Add **Venue availability, Booking details, and Event requirements**
- Assign **Vendors** for catering, decoration, etc.

2. System Logic:

- Validates booking slots and venue availability
- Fetches vendor services and costs via flows based on event type and scale
- Calculates total charges using formula (Service Costs + Venue Fees + Discounts)

3. Outputs:

- Generates performance dashboards (e.g., revenue by event type, vendor utilization)
- Sends automated booking confirmations and payment receipts
- Triggers error messages for time conflicts or missing vendor assignments



3.3 Solution Requirements:

What the CRM System Must Do

Functional Requirements:

- **Create custom objects for:**
 - **Venue** (with capacity, location, availability)
 - **Booking** (with date, time, customer, event type)
 - **Customer** (contact info, history, preferences)
 - **Vendor** (services, costs, availability)
 - **Payment** (methods, totals, transaction status)
- **Establish relationships using lookup, master-detail, and formula fields:**
 - Booking → Customer, Venue, Vendor
 - Payment → Booking
 - Dynamic pricing logic via formulas (e.g., duration × rate)
- **Validate booking logic using Apex Triggers:**
 - Prevent double bookings
 - Ensure vendors aren't double-assigned
 - Trigger alerts if hall capacity is exceeded
- **Automate workflows using Flows:**
 - Auto-confirm availability
 - Trigger payment reminders and vendor notifications
 - Generate event checklist from booking details
- **Support analytics through:**
 - Dashboards showing booking trends, revenue, vendor utilization
 - Reports for customer feedback, booking frequency, peak seasons

Non-Functional Requirements:

- **Intuitive Lightning App Interface** for staff and managers
- **Real-time validation** for booking conflicts and data accuracy
- **Centralized and relational database** with clear object-linking for high usability, data consistency, and scalability

3.4 Technology Stack:

CRM Technologies Used

Category	Technology Used	Description
Platform	Salesforce Lightning	Used to build custom CRM using standard & custom objects
Automation	Flows & Validation Rules	Automate booking confirmations and enforce data accuracy
Custom Logic	Apex Triggers & Classes	Used for custom business logic and validations
Reports & Dashboards	Salesforce Reports	To analyze booking data, revenue, vendor usage, etc
UI/UX	Lightning App Builder	For creating a unified app view for Banquet Hall Booking

Summary:

The Requirement Analysis Phase for the CRM Application for Banquet Hall Booking ensured that system features were rooted in real user pain points like miscommunication and booking clashes. It guided the creation of structured Salesforce objects, automated flows, and relationship logic. This phase shaped the app's UI and dashboards, aligning technology with stakeholder needs. Overall, it laid the groundwork for a smart, efficient, and user-centered solution.

4. Project Design Phase

The Project Design Phase laid the technical and functional blueprint for the banquet hall CRM system, ensuring it addressed real user needs while remaining scalable and aligned with Salesforce best practices. It transformed validated pain points into structured objects, flows, and business rules. This phase guided decisions around data relationships, automation logic, and UI components, bridging the gap between user insights and a buildable, maintainable solution.

4.1 Problem–Solution Fit:

Problem Recap:

- Current processes are manual or scattered across spreadsheets and calls, leading to inefficiencies
- Frequent data entry errors and duplicated customer or event information
- Lack of real-time visibility for managers into hall availability, staff assignments, or upcoming events
- Poor coordination in assigning vendors and staff, resulting in last-minute issues
- Challenges in tracking payments, generating post-event reports, and analyzing booking trends
- Banquet hall operations demand real-time coordination across bookings, venues, vendors, and payments

Does the Proposed Solution Fit?

Yes. The Salesforce CRM solution:

- Introduces object-level control for **Bookings, Venues, Customers, Vendors, and Payments**
- Enables automated **service pricing and availability checks** through Flows
- Validates **vendor assignments and booking conflicts** using Apex Triggers
- Summarizes operational performance using **Reports and Dashboards**
- Uses **formula fields** to dynamically calculate charges and event costs

- Creates **centralized scheduling and coordination views** using Lightning App Builder

Thus, it directly addresses the operational pain points of managing banquet hall bookings and event logistics in a unified, scalable, and efficient manner.



PROS

Centralized Booking Management

All bookings, customer details, and vendor assignments are stored in one place—reducing errors and improving coordination

Automation of Routine Tasks

Flows and triggers can automate confirmations, reminders, and payment alerts, saving time and reducing manual thofe-ups.

Customizable to Business Needs

Salesforce allows you to tailor objects, fields, and logic to mach your specific banquet operations and workflows



CONS

High Initial Setup Cost

Customizing Salesforce for banquet operations may require developer time and licensing costs.

Learning Curve

Staff may need taining to navigate the Lightning interface and understand CRM workflows.

Overhead for Small Venues

For smaller banquet halls w/ilimited bookings, the system might feel too complex or underutilized

Ongoing Maintenance

Custom hows, triggers, and reports need periodic updates to stay aligned with business changes

4.2 **Proposed Solution:**

Our proposed CRM application is designed to digitize and streamline banquet hall booking operations using Salesforce's powerful customization capabilities.

Key Functional Features:

- **Custom Objects:**

- Venue, Booking, Customer, Vendor, Event Details, and Payment

- **Automation & Validation:**

- Vendor assignment checks (e.g. caterers, decorators) using Apex Triggers
- Total cost calculation automation using Flows based on services and duration
- Input validation for booking conflicts, missing information, or overbooking

- **Formula Fields for Efficiency:**

- Event Duration = End Time – Start Time
- Total Event Cost = Base Venue Fee + Vendor Charges – Discounts
- Auto-lookup of assigned Vendor Names and Customer Contact Info

- **UI & Navigation:**

- Banquet Booking App built using Lightning App Builder
- Tabs for each custom object and user-tailored page layouts for staff, managers, and vendors

- **Reports and Dashboards:**

- Booking Summary Reports by date, type, or customer
- Vendor Assignment Dashboards showing service load and availability
- Monthly Revenue and Event Frequency Tracking Dashboards

(3) WhatsApp

Home | Salesforce

Billing | Salesforce

Total Revenue | Sales

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Trigger name conflic

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orgfarm-b680d2676d-dev-ed.develop.lightning.force.com/lightning/r/Dashboard/01ZgL000002HA6fUAG/view?queryScope=userFolders

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Banquet Hall Booking

Banquet Halls

Billings

Staffs

Reports

Dashboards

Dashboard

Total Revenue

As of Jun 23, 2025, 1:10 AM

Viewing as manikinda akashstudent

Refresh

Edit

Subscribe

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Banquet Halls with Billings Report

Sum of Total Amount

Booking Date

10/22/2025

\$50k

\$50k

View Report (Banquet Halls with Billings ...)

As of Jun 23, 2025, 1:10 AM

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6/23/2025

4.3 Solution Architecture:

Object Relationship Overview

Object	Key Fields / Features
Venue	Name, Location, Capacity Availability
Booking	Linked to Venue, Start Date, End Date, Status
Customer	Name, Email, Phone, Address
Vendor	Name, Service (Picklist), Phone, Email
Event Details	Linked to Customer and Vendor Number of Guests Setup Details Formula

Lookups:

- Staff Member → Venue
- Booking → Venue, Customer, Event Coordinator, Vendor Package
- Vendor Package → Vendor

Formulas:

- IF(Customer_Name__r.Archestra__c = TRUE, 50000, 0)
- IF(Customer_Name__r.DJ__c = TRUE, 70000, 0)
- IF(Customer_Name__r.Magician__c , 15000, 0)
- IF(Customer_Name__r.Shenai_and_Mridangam__c = TRUE, 25000, 0)
- IF(Customer_Name__r.Kolatam__c , 15000, 0)
- CASE(Customer_Name__r.Food_Menu__c , 'Veg', 450, 'Special Veg', 550,

'Non-Veg', 550, 650)

- Food_Amount_per_Plate__c *
Customer_Name__r.No_of_Visitors__c
- CASE(Customer_Name__r.Decoration_Purpose__c , 'Marriage',
50000,
'Reception', 60000,
'Anniversary', 30000,
'Birthday', 25000 ,
'Other Events', 20000 , 0)
- Booking_Date__c <= TODAY()

Automation:

- Flows for service pricing logic
- Triggers for vendor assignment validation
- Reports & dashboards for operational insights

Summary:

The Project Design Phase ensured that our banquet hall CRM solution aligned closely with the needs of customers, staff, and managers while adhering to Salesforce best practices in object modeling, validation, automation, and UI design. It provided a structured foundation for booking workflows, vendor coordination, and event cost logic. This comprehensive design blueprint served as a critical guide for the upcoming build and configuration stages, ensuring clarity and scalability.

5.Project Planning Phase

The Project Planning Phase transformed major project milestones into manageable, time-bound sprints aligned with the banquet hall CRM development timeline. This approach ensured clear task ownership, streamlined collaboration, and consistent progress tracking. By breaking down features like booking automation, vendor assignment, and reporting into structured deliverables, the team was able to execute efficiently and stay aligned with project goals and stakeholder expectations.

Project Planning Template

Sprint Schedule – Based on Project Milestones

Sprint	Functional Requirement (Epic)	T ask (Mapped from Milestone)	Priority	Team Members
Sprint-1	Developer Setup & Basic Objects	Creating Developer Account & Activating Org	High	Member 1
Sprint-1	Custom Object Creation	Creating custom Objects-A Banquet booking application	High	Member 1,2
Sprint-2	UI Tabs & App Creation	Creating Tabs & Lightning App	High	Member 3
Sprint-2	Field Configuration	Creating fields, formula fields, picklists, relationships	Medium	Member 1,3
Sprint-3	Layouts & Validations	Page Layouts + Validation Rules	High	Member 2,4
Sprint-3	Flows & Triggers	Automations using Flows and Apex Triggers	High	Member 2,3
Sprint-4	Reports & Dashboards	Generate Reports and create Dashboards	High	Member 4
Sprint-4	Final Integration & Conclusion	Final Review, Testing, and Functional Summary	Medium	All Members

Project Tracker & Sprint Timeline

Duration: Each sprint is 6 days, aligned with your June 2025 internship Schedule.

Sprint	Duration	Sprint start date	Sprint end date	Sprint release date
Sprint-1	6 Days	03 Jun 2025	08 Jun 2025	08 Jun 2025
Sprint-2	6 Days	09 Jun 2025	14 Jun 2025	14 Jun 2025
Sprint-3	6 Days	15 Jun 2025	20 Jun 2025	20 Jun 2025
Sprint-4	6 Days	21 Jun 2025	26 Jun 2025	26 Jun 2025

Summary:

The Project Planning Phase allowed our team to convert 12 major milestones into 4 streamlined sprints with assigned priorities and contributors. By aligning sprints with real internship dates and breaking tasks down into functional chunks, we ensured steady progress and simplified execution.

6. Project Executable Files

This phase outlines the actual Salesforce configurations, data models, and outcomes implemented during the execution of the Banquet Hall Booking CRM application. It ensures that all key elements—custom objects, automation flows, validations, and reports—are clearly documented and aligned with real-world use cases. The components developed in this phase are designed to be traceable, reusable, and easily assessable for future improvements or audits. It captures the practical realization of booking flows, vendor assignment rules, and payment tracking modules, offering clarity, replication, and validation across the entire system lifecycle.

6.1 Project Files

Project Executable Files

The following project files were executed in the Salesforce Developer Org:

Milestone 1: Developer Account Setup

Milestone 2: Object Creation

Milestone 3: Tab Creation

Milestone 4: Lightning App Setup

Milestone 5: Field Creation

Milestone 6: Page Layouts

Milestone 7: Creation Of Record Types

Milestone 8: Validation Rules

Milestone 9: Flow Setup

Milestone 10: Apex Trigger

Milestone 11: Reports

Milestone 12: Dashboards

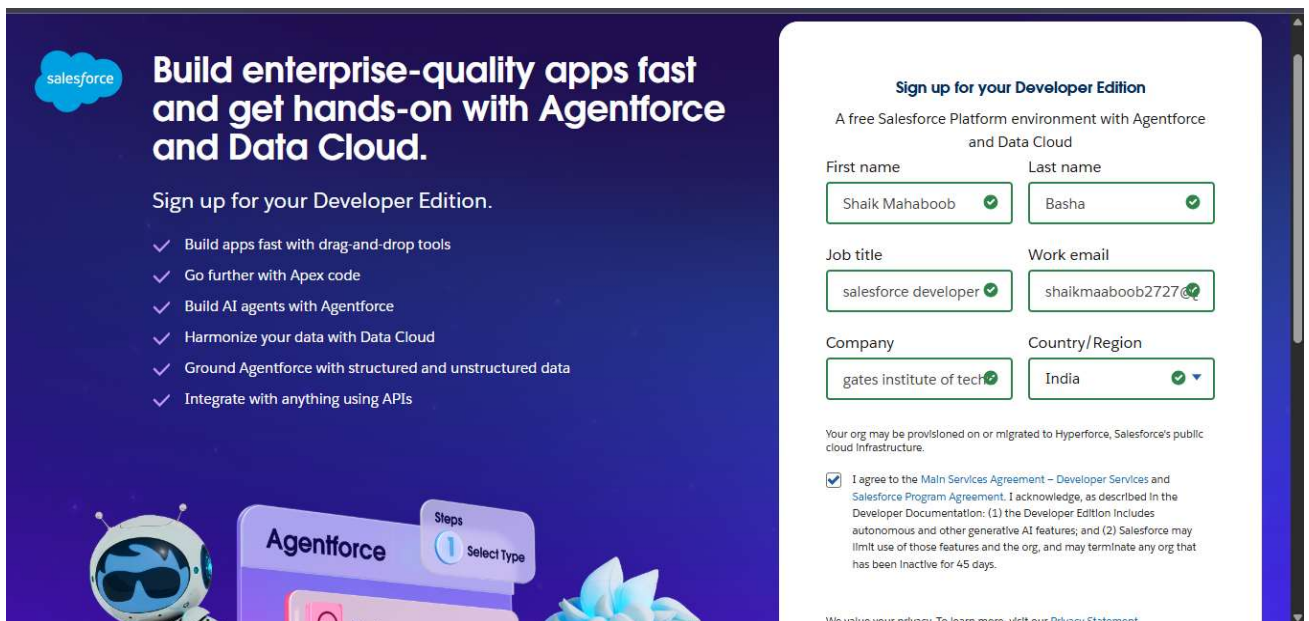
Milestone 13: Final Review

List of Milestone Tasks with Supporting Screenshots and Descriptions

Milestone 1: Developer Account Setup

- Created and activated a Salesforce Developer Org.
- Link: <https://developer.salesforce.com/signup>
- Setup the base environment for CRM development.
- Verified access to Object Manager, Flow Builder, and App Builder

OUTPUT SCREENSHOT



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Job title: salesforce developer ✓ Work email: shaikmaaboob2727@gmail.com ✓

Company: gates institute of tech ✓ Country/Region: India ✓

Your org may be provisioned on or migrated to Hyperforce, Salesforce's public cloud Infrastructure.

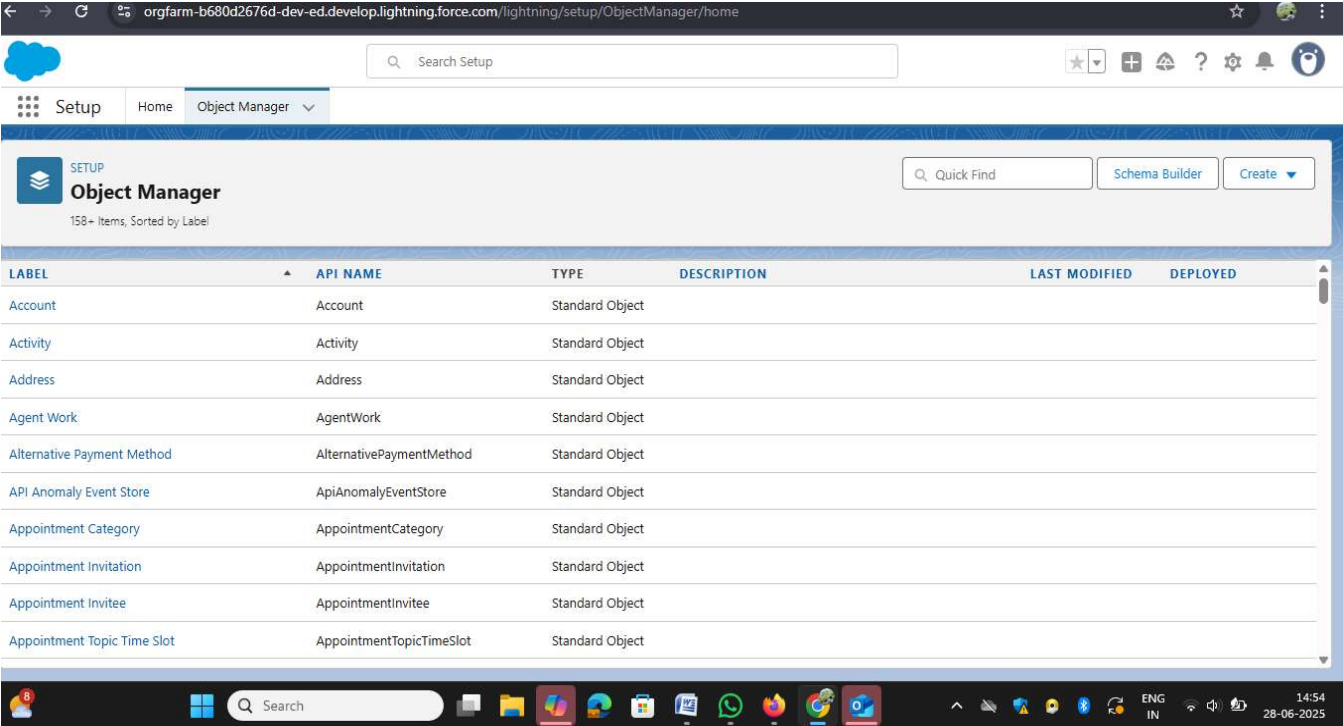
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Milestone 2: Object Creation

- Created 3 custom objects:
 - Banquet hall custom, Billing and Staff
- Established foundational schema for Banquet Hall Booking.
- Configured relationships using lookup fields.

OUTPUT SCREENSHOT



The screenshot displays the Salesforce Object Manager interface. The browser address bar shows the URL: `orgfarm-b680d2676d-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/home`. The page header includes a search bar labeled "Search Setup" and navigation tabs for "Setup", "Home", and "Object Manager". The main content area is titled "Object Manager" with a subtitle "158+ Items, Sorted by Label". It features a "Quick Find" search bar, a "Schema Builder" button, and a "Create" dropdown menu. Below this is a table listing standard objects.

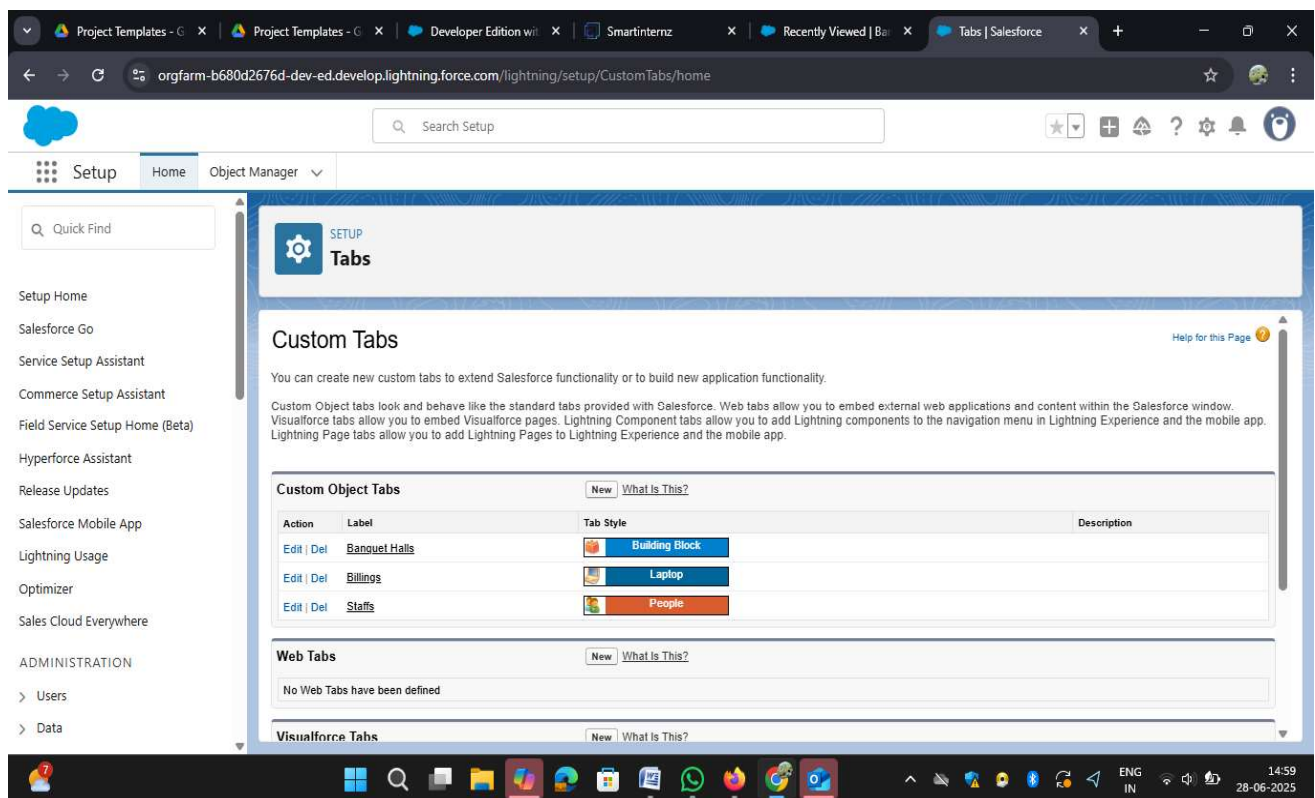
LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Account	Account	Standard Object			
Activity	Activity	Standard Object			
Address	Address	Standard Object			
Agent Work	AgentWork	Standard Object			
Alternative Payment Method	AlternativePaymentMethod	Standard Object			
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object			
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	AppointmentInvitation	Standard Object			
Appointment Invitee	AppointmentInvitee	Standard Object			
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object			

The bottom of the screenshot shows the Windows taskbar with various application icons and a system clock indicating 14:54 on 28-06-2025.

Milestone 3: Tab Creation

- Created tabs for each custom object.
- Enabled easy navigation and object access in the app.
- Ensured users can create/view records from the UI.

OUTPUT SCREENSHOT



Milestone 4: Lightning App Setup

- Built a custom Lightning App named " Banquet Hall Booking".
- Added relevant tabs to centralize operations.
- Simplified user workflow by grouping features.

OUTPUT SCREENSHOT

The screenshot displays the Salesforce Lightning Experience App Manager interface. The left sidebar shows the navigation menu with 'App Manager' selected under the 'Apps' section. The main content area shows a list of 27 apps, sorted by App Name. The 'Banquet Hall Booking' app is listed as item 6, created on 6/19/2025 at 11:51 PM, and is a Lightning app. The interface includes a search bar, a 'Search Setup' button, and a 'New Lightning App' button.

	App Name ↑	Developer Name	Description	Last Modified ...	Ap...	Vi...
1	All Tabs	AllTabSet		6/15/2025, 6:30 AM	Classic	
2	Analytics Studio	Insights	Build CRM Analytics dashboards and apps	6/15/2025, 6:30 AM	Classic	✓
3	App Launcher	AppLauncher	App Launcher tabs	6/15/2025, 6:30 AM	Classic	✓
4	Approvals	Approvals	Manage approvals and approval flows	6/15/2025, 6:30 AM	Lightning	✓
5	Automation	FlowsApp	Automate business processes and repetitive tasks.	6/15/2025, 6:37 AM	Lightning	✓
6	Banquet Hall Booki...	Banquet_Hall_Booking		6/19/2025, 11:51 PM	Lightning	✓
7	Bolt Solutions	LightningBolt	Discover and manage business solutions designed for your industry.	6/15/2025, 6:30 AM	Lightning	✓
8	Community	Community	Salesforce CRM Communities	6/15/2025, 6:30 AM	Classic	✓
9	Content	Content	Salesforce CRM Content	6/15/2025, 6:30 AM	Classic	✓
10	Data Cloud	Audience360	Build a thorough and complete understanding of your customers.	6/15/2025, 6:30 AM	Lightning	✓
11	Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recip...	6/15/2025, 6:30 AM	Lightning	✓

Milestone 5: Field Creation

Added custom and formula fields like:

- Banquet Hall, Staff, Billing

Formula:

- IF(Customer_Name__r.Archestra__c = TRUE, 50000, 0)
- IF(Customer_Name__r.DJ__c = TRUE, 70000, 0)
- IF(Customer_Name__r.Magician__c , 15000, 0)
- IF(Customer_Name__r.Shenai_and_Mridangam__c = TRUE, 25000, 0)
- IF(Customer_Name__r.Kolatam__c , 15000, 0)

OUTPUT SCREENSHOT

Banquet Hall Object Fields

The screenshot shows the Salesforce Setup interface for the 'Banquet Hall' object. The 'Fields & Relationships' section is active, displaying a list of 17 fields. The fields are sorted by Field Label. The table below represents the data shown in the screenshot:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Archestra	Archestra__c	Checkbox		
Booking Date	Booking_Date__c	Date		
Created By	CreatedById	Lookup(User)		
Customer Name	Name	Text(80)		✓
Decoration Purpose	Decoration_Purpose__c	Picklist		
DJ	DJ__c	Checkbox		
Email	Email__c	Email		

Staff Object Fields

The screenshot shows the Salesforce Setup interface for the 'Staff' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Fields & Relationships' and shows 4 items, sorted by Field Label. The table below lists the fields:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓
Standard field	Name	Text(80)		✓

At the bottom of the page, the Windows taskbar is visible with various application icons and the system clock showing 15:28 on 28-06-2025.

Billing Object Fields

The screenshot shows the Salesforce Setup interface for the 'Billing' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships (selected), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Fields & Relationships' and shows 13 items, sorted by Field Label. The table below lists the fields:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Archestra Amount	Archestra_Amount__c	Formula (Currency)		
Billing Name	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Customer Name	Customer_Name__c	Master-Detail(Banquet Hall)		✓
Decoration Amount	Decoration_Amount__c	Formula (Currency)		
DJ Amount	DJ_Amount__c	Formula (Currency)		
Email	Email__c	Email		

At the bottom of the page, the Windows taskbar is visible with various application icons and the system clock showing 15:28 on 28-06-2025.

Milestone 6: Page Layouts

- Customized page layouts per object.
- Grouped fields logically for usability.
- Enhanced record readability and data entry experience.

OUTPUT SCREENSHOT

Banquet Hall object Page Layouts

The screenshot shows the Salesforce Lightning Setup interface for the 'Banquet Hall' object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Banquet Hall' and 'Page Layouts', showing 3 items sorted by Page Layout Name. A table lists the page layouts:

PAGE LAYOUT NAME	CREATED BY	MODIFIED BY	
Banquet Hall Layout	manikinda akashstudent, 6/19/2025, 10:56 PM	manikinda akashstudent, 6/22/2025, 1:12 AM	▼
Celebrations	manikinda akashstudent, 6/22/2025, 1:43 AM	manikinda akashstudent, 6/22/2025, 1:48 AM	▼
Official Booking	manikinda akashstudent, 6/22/2025, 1:33 AM	manikinda akashstudent, 6/22/2025, 1:41 AM	▼

The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 15:37 on 28-06-2025.

Staff object Page Layouts

The screenshot shows the Salesforce Setup interface for the Staff object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Staff' and includes a 'Page Layout Properties' window at the top. This window has a 'Fields' tab with a 'Quick Find' bar and a list of fields: Section, Blank Space, Created By, and Last Modified By. Below this, the 'Staff Detail' layout is shown, featuring a 'Standard Buttons' bar with buttons like Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Sharing, Sharing Hierarchy, and Edit Labels. The layout also includes sections for Information (Header visible on edit only), System Information (Header visible on edit only), and Custom Links (Header visible on edit only). The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 15:38 on 28-06-2025.

Billing object Page Layouts

The screenshot shows the Salesforce Setup interface for the Billing object. The left sidebar contains a navigation menu with options: Details, Fields & Relationships, Page Layouts (selected), Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area is titled 'Billing' and includes a 'Page Layout Properties' window at the top. This window has a 'Fields' tab with a 'Quick Find' bar and a list of fields: Section, Blank Space, Created By, Email, Last Modified By, Customer Name, Food Amount, Magician Amount, Total Amount, Archestra Amount, Decoration Amount, Food Amount per P..., and Billing Name. Below this, the 'Billing Detail' layout is shown, featuring a 'Standard Buttons' bar with buttons like Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, and Edit Labels. The layout also includes sections for Information (Header visible on edit only), System Information (Header visible on edit only), and Custom Links (Header visible on edit only). The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 15:39 on 28-06-2025.

Milestone 7: Creation Of Record Types

- Type of record is created

The screenshot shows the Salesforce Setup interface for the 'Banquet Hall' object. The 'Record Types' section is active, displaying a table with one record type: 'Official Booking'. The table has columns for 'RECORD TYPE LABEL', 'DESCRIPTION', 'ACTIVE', and 'MODIFIED BY'. The 'Official Booking' record is active and was modified by 'manikinda akashstudent' on 6/22/2025 at 1:54 AM. The left sidebar shows the navigation menu with 'Record Types' selected. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The bottom status bar shows the time as 15:57 on 28-06-2025.

RECORD TYPE LABEL	DESCRIPTION	ACTIVE	MODIFIED BY
Official Booking	it is for official meetings,lunch,gatherings	✓	manikinda akashstudent, 6/22/2025, 1:54 AM

Milestone 8: Validation Rules

- Enforced data quality with validations like:
- `Booking_Date__c <= TODAY()`, “Booking Date must be a future Date”.
- Prevented invalid inputs and ensured system reliability.

OUTPUT SCREENSHOT

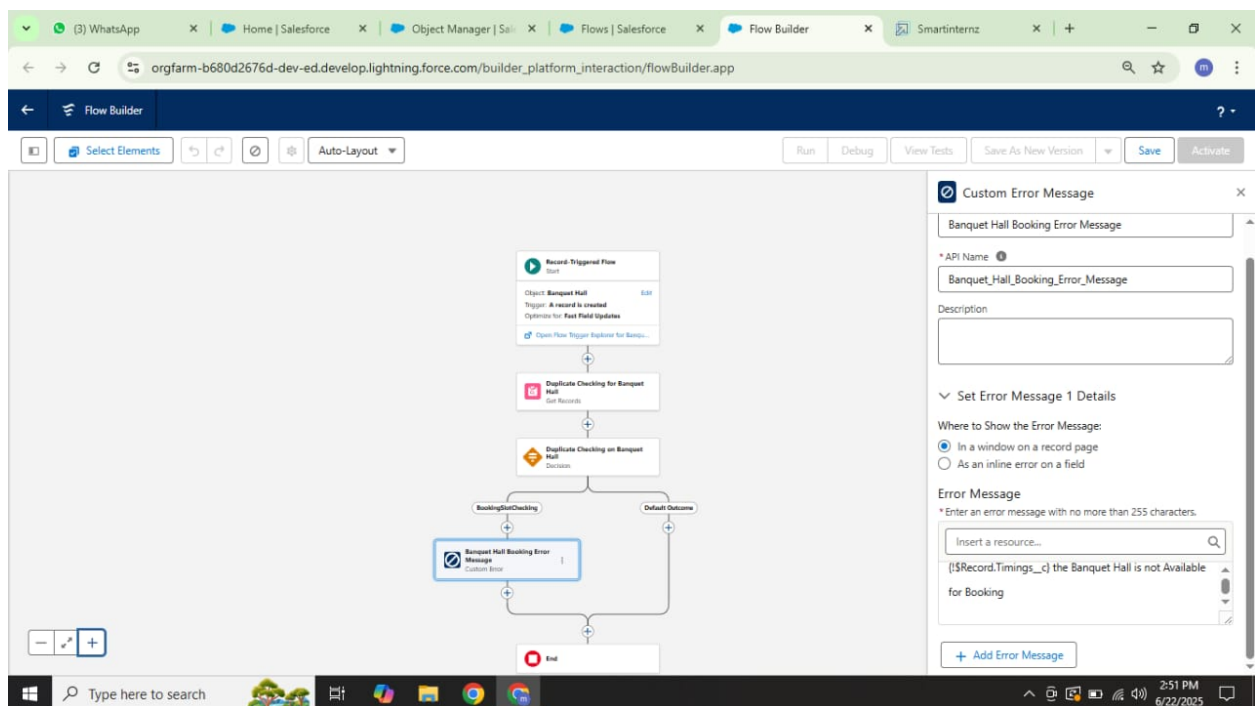
The screenshot displays the Salesforce Lightning Setup interface, specifically the 'Object Manager' section for the 'Banquet Hall' object. The 'Validation Rules' tab is selected, showing a list of validation rules. A single rule, 'BookingDateChecking', is listed with the error message 'Booking Date must be a future Date'. The rule is active and was modified by 'manikinda akashstudent' on 6/22/2025 at 1:57 AM. The left sidebar shows the navigation menu with options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The bottom status bar shows the system time as 15:53 on 28-06-2025.

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
BookingDateChecking	Booking Date	Booking Date must be a future Date	✓	manikinda akashstudent, 6/22/2025, 1:57 AM

Milestone 9: Flow Setup

- Designed a record-triggered flow
- Improved automation and reduced manual input errors

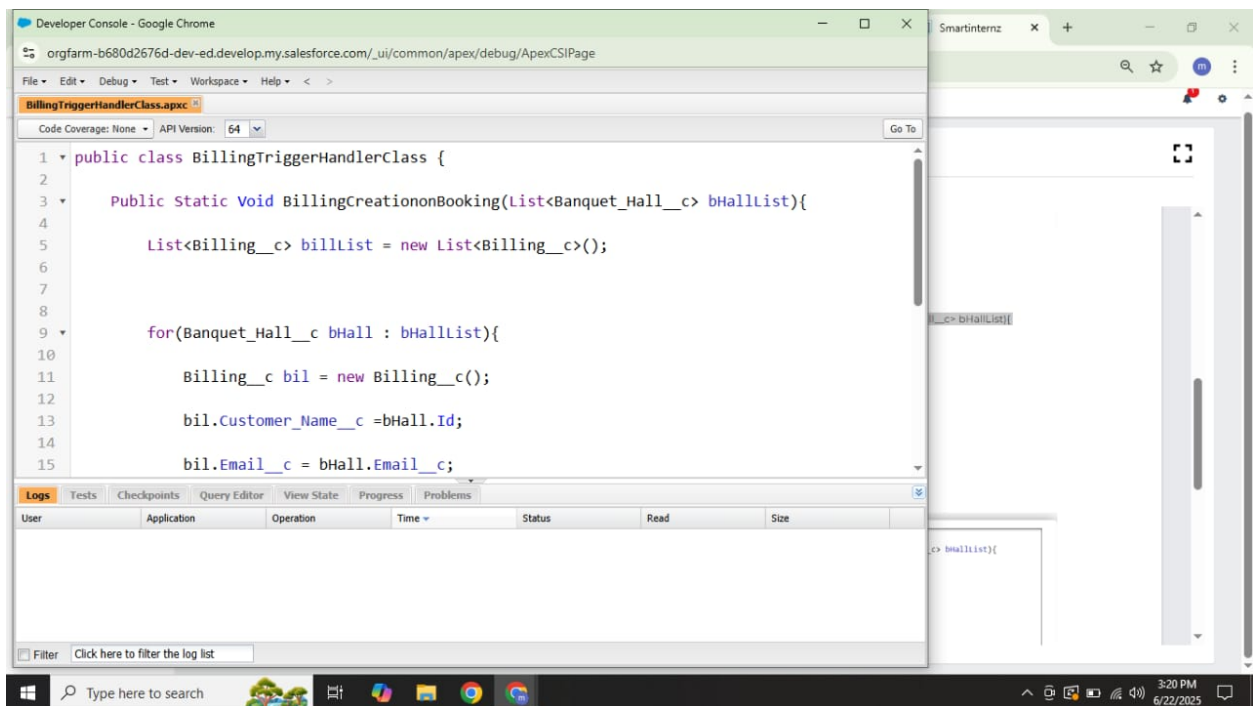
OUTPUT SCREENSHOT



Milestone 10: Apex Trigger

- Developed a trigger to validate:
 - Only users with role “Event Coordinator” can be added as Event Coordinator.
 - Only “Staff” can be added as Staff.
- Ensured business logic is enforced at data level

OUTPUT SCREENSHOT



Developer Console - Google Chrome

orgfarm-b680d2676d-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File Edit Debug Test Workspace Help < >

BillingTriggerHandlerClass.apxc BillingTrigger.apxt

Code Coverage: None API Version: 64 Go To

```
9 for(Banquet_Hall_c bHall : bHallList){
10
11     Billing__c bil = new Billing__c();
12
13     bil.Customer_Name__c =bHall.Id;
14
15     bil.Email__c = bHall.Email__c;
16
17     billList.add(bil);
18
19 }
20
21 if(!billList.isEmpty()){
22
23     insert billList;
```

Logs Tests Checkpoints Query Editor View State Progress Problems

Name	Line	Problem
BillingTrigger	-1	Trigger name, BillingRecordCreation, exists on different sObject type: Billing__c

Smartinternz x +

Type here to search

3:17 PM 6/22/2025

Developer Console - Google Chrome

orgfarm-b680d2676d-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File Edit Debug Test Workspace Help < >

BillingTriggerHandlerClass.apxc TriggerBilling.apxt

Code Coverage: None API Version: 64 Go To

```
1 trigger BillingRecordCreation on Banquet_Hall__c (after insert) {
2
3     if(trigger.isInsert){
4
5         if(trigger.isAfter){
6
7             BillingTriggerHandlerClass.BillingCreationonBooking(trigger.new);
8
9         }
10
11     }
12
13 }
14
```

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size
------	-------------	-----------	------	--------	------	------

Filter Click here to filter the log list

Smartinternz x +

Type here to search

3:21 PM 6/22/2025

Milestone 11: Reports

- Created reports for:
 - Banquet Halls with Billings Report
- Used grouping, filters, and field summaries.
- Enabled data-driven decision-making.

OUTPUT SCREENSHOT

Report: Banquet Halls with Billings
Banquet Halls with Billings Report

Total Records: 6 Total Total Amount: \$200,000.00

<input type="checkbox"/> Booking Date ↑	<input type="checkbox"/> Total Amount	<input type="checkbox"/> Timings
<input type="checkbox"/> 7/28/2025 (1)	\$50,000.00	morning
Subtotal	\$50,000.00	
<input type="checkbox"/> 8/15/2025 (2)	\$50,000.00	evening
	\$50,000.00	evening
Subtotal	\$100,000.00	
<input type="checkbox"/> 10/22/2025 (1)	\$50,000.00	evening
Subtotal	\$50,000.00	
<input type="checkbox"/> 11/16/2025 (2)	\$0.00	morning
	\$0.00	morning
Subtotal	\$0.00	
Total (6)	\$200,000.00	

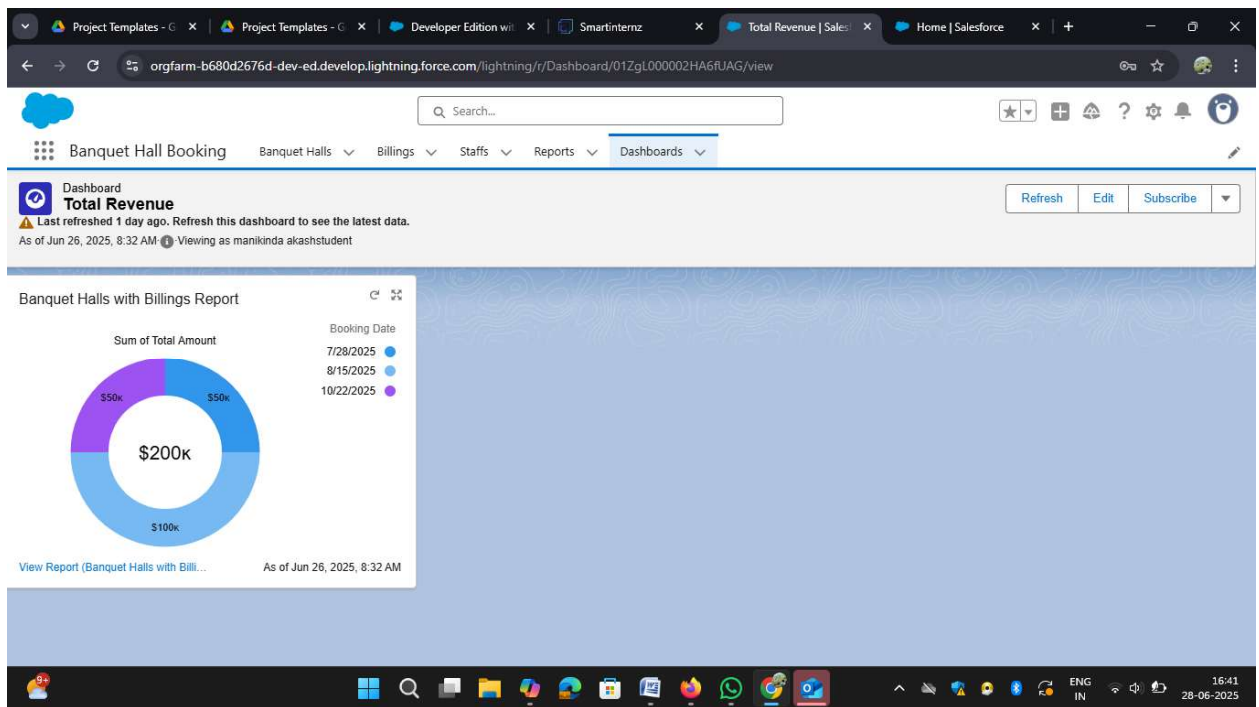
Row Counts ☒ Detail Rows ☒ Subtotals ☒ Grand Total ☒

16:34 28-06-2025

Milestone 12: Dashboards

- Designed dashboards showing:
 - Total Revenue and role summary.
- Used pie, and summary widgets for visualization.

OUTPUT SCREENSHOT



Milestone 12: Final Review

- Conducted full system testing.
- Checked all object links, flows, triggers, reports.
- Confirmed the CRM is fully functional and stable.

Dataset

The system was tested with the following types of data:(Sample Records and Input Values Used During Testing)

Object	Samples Fields Used
Venue	Name: Grand Plaza, Location: Downtown, capacity
Customer	Name: Rajesh, Email: rajesh@gmail.com
Event Coordinator	Name: Priya, Role: Event Coordinator, phone: 8910985504
Vendor Package	Package Name: Premium Catering, Services included: Catering, Cost:\$5000
Booking	Booking ID: B001, Date:2025-06-27, Number Pf Guests 250, booking Status: confirmed
Payment	Booking ID: B001,Amount:\$7500, Payment Mode: Credit Card

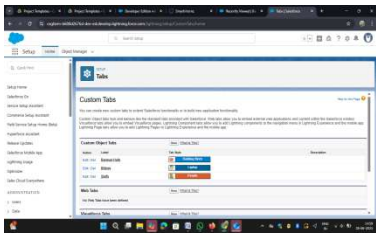
Note: All test records were created using Salesforce's UI and validated via flows and formula fields

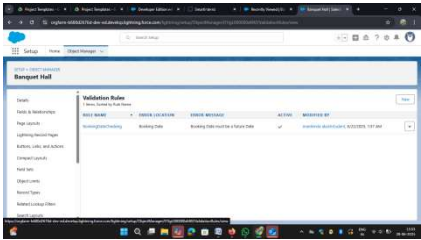
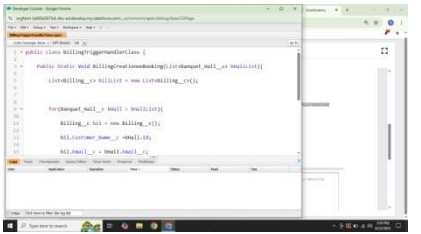
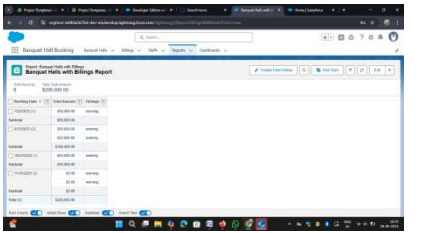
7. FUNCTIONAL AND PERFORMANCE TESTING

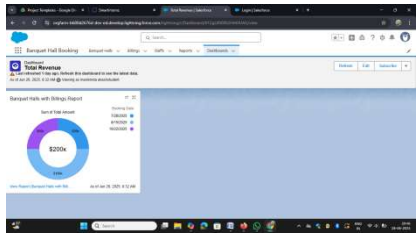
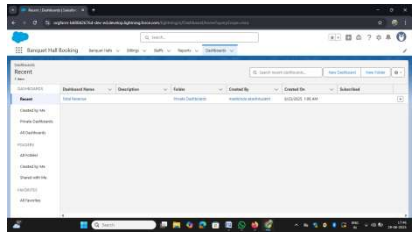
7.1 Performance Testing

The system was evaluated using realistic booking scenarios and sample data across venues, customers, and service packages. Key validations performed during the testing phase included:

- **Trigger for role validation** (Event Coordinator/Support Staff) to ensure only eligible users were assigned specific event responsibilities
- **Flow for auto-fetching event cost** based on venue, service package, and guest count parameters
- **Field validation for input accuracy**, such as mobile number formats, event dates, and payment fields

S.No	Parameter	Value/Observation	Screenshot suggestion
1.	Model Summary	Salesforce CRM setup for the Banquet Hall Booking project leverages custom objects, relationships, automation flows, and validation triggers to streamline event operations. All configurations are aligned with the defined schema to support data integrity. Test data import succeeds only if object relationships and formats are accurate.	 A screenshot of the Salesforce 'Custom Table' configuration page. The page shows a table with columns for 'Name', 'Type', and 'Status'. The 'Name' column contains 'Banquet Hall', 'Event', and 'Guest'. The 'Type' column contains 'Event', 'Guest', and 'Guest'. The 'Status' column contains 'Active', 'Inactive', and 'Inactive'. The page also includes a 'New Table' button and a 'Table Name' field.
2.	Field Validations	Tested rules such as: <ul style="list-style-type: none">• Age must be above 21 for staff and customer eligibility• Phone number must be exactly 10	

		<p>digits to ensure contact accuracy</p> <ul style="list-style-type: none"> Mandatory fields (e.g., event date, venue, customer name) cannot be left empty <p>The system successfully blocks incorrect or incomplete entries to uphold data integrity and operational accuracy.</p>	
3.	Automation Accuracy(Flow +Trigger)	<p>Flow: Auto-fetch event cost based on venue, vendor package, and duration</p> <p>Trigger: Validates assigned role is either “Event Coordinator” or “Support Staff”</p> <p>Test Result: All logic executed successfully in trial runs</p>	
4.	Reports Testing	<p>Event Summary Report displays correct grouping by venue and event date</p> <p>Total cost and guest counts are accurately calculated using formula fields</p> <p>Report export and download functions tested and confirmed working as expected</p>	

5.	Dashboard Verification	<p>Dashboards built using correct source reports from bookings, venues, and payments</p> <p>Visuals reflect live event data like booking counts, total revenue</p> <p>Tested filter logic and component refresh for real-time accuracy</p>	
6.	Data Accuracy (Manual + Automated)	<p>Manual test records were entered to validate input rules and automation flows</p> <p>Flow logic was verified for various combinations of venue, vendor packages, and guest count .Output values matched expected results across all test scenarios, confirming accurate system behavior</p>	

Summary

All Salesforce components were thoroughly tested for:

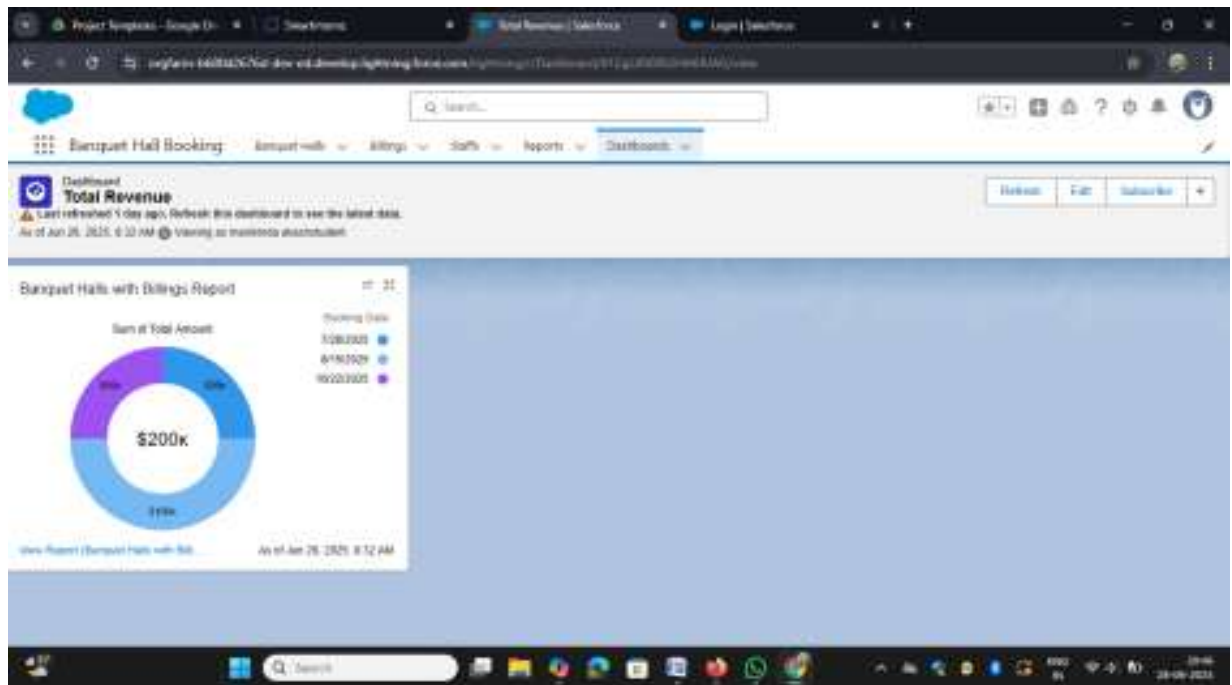
- Validation rule enforcement
- Flow and trigger logic correctness
- Dashboard accuracy
- Report reliability
- Data relationships integrity

8. RESULTS

Output Screenshots

Key functional screenshots include:

- **Dashboards**



- **Reports of data**

The screenshot shows a web application report titled 'Report: Banquet Halls with Billings Banquet Halls with Billings Report'. The report includes a table with columns for 'Booking Date', 'Total Amount', and 'Timings'. The table shows 6 records with a total amount of \$200,000.00. The report is dated 'As of Jun 26, 2025, 6:33 AM' and 'Viewing as translated dashboard'. The bottom of the screen shows a Windows taskbar with various application icons and the system clock.

Booking Date	Total Amount	Timings
7/28/2025 (1)	\$50,000.00	morning
Subtotal	\$50,000.00	
8/15/2025 (2)	\$50,000.00	evening
Subtotal	\$100,000.00	
10/22/2025 (1)	\$50,000.00	evening
Subtotal	\$50,000.00	
11/16/2025 (2)	\$0.00	morning
Subtotal	\$0.00	
Total (6)	\$200,000.00	

9. ADVANTAGES & DISADVANTAGES

Advantages

- Real-time data validation and automation
- Modular structure allows easy customization
- Centralized and streamlined process for booking, event cost, and staff coordination
- Visual reports and dashboards for decision-making

Disadvantages

- Requires knowledge of Salesforce for advanced use
- Limited functionality in offline mode due to cloud dependency
- Dependent on correctly established object relationships

10. CONCLUSION

The project successfully delivered a customized Salesforce CRM application tailored to banquet hall booking operations. It streamlined event management workflows, addressed key operational inefficiencies, and enhanced user coordination across venues, vendors, and customers. The initiative also offered valuable learning opportunities for the team in both declarative and programmatic Salesforce development, reinforcing best practices in CRM design, automation, and scalability.

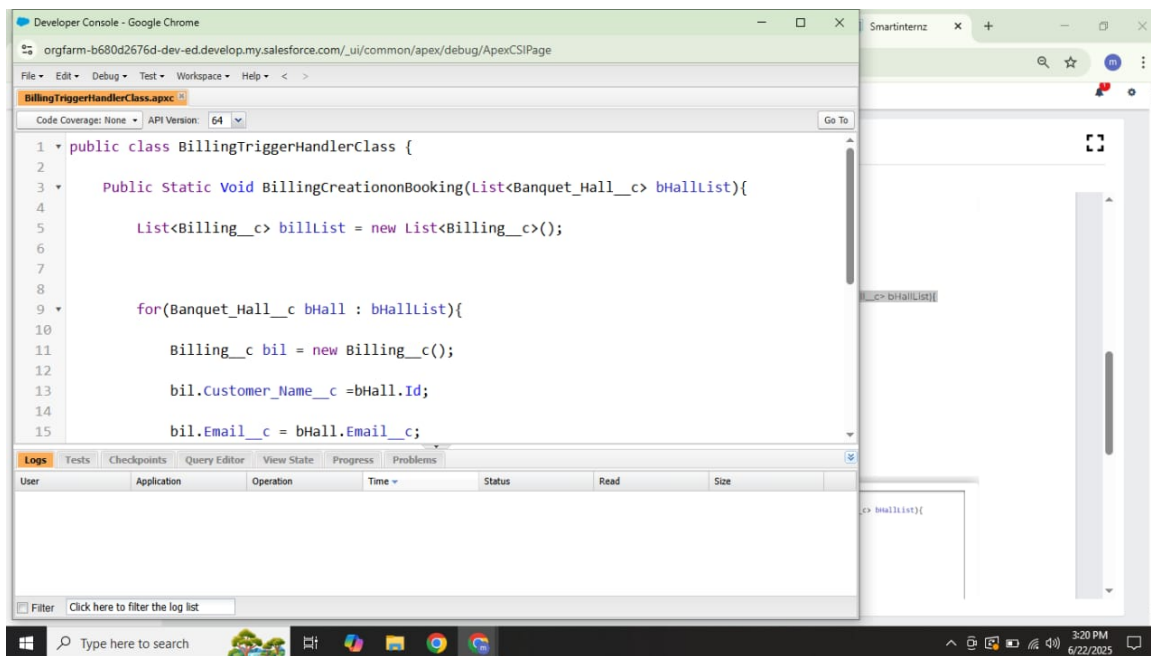
11. FUTURE SCOPE

The Banquet Hall Booking CRM can be further enhanced with the following capabilities:

- **Third-party payment and service integration** for seamless vendor payments and guest-facing ticketing
- **Automated alerts and communication workflows** (e.g., SMS/email reminders for bookings and payment confirmations)
- **Mobile-first interface via Salesforce Experience Cloud** to allow customers and vendors to access bookings on the go
- **AI-powered forecasting using Salesforce Einstein** to predict peak booking periods, service demand, and revenue patterns

12. APPENDIX

- Source Code: Attach Apex Trigger, Flow logic files



- **GitHub Link:**

<https://github.com/Akash3203/a-crm-application-for-banquet-hall-booking>