Phase 10 – Quality Assurance Testing Documentation

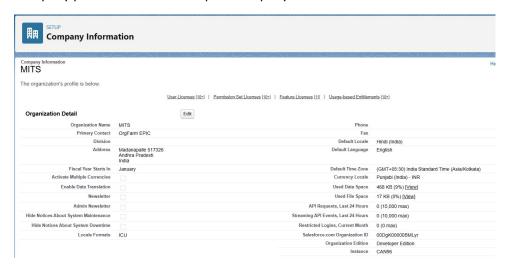
Project: Visitor CheckIn System for Offices

The Visitor Check-In System replaces manual registers with a Salesforce app that enables quick digital logging, automatic host notifications, and secure visitor records. It provides real-time dashboards for management insights while ensuring compliance for HR/security teams. Unlike costly AppExchange apps, this solution is simple, lightweight, and cost-effective for offices.

Company Profile Setup

Company information added:Name, Address, Default Currency, Default Language, Default Locale

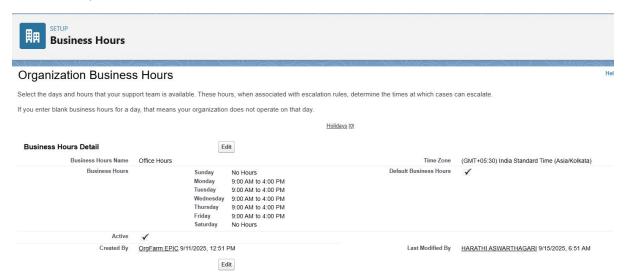
Company profile verified in Setup → Company Information



Business Hours & Holidays

Business hours defined for the company.

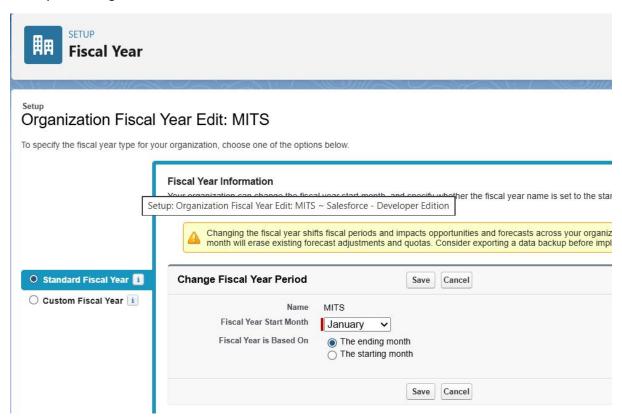
Public holidays added for accurate case and visit time calculations.



Fiscal Year Settings

Standard Fiscal Year (January – December) selected.

Fiscal year settings verified.



User Setup & Licenses

Users created with appropriate Salesforce Licenses.

Example: HARATHI ASWARTHAGARI – System Administrator.

Email, role, and profile assigned.

Profiles

System Administrator Profile verified with access to all objects.

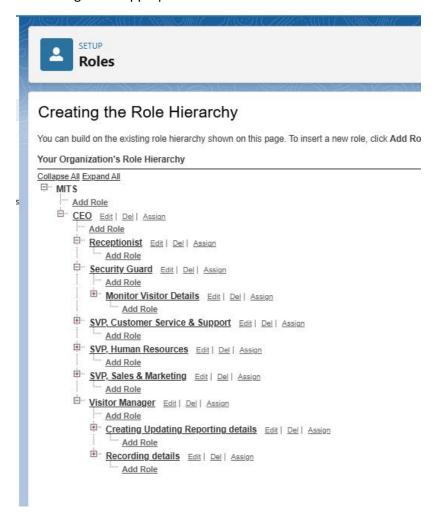
Field-level security configured for sensitive fields like Visitor Email, ID Proof Number.

Roles

Role hierarchy created:

System Administrator \rightarrow Manager \rightarrow Employee

Users assigned to appropriate roles for record access.



Permission Sets

Permission set Visitor Object Access created.

Assigned to System Administrator to allow full access to Visitor Object.

Organization-Wide Defaults (OWD)

Visitor object default sharing set to Private.

Verified record visibility for assigned users.



Sharing Rules

Created sharing rules to allow managers and relevant users access to visitor records.

Verified that rules reflect intended record visibility.



Login Access Policies

Login access policies enabled to allow admin login for support and troubleshooting.

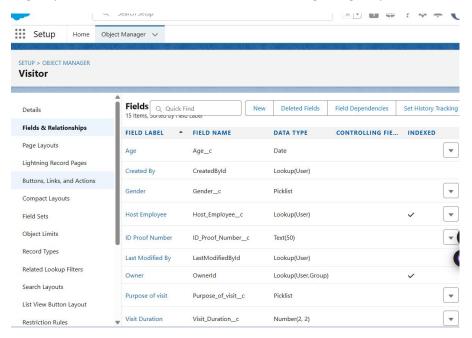
Visitor Object Configuration

Visitor object created and fields added:

Visitor Name, Email, Phone Number, ID Proof Number, Gender, Age, Check-In/Check-Out Time, Host Employee, Purpose of Visit, Visit Duration

Visitor tab created for easy access.

Page layout verified with all fields visible and arranged logically.



General Guidelines

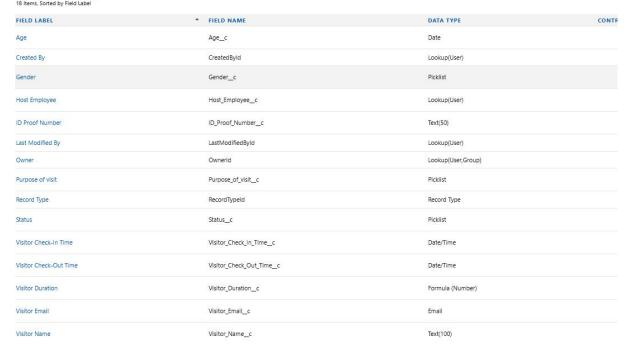
• Custom Objects created: Visitor (to store visitor information such as name, phone, email, check-in/out times, etc.), to track specific meetings associated with visitors.



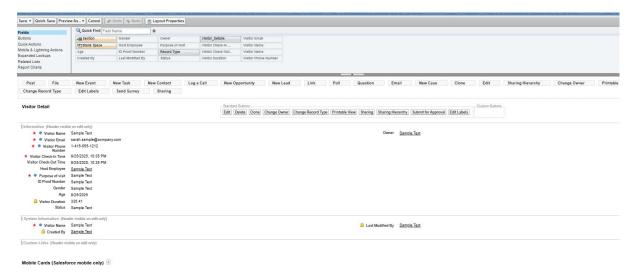
- Visitor Name (Text)
- Visitor Email (Email)
- Visitor Phone Number (Phone)
- Visitor Check-In Time (Date/Time)
- Visitor Check-Out Time (Date/Time)
- Visitor Duration (Formula Number; calculates visit length in hours)
- Purpose of Visit (Picklist)
- Gender (Picklist)
- Age (Date field to store DOB)
- ID Proof Number (Text)

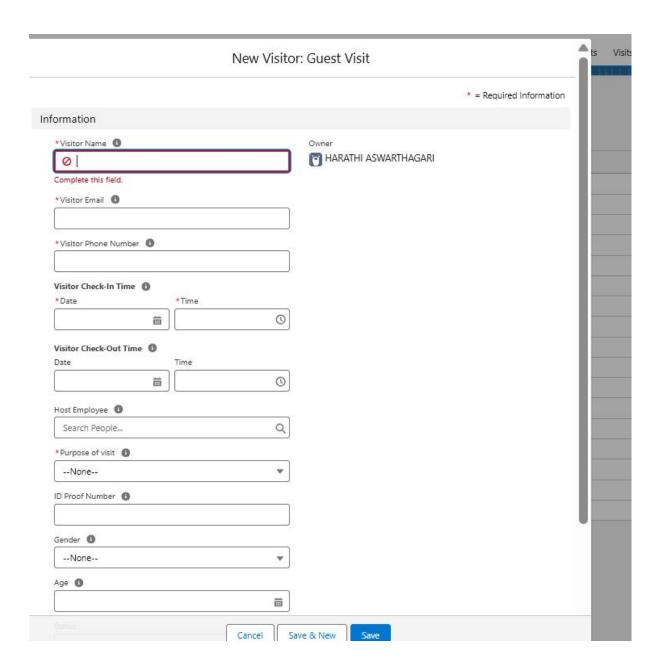
Host Employee (Lookup to User object)

Fields & Relationships

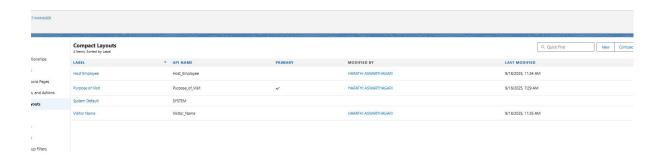


 Edited Visitor page layout to organize fields (Visitor Name, Email, Phone, Check-In, Check-Out, Purpose of Visit, Host Employee, etc.).



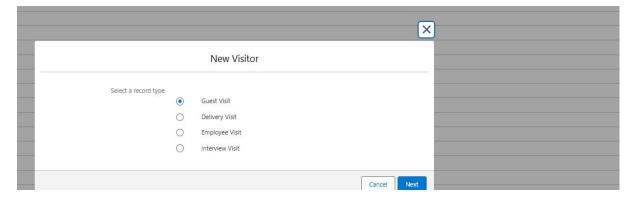


- Defined a "Visitor Compact Layout" to show key details in highlights panel:
- Visitor Name
- Visitor Phone Number
- Purpose of Visit
- Host Employee

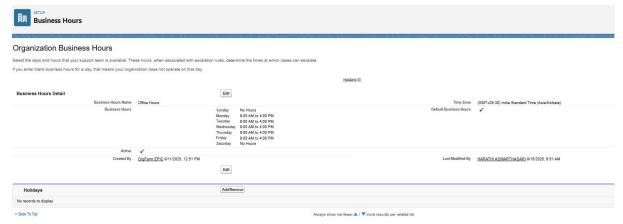


 Record types were noted but not yet deeply configured (can be extended later for differentiating visit types like (Interview, Guest, Contractor).



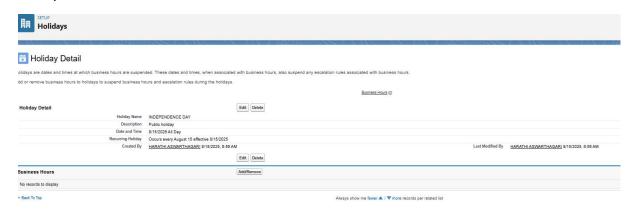


Business Hours

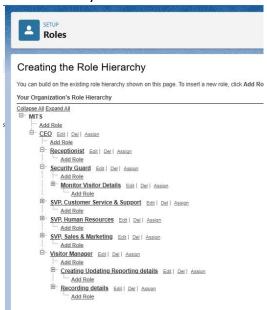


Holiday

Example:



Role hierarchy

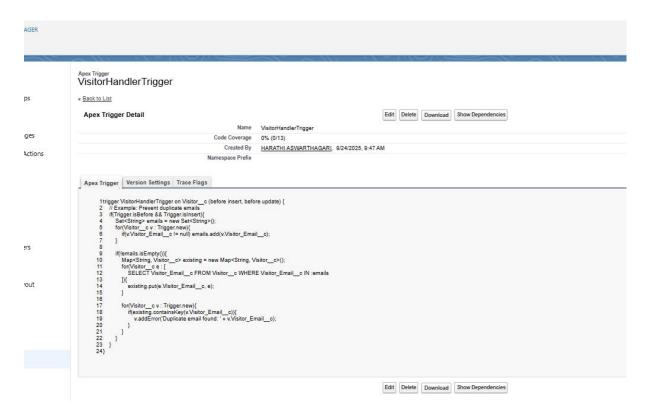


Organization-Wide Defaults (OWD): owners (receptionists) and higher roles can see them.



Sharing Rules: Sharing Rules open up record visibility beyond OWD. For example, share all Visitor__c records with the Security Team. Apex Triggers for detecting Duplicate Emails and for handling the data

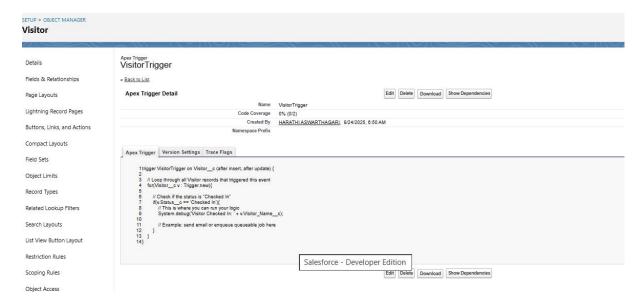




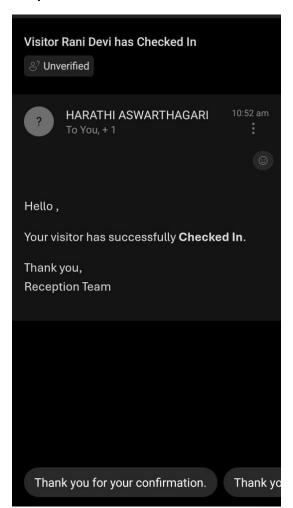
Output:

	D	C	D	L	I.	U	1.1	1.	
Visitor Nam	Email	Phone	CheckIn Tim	Purpose of	ERROR				
Rani Devi	rani@exam	9.877E+09	2025-09-25	Meeting	Duplicate email found: rani@example.com				
Karthik Sha	r karthik@exa	9.877E+09	2025-09-25	Interview	Duplicate email found: karthik@example.com				
Meena Kum	meena@exa	9.877E+09	2025-09-25	Delivery	Duplicate e	mail found: n	neena@exar	nple.com	
Suresh Red	suresh@exa	9.877E+09	2025-09-25	Other	Duplicate e	mail found: s	uresh@exan	ple.com	
Anjali Verm	anjali@exar	9.877E+09	2025-09-25	Meeting	Duplicate er	mail found: a	nja <mark>li</mark> @exam _l	ole.com	
Vikram Sing	vikram@exa	9.877E+09	2025-09-25	Interview	Duplicate e	mail found: v	ikram@exan	nple.com	
Priya Nair	priya@exan	9.877E+09	2025-09-25	Delivery	Duplicate e	mail found: p	riya@examp	le.com	
Arjun Das	arjun@exan	9.877E+09	2025-09-25	Other	Duplicate e	mail found: a	rjun@examp	ole.com	
Neha Gupta neha@exan		9.877E+09	2025-09-25	Meeting	Duplicate email found: neha@example.com				
Rahul Meht: rahul@exan		9.877E+09	2025-09-25	Interview	Duplicate email found: rahul@example.com				

• Trigger for Visitor checkIn



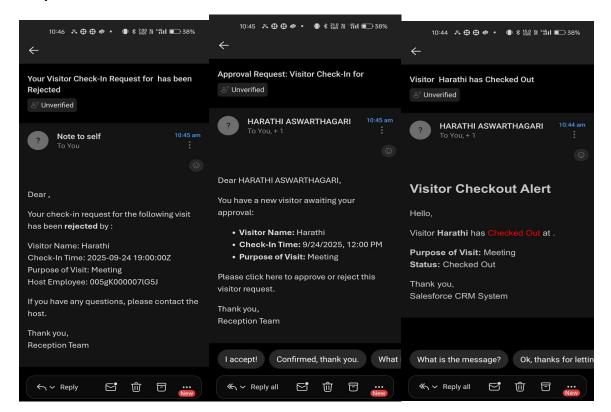
Output:

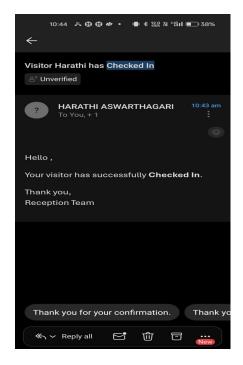


• Flow Triggers: For Sending mails Automatically whenever a visitor is checkedIn,CheckOut,Pending Approval,Approval Cancelled.

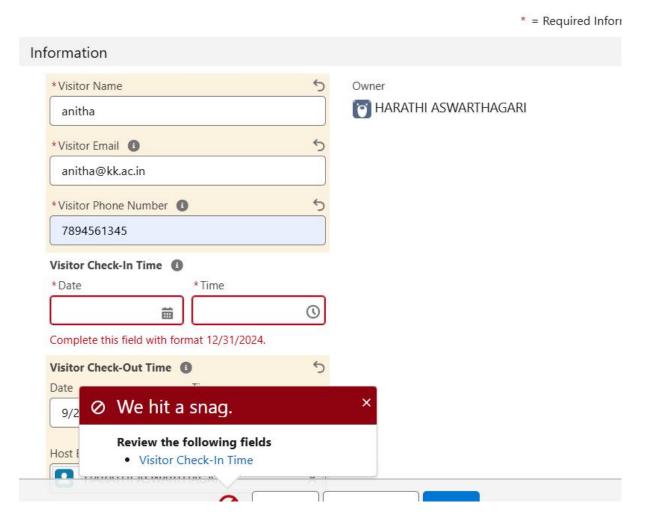


Output:

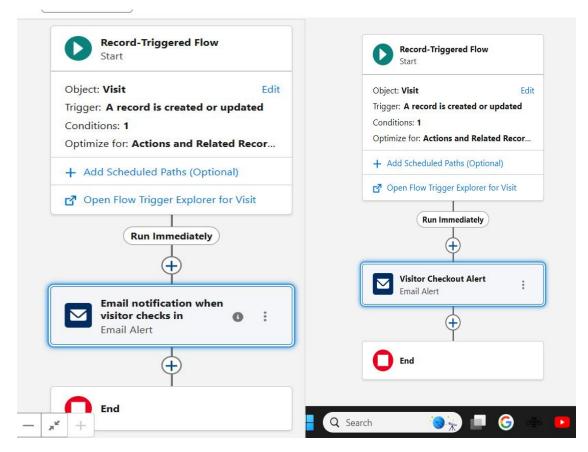




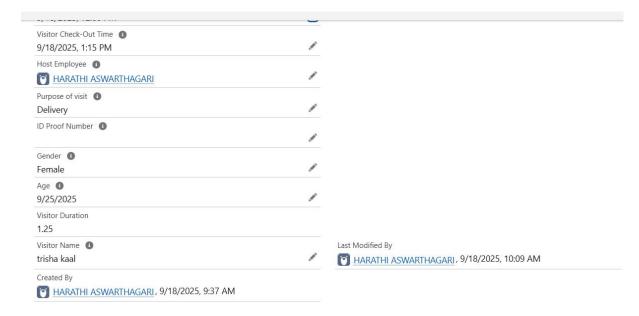
• Visitor Can't check out without Checking In.



• Record Triggered Flow: These flows helps to send email alerts automatically based on the status of the visit.

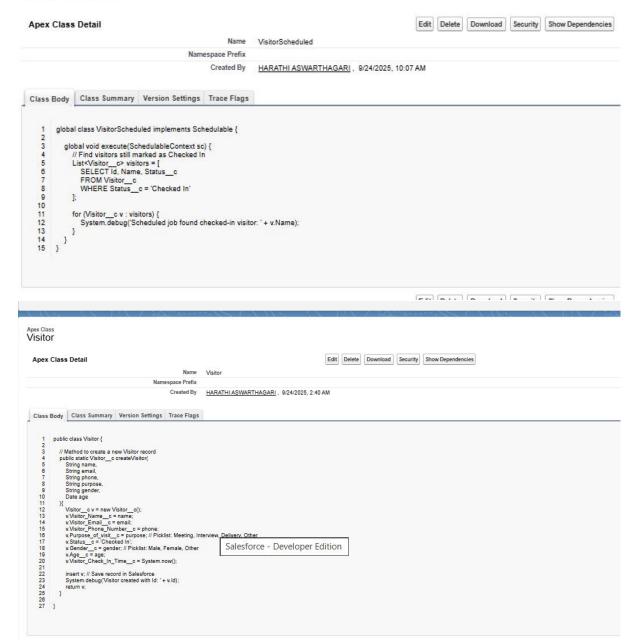


• Record Update Automation: After providing the checkIn and checkout automatically calculating the visit duration as 1.25 i.e. 1 hour 25 minutes.



• Apex Classes: Handling, Inserting, Updating the Visitor Details using Apex classes

Apex Class VisitorScheduled



VisitorBatch Edit Delete Download Security Show Dependencies Apex Class Detail Name VisitorBatch Created By HARATHI ASWARTHAGARI , 9/24/2025, 8:41 AM Class Body Class Summary Version Settings Trace Flags 1 global class VisitorBatch implements Database.Batchable<sObject> { global Database.QueryLocator start(Database.BatchableContext BC){
// Select all checked-in visitors
return Database.getQueryLocator(
'SELECT Id, Visitor_Name_c, Status_c, Visitor_Email_c FROM Visitor_c WHERE Status_c = \'Checked In\' }): global void execute(Database.BatchableContext BC, List<Visitor_c> scope){
 for(Visitor_c v : scope){
 System.debug(Batch processing: ' + v.Visitor_Name_c);
 }
} global void finish(Database.BatchableContext BC){ System.debug('Batch Job Finished.'); Edit Delete Download Security Show Dependencies Apex Class VisitorController Apex Class Detail Edit Delete Download Security Show Dependencies Name VisitorController

Namespace Prefix

Created By HARATHI ASWARTHAGARI , 9/24/2025, 11:17 AM
 Status
 Active

 Code Coverage
 0% (0/10)

 Last Modified By
 HARATHI ASWARTHAGARI
 Class Body Class Summary Version Settings Trace Flags public with sharing class VisitorController {

@AursEnabled

solids state you'd inserfVisitorController {

white state you'd inserfVisitorController {

white you'd you'd inserfVisitorController {

white you'd you']

QAursEnabled(cachablectus)
public static ListVistor_C - 2 getCheckedinVisitors() {
 return (SELECTId, Visitor_ListNess_c, Visitor_Enail_c, Purpose_of_Visit_c, Status_c, Visitor_Check_In_Time_c
 FROM Visitor_C
 WHORE Status_c = Checked in'
 GREER 91 Visitor_Check_In_Time_c DESC); Salesforce - Developer Edition Edit Delete Download Security Show Dependencies Apex Classes Apex Class VisitorNotificationQueueable Apex Class Detail Edit Delete Download Security Show Dependencies Name VisitorNofficationQueueable
Namespace Prefix
Created By HARATHI ASWARTHAGARI . 9/24/2025, 8:36 AM
 Status
 Active

 Code Coverage
 0% (0/3)

 Last Modified By
 HARATHI ASWARTHAGARI - 9/24/7
 Class Body Class Summary Version Settings Trace Flags public void execute/Queueable (mplements Qu
public void execute/Queueable/Contex context){
// Query all visitors who are benezed in
List Visitor_u o- checked in/Visitors = [
SELECT id, Visitor_Name__o, Visitor_Email_o
FROM Visitor_o
WHERE Status_o = "Checked In"
} // Example: Debug log (replace with actual email logic if needed) for[Visitor_c v : checkedInVisitors)[
System.debug(Send notification to: "+ v.Visitor_Email_c);

 Edit
 Delete
 Download
 Security
 Show Dependencies



 Apex with LWC / Aura : Apex classes were used to handle data insertion and retrieval for the Visitor Management system.

Implementation:

• VisitorController Apex Class: insertVisitor → Inserts a new Visitor record.o getCheckedInVisitors → Fetches all visitors with Status = Checked In.

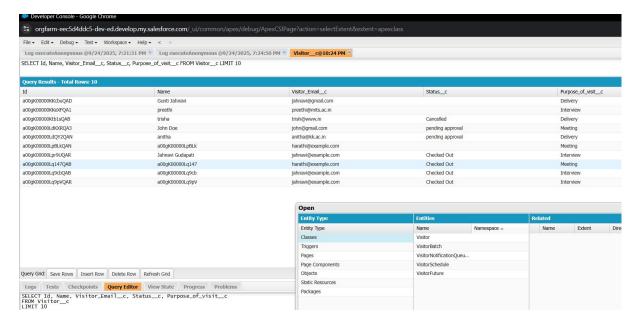
```
Fetches all visitors with Status = Checked In.
• Integrated these methods with Aura components to make imperative calls.
Code:visitorCheckInForm.cmp
<aura:component controller="VisitorController"</pre>
implements="flexipage:availableForRecordHome,force:hasRecordId" access="global">
<aura:attribute name="visitorName" type="String"/>
<aura:attribute name="visitorEmail" type="String"/>
<aura:attribute name="purpose" type="String"/>
<aura:attribute name="purposeOptions" type="List" default="[</pre>
{'label':'Meeting','value':'Meeting'},
{'label':'Interview', 'value':'Interview'},
{'label':'Delivery', 'value':'Delivery'},
{'label':'Other','value':'Other'}
]"/>
dightning:card title="Visitor Check-In">
<div class="slds-p-around_medium">
lightning:input label="Visitor Name" value="{!v.visitorName}"/>
dightning:input label="Visitor Email" value="{!v.visitorEmail}"/>
lightning:select label="Purpose of Visit" value="{!v.purpose}">
<aura:iteration items="{!v.purposeOptions}" var="opt">
<option value="{!opt.value}">{!opt.label}</option>
</aura:iteration>
</lightning:select>
description continuous c
m-top_small"/>
</div>
</lightning:card>
</aura:component>
visitorCheckInFormController.js
({handleCheckIn: function(component, event, helper) {
var action = component.get("c.insertVisitor");
action.setParams({
name: component.get("v.visitorName"),
email: component.get("v.visitorEmail"),
purpose: component.get("v.purpose")
});
action.setCallback(this, function(response){
```

```
var state = response.getState();
if(state === "SUCCESS"){
alert('Visitor checked in successfully!');
component.set("v.visitorName", "");
component.set("v.visitorEmail", "");
component.set("v.purpose", "");
} else {
var errors = response.getError();
alert('Error: ' + errors[0].message);
}
});
$A.enqueueAction(action);
})
Apex Controller (VisitorController)
public with sharing class VisitorController {
@AuraEnabled
public static void insertVisitor(String name, String email, String purpose) {
Visitor__c v = new Visitor__c();
v.Visitor_Name__c = name;
v.Visitor_Email__c = email;
v.Purpose_of_visit__c = purpose;v.Status__c = 'Checked In';
v.Visitor_Check_In_Time__c = System.now();
insert v;
}
}
```

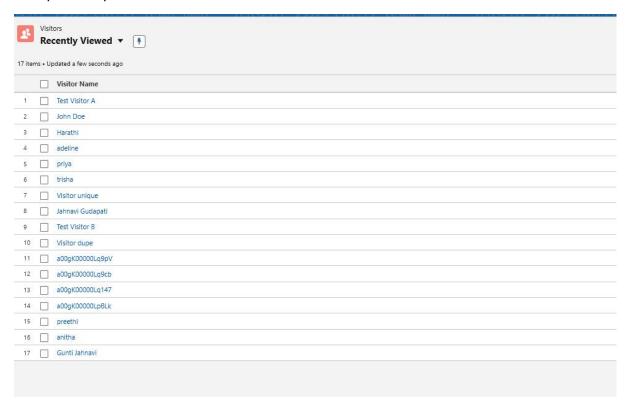
 Record Pages: Customized the Visitor record page to show all essential) and integrate the check-in workflow directly on the page.

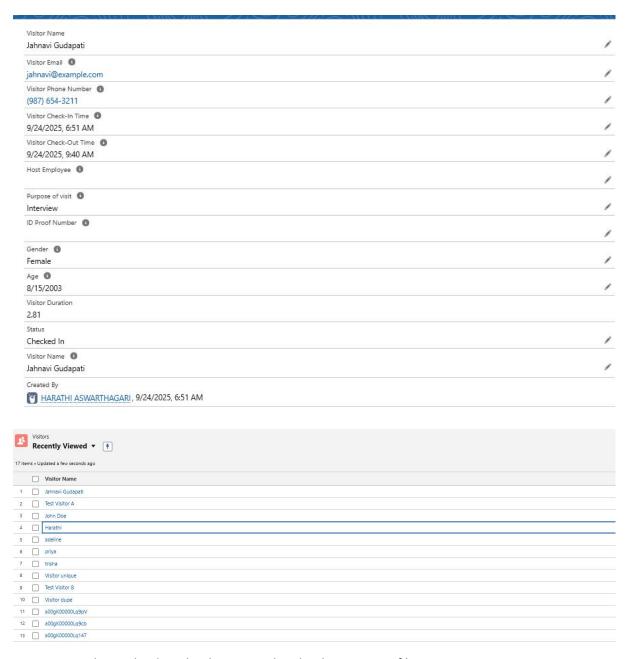


Retrieving the data using SOQL

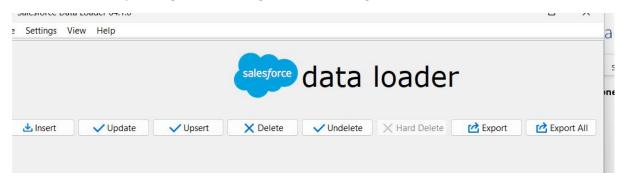


• Events in LWC / Aura : Aura event handling was implemented to update the visitor list dynamically after a new check-in.





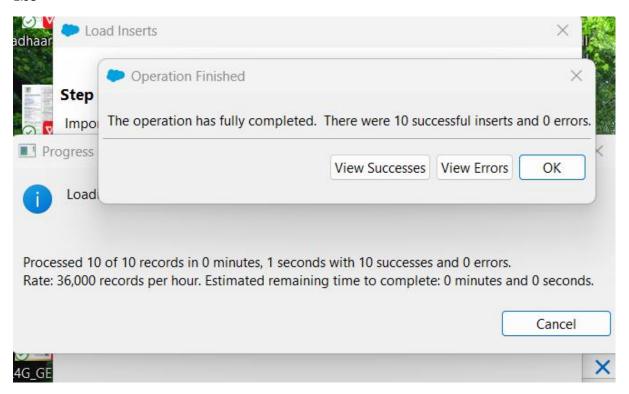
• Data Loader: Uploading the data using data loader using csv file



If you provide the same data or duplicate emails or values it might show error while uploading the data like

	D	C	D	L	I.	U	1.1	I.
Visitor Nam	Email	Phone	CheckIn Tim	Purpose of	ERROR			
Rani Devi	rani@exam	9.877E+09	2025-09-25	Meeting	Duplicate email found: rani@example.com			
Karthik Shar	karthik@exa	9.877E+09	2025-09-25	Interview	Duplicate er	mail found: k	arthik@exar	nple.com
Meena Kum	meena@exa	9.877E+09	2025-09-25	Delivery	Duplicate er	mail found: n	neena@exar	nple.com
Suresh Redo	suresh@exa	9.877E+09	2025-09-25	Other	Duplicate e	mail found: s	uresh@exan	ple.com
Anjali Verma	anjali@exar	9.877E+09	2025-09-25	Meeting	Duplicate e	mail found: a	nja <mark>li</mark> @exam _l	ole.com
Vikram Sing	vikram@exa	9.877E+09	2025-09-25	Interview	Duplicate er	mail found: v	ikram@exan	nple.com
Priya Nair	priya@exan	9.877E+09	2025-09-25	Delivery	Duplicate e	mail found: p	riya@examp	le.com
Arjun Das	arjun@exan	9.877E+09	2025-09-25	Other	Duplicate er	mail found: a	rjun@examp	ole.com
Neha Gupta	neha@exan	9.877E+09	2025-09-25	Meeting	Duplicate e	mail found: n	eha@examp	le.com
Rahul Meht	rahul@exan	9.877E+09	2025-09-25	Interview	Duplicate er	mail found: r	ahul@examp	ole.com

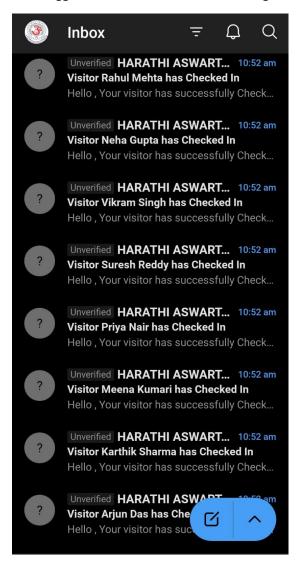
Else



You will be given a downloaded file that shows updation/insertion of details

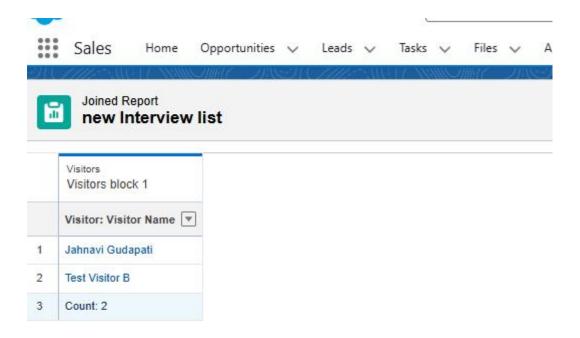
А	В	C	D	E	F	G	Н
D	Visitor Nam	Email	Phone	CheckIn Tim	Purpose of	STATUS	
00gK00000	Rani Devi	rani+1@exa	9.877E+09	2025-09-25	Meeting	Item Created	
00gK00000	Karthik Shar	karthik+2@	9.877E+09	2025-09-25	Interview	Item Created	
00gK00000	Meena Kum	meena+3@	9.877E+09	2025-09-25	Delivery	Item Created	
a00gK00000	Suresh Redo	suresh+4@e	9.877E+09	2025-09-25	Other	Item Created	
00gK00000	Anjali Verm	anjali+5@ex	9.877E+09	2025-09-25	Meeting	Item Created	
00gK00000	Vikram Sing	vikram+6@	9.877E+09	2025-09-25	Interview	Item Created	
a00gK00000	Priya Nair	priya+7@ex	9.877E+09	2025-09-25	Delivery	Item Created	
a00gK00000	Arjun Das	arjun+8@ex	9.877E+09	2025-09-25	Other	Item Created	
100gK00000	Neha Gupta	neha+9@ex	9.877E+09	2025-09-25	Meeting	Item Created	
100gK00000	Rahul Meht	rahul+10@e	9.877E+09	2025-09-25	Interview	Item Created	

That triggers and mails are sent as entering checkIn time results status as checkIn and results:

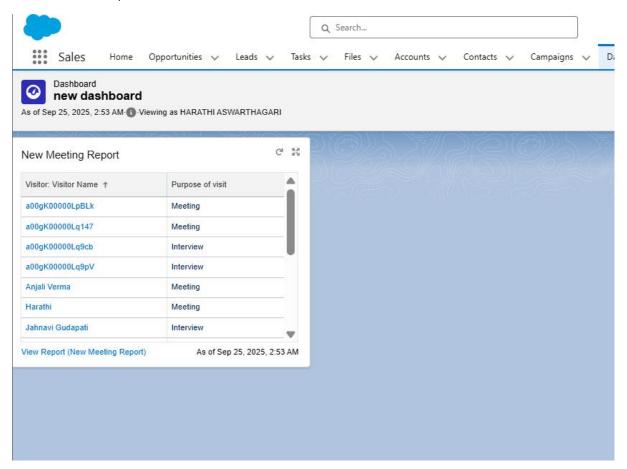


• Reports & DashBoards

Report given based on adding filters



Data based on required criteria in the dashboard



• Login IP ranges is not specified as it is optional to test now and session settings is for 1 hour

• Audit Trail: Audit Trail tracks configuration changes. Useful for monitoring admin changes in Visitor Management.

