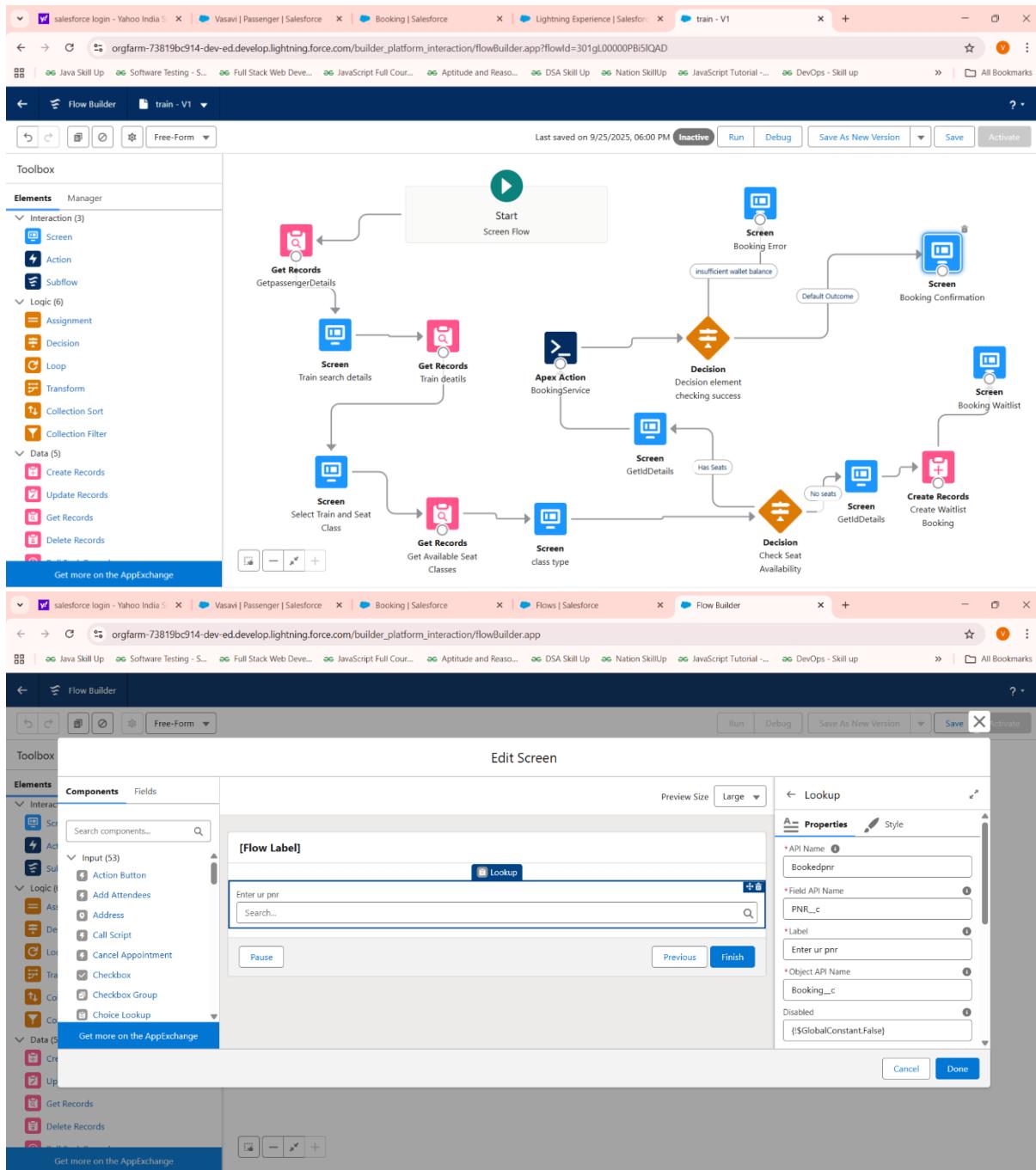


# Train Ticket Booking System

---

## Phase 4: Process Automation (Admin)

- Validation Rules
- Workflow Rules
- Process Builder
- Approval Process
- Flow Builder (Screen, Record-Triggered, Scheduled, Auto-launched)
- Email Alerts
- Field Updates
- Tasks
- Custom Notifications



Recently Viewed | Passengers | Flows | Salesforce train how to show flow in app in salesforce

Run Again

**train**

1 of 1 item • 1 item selected

Train Name	Destination	source	Departure_DateTime	Available_seats
Madurai express	Mumbai	Delhi	9/27/2025, 01:00 PM	91

Previous Next

**Debug Details**

**TEXTBOX:** Destination  
Label: Destination  
Value at run time: Mumbai

**Date/Time:** Journey\_Date  
Label: Journey Date  
Value at run time: 9/27/2025, 1:00 PM

**Selected Navigation Button:** NEXT

**GET RECORDS:** Train details  
Find all Train\_c records where:  
source\_c Equals (!Source) (Delhi)  
AND Destination\_c Equals (!Destination) (Mumbai)  
AND Departure\_DateTime\_c Equals (!Journey\_Date) (9/27/2025, 1:00 PM)  
Sort records by: Departure\_DateTime\_c (Ascending)  
Store the values of these currently referenced fields in Train\_details: Id  
Because Train\_details is passed to an action, subflow, or Lightning component, store the values of all Train\_c fields that the running user has access to.

**Result**  
Successfully found records.

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

Vasavi | Passenger | Salesforce Flows | Salesforce train how to show flow in app in salesforce

Run Again

**train**

1 of 1 item • 0 items selected

Class_Type	Available_Seats	Price
AC	0	\$800.00

Previous Next

**Debug Details**

Systemmostamp:[nu Sep 23 12:54:10 GMT 2025, CreatedBy:id:005g|000005E17sQAC, OwnerId:005g|000005E17sQAC, Train\_Number\_c:1234, CreatedDate:Tue Sep 23 08:51:46 GMT +2025, LastActivityDate:null, RecordType:012g|0000025mxQAS, Departure\_DateTime\_c:Sat Sep 27 20:00:00 GMT 2025, Id:a01g|000000UH2LQAV, LastModifiedBy:id:005g|000005E17sQAC]]

**Selected Navigation Button:** NEXT

**GET RECORDS:** Get Available Seat Classes  
Find all Seat\_Class\_c records where:  
Train\_c Equals (!Trains\_returned.firstSelectedRow.Id) (a01g|000000UH2LQAV)  
Sort records by: Class\_Type\_c (Ascending)  
Store the values of these currently referenced fields in Get\_Available\_Seat\_Classes: Id  
Because Get\_Available\_Seat\_Classes is passed to an action, subflow, or Lightning component, store the values of all Seat\_Class\_c fields that the running user has access to.

**Result**  
Successfully found records.

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

train

As there are no seats available ,you are going to be added to waitlisted.if ok provide details or else cancel the booking process

\*IdProof  
Aadhar

\*Enter Id number  
12345

[Previous](#) [Next](#)

**Debug Details**

```
LastModifiedDate[Thu Sep 25 16:10:14 GMT 2025]
selectedRows = {[Seat_Class__c
(LastModifiedDate:Thu Sep 25 16:10:14 GMT 2025,
IsDeleted:false,Total_Seats__c:50,
LastViewedDate:Thu Sep 25 16:10:28 GMT 2025,
Price__c:800,Available_Seats__c:0,
LastReferencedDate:Thu Sep 25 16:10:28 GMT 2025,
Class_Type__c:AC,Name:Madurai expressc,
SystemModstamp:Thu Sep 25 16:10:14 GMT 2025,
Train__ca01gL000000OuH2LQAV,
CreatedById:005g00000SE17sQAC,
CreatedDate:Tue Sep 23 08:52:43 GMT 2025,
LastActivityDate:null,Id:a07g00000EHOGDQA3,
LastModifiedById:005g00000SE17sQAC]}]
```

**Selected Navigation Button:** NEXT

**DECISION:** Check Seat Availability  
Skipped this outcome because its conditions weren't met: Has\_Seats  
Outcome conditions:  
{!Seat\_Class\_Select.firstSelectedRow.Available\_Seats\_\_c} (0) Greater than 0  
All conditions must be true (AND)

Default outcome executed.

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

train

You are waitlisted

[Previous](#) [Finish](#)

**Debug Details**

```
value at run time: 12345
```

**Selected Navigation Button:** NEXT

**CREATE RECORDS:** Create Waitlist Booking  
Create one Booking\_\_c record where:  
Amount\_Deducted\_\_c =  
{!Seat\_Class\_Select.firstSelectedRow.Price\_\_c} (800)  
Journey\_Date\_\_c = {!Journey\_Date} (9/27/2025,  
1:00 PM)  
Passenger\_\_c =  
{!PassengerId.selectedChoiceValues}  
(a03gL000000DAQTQDQ5)  
Price\_\_c =  
{!Seat\_Class\_Select.firstSelectedRow.Price\_\_c} (800)  
Seat\_Class\_\_c =  
{!Seat\_Class\_Select.firstSelectedRow.Id}  
(a07g00000EboGQDQA3)  
Status\_\_c = Waitlisted  
Train\_\_c = {!Trains\_returned.firstSelectedRow.Id}  
(a01gL000000OuH2LQAV)

**Result**  
A record is ready to be created when the next screen, pause, or local action is executed or when the interview finishes.  
a02gL000007FECsQAM

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

train

\* IdProof  
Aadhar

\* Enter Id number  
12345678910

Previous Next

**Debug Details**

message (Booking\_Committed: a0zg000007fH8v,  
Seat Number: 19)  
seatNumber (19)

**DECISION:** Decision element checking success  
Skipped this outcome because its conditions weren't met: insufficient\_wallet\_balance  
Outcome conditions:  
{!BookingService.success} (true) Equals false  
All conditions must be true (AND)

Default outcome executed.

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

**SCREEN:** Booking Confirmation  
**Display Text:** Confirmation\_message  
Value at run time:  
Booking Confirmed: a02gL000007ffyM, Seat Number: 19

**Selected Navigation Button:** PREVIOUS

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

train

Booking Confirmed: a02gL000007fH8v, Seat Number: 31

Previous Finish

**Debug Details**

**BOOKINGSERVICE (APEX): bookingService**

**Inputs:**  
journeyDate = {!Journey\_Date} (9/27/2025, 1:00 PM)  
passengerId = {!PassengerId.selectedChoiceValues}  
(a03gL00000DAQTQQA5)  
seatClassId =  
(!Seat\_Class\_Select.firstSelectedRow.Id)  
(a07gL00000EB0GDQQA3)  
trainId = {!Trains\_returned.firstSelectedRow.Id}  
(a01gL00000OuH2LQAV)

**Outputs:**  
pnr (a02gL000007fH8v)  
success (true)  
message (Booking Confirmed: a02gL000007fH8v,  
Seat Number: 31)  
seatNumber (31)

**DECISION:** Decision element checking success  
Skipped this outcome because its conditions weren't met: insufficient\_wallet\_balance  
Outcome conditions:  
{!BookingService.success} (true) Equals false  
All conditions must be true (AND)

Default outcome executed.

**Transaction Committed**  
Any records that the flow was ready to create, update, or delete were committed to the database.

The screenshot shows the Salesforce Object Manager interface for the 'Booking' object. On the left, a sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, etc. The main area is titled 'Validation Rules' and displays two items:

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Booking_Journey_Date_Window	Journey_Date	Booking is allowed only from 15 days before up to 1 day before the journey. Same-day booking is not allowed.	✓	Vasavi Kota, 9/23/2025, 1:32 AM
No_Seats_Available	Train	"No seats available."	✓	Vasavi Kota, 9/22/2025, 7:10 AM

## Phase 5: Apex Programming (Developer)

- Classes & Objects
- Apex Triggers (before/after insert/update/delete)
- Trigger Design Pattern
- SOQL & SOSL
- Collections: List, Set, Map
- Control Statements
- Batch Apex
- Queueable Apex
- Scheduled Apex
- Future Methods
- Exception Handling
- Test Classes
- Asynchronous Processing

The screenshot shows the Salesforce Setup Apex Classes page. The left sidebar includes sections for Email, Custom Code (with Apex Classes selected), Environments, and Jobs. The main content area displays the Apex Classes page with a table of three entries:

Action	Name	Namespace Prefix	Api Version	Status	Size Without Comments	Last Modified By	Has Trace Flags
Edit   Del   Security	BookingService		64.0	Active	5,796	Vasavi.Kota	9/25/2025, 9:33 AM
Edit   Del   Security	WaitlistAutoCancel		64.0	Active	514	Vasavi.Kota	9/24/2025, 11:13 PM
Edit   Del   Security	WaitlistAutoPromotion		64.0	Active	3,938	Vasavi.Kota	9/24/2025, 11:47 PM

The screenshot shows the Salesforce Setup Scheduled Jobs page. The left sidebar includes sections for Environments and Jobs (with Scheduled Jobs selected). The main content area displays the All Scheduled Jobs page with a table of five entries:

Action	Job Name	Submitted By	Submitted	Started	Next Scheduled Run	Type	Cron Trigger ID
Del	Metalytics Data Loader Job for Org : 00DgL000007cDWK	User_Integration	7/21/2025, 12:16 AM	9/24/2025, 1:21 PM	9/25/2025, 1:21 PM	Autonomous Data Loader Job	08egL000006EIOw
	Program Milestone Computation Cron Job	Process_Automated	7/21/2025, 12:16 AM	9/25/2025, 6:59 AM	9/25/2025, 11:59 PM	Program Milestone Computation Cron Job	08egL000006EIOU
	Program Status Update Cron Job	Process_Automated	7/21/2025, 12:16 AM	9/25/2025, 5:01 AM	9/25/2025, 8:00 PM	Program Status Update Cron Job	08egL000006EIOV
Manage   Del   Pause Job	Waitlist Auto Promotion Job	Kota_Vasavi	9/24/2025, 11:51 PM	9/25/2025, 2:00 AM	9/26/2025, 2:00 AM	Scheduled Apex	08egL000006cvQ7
Manage   Del   Pause Job	WaitlistCancel	Kota_Vasavi	9/25/2025, 10:40 AM		9/26/2025, 2:00 AM	Scheduled Apex	08egL000006em7u

```
public class BookingService {
    @AuraEnabled
    public static String cancelBooking(Id bookingId) {
        Booking__c b = [SELECT Id, Passenger__c, Amount_Deducted__c, Status__c, Journey_Date__c
                      FROM Booking__c WHERE Id = :bookingId FOR UPDATE];
        if (b.Status__c == 'Cancelled') {
            return 'Booking already cancelled.';
        }
    }
}
```

```

Date today = Date.today();
Integer daysToJourney = b.Journey_Date__c.daysBetween(today);

if (daysToJourney < 2) {
    return 'Cannot cancel booking less than 2 days before journey.';
}

b.Status__c = 'Cancelled';

Passenger__c p = [SELECT Id, Wallet_Balance__c FROM Passenger__c WHERE Id = :b.Passenger__c FOR UPDATE];

if (b.Amount_Deducted__c != null && b.Amount_Deducted__c > 0) {
    p.Wallet_Balance__c += b.Amount_Deducted__c;

    Wallet_Transaction__c wt = new Wallet_Transaction__c(
        Passenger__c = p.Id,
        Amount__c = b.Amount_Deducted__c,
        Transaction_Type__c = 'Refund',
        Transaction_Date__c = Datetime.now(),
        Balance_After__c = p.Wallet_Balance__c,
        Reference__c = b.Name
    );
    update p;
    insert wt;
}

update b;
return 'Booking cancelled successfully.';
}

public class BookingResult {
    @InvocableVariable public Boolean success;
    @InvocableVariable public String message;
    @InvocableVariable public String pnr;
    @InvocableVariable public String seatNumber;
}

@InvocableMethod(label='Create Booking')
public static List<BookingResult> createBooking(List<Request> requests){
    List<BookingResult> results = new List<BookingResult>();
    for(Request req : requests){
        BookingResult br = new BookingResult();
        br.success = false;
        Passenger__c p = [SELECT Id, Wallet_Balance__c FROM Passenger__c WHERE Id = :req.passengerId FOR UPDATE];
        Seat_Class__c sc = [SELECT Id, Available_Seats__c, Price__c, Train__c, Total_Seats__c FROM Seat_Class__c WHERE Id = :req.seatClassId FOR UPDATE];
    }
}

```

```

Train__c t = [SELECT Id, Available_Seats__c, Price__c FROM Train__c WHERE Id = :sc.Train__c
FOR UPDATE];
Decimal fare = sc.Price__c != null ? sc.Price__c : t.Price__c;
if(sc.Available_Seats__c > 0 && t.Available_Seats__c > 0){
    if(p.Wallet_Balance__c >= fare){
        // Assign seat number randomly
        Set<Integer> bookedSeats = new Set<Integer>();
        for(Booking__c prev : [SELECT Seat_Number__c FROM Booking__c WHERE Seat_Class__c
= :sc.Id AND Journey_Date__c = :req.journeyDate]) {
            if(prev.Seat_Number__c != null) bookedSeats.add(Integer.valueOf(prev.Seat_Number__c));
        }
        List<Integer> availableSeats = new List<Integer>();
        for(Integer i = 1; i <= sc.Total_Seats__c; i++) {
            if(!bookedSeats.contains(i)) availableSeats.add(i);
        }
        Integer seatNumber = availableSeats.size() > 0 ? availableSeats[Math.mod(Math.abs(Crypt
to.getRandomInteger()), availableSeats.size())] : null;
    }
    p.Wallet_Balance__c -= fare;
    Wallet_Transaction__c wt = new Wallet_Transaction__c(
        Passenger__c = p.Id,
        Amount__c = -fare,
        Transaction_Type__c = 'Deduction',
        Transaction_Date__c = Datetime.now(),
        Balance_After__c = p.Wallet_Balance__c,
        Reference__c = 'Booking'
    );
    Booking__c b = new Booking__c(
        Passenger__c = p.Id,
        Train__c = t.Id,
        Seat_Class__c = sc.Id,
        Status__c = 'Confirmed',
        Journey_Date__c = req.journeyDate,
        Price__c = fare,
        Amount_Deducted__c = fare,
        Seat_Number__c = String.valueOf(seatNumber)
    );
    sc.Available_Seats__c -= 1;
    t.Available_Seats__c -= 1;
    update p;
    insert wt;
    insert b;
    // Query inserted booking to get generated PNR (Name)
    Booking__c booked = [SELECT Name FROM Booking__c WHERE Id = :b.Id];
    update sc;
    update t;
}

```

```

        br.pnr = booked.Name;
        br.seatNumber = String.valueOf(seatNumber);
        br.success = true;
        br.message = 'Booking Confirmed: ' + booked.Name + ', Seat Number: ' + seatNumber;
    } else {
        br.message = 'Insufficient wallet balance.';
    }
} else {
    Booking__c wb = new Booking__c(
        Passenger__c = p.Id,
        Train__c = t.Id,
        Seat_Class__c = sc.Id,
        Status__c = 'Waitlist',
        Journey_Date__c = req.journeyDate,
        Price__c = fare,
        Amount_Deducted__c = 0
    );
    insert wb;
    br.success = true;
    br.message = 'Added to waitlist. PNR: ' + wb.Name;
    br.pnr = wb.Name;
}
results.add(br);
}
return results;
}

public class Request {
    @InvocableVariable public Id passengerId;
    @InvocableVariable public Id trainId;
    @InvocableVariable public Id seatClassId;
    @InvocableVariable public Date journeyDate;
}
}

```

```

global class WaitlistAutoCancel implements Schedulable {
    global void execute(SchedulableContext sc) {
        Date checkDate = Date.today().addDays(1);
        List<Booking__c> waitlist = [SELECT Id, Passenger__c, Price__c FROM Booking__c WHERE Status__c = 'Waitlist' AND Journey_Date__c = :checkDate];
        List<Booking__c> toCancel = new List<Booking__c>();
        for(Booking__c b : waitlist){
            b.Status__c = 'Cancelled';
        }
    }
}

```

```

        toCancel.add(b);
        // Optionally, call an email utility here to notify the passenger and create refund Wallet_Transaction__c if needed.
    }
    if(!toCancel.isEmpty()) {
        update toCancel;
        // Optionally, send notification emails or process further logic.
    }
}
}
}

```

```

global class WaitlistAutoPromotion implements Schedulable {

    global void execute(SchedulableContext sc) {
        Date checkDate = Date.today().addDays(1); // day before journey

        // Query all cancelled bookings freeing seats
        List<Booking__c> cancelledBookings = [
            SELECT Train__c, Seat_Class__c, Journey_Date__c
            FROM Booking__c
            WHERE Status__c = 'Cancelled' AND Journey_Date__c = :checkDate
        ];

        // Map to count freed seats by train + seat class
        Map<String, Integer> freedSeatsCount = new Map<String, Integer>();
        for (Booking__c b : cancelledBookings) {
            String key = b.Train__c + ':' + b.Seat_Class__c;
            Integer currentCount = freedSeatsCount.containsKey(key) ? freedSeatsCount.get(key) : 0;
            freedSeatsCount.put(key, currentCount + 1);
        }

        // Process each train + seat class combination
        for (String key : freedSeatsCount.keySet()) {
            String[] parts = key.split(':');
            Id trainId = parts[0];
            Id seatClassId = parts[1];
            Integer seatsToPromote = freedSeatsCount.get(key);

            // Query waitlist bookings FIFO order
            List<Booking__c> waitlistBookings = [SELECT Id, Passenger__c, Journey_Date__c FROM Booking__c
                WHERE Status__c = 'Waitlist' AND Train__c = :trainId AND Seat_Class__c = :seatClassId
                AND Journey_Date__c = :checkDate ORDER BY CreatedDate ASC LIMIT :seats
            ];
        }
    }
}

```

```

ToPromote];

// Bulk query passengers and seat class/train details for efficiency
Set<Id> passengerIds = new Set<Id>();
for(Booking__c wb : waitlistBookings) passengerIds.add(wb.Passenger__c);
Map<Id, Passenger__c> passengers = new Map<Id, Passenger__c>([
    SELECT Id, Wallet_Balance__c FROM Passenger__c WHERE Id IN :passengerIds FOR UPDATE
]);
Seat_Class__c scs = [SELECT Id, Available_Seats__c, Train__c, Total_Seats__c, Price__c FROM Seat_Class__c WHERE Id = :seatClassId FOR UPDATE];
Train__c train = [SELECT Id, Available_Seats__c, Price__c FROM Train__c WHERE Id = :trainId FOR UPDATE];

Decimal fare = scs.Price__c != null ? scs.Price__c : train.Price__c;
List<Booking__c> toUpdateBookings = new List<Booking__c>();
List<Wallet_Transaction__c> walletTransactions = new List<Wallet_Transaction__c>();

Integer seatsPromoted = 0;
for (Booking__c waitlist : waitlistBookings) {
    Passenger__c p = passengers.get(waitlist.Passenger__c);
    if (p != null && p.Wallet_Balance__c >= fare && seatsPromoted < seatsToPromote) {

        // Find and assign next available seat number
        Set<Integer> bookedSeats = new Set<Integer>();
        for(Booking__c b : [SELECT Seat_Number__c FROM Booking__c WHERE Seat_Class__c = :scs.Id AND Journey_Date__c = :waitlist.Journey_Date__c AND Status__c='Confirmed']) {
            if (b.Seat_Number__c != null) bookedSeats.add(Integer.valueOf(b.Seat_Number__c));
        }
        List<Integer> availableSeats = new List<Integer>();
        for (Integer i = 1; i <= scs.Total_Seats__c; i++) {
            if (!bookedSeats.contains(i)) availableSeats.add(i);
        }
        if (availableSeats.isEmpty()) break; // no seats to assign, break

        Integer seatNumber = availableSeats[Math.mod(Math.abs(Crypto.getRandomInteger()), availableSeats.size())];

        // Deduct fare from wallet
        p.Wallet_Balance__c -= fare;

        // Update booking to confirmed
        waitlist.Status__c = 'Confirmed';
        waitlist.Amount_Deducted__c = fare;
        waitlist.Price__c = fare;
        waitlist.Seat_Number__c = String.valueOf(seatNumber);

        // Track records for update/insert
        toUpdateBookings.add(waitlist);
    }
}

```

```

walletTransactions.add(new Wallet_Transaction__c(
    Passenger__c = p.Id,
    Amount__c = -fare,
    Transaction_Type__c = 'Deduction',
    Transaction_Date__c = Datetime.now(),
    Balance_After__c = p.Wallet_Balance__c,
    Reference__c = 'Booking Promotion'
));

seatsPromoted++;
scs.Available_Seats__c -= 1;
train.Available_Seats__c -= 1;
} else {
    // Optionally notify passenger for insufficient balance or handle per policy
}
}

if (!toUpdateBookings.isEmpty()) {
    update toUpdateBookings;
    update new List<Passenger__c>(passengers.values());
    insert walletTransactions;
    update scs;
    update train;
}
}
}
}

```

## Phase 6: User Interface Development

- Lightning App Builder
  - Record Pages
  - Tabs
  - Home Page Layouts
  - Utility Bar
  - LWC (Lightning Web Components)
  - Apex with LWC
  - Events in LWC
  - Wire Adapters
  - Imperative Apex Calls
  - Navigation Service



## App Settings

[App Details & Branding](#)[App Options](#)[Utility Items \(Desktop Only\)](#)[Navigation Items](#)

### User Profiles

## User Profiles

Choose the user profiles that can access this app.

### Available Profiles

Type to filter list
Analytics Cloud Integ...
Analytics Cloud Secu...
Anypoint Integration
Authenticated Website
Authenticated Website
B2B Reordering Port...
Contract Manager
Custom: Marketing P...
Custom: Sales Profile
Custom: Support Pro...
Customer Communite...

### Selected Profiles

System Administrator
Agent Profile
Passenger profile



The screenshot shows a Salesforce Lightning interface with the following details:

- Header:** salesforce login - Yahoo India, Recently Viewed | Passengers, Apex Classes | Salesforce, Flows | Salesforce, Flow Builder.
- URL:** orgfarm-73819bc914-dev-ed.develop.lightning.force.com/lightning/o/Passenger\_\_c/list?filterName=\_Recent
- Search Bar:** Search...
- Page Title:** Train Booking System
- Section:** Passengers
- Section Subtitle:** Recently Viewed
- Table:** Passenger Name
- Data:**
  - 1. Vasavi
  - 2. Pandu
- Buttons:** New, Import, Change Owner, Assign Label, and various grid and edit icons.

The screenshot shows the Lightning App Builder settings for the Train Booking System:

- Header:** salesforce login - Yahoo India, Recently Viewed | Passengers, Train Booking System - Lightning, train - V1.
- URL:** orgfarm-73819bc914-dev-ed.develop.lightning.force.com/visualEditor/appBuilder.app?id=02ugl.0000070c8bQAA&retUrl=https%3A%2F%2Forgfarm-73819bc914-dev-ed.develop.lightning.force.com%2...
- Page Title:** Train Booking System
- Left Sidebar:** App Settings (selected), App Details & Branding, App Options, Utility Items (Desktop Only), Navigation Items.
- Content Area:**
  - User Profiles:** A section titled "User Profiles" with the sub-instruction "Choose the user profiles that can access this app."
  - Available Profiles:** A list of profiles:
    - Analytics Cloud Integration User
    - Analytics Cloud Security User
    - Anypoint Integration
    - Authenticated Website
    - Authenticated Website
    - B2B Reordering Portal Buyer Profile
    - Contract Manager
    - Custom: Marketing Profile
    - Custom: Sales Profile
    - Custom: Support Profile
    - Customer Community Login User
  - Selected Profiles:** A list of profiles:
    - System Administrator
    - Agent Profile
    - Passenger profile

The screenshot shows the Lightning App Builder interface. On the left, there's a sidebar with sections like 'App Settings', 'App Details & Branding', 'App Data', 'Navigation Items', and 'User Profiles'. The main area is titled 'Train Booking System' and shows a 'Branding' section where users can choose a primary color hex value (#1B9881) and upload a logo (a blue train icon). Below this is a 'Theme Options' section, followed by a 'Launcher Preview' which displays the app's name 'Train Booking System'.

This screenshot shows the Lightning App Builder with the 'Components' tab selected. A search bar and filter buttons are at the top. The main canvas has three placeholder boxes labeled 'Add Component(s) Here'. To the right, a sidebar shows a 'Flow' component with the identifier 'train'. It includes fields for 'Flow' (set to 'train'), 'Layout' (set to 'One Column'), and a 'Set Component Visibility' section with a single filter for 'var\_SelectedPassengerId'. Buttons for 'Activation...' and 'Save' are at the top right of the sidebar.

salesforce login - Yahoo India | Recently Viewed | Passengers | Train Booking System - Passenger Booking Home

orgfarm-73819bc914-dev-ed.lightning.force.com/visualEditor/appBuilder.app?id=0ugl0000070c8bQAA&retUrl=https%3A%2F%2Forgfarm-73819bc914-dev-ed.lightning.force.com%2... ☆ ○ :

Java Skill Up Software Testing - S... Full Stack Web Dev... JavaScript Full Cour... Aptitude and Reasoning DSA Skill Up Nation SkillUp JavaScript Tutorial -... DevOps - Skill up All Bookmarks

Lightning App Builder App Settings Pages Train Booking System - Passenger Booking Home

Activation: Passenger Booking Home

Any app and profile assignments are displayed for specified app and profile combinations, and they override all other assignments.

Learn more about forecast page assignment in Salesforce Help.

Org Default App Default App and Profile

Set the home page for different user profiles when they're using certain apps. These assignments are the most specific, and override all other home page assignments.

Assignments (1)

Add Assignments Remove Assignments

App	Profile
Train Booking System	Passenger profile

Name: Passenger\_Booking\_Home

Type: Home Page

Template: Header and Three Regions

Description:

Close

Standard (43)

- Accordion
- App Launcher
- Assistant
- Cdp Metrics Overview
- Chatter Feed
- Chatter Publisher
- CRM Analytics Collection
- CRM Analytics Dashboard
- Dashboard
- Data Mask Console Home Component
- Einstein Next Best Action
- Flow
- Flow App Home cards
- Generate Batch Documents
- Inventory Lookup Component
- Placeholder

Get more on the AppExchange

The screenshot shows the Salesforce Lightning App Builder interface. A modal window titled "Activation: Passenger Booking Home" is open, displaying a list of assignments for the "Passenger Booking Home" page. The "App and Profile" tab is selected. One assignment is shown: "Train Booking System" is assigned to the "Passenger profile". Other tabs like "Org Default" and "App Default" also show assignments. The background shows the "Lightning App Builder" interface with various components and settings.

Screenshot of the Train Booking System application interface on a web browser.

The top navigation bar includes links for Passengers, Agents, Bookings, Trains, Cancellation\_Requests, Seat\_Classes, Reports, and Dashboards.

The main content area displays a passenger profile for "Vasavi".

**Passenger Name:** Vasavi

**Age:** 21

**Gender:** Female

**Email\_p:** vasavi@gmail.com

**Phone\_p:** (950) 214-3913

**ID\_Proof:** Aadhar

**ID\_Number:** 12345678912

**Wallet\_Balance:** ₹2,200

**Created By:** Vasavi Kota, 9/25/2025, 12:38 AM

**Last Modified By:** Vasavi Kota, 9/25/2025, 9:34 AM

**Bookings (6+)**

**Ticket Name:**

**Report Chart**

**Recently Viewed Bookings**

26 items • Updated a few seconds ago

1	a02gL000007fI09
2	a02gL000007fH8v
3	a02gL000007ffyM
4	a02gL000007f8Gz
5	a02gL000007f7Z0
6	a02gL000007f6n5
7	a02gL000007fEcS
8	a02gL000007fEnl
9	a02gL000007emeb
10	a02gL000007ejX3
11	a02gL000007ecig
12	a02gL000007eQvr
13	a02gL000007ezXv
14	a02gL000007eVaZ
15	a02gL000007eXKc

**Report Chart**

The screenshot shows a Salesforce Lightning interface for a 'Train Booking System'. At the top, there are several tabs and a search bar. Below the header, a modal window displays a 'Seat\_Class' record for 'Madurai expresssc'. The record details include:

- Seat\_Class Name: Madurai expresssc
- Train: Madurai express
- Class\_Type: AC
- Total\_Seats: 50
- Available\_Seats: 4
- Price: ₹800.00
- Created By: Vasavi Kota (9/23/2025, 1:52 AM)
- Last Modified By: Vasavi Kota (9/25/2025, 9:34 AM)

Below the modal, a section titled 'Bookings (6+)' lists ticket numbers: a02gl000007dler and a02gl000007dlv1. A 'Report Chart' button is also visible.

Overall summary:

#### Phase 4: Process Automation (Admin)

- Validation Rules: Implemented to enforce business rules like cancellation timing policies.
- Workflow Rules & Process Builder: Limited use; moved towards Flow Builder for UI and automation.
- Approval Process: Not implemented in current scope; can be added if needed.
- Flow Builder:
  - Created Screen Flows for Booking and Cancellation processes.
  - Used Record-Triggered and Scheduled Flows via Apex scheduled jobs for waitlist management.
- Email Alerts: Setup for booking confirmation, cancellation notifications (integration with Apex or Flow).
- Field Updates & Tasks: Integrated as part of Apex logic and Flow outcomes.
- Custom Notifications: Configured or considered for alerting users on booking statuses.

#### Phase 5: Apex Programming (Developer)

- Classes & Objects: Built core BookingService and Waitlist management Apex classes.
- Apex Triggers: Not extensively implemented; Apex classes handle logic.
- Trigger Design Patterns: Not covered but can be adopted for scale.

- SOQL & SOSL: Used for querying bookings, passengers, trains, seat classes efficiently.
  - Collections: Utilized Lists, Sets, and Maps for data processing.
  - Control Statements: Implemented complex booking logic and validations.
  - Scheduled Apex: Developed WaitlistAutoCancel to cancel waitlisted tickets before 1 day from journeydate and WaitlistAutoPromotion for freed seats from cancellation to confirmed booking schedulable classes
  - Exception Handling & Test Classes: Recommendations to enhance for production readiness.
  - Asynchronous Processing: Scheduled Apex for batch/scheduled jobs.
- 

#### **Phase 6: User Interface Development**

- Lightning App Builder: Used for building flow containers and app pages.
- Record Pages & Tabs: Setup for quick access to Booking and related objects.
- Home Page Layouts & Utility Bar: Customized for better UX.
- **Lightning Web Components (LWC): Not implemented; but working on it will complete soon**
- Apex with LWC Integration: Considered for complex UI functionality.
- Events, Wire Adapters, Imperative Apex Calls: Planned for advanced interaction.
- Navigation Service: Used for smooth UI transitions in Lightning apps.