

REQUIREMENT ANALYSIS

[CUSTOMER JOURNEY MAP]

Creating a **Customer Journey Map** for an **Airline Management System Project** in **Salesforce** involves outlining the experience a customer has from first learning about the airline to post-flight engagement, while integrating how **Salesforce** tools support and enhance each step.

Airline Management System – Customer Journey Map

Stage	Customer Actions	Touchpoints	Salesforce Capabilities Used	Opportunities for Enhancement
1. Awareness	Searches flights, visits airline website, sees ads	Social media, Google ads, partner sites, mobile app	<i>Marketing Cloud, Advertising Studio, Web-to-Lead</i>	Personalized ad targeting, capture leads for follow-up
2. Consideration	Compares airlines, reads reviews, signs up for newsletter	Website, blog, email campaigns	<i>Marketing Cloud, Email Studio, Lead Scoring</i>	Lead nurturing with personalized offers
3. Booking	Selects flight, enters preferences, makes payment	Website, mobile app, call center	<i>Salesforce Experience Cloud, Service Cloud, Commerce Cloud</i>	Seamless booking flow with AI-based fare suggestions
4. Pre-Travel	Gets updates, checks-in online, chooses seat	Email, SMS, app notifications, chatbot	<i>Journey Builder, Einstein Bots, Mobile Studio</i>	Proactive flight updates, upsell upgrades (luggage, seat)
5. At Airport	Uses e-boarding pass, contacts support for queries	Airport kiosk, mobile app, live chat	<i>Field Service Lightning, Service Cloud Voice</i>	AI routing to reduce wait time, sentiment detection

6. In-Flight	Onboard services, feedback forms, entertainment	Inflight app/portal, email survey	<i>Service Cloud, Feedback Management, IoT integration</i>	Real-time service tracking, personalized content
7. Post-Flight	Feedback, loyalty program engagement, future bookings	Email, loyalty app, survey forms	<i>Salesforce Loyalty Management, Marketing Cloud, CDP</i>	Reward points, next-flight promo emails
8. Advocacy	Shares experience, refers friends	Social media, reviews, referral links	<i>Social Studio, Referral Management, CRM Analytics</i>	Track NPS, incentivize referrals

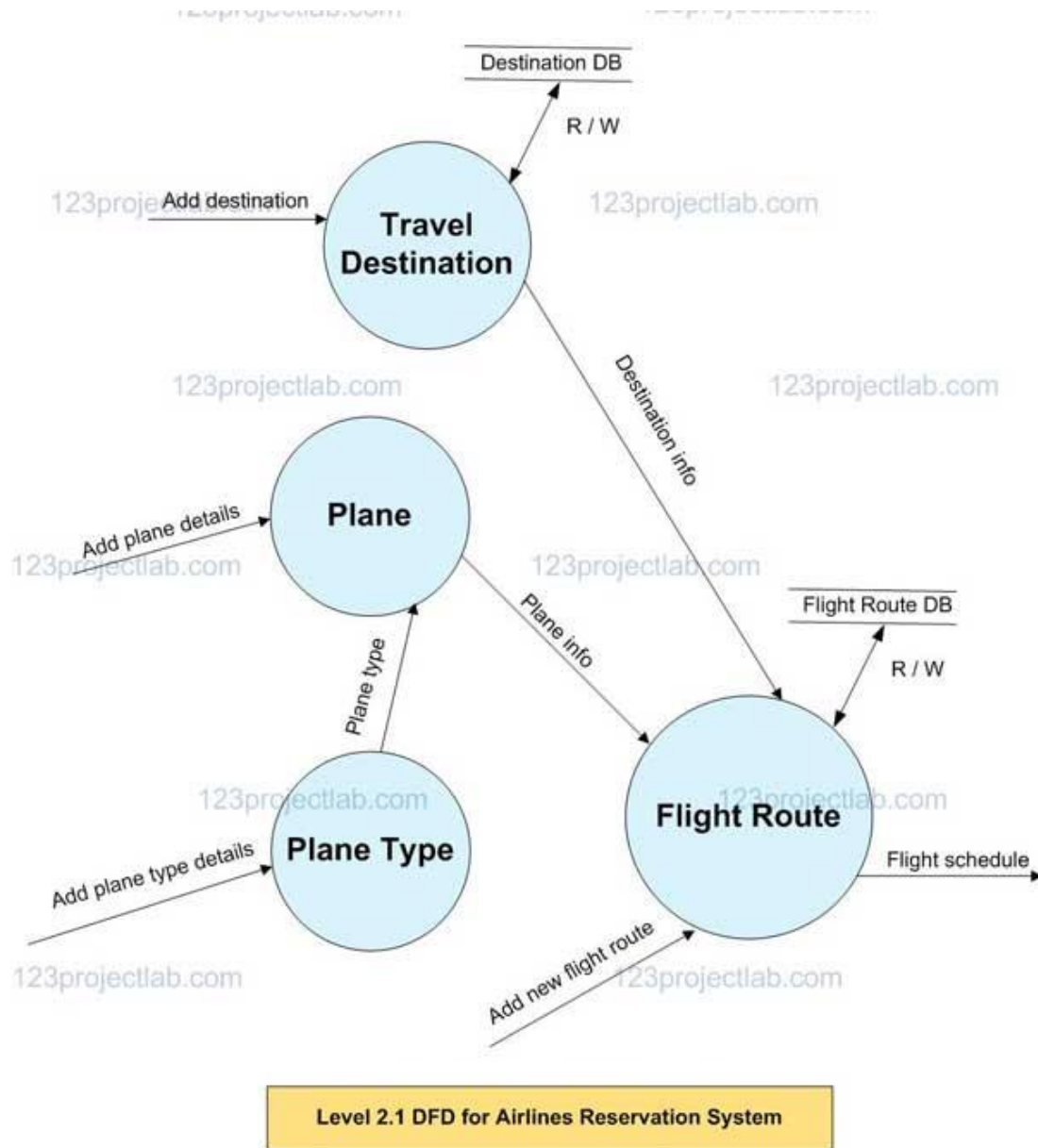
Salesforce Tools Breakdown

- **Marketing Cloud** – Automate email/SMS journeys, personalize communication.
- **Service Cloud** – Omnichannel support (chat, voice, email).
- **Experience Cloud** – Build branded customer portals.
- **Loyalty Management** – Build/customize loyalty tiers and promotions.
- **Salesforce CDP (Customer Data Platform)** – Unified 360° customer profile.
- **Einstein AI** – Predictive recommendations, AI chatbots.
- **CRM Analytics** – Visualize customer satisfaction and booking trends.

Tips for Implementation

- **Data Integration:** Integrate Salesforce with flight operations databases.
- **Mobile First:** Optimize the journey for mobile users.
- **Omnichannel Service:** Use Salesforce for consistent support across all touchpoints.
- **Feedback Loops:** Capture insights at every stage using Salesforce Surveys.

[DATA FLOW DIAGRAM]



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[SOLUTION REQUIREMENTS]

Solution Requirements for Airline Management System in Salesforce

1. Functional Requirements

These are the core features the system must support.

◇ ***Customer Management***

- Register and manage customer profiles
- View customer travel history and preferences
- Manage frequent flyer status and loyalty points
- Link multiple passenger profiles under one customer account (e.g. family)

◇ ***Flight Booking & Management***

- Search for flights based on origin, destination, dates
- Book and manage flight reservations (one-way, round-trip, multi-city)
- Modify or cancel bookings
- Display dynamic pricing and seat availability

◇ ***Check-In and Boarding***

- Enable online/mobile check-in
- Assign or change seats during check-in
- Generate e-boarding passes and notify customers

◇ **Loyalty & Rewards**

- Enroll customers in loyalty programs
- Accumulate and redeem points for flights or services
- View tier benefits, history, and upcoming tier upgrades

◇ **Customer Support**

- Support via chatbot, email, phone, and in-app messaging
- Escalate to live agents via Service Cloud
- Log and track support tickets and feedback

◇ **Notifications & Alerts**

- Notify customers via SMS/email for booking confirmations, flight delays, cancellations
- Pre-boarding and check-in reminders

◇ **Payments & Invoicing**

- Integrate with secure third-party payment gateways
- Generate invoices and send payment confirmations
- Handle refunds and cancellations

◇ **Feedback & Surveys**

- Send post-flight surveys
- Collect NPS (Net Promoter Score) and satisfaction metrics

2. Non-Functional Requirements

Performance

- System should support concurrent users during peak times (e.g., holiday travel)
- Response time < 3 seconds for search and booking

Scalability

- Ability to scale up to support new markets or regions
- Modular design for future feature expansion

Security

- Role-based access control for internal users
- GDPR and PCI-DSS compliance
- Encrypted data at rest and in transit

Availability

- 99.9% system uptime with Salesforce SLA
- Real-time sync of customer and booking data

Integration

- Integrate with third-party systems:
 - Global Distribution Systems (GDS)
 - Payment gateways (e.g. Stripe, PayPal)
 - Baggage handling or airport systems
 - Airline ERP systems

3. Salesforce-Specific Requirements

Salesforce Clouds to Use

- **Service Cloud:** Omnichannel customer support and case management
- **Marketing Cloud:** Personalized journey automation and promotions
- **Experience Cloud:** Self-service customer portal and mobile site
- **Loyalty Management:** Loyalty tiers, point tracking, and rewards
- **CRM Analytics:** Track KPIs like churn, revenue, customer satisfaction
- **Salesforce CDP:** Unified customer profile across departments

Automation & Intelligence

- Use **Einstein AI** for:

- Predictive offers
 - Chatbot support
 - Intelligent case routing
- Use **Journey Builder** for email/SMS workflows based on triggers

Data Sync & APIs

- REST/SOAP APIs for syncing flight schedules and inventory
- Real-time sync with external GDS (e.g., Sabre, Amadeus)

Audit & Compliance

- Use Salesforce Shield for audit trails, data retention, and encryption

REQUIREMENT ANALYSIS

[TECHNOLOGY STACK]

Technology Stack for Airline Management System

1. Salesforce Core Stack

Component

Technology

Purpose

CRM Platform	Salesforce Core (Sales, Service, Experience Cloud)	Customer data, booking & support management
Marketing Automation	Salesforce Marketing Cloud	Email/SMS campaigns, journey automation
Customer Service Self-Service Portal	Salesforce Service Cloud + Omnichannel	Ticketing, chatbots, agent routing
Loyalty Management	Salesforce Experience Cloud	Customer-facing portal for booking & account
Analytics	Salesforce Loyalty Management	Tier system, rewards, redemptions
Data Unification	CRM Analytics (Tableau CRM)	Dashboards, customer insights, trends
Security & Auditing	Salesforce CDP	Real-time unified customer profile
	Salesforce Shield	Field-level encryption, audit trail, monitoring

2. Front-End Technologies

Component	Technology	Purpose
Web Portal	LightningWeb Components (LWC), HTML5, CSS3, JS	Responsive booking and check-in interfaces
Mobile App	React Native or Flutter (with Salesforce Mobile SDK)	Flight booking, loyalty, and real-time updates
CMS Integration	Salesforce CMS or Headless CMS (e.g., Contentful)	Content delivery for promotions and pages

3. Integration & Middleware

Purpose	Technology	Use Case
API Integration	MuleSoft Anypoint Platform	Connect to GDS (Sabre, Amadeus), payment gateways, airport systems
Real-Time Sync	Platform Events, Change Data Capture	Update flight schedules, seat availability
Legacy System Integration	REST/SOAP APIs, ESB	Connect with older airline ERP or reservation systems

External Payment	Stripe, PayPal, Razorpay (via MuleSoft or native API)	Secure customer transactions
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4. Data & Storage

Type	Technology	Purpose
Primary Data Store	Salesforce Data Cloud / Platform	Customer data, bookings, preferences
Data Warehouse	Snowflake, AWS Redshift (optional external DW)	Analytical data at scale
Backup & Archival	AWS S3, Salesforce Shield, MuleSoft connectors	Long-term retention and auditing

5. Security & Identity Management

Purpose	Technology	Use Case
SSO & Identity	Salesforce Identity + SAML/OAuth2	Customer and agent login with SSO
Field-Level Security	Salesforce Shield	PII and payment info protection
Access Control	Salesforce Profiles & Roles	Internal and external access management

6. AI & Automation

Purpose	Technology	Use Case
AI Predictions	Salesforce Einstein	Upsell recommendations, case deflection
Chatbots	Einstein Bots	24/7 automated customer support
Workflow Automation	Flow Builder, Process Builder	Booking confirmations, alerts, case triggers
Journey Automation	Journey Builder	Marketing flows based on user behavior

7. Monitoring & DevOps

Tool	Purpose
Salesforce DevOps Center / Copado	CI/CD pipelines for metadata and code
DataDog / New Relic	App performance and real-time monitoring
Salesforce Event Monitoring	Track user interactions, security incidents

Optional Enhancements

- **IoT Integration** (e.g., for baggage tracking): Salesforce IoT Cloud or external platform
- **Voice Support:** Amazon Connect + Salesforce Service Cloud Voice
- **BI Tool Integration:** Tableau, Power BI (via CRM Analytics connector)