Booking History

Guest → BookingUI: 1.1 openBookingHistory()
BookingUI → Guest: 1.10 displayBookingHistory()
BookingUI → API Client: 1.2 requestBookings(userId, authToken)
API Client → AuthService: 1.3 validateToken(authToken)
AuthService → UserContext: 1.4 extractUserData(token)
API Client → BookingController: 1.5 getUserBookings(userId)
BookingController → BookingRepository: 1.6 findByUserId(userId)
BookingRepository → CacheManager: 1.7 checkCache(userId)
BookingRepository → Database: 1.8 getBookingList(userId)

Dispute Solve

Guest → **GuestUI**: 1.1a initiateDispute(bookingId, reason, evidence) 4.1a feedback()

GuestUI → **Guest**: 3.7a acceptResolution()

NotificationService → **GuestUI**: 3.6a pushNotification(message)

NotificationService → **HostUI**: 3.6b pushNotification(message)

NotificationService → **DisputeController**: 1.6 notifyToAdmin(adminEmail, subject)

DisputeService → **NotificationService**: 1.5 triggerAdminAlert(disputeId) 3.5 triggerResolutionEmail(userId, decision)

DisputeService → **Database**: 1.4 save(DisputeEntity) 2.4 findAllByStatus(DisputeStatus.OPEN) 3.4 updateStatus(id, DisputeStatus.RESOLVED, decision) 4.4 saveFeedback(FeedbackEntity)

Host → **HostUI**: 1.1b initiateDispute(bookingId, reason, evidence))

HostUI → **Host**: 3.7b acceptResolution() 4.1b feedback()

HostUI → **DisputeController**: 1.2b create(DisputeDTO) 4.2b addResolutionFeedback(id, rating, comment)

GuestUI → **DisputeController**: 1.2a create(DisputeDTO) 4.2a addResolutionFeedback(id, rating, comment)

Admin → **AdminUI**: 2.1 viewOpenDisputes() 3.1 submitVerdict(disputeId, decision)

AdminUI → **Admin**: 1.6 notifyToAdmin(subject)

AdminUI → **DisputeController**: 2.2 getDisputeDetails() 3.2 resolve(DisputedId, decision)

DisputeController → **DisputeService**: 1.3 createDispute(disputeDetails) 2.3 getOpenDisputes() 3.3 processResolution(disputeId, resolutionData) 4.3 saveFeedback(FeedbackEntity)

Review

Guest → Frontend:
1.1 viewReviews(listingId)
2.1 submitReview(listingId, rating, comment)

Frontend → Guest:
1.8 displayReviews()
3.3 showUpdated AISummary()

Frontend → Review Controller:
1.2 getReviews(listingId)
2.2 validateReviewRequest()

Review Controller → Booking Service:
2.3 verifyCompletedStay(guestId, listingId)

Booking Service → Review Controller:
2.4 stayConfirmation()

Review Controller → Review Service:
1.3 fetchReviews(listingId)
2.5 addReview(reviewData)

Review Service → AI Summary Service:
3.1 generateSummary(allReviews)

Review Service → Database:
1.4 getAllReviews(listingId)
2.6 storeReview(reviewData)
3.2 storeAISummary(listingId, aiSummary)

Search

Top Destinations view

Guest

1.1 requestTopDestinations()

2.4 renderTopDestination(
destinationCards,
recentSearchContext)

Frontend

1.2 fetchRecentSearches(userId)

Destination View Controller

2.1 getRecentSearch
Records(userId)

Searches

1.3 lookupRecentSearches(userId)
2.3 storeTopDestinations(userId,
rankedTopDestinations)

1.4 cacheMiss()

Cache

2.2 rankTopDestinations(
recentSearchData)

Ranking Engine

Host Calendar & Availability Control

Confirmation Notification

Preference Service

Template Service

Guest

2.3 getUserNotificationPreferences(
guestId, hostId)

2.4 resolveConfirmationTemplate(
locale, channel)

2.6a bookingConfirmation
Notification(
reservationNumber,stayDetails)

2.2 consumeBookingConfirmedEvent()

2.5 sendConfirmation(
reservationNumber,
bookingSummary,
stayDates)

Booking Service

1.1 readBookingConfirmation(
bookingId)
2.1 publishBookingConfirmedEvent(
bookingId, guestId, hostId,
reservationNumber)

Event Bus

2.8 publishNotificationStatusEvent(
bookingId, channel,
deliveryState)

Notification Controller

Notification UI

2.7 logConfirmationNotification(
bookingId,
reservationNumber,
channel, timestamp)

2.6b bookingConfirmedNotification(
reservationNumber,guestInfo)

Audit Service

Host

Payment Module

Notification Service

1.10 newBookingNotification()
2.10 paymentReceivedNotification()

Host

1.9 paymentConfirmation()

1.8 sendBookingConfirmation()
2.9 notifyHostPayout()

External Payment Service

1.4 chargeCard(paymentInfo)
2.5 transferToHost(
hostAccount, amount)

1.3 initiatePayment(
bookingId, paymentInfo)
2.4 initiateHostPayout(bookingId)

1.6 confirmBookingPayment(bookingId)
2.7 markPayoutCompleted(bookingId)

1.2 processPaymentRequest(paymentInfo)
2.3 processHostPayout()

1.1 makePayment(bookingId, paymentInfo)

Guest

Frontend

Payment Controller

Payment Service

Booking Service

1.5 storeTransaction(paymentDetails)
2.6 storePayoutTransaction()

Database

1.7 updateBookingStatus(CONFIRMED)
2.8 updatePayoutStatus(PAID)

2.2 releaseHostPayment(bookingId)

2.1 markStayCompleted(bookingId)

Admin