

SWE 202 - Software Modeling & Design

Xhois Cano - Personalized Document Requirements

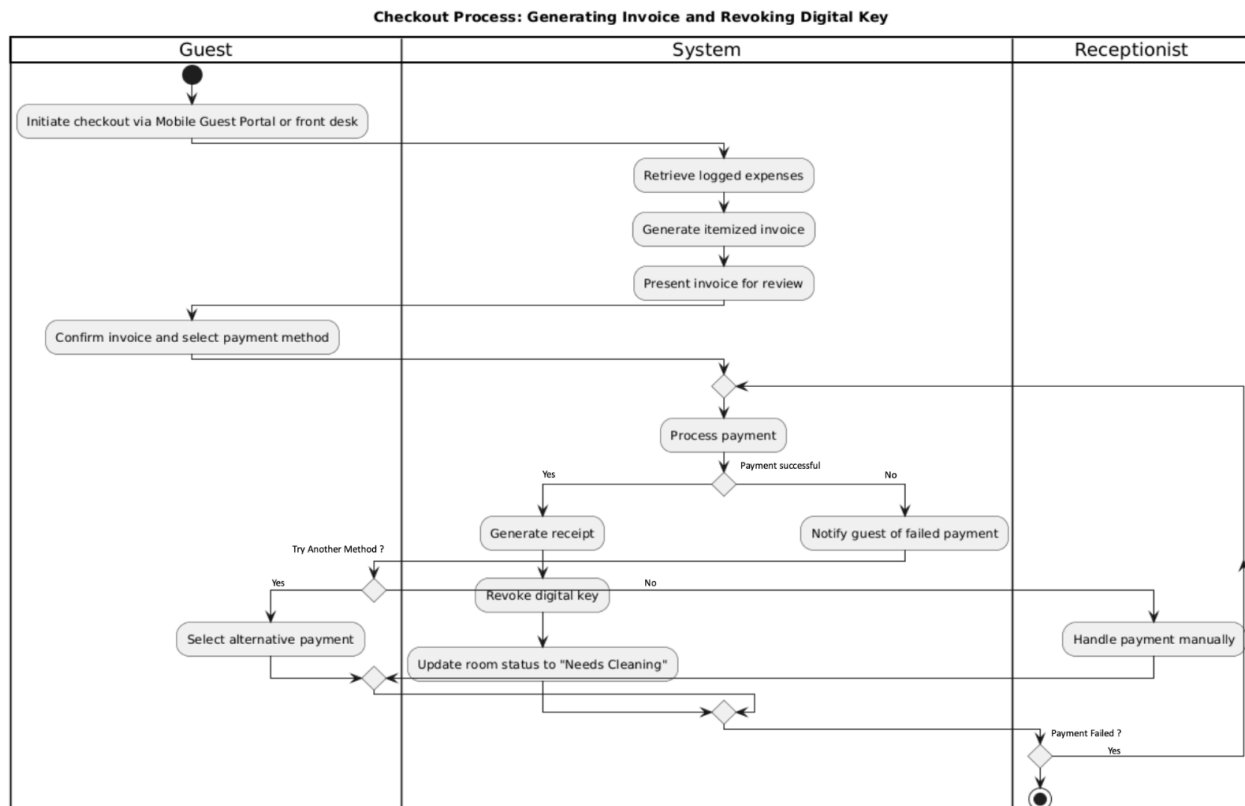
Fr_GST_13: When a guest is checking out, the system shall generate an itemized invoice, which guests can pay online through payment gateways or at the front desk and shall revoke the digital key.

Use Case Table:

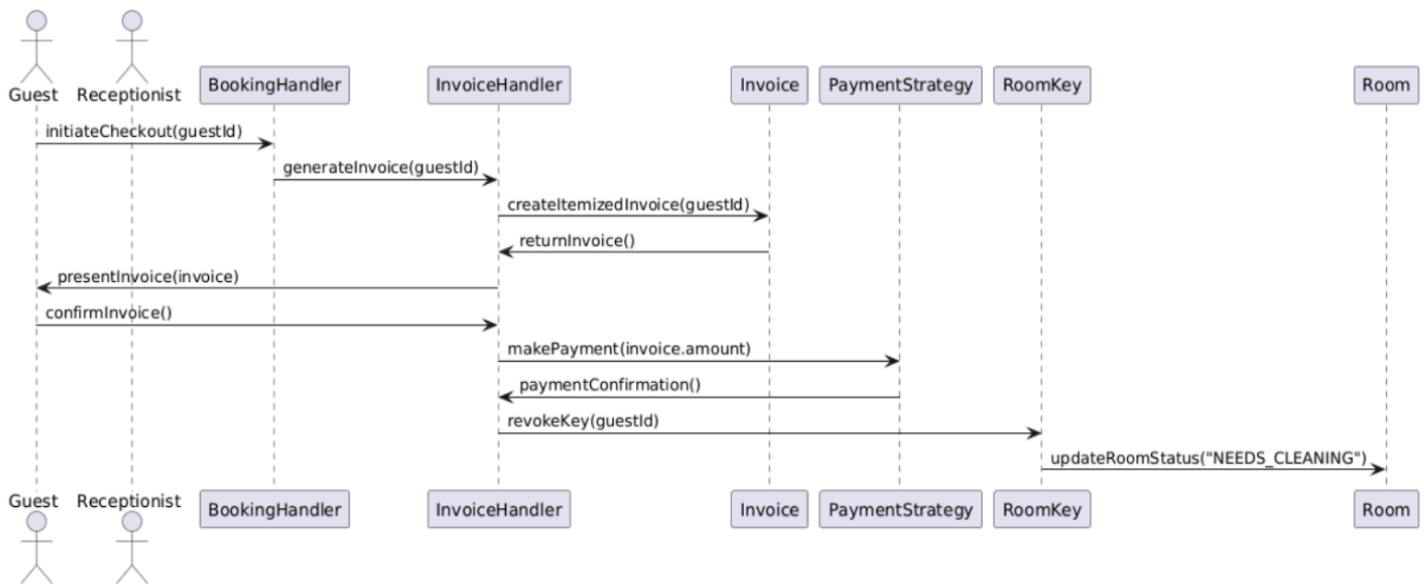
UC Name	FR_GST_13: Generate itemized invoice at checkout, revoke digital key.
Summary	This UC allows the receptionist to generate, revoke, and invoice for the guests.
Dependency	
Actors	Primary actor: Guest Secondary actor: Receptionist, Flexipass SDK
Preconditions	The guest has checked in and stayed at the hotel. All the expenses (services, room charges ,etc.) have been logged in the system. The guest is ready to check out
Description of the Main Sequence	<ul style="list-style-type: none">• The guest initiates the checkout process via the Mobile Guest Portal or at the front desk.• The system retrieves all logged expenses (room charges, services, etc.) for the guest.• The system generates an itemized invoice, including a breakdown of all charges.• The system presents the invoice to the guest for review at the Mobile Guest Portal.• The guest confirms the invoice and selects a payment method (online or at the front desk).• The system processes the payment and generates a receipt.• The system revokes the guest's digital key, ensuring they no longer have access to the room or facilities.• The system updates the room status to "Needs Cleaning" for housekeeping.

Description of the Alternative Sequence	<ol style="list-style-type: none"> 1. If the guest disputes any charges: <ol style="list-style-type: none"> 1.1 The receptionist reviews the charges and makes adjustments if necessary. 1.2 The system regenerates the invoice and presents it to the guest for approval. 2. If payment fails: <ol style="list-style-type: none"> 2.1 The system notifies the guest and prompts them to try another payment method. 2.2 If payment still fails, the receptionist handles the situation manually.
Non functional requirements	The system must generate the invoice within 2 seconds of the guest initiating checkout. The digital key revocation process must be instantaneous to ensure security. The system must ensure all financial transactions are encrypted and comply with PCI DSS standards.
Postconditions	The guest has received an itemized invoice and paid their bill. The guest's digital key has been revoked, and they no longer have access to the room or facilities. The room status has been updated to "available" for housekeeping.

Activity Diagram:



Sequence Diagram:



Collaboration Diagram:

