**Systems Analysis and Design**

**Phase 1 Use Case Narrative**

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This use case explains how a user makes a payment for a hotel booking on hotel booking application, HAS.com.

**Use case Name:** Make payment

**Primary Actor:** User

**Other participating (Secondary Actors**): Hotel Staff and third-party payment provider

**Goal statement:**

The purpose of this use case is to handle a customer's desire to make a payment on HAS.com. The customer creates an account and logs in. They use HAS.com to find the perfect hotel for them. Following their selection, they reserve their hotel room and pay via a third-party system. The hotel receives the booking confirmation and manages check-in. An email of confirmation is sent to the customer upon completion.

**Pre-conditions:**

* The customer needs to be signed into HAS.com for booking hotels.
* The customer needs to have chosen a hotel room and moved on to the payment process.

**Post-conditions:**

* A booking confirmation receipt is sent to the customer.
* The system updates the booking status to “the booking has been paid”.
* Payment information is kept on file for future use.

**Actor Action (user requirement):**

* In HAS.com, the customer chooses to pay for the booked room.
* The customer is prompted to select a payment method by the system, which then shows the payment page with the booking details.
* The customer chooses a payment option (online banking, debit card, credit card, etc.).
* The payment information that the customer enters is verified by the system.
* The system sends a request to the payment gateway if the payment details are legitimate.
* The payment request is securely processed by the payment gateway.
* The Payment gateway notifies the system of the successful payment processing by sending a confirmation message.
* HAS.com creates a booking confirmation receipt and modifies the reservation status to “the booking has been paid”.
* The customer sees the booking confirmation receipt from the system, along with information about the payment and booking.
* The customer has the option to print, save the booking confirmation receipt or receive it through email.
* The use case terminates.

**Application Response (functional requirement):**

* HAS.com will show a payment site with the booking details and amount due.
* The customer will be able to select from several payment options on the payment site, including credit card, debit card, online banking, and others.
* HAS.com will verify the card detail.
* If an issue appears due to invalid details and error message will appear.
* If the details are correct the customer will move to the payment gateway
* HAS.com will create a booking confirmation receipt and update the booking status to “the booking has been paid” if the payment is completed.
* If a payment doesn't go through HAS.com must notify the customer and provide guidance on what to do next.
* HAS.com will communicate with customer if the payment works or not.
* HAS.com will show the booking confirmation receipt with payment and booking details if the payment goes through.
* The system notifies the customer of any technical problems with the payment gateway or HAS.com and go to proceed.

**Alternate/Exceptional Flow:**

**Alternate flow**

* Incorrect Payment Information: HAS.com will display an error message and will ask the customer to update their payment information before allowing them to proceed if the customer enters invalid information.
* Payment Failure: HAS.com notifies the customer of the payment failure and offers guidance on how to progress such as getting in touch with support if the payment gateway malfunctions in processing the payment.
* Cancelling a booking: If the customer chooses to cancel a payment, HAS.com either takes them back to the previous stage or gives them the option to cancel the booking completely.

**Exceptional flow**

* Technical Problems: The system notifies the customer of any technical problems with the payment gateway or HAS.com, suggesting that they try later or get in touch with support if the problem continues.