

Case Study

AltexSoft Integrated Booking.com Content via Sabre GDS

Java, Spring Framework



Background

A hospitality company reached out to AltexSoft to add content from Booking.com to their website and thus offer customers more stay and activity options across the US. The uniqueness of the project was that the client wanted access to be established not directly but via Sabre GDS.



Challenges

When integrating Booking.com with the client's marketplace through Sabre, AltexSoft faced the following challenges:

1.

Build the sequence of Sabre API calls to make bookings

2.

Provide convenient access to Sabre functionality

3.

Ensure compliance with Payment Card Industry Data Security Standard (PCI DSS)

Value delivered

1. Using an accelerator to speed up the integration process

Since AltexSoft had previous experience in Sabre integration, we could take advantage of an accelerator designed for our internal needs. It includes a pre-built development environment for Java projects and a booking flow builder to recreate interactions with Sabre. The accelerator allowed us to shorten development time by around 20 percent.

2. Running multistep booking flow in a single service

Technically, booking via a GDS involves calling several APIs in a certain sequence. We packed the end-to-end flow, which includes search by geolocation, availability confirmation, price checking, and payment, into a separate microservice. As a result, instead of dealing with a collection of SOAP APIs provided by Sabre, the client's platform makes all requests and accepts data via a single REST API. Just for reference, REST is the most common and widely-used standard for web communications.

3. Securing transactions via the third-party payment platform

To accept debit and credit cards, online businesses must comply with PCI DSS which requires encrypting cardholder data before transmitting it over open networks. The problem with Sabre is that its API accepts payment details only in their original form. To address this issue, the GDS provides a virtual payments tool that generates single-use cards for every transaction. Yet, our client opted for a third-party PCI-compliant service and we integrated it with their marketplace. The service tokenizes sensitive elements once a user enters them on the website and recovers data after transit so that the SABRE API can consume the feed.

Approach and technical info

The project lasted for around three months and involved five experts: **a software architect** (part-time), **a project manager** (part-time), **a senior Java developer**, **a middle Java developer**, and **a QA engineer** (part-time).

The technology stack included **Java** and the **Spring Framework**.



AltexSoft US Sales HQ

654 Matsonia Dr,
Foster City, CA 94404
+1 (877) 777-90-97

AltexSoft Global HQ

11/13 Hromadianska Str.,
Kharkiv, Ukraine 61057
+38 (057) 714-1537
solutions@altexsoft.com

