

Case Study

# AltexSoft & TernBooking:

Building a Search & Booking Module

Java, Spring Boot libraries (Security, Data, Cloud, Session), Redis (for session storage), Elasticsearch (for text caching), PostgreSQL (for databases), Amazon AWS servers.

# Background

TernBooking is a US-based B2B2C employee benefits program. Their product helps employees deposit savings from their paychecks automatically and use this money to buy a vacation. Working on the program, TernBooking reached out to us to expand the existing feature set by enabling self-service flight and hotel booking functionality. Our goal was to create a module supporting search and booking, integrate Sabre GDS, and fit this module into the existing system architecture.



# Challenges

Within the scope, our team faced the following challenges:

**1.**

GDS API integration

**2.**

Automating hotel  
description edits

**3.**

Fitting into the existing  
ecosystem

# Value Delivered

## 1. Enabling search and booking functionality

Our primary goal was to integrate the flight and hotel search, and booking API by Sabre GDS, providing the employees with this functionality. The travel booking module is deployed and can be managed independently from the rest of the platform's systems. The module was created using **Java** and **Spring Boot framework**.

## 2. Editing hotel descriptions

One of the obstacles was to edit hotel descriptions returned by Sabre GDS. Some copy didn't have spaces between the words or punctuation marks, while some was written in all capital letters. To solve this problem, our engineer used a semi-automated approach to text editing and used a machine learning library to process the writings.

## 3. Integrating the travel module into the ecosystem

The client's technology ecosystem already had a set of existing services, including payments, so our software architect had to enable the interaction between them and a travel module. To solve this challenge, we created a middleware between our module and the TernBooking services, based on **Amazon AWS** and **REST API**. Also, our software architect integrated the session management into the new module using **Spring** security libraries.

# Approach and Technical Info

Total scope of the project was **2 man/months**. The project was completed by a **software architect** and a developer from the client's side over the course of **2 months**.

The technology stack included **Java**, **Spring Boot libraries** (Security, Data, Cloud, Session), **Redis** (for session storage), **Elasticsearch** (for text caching), **PostgreSQL** (for databases), **Amazon AWS** servers.

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