CASE STUDY: HOMELIKE

aimprosoft
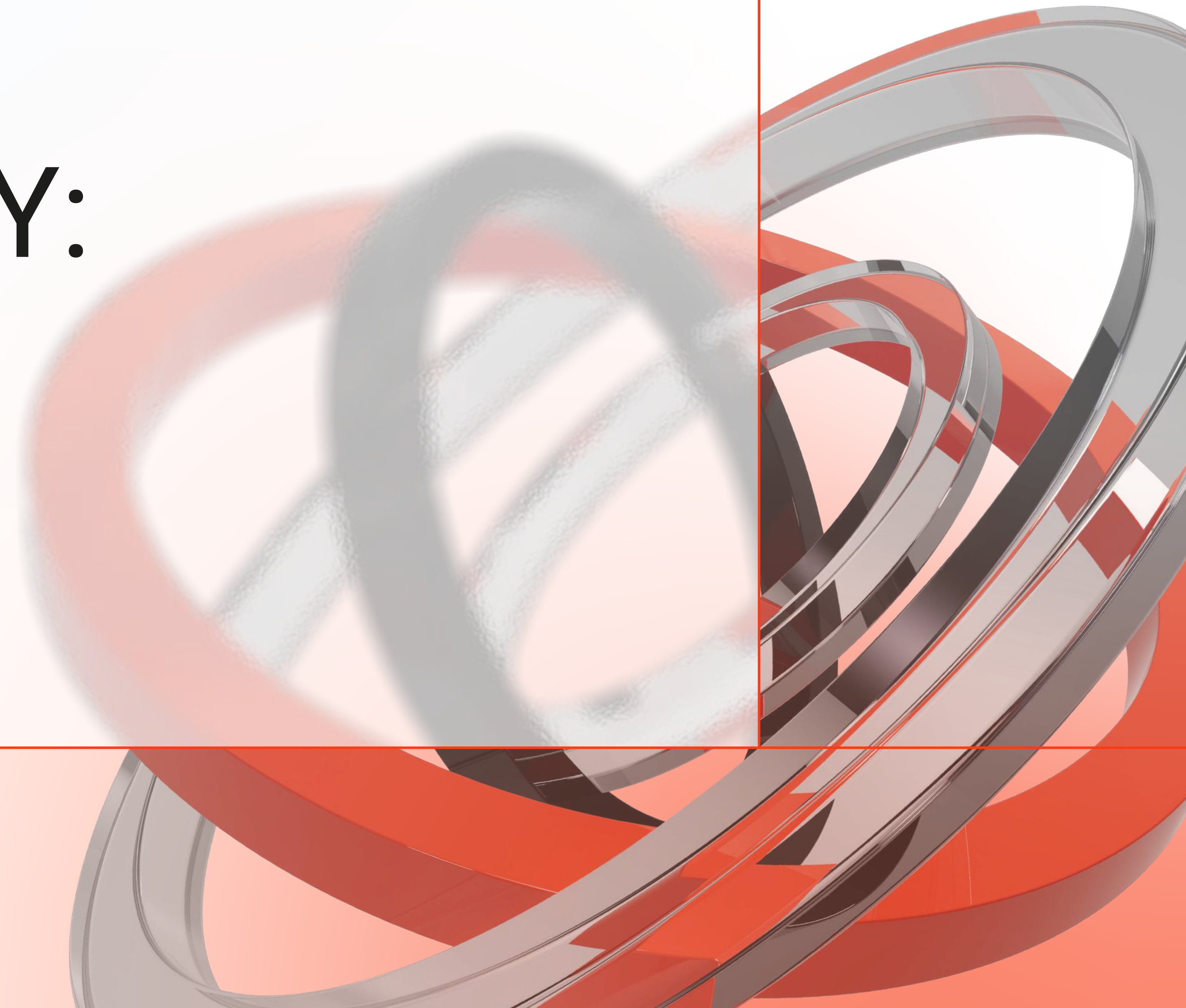
An online booking service for long-term apartment rentals

Partner information:
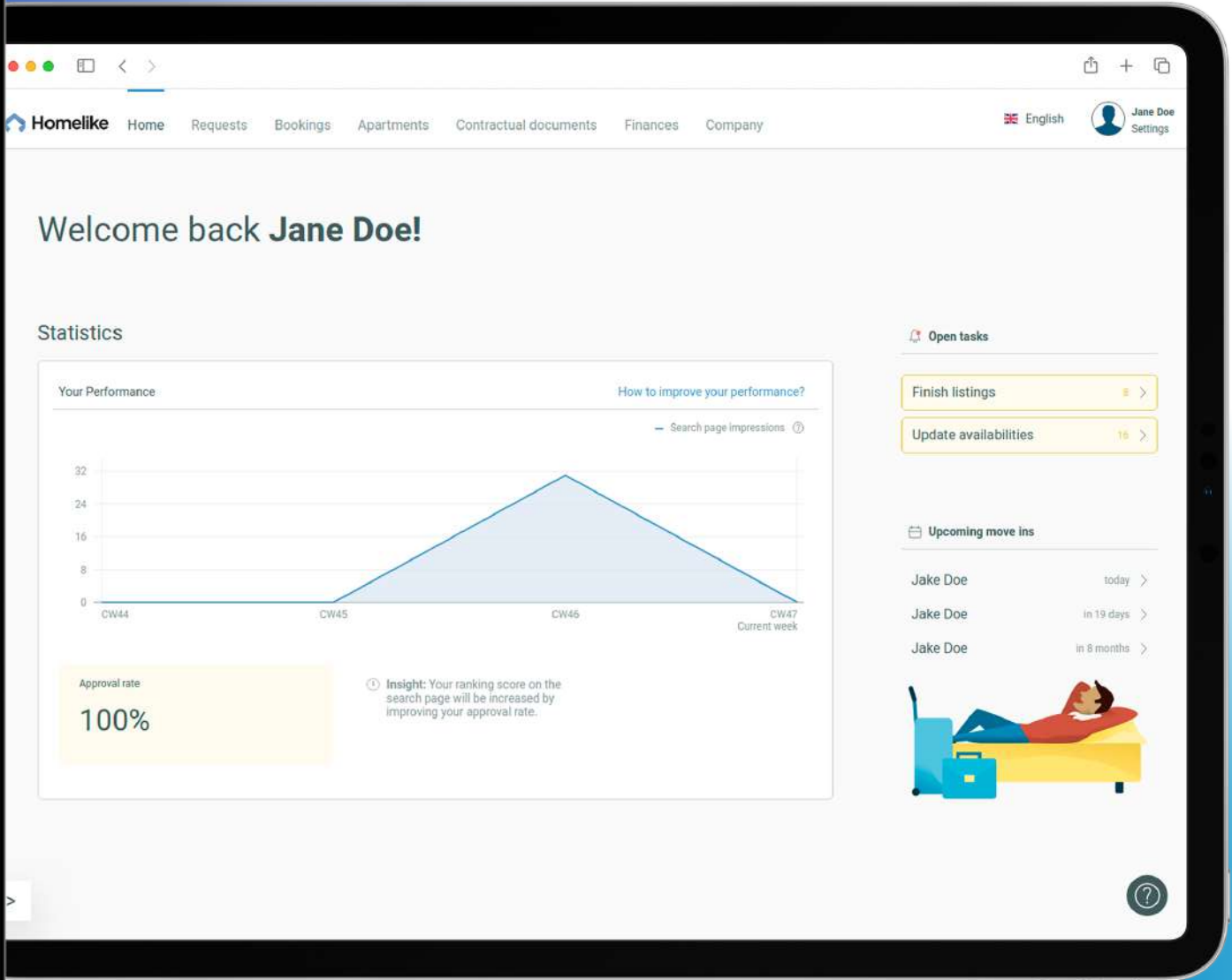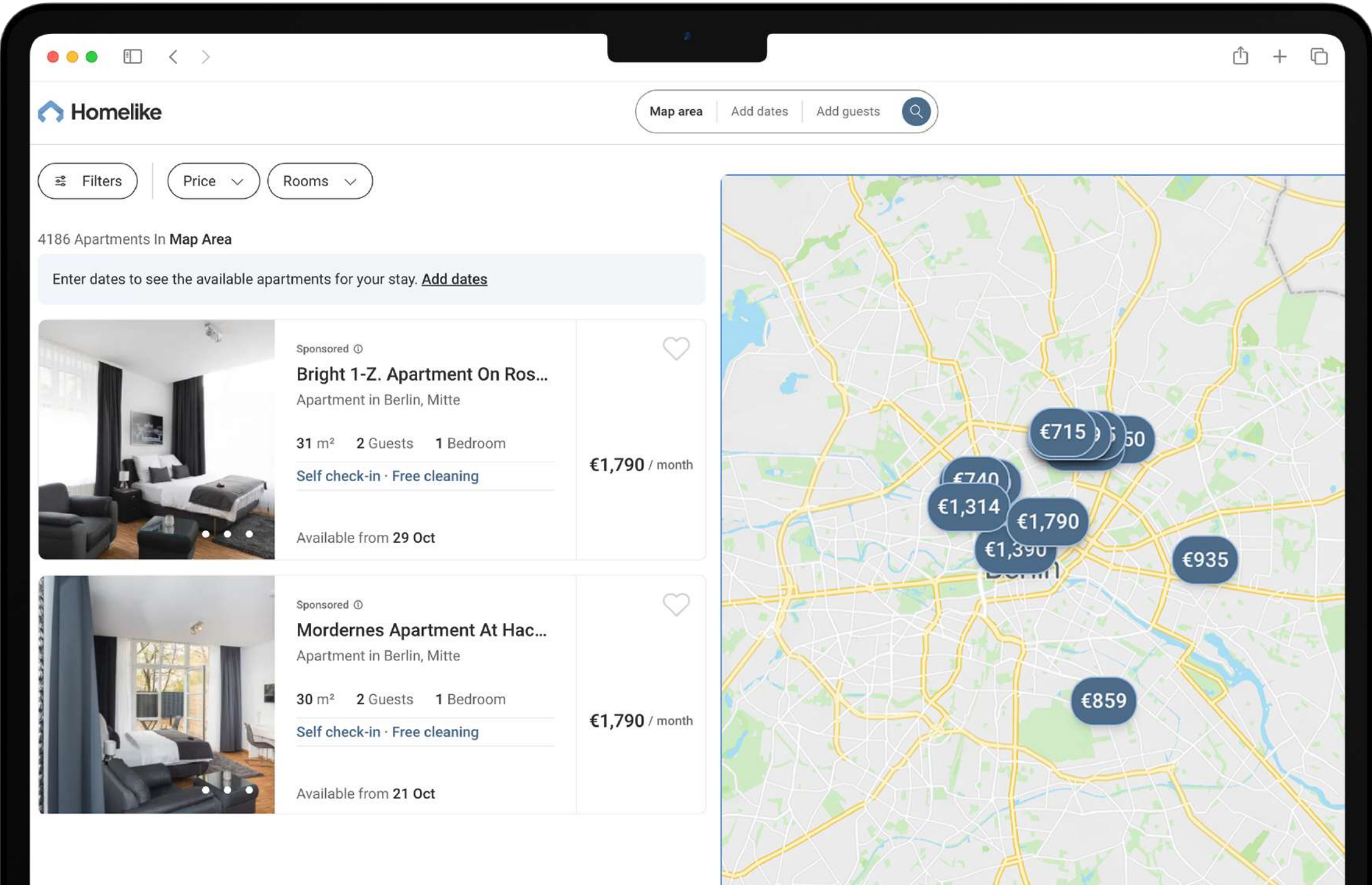
Partner: **Homelike**

Company size: **101-250**

Headquarters: **Germany**

Team size:

Full-stack developer: 1
Back-end developers: 4-6
Front-end developers: 2-3
QA engineer: 1

DevOps engineer: 1
Software architect: 1
Project manager: 1

PROJECT OVERVIEW

Summary

In 2018, Homelike, a B2B startup, turned to us with a request to expand their web platform. The task was to help scale their services by building feed processors – functionality that can collect apartment data from external systems and convert it into a standardized format compatible with Homelike's internal structure.

As the platform expanded, so did the scope of our work. What started as a narrow technical task grew into an ongoing, long-lasting partnership.

Over the course of 7 years, our team worked alongside Homelike's in-house developers, improving performance, scalability, and UX of their platform. While product direction remained on our partner's side, our team contributed to a number of key technical milestones that made Homelike's platform more flexible and capable of supporting its growing user base and partner network.
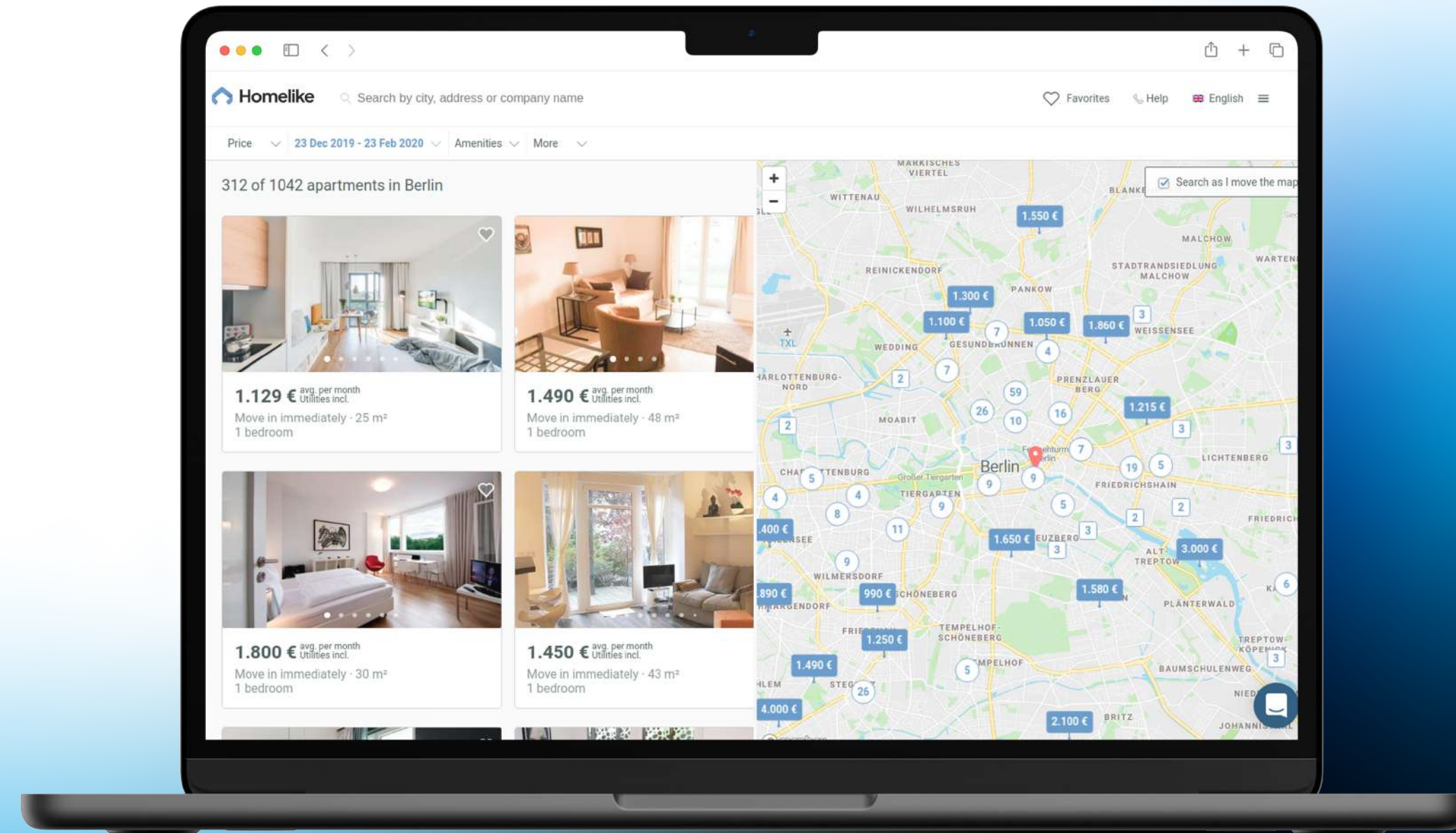
Provided services

- Web development
- QA & software testing
- Project management
- DevOps services

Technologies & tools

- **Platform:** Node.js, Python
- **Frontend:** React, Redux, Next.js, styled-components, React Hooks, GraphQL, Apollo Client, Jest, Enzyme, Webpack
- **Backend:** Feathers.js, Nest.js, MongoDB, Elasticsearch, Amazon S3, GraphQL
- **QA tools:** Postman, Java, TestNG, Cucumber
- **DevOps:** Amazon CloudWatch, AWS Lambda, CircleCI, EC2, RDS, Sentry, Kubernetes (EKS)
- **Third-party tools:** Stripe, Airbnb API, Google Analytics, Google Maps APIs, HelloSign API, Puppeteer
- **Additional tools:** ESLint, npm, Yarn, GitFlow, Lerna, Mongoose

REQUIREMENTS & CHALLENGES

Our initial task was straightforward: help our client collect and manage apartment listings from 3rd-party providers to quickly expand their list of properties. Our team focused solely on delivering new features and services, like a feed processor and external API.

At the early stage, most of the platform's logic lived in a Feathers.js-based monolith. But as the company scaled, the setup's limitations became apparent, from performance bottlenecks to issues with system stability during peak traffic. Our task was to help with specific areas of development and gradually transfer certain features into microservices.

Over time, our responsibilities evolved far beyond the initial scope. We handled tech challenges like redesigning their payment system, improving search performance and enhancing infrastructure scalability. Not all challenges were technical. Supporting a live B2B platform with multi-region coverage meant navigating trade-offs, balancing speed and quality, and keeping the product stable while handling changes continuously.

Overcoming limitations of a legacy monolith

The platform was initially built as a Feathers.js monolith, which had become increasingly rigid and hard to scale. Our task was to gradually transfer new functionality into modern, modular microservices without disrupting ongoing operations.

Scaling data integrations for business growth

Homelike needed to rapidly expand its apartment listings by integrating with dozens of third-party providers. To support this, our team had to build a system of feed processors and data pipelines that collect, standardize and sync large volumes of external data in real time, with minimal manual intervention.

Modernizing payment system

As Homelike expanded, it needed to support location-specific payment methods and handle complex pricing logic. Our task was to rebuild the payment system as a standalone service and integrate providers like Klarna, iDEAL and SEPA. We also had to integrate Stripe's subscription system to support a more scalable monetization model and introduce support for dynamic fee adjustments without disrupting booking flow.

Maintaining reliability at scale

With growing traffic and new microservices in place, the platform needed stronger infrastructure. Our task was to manage AWS resources using Terraform, improve monitoring and alerting, stabilize Kubernetes clusters and introduce CI/CD pipelines to ensure reliable deployments.

HOW WE WORK

Collaboration approach & process

Our collaboration with Homelike was built on **long-term commitment, mutual trust and flexibility.** From the beginning, we worked as an extension of their internal team, contributing to clearly defined feature scopes while also stepping in to solve unexpected challenges as their platform evolved.

Our team participated in planning sessions, technical discussions, and regular hackathons with Homelike's tech specialists. This **tight collaboration allowed us to stay aligned with their goals,** explore new ideas, and deliver improvements that often went beyond the initial scope of work.

The established trust allowed us to **proactively suggest** architecture improvements, streamline performance, and help shape how core parts of the platform were built.

What made this partnership work was not solely technical contribution, but **shared ownership of outcomes.** We weren't just building features — we were helping Homelike scale their platform responsibly, solve real business bottlenecks, and continuously improve the experience for their users, partners and internal teams alike.

Partner testimonial

We'd had some negative experiences with companies in the past misrepresenting the seniority of their team members. Aimprosoft, on the other hand, gave us a list of engineers based on price, with a description of their experience levels. Those levels have been exactly as depicted.

Demchenko Yevhen
Head of Engineering, HomeLike

STEP-BY-STEP PROJECT FLOW

1. Beginning our collaboration: expanding a startup's capabilities

We joined Homelike to help scale their apartment rental platform by building feed processors and integration pipelines with third-party real estate providers. This automated data import and export, forming the technical foundation for a scalable B2B ecosystem. At this stage, our team focused efforts entirely on backend development — there was no UI involved, as feed processing was purely a behind-the-scenes integration effort. Architectural planning was part of our scope early on, and as our involvement grew, additional frontend and QA specialists from our team were brought in to support other areas of the product. When our second team was introduced, they focused on the dashboard and contributed more actively to UI/UX improvements across the platform.

2. In-house transition and renewed cooperation

For a brief period, Homelike shifted most of the development in-house. However, we continued to support the project with a few of our team's experts assigned during this time. Shortly after, they decided to scale up collaboration again, and our specialists were re-integrated into Homelike's product teams — each focusing on specific areas such as payments, search, infrastructure and booking flow.

3. Maintenance, optimization, & further development

In the final phase, our team focused on expanding platform functionality, improving system performance and reducing technical debt. We migrated parts of the monolith to microservices, reworked the payment and search systems, supported CI/CD pipelines and continued improving third-party integrations, with a particular focus on maintaining and fine-tuning the internal feed processor system. Our team also worked on improving and validating incoming data to ensure it reached the frontend in a reliable, accurate and user-friendly format. Throughout this stage, we collaborated closely with Homelike's team to align technical delivery with evolving business goals.

DELIVERED PRODUCTS & FUNCTIONALITY
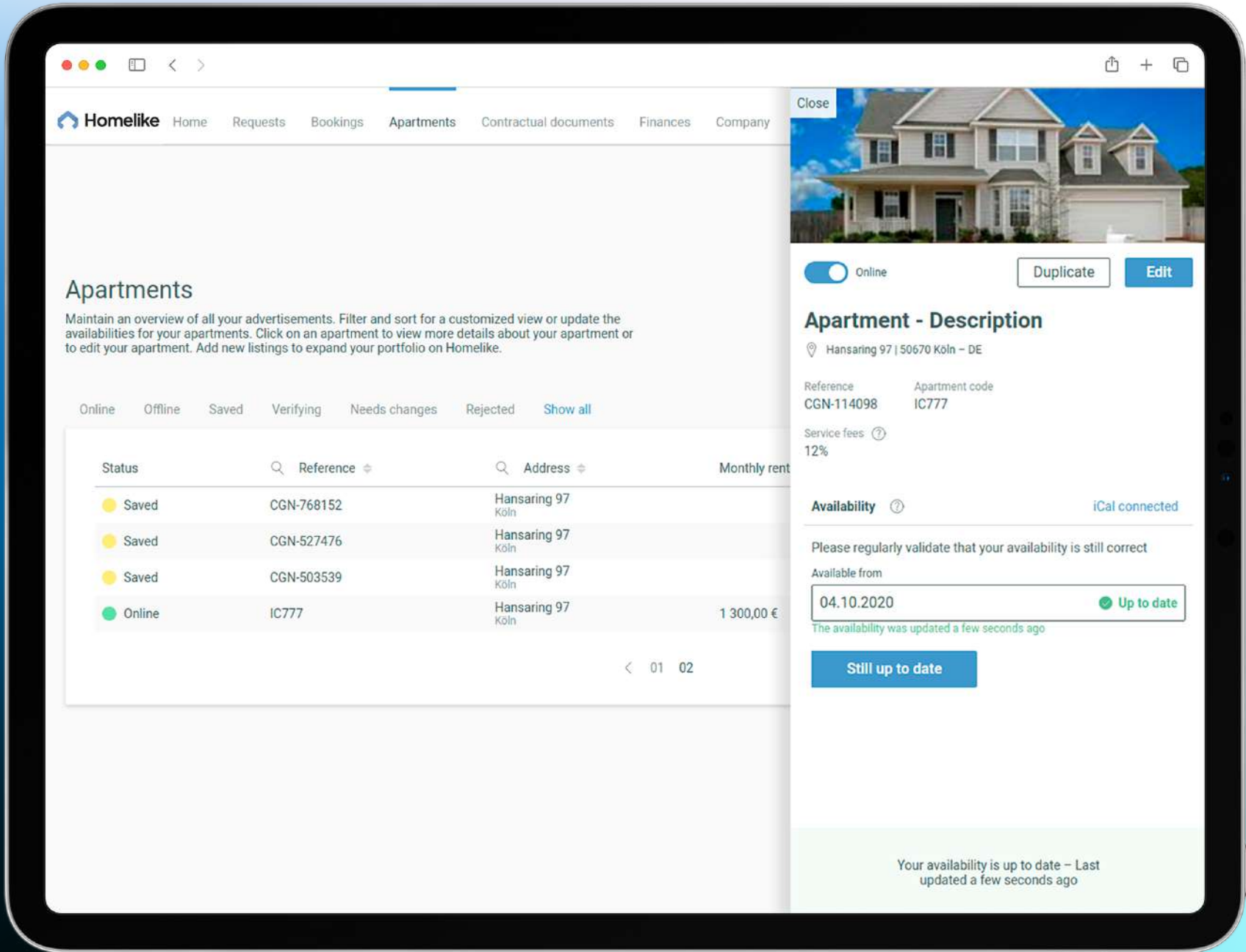
Third-party listing integration: We developed a flexible feed processor system that allows Homelike to ingest apartment data from various external sources. This significantly expanded the platform's offerings while ensuring that listing information remained up to date and formatted correctly for its internal structure.

External API for B2B partners: We built an external API that allows authorized platforms to fetch up-to-date apartment listings directly from Homelike. This resulted in a smooth two-way data exchange, making it easier to integrate with the platform, positioning Homelike as a scalable provider in the B2B market.

Advanced search and filtering: By replacing the original MongoDB-based search with a high-performance Elasticsearch, we enabled faster response times and more complex filtering. It significantly improved the platform's user experience and responsiveness.

Scalable payment system: Our developers rebuilt the payment system as a standalone microservice, integrated Stripe and other payment methods like Klarna, iDEAL and SEPA, and enabled support for dynamic pricing logic. These upgrades support regional expansion and contribute to better conversion rates.

AI-powered assistant: To reduce support load and streamline the user journey, our team helped build a chatbot capable of answering common user questions. The assistant became a key part of the customer support process, improving self-service and reducing manual inquiries.

Admin panel: We supported the development and refinement of Homelike's internal admin panel. This tool became essential for day-to-day platform operations, speeding up support resolution and improving control over platform data.

PROJECT IN NUMBERS

Throughout our partnership, our team provided technical expertise and improvements to Homelike's platform that position their business for growth and long-term success.

500+
cities in Europe and the US covered
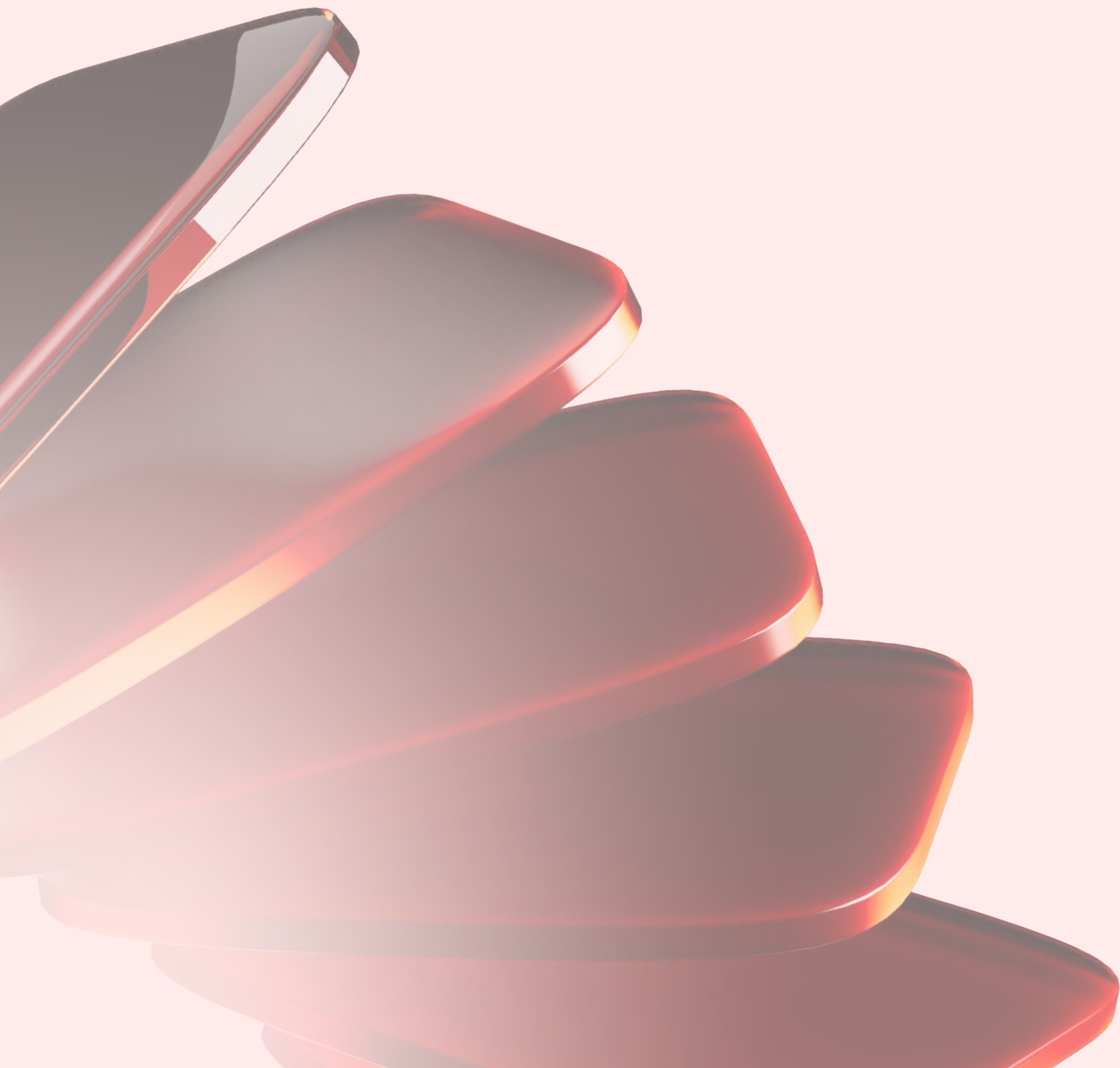
5x
faster request processing

120,000+
high-quality furnished apartments

7years
of partnership between Aimprosoft and Homelike

85%
test coverage

PROJECT OUTCOMES

Seamless integration with third-party providers

We developed a flexible data integration framework that allows Homelike to import and export property listings across dozens of external platforms. This allowed them to scale their offerings quickly without relying on manual data entry, making it easier to onboard new partners and grow inventory across multiple markets.

Scalable and localized payment system

We re-architected the payment infrastructure as a dedicated microservice, integrated global and region-specific payment methods like Klarna and iDEAL, and supported dynamic pricing updates. These changes let Homelike expand more confidently across new cities and countries.

Automation and reduced support load

To support scaling without adding overhead, we helped build an AI-powered chatbot that handles booking-related questions, reducing pressure on customer support. Combined with automation in booking and cancellation flows, this contributes to a more efficient platform with lower operational friction.

Faster and smarter search experience

By migrating their search engine from MongoDB to Elasticsearch, we significantly improved the speed, precision and flexibility of apartment search on Homelike's platform. This upgrade facilitates advanced filtering, better ranking algorithms and smoother UX, leading to higher user satisfaction and increased conversion rates.

Continuous delivery and infrastructure stability

Our DevOps engineers improved CI/CD pipelines, optimizing AWS resource usage and supporting reliable deployment cycles. These improvements reduced downtime, streamlined releases and ensured the platform remained stable as usage grew, all while cutting unnecessary infrastructure costs.

Long-term contribution to platform growth

Beyond specific features, our team consistently worked across multiple verticals, such as integrations, payments, search, infrastructure and admin panel, to support Homelike's expansion from a fast-growing startup to a more mature, stable and scalable B2B platform. Our technical input translated into better user experience, improved platform performance and tangible business growth.

aimprosoft

contact@aimprosoft.com