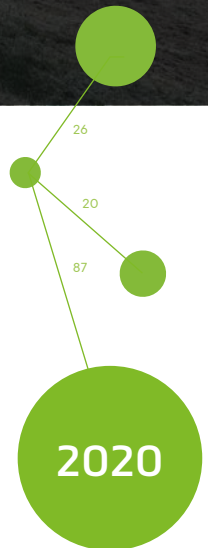
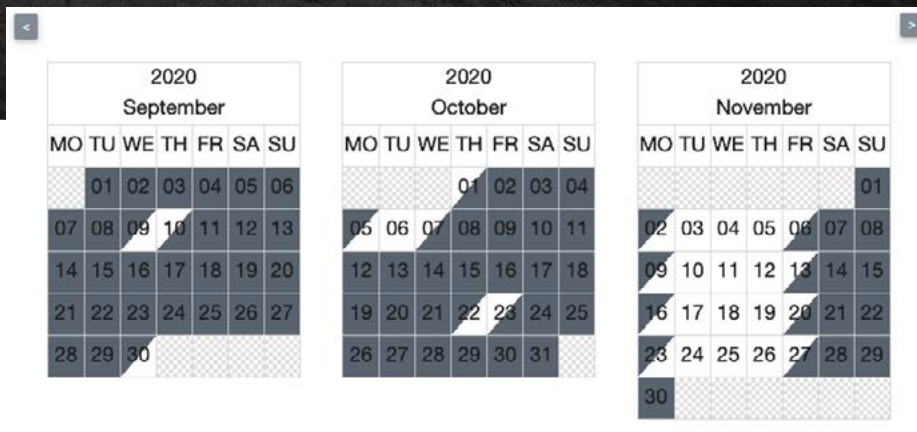


SMART BOOKING SYSTEM FOR UNIQUE HOLIDAY RESIDENCES

How URLAUBSARCHITEKTUR created an individual and flexible solution for holiday property rentals with Low Code and Graph Technology



Industry

Tourism / Architecture

Challenges

- Individual solution for booking management of holiday residences
- Various external systems and interfaces to external software
- High-performance queries in real time despite large amounts of data

Solution

- Flexible, customized booking management system
- Flexible calendar widget for the visualization of occupancy
- iCal import / export for booking data
- Configurable booking form for integration in third-party websites

Benefits

- Central location for occupancy management
- Maximum flexibility and clarity
- Individually configurable mail traffic

CUSTOMER

URLAUBSARCHITEKTUR

Since 2007, the platform urlaubsarchitektur.de presents architecturally outstanding vacation domiciles in Europe.

There are now 550 vacation homes, family-run hotels and B&Bs that meet the demanding concept, which focuses on the architectural and design quality and individuality of the accommodations. In addition to these core requirements, compelling tourist content, local as well as social responsibility and the issue of sustainability are also decisive criteria when accepting new partner houses into the network.

On the one hand, URLAUBSARCHITEKTUR functions as a gallery that brings together lovers and owners of first-class architecture for the duration of the vacation. On the other hand, the platform ensures a dynamic exchange within the network with workshops, partner meetings and consulting services.

URLAUBSARCHITEKTUR always mediates the dream houses on a recommendation basis, so it is not a booking platform. Communication between hosts and guests is always direct. To make it easier for partners to successfully handle their own communication and booking management, the team has developed the present tool based on its own experience and the expertise of the Structr team.

- For over 10 years the first choice for architecturally sophisticated vacation and guest houses
- Focus on high quality and individuality
- Brings together owners and lovers of first-class architecture



Challenge

The vacation homes integrated into the URLAUBSARCHITEKTUR platform are so individual and sometimes unusual that the owners naturally have special requirements for the management of these properties.

The initial basic requirement for a booking management system was that it should offer a large degree of flexibility in order to map the individual characteristics of the properties but also different booking processes accordingly.

Since it was also supposed to make the administration work easier for the users, it also had to be compact, simple and clear.

In addition to the individual administration by the owner, the system should also manage the central occupancy of all URLAUBSARCHITEKTUR accommodations, display them on the platform and make them available for the search for free periods.

Another requirement was to create the possibility of connecting the system to external systems and thus, for example, to enable the import of occupancy data via calendar interfaces.

Finally, the required information should be available in real time and be retrievable at any time.

Buchungsnummer	Gast	Kontakt Daten	Erwachsene	Kinder	Notiz	Startum	Endum	Unterkunft	Status	Preis (Netto)	Summe Zahlungen
204	Max Müller	+49 176 3927084 max@muntermanagement.de	2	2	Bitte in handlicher	02.05.2019	09.05.2019	BWK, OCG, Wohnung Berg	booked	1.482,50 €	300,00 €
214	Petra Bauer	+49 0111 6781234 petra@muntermanagement.de	2	2		05.05.2019	10.05.2019	BWK, ECG, Wohnung Tal	booked	1.192,50 €	300,00 €
617	Max Müller	+49 176 3927084 max@muntermanagement.de	2	0		17.05.2019	26.05.2019	BWK, ECG, Wohnung Tal	booked	1.205,00 €	280,00 €
412	Petra Bauer	+49 0111 6781234 petra@muntermanagement.de	2	0		27.05.2019	31.05.2019	BWK, ECG, Wohnung Tal	booked	990,00 €	0,00 €

Overview of accommodations and bookings of a host. Above the monthly view, below in table format.

Solution

The core requirement for the system to be established was the management of vacation homes or accommodations including occupancy management and corresponding actions, such as invoicing, booking inquiries, communication with interested parties/tenants or tasks arising in the rental property.

In addition to the basic functionality of the booking management, several technical interfaces were created, for example:

- Externally integrated booking form (with occupancy check and integration into the overall workflow)
- Externally integrated booking calendar/occupancy information
- Interface for providing booking/occupancy information available to other technical consumers

Through the booking management system created with Structr, each host has been given the possibility to independently manage accommodations, guests, prices, invoices, as well as the booking calendars.

The solution also offers individual users the possibility to collect statistics from the database for better tracking of occupancy.

The following Structr tools were used for the solution:

Dynamic Pages

The server-side generated HTML structure is defined in the Structr Page Editor and transferred to the client. Parts of the HTML structure can be assigned user rights in order to show, hide or repeat them according to the respective needs. This way the user always gets an individual overview according to his own database.

The solution "Dynamic Pages" saves additional work by abstractable components, which can be used in several pages.

PDF-Generator

The PDF generator makes it possible to output any page as a PDF. Here it is used for automatic invoice generation. Through the direct link with the "dynamic pages" it is possible to export an invoice generated there directly as a PDF.

Time-Controlled Execution of Operations (Cron Jobs)

Functions configured in Structr (schema methods) can be executed and controlled according to a schedule created in the system at defined times.

Fully Dynamic Schema

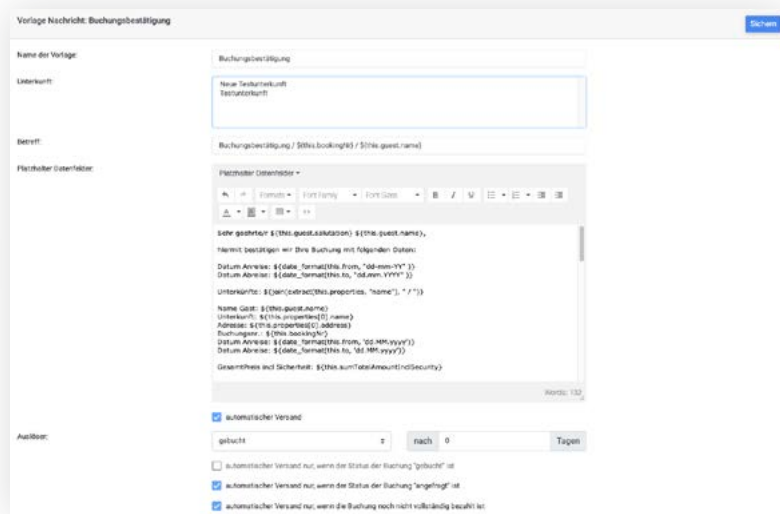
This is a completely flexible data schema that is created in a visual schema editor and can be changed at runtime. Many lifecycle methods for data processing are made available in an easily implementable way. Structr allows you to program your own business logic within these functions.

Mail-Functionality

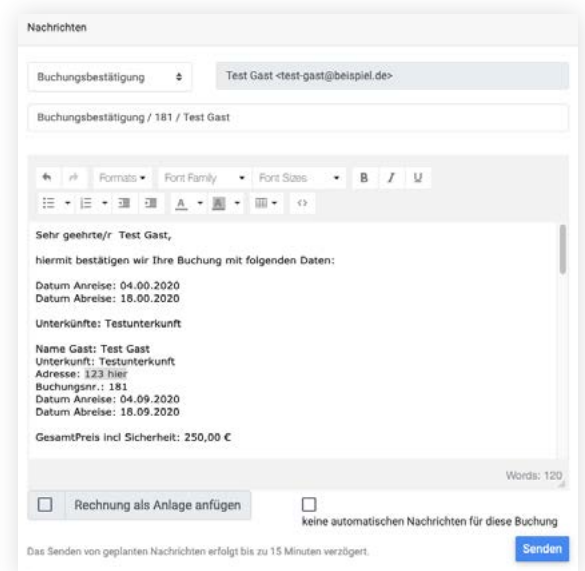
Page functionality to automate (optionally) sending of dynamically generated mails created from user-defined templates. Structr enables the storage of access data to the user's mail server in order to send the emails with the user's identity. To do this, Structr connects to the customer's mail server and sends automatically through their account. What was previously handled centrally by urlaubarchitektur.biz can now be managed directly by the property's landlord, allowing the tenant to be addressed directly.

User Management

Structr provides a flexibly configurable user and group rights management system that allows access control at different levels of granularity.



Dynamic Mail Template Edit Screen



Mask for mail traffic in the context of a booking

Result

Within just a few months, a flexible, dynamic management solution was created that covers most of the requirements of property owners and managers alike – from scheduling to email communication and payment management.

The solution is an innovative system that integrates cutting-edge technologies such as low code and graph technology, as well as apps that have been specifically tailored to the needs of the target group.

With Structr's solution, the platform's partners have, for the first time, the possibility to customize their booking management, making their own administrative work easier. At the same time, the URLAUBSARCHITEKTUR portal will in future provide its visitors with an insight into the occupancy data (occupancy calendar and availability queries).

The result includes the following key features:

- Web-based, multilingual and adaptable to all currencies and tax rates
- Management of requests, bookings and blocked periods
- Management / CRM of all guest data.
- Booking and occupancy calendar for integration into the vacation home website with the possibility to choose different formats (monthly calendar / monthly overview / annual calendar)

- Booking form with availability query for integration into the website of the vacation home
- Occupancy data in different formats (xls, csv, ical), e.g. for integration into calendar
- Check routines for bookings (no more double bookings)
- Automatic calculation of rental prices (incl. seasonal prices, visitor's tax, cleaning...)
- Entry of additional services and extras
- Automatic determination of deposit and down payment
- Generation of invoices
- Administration of incoming payments
- Mail communication to guests, automated or individually
- Administration of task lists (e.g. for cleaning service /janitor, arrival/ departure lists, payment deadlines)
- Manual and automatic generation of tasks
- Determination of occupancy and turnover
- Printout of occupancies and bookings as PDF
- Availability queries from the URLAUBSARCHITEKTUR portal

The booking system will be expanded step by step in the future in coordination with the partners of URLAUBSARCHITEKTUR. The goal of this next version is a booking frontend for guests as well as a payment system in the backend.

How you find your holiday home with HOLIDAYARCHITECTURE

On our portal, we present more than 500 properties. With the help of the search function you can specifically browse for accommodations that are of interest to you. You can narrow down the number of listed houses by specifying the number of people, the region and many other criteria (e.g. pool, pets). For some months now, there has also been an **availability enquiry**. You can thus search for holiday homes that are available at a certain time period. All houses for which we have the occupancy data are considered here.

The screenshot shows a search interface with the following sections:

- Enter availability OR criteria**: Found: 541 Objekte
- Availability**: from TT.MM.JJJJ to TT.MM.JJJJ flexible
- Number of guests**: 1-2 (house/apartment), 1-4 (house/apartment), 1-4 (house/apartment), 1-4 (house/apartment), 8+ (house/apartment), Apartments combinable, Rooms for 1-2 (hotel), Rooms for 1-4 (hotel)
- Criteria**: Art, Beach, Family, Garden, Golf, Hiking, Island, Lake/river, Meeting, Metropolis, Mountains, No barriers, Pet friendly, Pool, Restaurant, Seaside, Skiing, Snow, Urban, View
- Region**: AT - Austria, BE - Belgium, CA - Canada, CH - Switzerland, CZ - Czech Republic, DE - Germany, DK - Denmark, ES - Spain, FI - Finland, FR - France, GR - Greece, HR - Croatia, IE - Ireland, IT - Italy, LI - Sri Lanka, NL - Netherlands, NO - Norway, PL - Poland, PT - Portugal, SE - Sweden, SI - Slovenia, TR - Turkey, UK - United Kingdom, XK - Kosovo, ZA - South Africa
- Architecture**: Historical, Listed building - new, Listed building - old, Modern, Modern classic, Old, Old & new
- Accommodation**: Apartment, B&B, Hotel, House, Resort
- Sustainability**: Eco Hotel, Energy efficiency, Own agriculture, Sustainable materials

Buttons at the bottom: Show properties, Simple search, Reset filter

External search engine for free booking periods: the data is generated by the API defined in Structr.

„The flexibility and performance of Structr never fails to impress us. Structr also made it possible to get our booking tool up and running in a short time.”

— Jan Hamer

Founder and Curator of URLAUBSARCHITEKTUR

___ ABOUT STRUCTR

The graph experts at Structr GmbH offer an integrated low-code development and runtime environment for web-based enterprise applications in which the entire definition of an application, from data model to business logic to user interface, is mapped in a graph database.

This unique approach enables unprecedented speed and flexibility in application development and maintenance, resulting in enormous time and cost savings. Structr stands for sustainable information management that creates good working environments.

The Structr team supports customers worldwide in projects and creates integrated, holistic solutions that can be easily expanded and adapted to individual circumstances at any time.

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