

Hilton Head Site

The site was designed by Key-Soft.Ltd as a service site for vacation rentals. Here customers can easily find a place where they can spend their leisure time. This site offers a really large database of vacation rentals and we provide a powerful content management system, so all these services are at your full disposal.

Feature list

The main feature of the site is the site **content management system** that was specially developed for this particular site. Also we developed an **interactive map** using up-to-date flash technologies. The central parameter of the search is an item, which is a basic unit for everything you see. The item means either a real estate or a restaurant.

Every item has its own characteristics such as location, address, price, etc. The map and the content management system use items as a central element to give information to users.

There were no existing solutions on the market when we started to develop it.

In order to meet our client's high requirements, we decided to offer our brand new framework **Sophit**, which occurred an ideal solution for these purposes.

Sophit

Sophit is a PHP framework that has been built by Key-Soft for easier and faster implementation of PHP projects. Sophit is built as a set of plug-ins around one smart framework, and so it re-uses the components and reduces the time and cost of development. Sophit was greatly appreciated by our clients. Basically all our projects that

MODIFY PROPERTY	
What is your name (optional)?	<input type="text"/>
What is your email address (optional)?	<input type="text"/>
What is your phone number (optional)?	<input type="text"/>
What is your relationship (if any) to the listing you are correcting or adding (optional)?	<input type="text"/>
Questions/Comments (optional)?	<input type="text"/>
<input type="checkbox"/> I am the owner of this listing/business, please contact me to discuss further advertising (menu, video, virtual tours, coupons, etc.)	
<input checked="" type="checkbox"/> Check this box if this listing no longer exists	
OR	
Edit the listing as you think it should be	
Title:	601 Tennismaster
Property Description (for enhanced properties only):	A spectacular townhome in Shipyard situated on a lagoon and golf course. Recently upgraded throughout, this townhome has it all!

Pic. 1 Edit Item Form

Content management system

We designed a powerful CMS for this site that provides abilities to manage such entities:

- Users (administrators, customers, registered users).
- Sections.
 - Properties (Real Estate, Vacation Rentals, Restaurants, and other listings).
 - Video files and images assigned to properties.
 - Virtual tours.
- Browse requests for properties and for magazines.
 - Create mailing lists.
- Articles, Surveys, Events.
- Related websites, Lead spots, Banners, Ads.

There are two main parts to manage the system: a user part and an item part. Especially for this site, we implemented a multi criterion search (for details see a search passage below). As characteristics of items can change, CMS should be able to change automatically and enable editing new characteristics.

Multi user access

The site admits of multi user access. There are two main cases:

- Every user can change information if he or she finds a misprint or a mistake in the address, but to avoid incorrect information the administrator monitors all corrections.
- Customers are divided into two groups: trusted and non-trusted. Trusted customers can change information without an additional permission. Non-trusted customers change information as general users only on the admin's permission.

Communication via site

Our solution provides a convenient opportunity for the members and visitors of Hilton Head site to communicate easily and effectively:

- **On-line** We use the open source solution craftysyntax.com.
- **Off-line** Users fill in a form on the site with all confident information safely protected from unauthorized access.
- **E-mail** We provide writing e-mails using our framework Sophit (read Sophit passage above)

<http://www.hirerussians.com/>

Search

We developed a multi criterion search for Hilton Head site. There is compound logic implemented that supports full-text search. The search we developed allows working with various criteria from range of price and text search to choosing options. The search is word-oriented and guarantees the most relevant results.



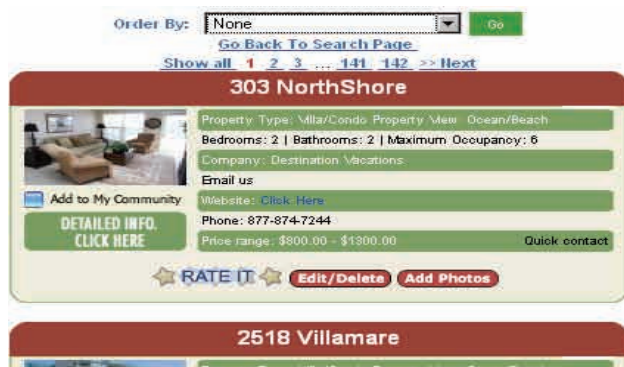
The screenshot shows a search interface titled "VACATION RENTAL LISTINGS". It features several dropdown menus for filtering: "Number of bedrooms" (set to 2), "Number of bathrooms" (set to 1), "Property type" (set to Any), "Location/view" (set to Ocean/Beach), "Community" (set to Forest Beach), and "Occupancy" (set to 3). A "Price" dropdown is also present, with a list of price ranges: Any, \$0 - \$500, \$500 - \$1 000, \$1 000 - \$1 500, \$1 500 - \$2 000, \$2 000 - \$3 000, \$3 000 - \$5 000, \$5 000 - \$10 000, \$10 000 - \$15 000, and \$15 000+. Below these filters is a "TITLE SEARCH" section with input fields for "Title (Sea Breeze, etc.)", "Address (3705 Villamare, etc.)", and "Location (Palmetto Dunes, etc.)", followed by a "Search" button. A "FLASH PLAYER" watermark is visible in the center.

Pic. 2 Search Form

We included several combo boxes into the search. Combo boxes are means of intellectual control. For every combo box, the system compares all the related information on all the items. The system works as follows:

- Looks through all items and their characteristics
- Finds out the necessary characteristic
- Summarizes all information
- Finds out the maximum and minimum values
- Makes a list of existing values and shows them in combo boxes.

We also made it real that users can share what they found out with their friends. Each step is memorized in the database, and the system forms a friendly link to make sharing easier. No more extremely long links! We optimized even that to the user's benefit.



The screenshot displays search results. At the top, there is an "Order By:" dropdown set to "None" and a "Go" button. Below it are navigation links: "Go Back To Search Page" and "Show all 1 2 3 ... 141 142 >> Next". The first result is for "303 NorthShore", showing a property type of "Villa/Condo Property", 2 bedrooms, 2 bathrooms, and a maximum occupancy of 6. It includes a "Detailed Info. Click Here" button, a "Rate It" star, and "Edit/Delete/Add Photos" buttons. The second result is for "2518 Villamare", with similar details.

Pic. 3 Results

Interactive Map

This Map is a separate project of Key-Soft's. It's done by means of flash technology. The Map uses the same database as a site.



Pic. 4 Map

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All items on the Map are grouped by colors, with each color assigned to the items of different kinds. We provide search for items using flash technology. If you point at one of the dots on the map, you'll see the information on what it is and its location.

Some technical features were developed on special customer's requirements. We made it possible that this map system could work with different other maps. We also implemented a mathematical model to calculate coordinates for special locations, which are stored in the database. All locations are calculated on this basis.

What is more, all items are placed automatically as they have exact addresses: the map locates the items exactly where they can be found. Because of the calibration engine, this mechanism can work with other maps as well.

Visitors can create their own dots on the map together with an appropriate description, and all the related information will show in a special pop-up form after you click on "My map" button.

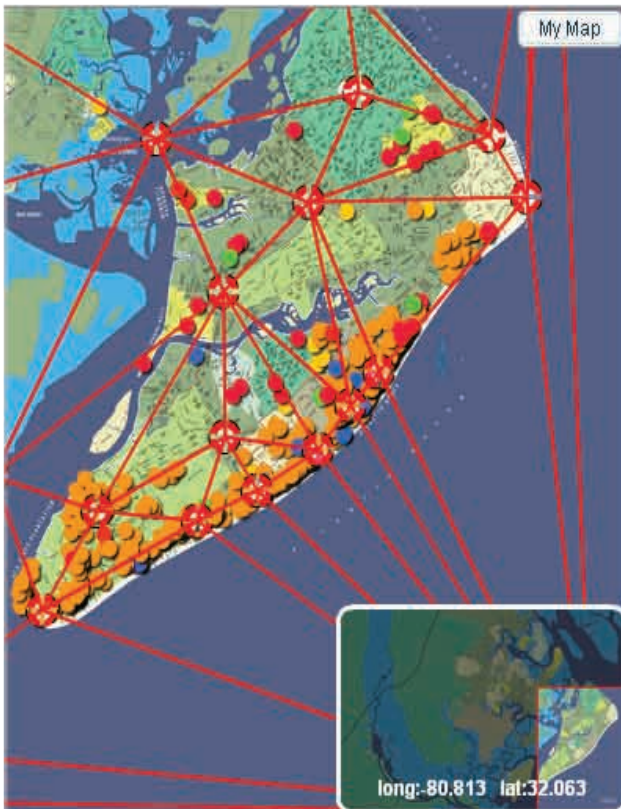
<http://www.hirerussians.com/>

This map has its own administrator. Customers and the Administrator can edit items in flash directly.

The navigation is extremely easy as it was our special concern. Visitors can zoom in or out the map to see more details. They can choose dots according to different categories from a drop-down menu, e.g. only hotels could be shown or only vacation rentals.

Visitors might want to send some information together with the map to their friends. Now they have such an opportunity. The technology which allows it is similar to wikimapia technology. Users easily share their own map information with everyone they want.

Therefore, it is possible to add new items to different maps. As a result, this technology can be applied in different projects that require maps.



Pic 5.Math Model

Technologies Used

PHP, Sopot, Flash, MySQL.

Senior Developer



Alexey Kupershtokh received his BS in Mathematics (Information Technologies) from Novosibirsk State University. He works as a PHP Technologist for Key-Soft / Hirusians. Alexey is particularly known as an innovative person devoted to internally graceful solutions. Also he is frequently engaged in projects requiring additional research.

References

"We have been working on projects with Key-soft for about 2 years now. We will continue to use them for all of our projects. They have continued to suggest improvements on what we are thinking and they have all turned out great!"

Jeremy Koch

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Summary

Key-Soft developed the content management system and interactive flash map for this particular project, and they, together with other worked out systems used in Hilton Head site project, can be implemented in others kinds of projects dealing with maps and search according to specific parameters.

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