GMI
An Idhasoft company
Vision Packaged. Delivered.

Case Study

COMMUNITY NETWORKING PORTAL FOR REGIONAL GROUPS

idhasoft™
Vision Packaged. Delivered

*"**Idhasoft** is a global world-class organization providing best-of-breed localized business and technology solutions, with continuous innovation and quality backed by best-in-class people"*

Client Requirement

The site will be a comprehensive social networking portal with particular focus on bringing together Chinese and English speaking users across the net.

The site will be designed in Chinese as well as English to add a certain amount of exclusivity to the portal.

The site will allow registered users to find old friends, meet interesting people, find romance, promote businesses or build new business connections.

Users will be able to create an accurate profile and manage friends lists based on different criteria to safeguard their privacy.

The site will offer a range of conveniences such as photo and video uploading, mail, blogs and forums, among others.

The site will provide easy navigation and user-friendly features to ensure access for members of all experience.

Challenges

Developing a community portal offering all the benefits of a social networking website with an exclusive focus on attracting Chinese and English speaking users.

Implementing and managing the exhaustive structure of the site in two languages i.e. Chinese and English.

Providing a robust framework for supporting the smooth functioning of uploads, mail, blogs and forums etc.

Sustaining good load balance for a feature-heavy website that is available 24/7 and accessed by thousands of users simultaneously.

Incorporating web usability principles while developing numerous features designed for enhancing the users' community networking experience.

Ensuring user privacy and safeguarding their content.

Technologies Used

PHP (Server-side Language)	Most appropriately suited to create dynamic web pages. Enables fast extraction of data out of a database for presenting it on the web page.
JavaScript and AJAX (Client-side Language)	Crossover browser support & faster loading time with light web pages that require no plug-in downloads. Scalable Javascript based controls to provide flexibility and enhance user experience and involvement.
MySQL Engine	Versatile, low-maintenance database management system. Cross-platform compatible database component of the LAMP platform.
Red Hat Linux	License-free, sturdy platform with powerful multitasking abilities. Open source code allowing for extensive customization.
Apache Web Server	Ideal for serving static as well as dynamic content on the web in a safe and secure manner. Supports a variety of features while offering extendable core functionality.

Manpower

Project Leader	1
Developers	5
Designers	2
Quality Assurance Testers	2

Planning

Keeping in mind the enormous structure of the website and the challenges involved, a four-tier development approach was adopted, consisting of:

- The Database layer containing MySQL Server Database, Tables, stored procedures and so on.
- The Interface layer and Database Abstraction layer for converting data between incompatible type systems in databases and accessing data from the database respectively.
- The Business Logic layer consisting of all business logic procedures for modules like User Profiles, Invitations, Forums and Blogs etc.
- The User Interface Layer which forms the Graphical User Interface of the website.

Architecture

The design approach was built around PHP and MySQL Server due to the social networking nature of the website. Modules like User Profiles, Invitations, Forums and Blogs were developed in PHP such that they can be executed directly from the UI layer. In order to most effectively access the database in an object-oriented context, an interface translating the object logic to the relational logic was used to communicate with the relational databases in an object-oriented manner. An intermediary abstraction layer was created for accessing data from the database. Stored procedures were used only for complex retrieval of data from multiple tables and were entirely avoided with conditional syntax to ensure smooth performance of the website. The UI layer was kept free of any business logic with images, applications and data being called from their respective servers. Sub-domains were used for the different areas of the website to guarantee scalability.

Development Highlights

Smooth performance of the site in two languages was ensured through the implementation of a robust and scalable framework. The site architecture was designed to enable the 'faster to market' transition which is highly imperative for social networks. Optimized query features were incorporated along with stratified directory structures, effectively providing greater ease for users while accessing various options and data. Web usability guidelines were strictly followed during development and the interface was made easily navigable through judicious use of AJAX, CSS and HTML controls. The site was developed and fully functional within a span of 6 months.

Client Feedback

“GMI and its team did exactly as they said and delivered more. They are a wonderful group of people and terrific to work with as well. I will definitely work with them in the future. Hire them with confidence.”