

Case Study



COMMUNITY NETWORKING SYSTEM FOR SOCIAL GROUPS



“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 capable of connecting registered users to numerous group networks present online.

The site will be an active online community where registered users can find jobs, advertise, participate in various events or simply connect with friends.

The site will be expected to offer a powerful search feature for users to locate groups, individuals, jobs and events based on different types of criteria.

The site will provide extensive customization of profile, access to mail, managing favorites and ranking & blocking of members to facilitate maximum user interaction.

Challenges

Developing an active social networking portal capable of handling millions of users at the same time without slowing the site down.

Implementing a reliable framework that instantly connects users with groups, individuals, events and other happenings across the web.

Synchronizing and incorporating an extensive list of features designed for enhancing the users' community networking experience.

Providing and maintaining the database of a range of interactive features like mail service, blogs and forums to ensure user participation.

Incorporating web usability principles in the website design to ensure easy navigation for all types of users. Ensuring data and content security.

Technologies Used

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

Manpower

Project Leader	1
Developers	4
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:

- o The Database layer containing MySQL Server Database, Tables, stored procedures and so on.
- o The Interface layer and Database Abstraction layer for converting data between incompatible type systems in databases and accessing data from the database respectively.
- o The Business Logic layer consisting of all business logic procedures for modules like User Profiles, Invitations, Forums and Blogs etc.
- o 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. In addition to this, the development structure was specifically implemented to facilitate the 'faster to market' transition of such concepts. 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

Privacy and security of content was ensured through greater accuracy in handling user status, user statistics and other user-related validations. Optimized query features offered comprehensive search & browse options. The entire framework was kept highly scalable in order to provide adaptability & ease while incorporating new features. Web usability guidelines were strictly followed during development and the interface was made easily navigable through judicious use of CSS and HTML controls. The site was developed and fully functional within a span of 5 months.

Client Feedback

“Very rarely does one encounter a company that delivers a high quality output with excellent round the clock support. We are very pleased with the job done by GMI and we will highly recommend them to anyone who is looking for consistency and quality in offshore development.”