



**GREY MATTER INDIA TECHNOLOGIES  
PRIVATE LIMITED**

[www.greymatterindia.com](http://www.greymatterindia.com)

**CASE STUDY**

**COMMUNITY NETWORKING PORTAL FOR  
REGIONAL GROUPS**

## CLIENT REQUIREMENT

The client required a comprehensive social networking portal with particular focus on bringing together Chinese and English speaking users across the net. The site would be designed in dual linguistic support with Chinese and English languages to add a certain amount of exclusivity to the portal. The site would enable registered users to find old friends, meet interesting people, find romance, promote businesses or build new business connections. Creation of accurate user profiles and management of friend lists based on different criteria to safeguard their privacy would also be provided by the site. Also a range of conveniences like photo and video uploading, mail, blogs and forums etc...would be included. Members of all experience levels would be ensured access through provision of easy navigation and user friendly features.

## CHALLENGES

- Development of a community portal offering all the benefits of a social networking portal with an exclusive focus on attracting Chinese and English speaking users.
- Implementation and management of the exhaustive structure of the site in two languages i.e. Chinese and English.
- Support for smooth functioning of uploads mail, blogs and forums etc... through the provision of a robust framework.
- Access to thousands of users simultaneously and sustaining good load balance for a feature heavy website that is available 24x7.
- Incorporation of web usability principles for enhancing the user's community networking experience.
- Ensuring the privacy of the user and safeguarding the 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)	(Client-side Language) Cross 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	A versatile low maintenance database management system which acts as a cross-platform compatible database component of

	the LAMP platform.
Red Hat Linux	License free, sturdy platform with open source code for extensive customization and with powerful multitasking abilities.
Apache Web Server	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

The enormous structure of the website and the challenges involved necessitated the adoption of a four-tier approach that consisted of

- MySQL Server Database, Tables, stored procedures etc... incorporated within the database layer
- The data conversion between incompatible type of systems in databases and accessing data from the database through the Interface layer and Database Abstraction layer respectively.
- All the business logic procedures for modules such as User Profiles, Invitations, Forums and Blogs etc... forming the Business Logic Layer.
- The GUI of the website formed by the User Interface layer

## ARCHITECTURE

The website was mainly characterized by social networking nature which entailed a PHP based design approach involving MySQL Server. PHP was used to develop modules like User Profiles, Invitations, Forums and Blogs such that direct execution from the UI layer was possible. Effective access to the database in an object oriented context was implemented using an interface translating the object logic to relational logic so as to communicate with the relational databases in an object-oriented manner. Access to the data base was enabled through the creation of an intermediary abstraction layer. Only the complex retrieval of data from multiple tables was facilitated through stored procedures and everywhere else conditional syntax was implemented to ensure seamless performance of the website. Images, applications and data were called from their respective servers

keeping the UI layer free of any business logic and scalability was guaranteed by implementing sub-domains for various areas of the website.

## **DEVELOPMENT HIGHLIGHTS**

A robust and scalable framework was implemented to ensure the smooth performance of the site in two languages. The site architecture was designed to enable the 'faster to market' transition which is highly imperative for social networks. Stratified directory structures, effectively providing greater ease for users while accessing various options and data were incorporated along with optimized query features in the site. Web usability guidelines were strictly adhered to during the development and the interface was easily navigable through the judicious use of AJAX, CSS and HTML controls. Search Engine Optimization activities were regularly resorted to with a view to ensuring high visibility for the site over the internet. 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."