



**GREY MATTER INDIA TECHNOLOGIES  
PRIVATE LIMITED**

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

**CASE STUDY**

**SOCIAL NETWORKING PORTAL FOR  
URBAN GROUPS**

## CLIENT REQUIREMENT

The client envisioned a fully comprehensive social networking portal for urbanites, capable of connecting people through cities, metros and common interest places like restaurants, theatres etc... The site would offer a comprehensive online community experience through a host of convenient features like customization of profile, instant messenger and mail access, managing favourites and ranking and blocking of members. User activity in the community over the web would be enhanced by providing the ability to upload pictures, write blogs and create blurbs. User participation was the crux of the site and hence it would also offer search options and creation of groups, forums & events.

## CHALLENGES

- Development of a robust framework for the site which endows it with the capability to handle million of users simultaneously without any performance issues.
- Development and incorporation of an extensive list of features designed to enhance the user's community experience.
- Synchronization of the integrated features and options to function smoothly while being executed simultaneously.
- Ensuring easy navigation through the implementation of web usability principles in the website design.
- Maintaining load balance and ensuring that the site operated at optimum speeds even in peak traffic hours.
- Ensuring safe and secure transfer of data.

## 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	4
Designers	2
Quality Assurance Testers	2

## **PLANNING**

A formidable and credible prior experience in the design and conception of full-fledged community portals led GMI to adopt a four tiered approach to development starting with:

- MySQL Server Database, Tables, stored procedures etc... incorporated within the database layer
- The libraries responsible for accessing data from database are contained in the data access layer.
- All the business logic procedures for modules such as User Profiles, 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 rich user data and featured extensive capabilities for social networking which entailed a PHP based design approach involving MySQL Server. PHP was used to develop modules like User Profiles, Invitations, Forums, Blogs and other modules such that direct execution from the UI layer was possible and the corresponding PHP files consisting of the business

logic for respective modules like Save (Add/Update), Delete, Get Single Object, Get Multiple Objects for listing were designed to possess the capability to handle much more logic not related to the database. The libraries responsible for accessing data from database and building a generic query for insert, update, delete and select depending on the business class were contained in the data access layer and all business layer components were coded to use this library for data accessing process from the database. 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**

The system design was targeted to provide greater ease for users while dealing with user statistics and other user-related validations, with greater accuracy in handling user status. The site architecture was implemented and developed through the planning to assist the 'faster to market' transition of such concepts. Comprehensive search and browse options were realized under optimized query features to offer greater freedom to users. 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 5 months.

## **CLIENT FEEDBACK**

"In my experience, GMI has mastered the challenges facing outsourcing today. Specifically, their communication and availability are amazing. After having done this many times, I can tell you that this is the key to a good outsourcing relationship. In terms of technical ability, GMI was great. From mobile to social networking to advanced search features, they did it all for us. In every case they gave me a list of examples of previous work, so I knew they knew what they were doing. Most importantly, management at GMI works with honesty and integrity, the kinds of people I'd hire in my organization if it wasn't for the commute. They really went above and beyond. Thanks GMI."