



**GREY MATTER INDIA TECHNOLOGIES
PRIVATE LIMITED**

www.greymatterindia.com

CASE STUDY

**YELLOW PAGES BASED BUSINESS
NETWORKING PORTAL**

CLIENT REQUIREMENT

The client required a 'Yellow Pages' based social & business networking portal exclusively aimed towards helping people find the right services on the net. The system would gather people's collective intelligence through its online 'Yellow Pages' resource and network them to locate the best possible businesses. The client wanted the site to stand as the ultimate resource for locating local businesses as it would offer a slew of features like Google Maps, location-centric searches and extensive user reviews in the form of articles, images and videos. The system would include a community section wherein the users would be encouraged to create an accurate profile and build a trustworthy community that helps them find and offer reliable services on the net. Enhanced offline interactions between users would be facilitated with a range of tools that would include bidding tools to get the best deals. To ensure and grant access to members belonging to all levels of web experience, the site would provide numerous customization options with easy navigation and user-friendly features.

CHALLENGES

- Development of a fully comprehensive business portal offering all the benefits of a community website along with crucial business locating features such as Google Maps, video reviews and bidding tools among others.
- The smooth handling of millions of records and provision of space for an increasing business inventory through the implementation of a highly flexible & robust database.
- Providing a robust framework for handling extensive amounts of data, ratings, statistics and options like bidding etc...
- Providing for state-of-the-art load balancing features for a 24x7 accessed site.
- Incorporation of web usability principles while developing numerous features designed for enhancing the user's 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
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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	3

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 conversion of data between incompatible data type systems in databases and accessing data from the database done through the Interface 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 extensive yellow pages based database features 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. 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

Fulfillment of the business networking aspect of the site was done through the equipping of a sturdy architecture with an exhaustive yellow pages database. Superior query features were included to synergize the optimized database to offer accurate results through comprehensive search & browse options. Inclusion of Google Maps and image accompanied reviews were included to enhance category based and location centric searches. User participation and ensure the authenticity of reviews through the employment of numerous user and service ranking tactics. Users could locate the best services for cheap with the help of extensive bidding options provided by the site. The site was equipped with numerous video options for supporting video reviews of services besides the usual integration of coupons system. 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

"GMI is clearly levels ahead of their competition and I am glad to have located them. Having worked with other outsourcing companies before, I am pleasantly surprised by the GMI level of preparation and documentation that goes into their projects. I am fortunate to have found them and look forward to a long term relationship with them on all my future development projects."

