



**GREY MATTER INDIA TECHNOLOGIES
PRIVATE LIMITED**

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CASE STUDY

**SMS & MMS BASED MOBILE COMMUNITY
PORTAL**

CLIENT REQUIREMENT

The client envisioned an exhaustive mobile community that makes it possible for users to send SMS or MMS from the web or their mobile phone to any phone in the world. The system would encourage users to build profiles, search for friends and actively participate in the mobile community. Features like photo galleries, buddy lists, guest books along with provisions for creating and joining groups would be supported by the system. Provision for a chat option to enhance interaction between users would also be incorporated within the system.

CHALLENGES

- Development of a wireless community networking system that encourages and motivates users to build communities through sending SMSs and MMSs from the web as well as the mobile.
- Smooth handling of the extensive features offered by the system through the development and implementation of a wireless framework.
- Incorporation of range of usability enhancements like photo galleries, buddy lists, guest books, group management and chat option, among others.
- Implementation and management of an exhaustive database of user profiles and user related statistics.
- Implementation of stringent security measures for safe handling of vast 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
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.
Rational Rose Enterprise Edition	Integrated tool best suited for modular architecture and iterative development

	of software.
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MANPOWER

Project Leader	1
Developers	4
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 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, Groups and Registration Info 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 wireless community portal development which entailed a PHP based design approach involving MySQL Server. PHP was used to develop 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

Along with the normal SMS and MMS support through web and mobile, the system also provided extensive wireless surfing capabilities. A multi-linguistic support was imbibed by the site and the adaptable code structure was made capable of integrating new language bases. The provision of greater options for conducting transactions was implemented through the enabling of different payment gateways. AJAX-based chat system was developed to offer enhanced chat functionality. A much superior control was established by the system over user profiles, with reports and statistics that could be generated as a PDF file for greater convenience. The system was developed and fully functional within a span of 5 months.

CLIENT FEEDBACK

"...professional, technocrats, quick and friendly. Their commitment to the timely delivery, sound competency pool and superior project management skills are over whelming. Definitely we would look forwards to working with them again in the future..."