



**GREY MATTER INDIA TECHNOLOGIES
PRIVATE LIMITED**

www.greymatterindia.com

CASE STUDY

**SMS & MMS BASED MOBILE COMMUNITY
PORTAL**



CLIENT REQUIREMENT

The system will be an exhaustive mobile community that makes it possible for users to send MMS or SMS from the web or their mobile phone to any phone in the world.

Users will be encouraged to build profiles, search for friends and actively participate in the mobile community.

The system will support features like photo galleries, buddy lists, guest books along with provisions for creating and joining groups.

The system will also provide a chat option to enhance interaction between users.

CHALLENGES

Developing a wireless community networking system that encourages users to build a community through sending SMS and MMS from the web as well as the mobile.

Developing and implementing a wireless framework that smoothly handles the extensive features offered by the system.

Incorporating a range of usability enhancements like photo galleries, buddy lists, guest books, group management and chat option, among others.

Implementing and managing an exhaustive database of user profiles and user-related statistics.

Implementing stringent security measures to safely handle the 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	Versatile, low-maintenance database management system. Cross-platform compatible database component of the LAMP platform.
Red Hat Linux	License-free, sturdy platform with powerful multi-tasking abilities. Open source code allowing for extensive customization.
Rational Rose Enterprise Edition	Integrated tool best suited for modular architecture and iterative development of software.

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:

The Database layer containing MySQL Server Database, Tables, stored procedures and so on.

The Data Access layer containing the libraries responsible for accessing data from database.

The Business Logic layer consisting of all business logic procedures for modules like user profiles, groups and registration info etc.

The User Interface Layer which forms the Graphical User Interface of the website.

ARCHITECTURE

PHP and MySQL Server formed the basis of development as the site was rich with user data and featured extensive capabilities for wireless community portal development. Modules were developed in PHP such that they can be executed directly from the UI layer. These PHP files consisted of all Business logics used for respective modules like Save (Add/Update), Delete, Get single object, get multiple objects for listing and were designed to be capable of handling many more logics which were not related to the database. The Data Access layer contained the libraries responsible for accessing data from database and built a generic query for insert, update, delete and select, depending on the business class. All business layer components were coded to use this library for data accessing process from 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

Besides the option of sending SMS and MMS through the web or the mobile, the system provided extensive wireless surfing capabilities. Multi-linguistic support was incorporated into the site and the adaptable code structure was made capable of integrating new language bases. The site was enabled with different payment gateways to provide greater options for conducting transactions. AJAX-based chat system was developed to offer enhanced chat functionality. The system also provided superior control over user profiles, with reports and stats 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 forward to working with them in future ..."