

Case Study



HEALTHCARE BASED SOCIAL NETWORKING PORTAL



“Idhasoft is a global world-class organization providing best-of-breed localized business and technology solutions, with continuous innovation and quality backed by best-in-class people”

Client Requirement

The site will be a comprehensive social networking portal with an exclusive focus on bringing together people interested in fitness, slimming & body toning.

The site will allow registered users to locate other registered users with similar fitness-related goals, helping them to cooperatively achieve their goals together through sharing of experiences and knowledge.

The site will provide extensive options for users to create an accurate profile and manage friends lists based on different criteria like diet, fitness, activity, gender etc.

In order to facilitate the sharing of tips, exercise modules, diet information etc. the site will offer a range of conveniences such as photo uploading, mail, blogs and fitness forums, among others.

The site will provide users with numerous options to safeguard their privacy and the security of the content they upload.

The site will provide easy navigation with high browser compatibility to ensure access for users of all experience.

Challenges

Developing a fitness-centric community portal offering all the benefits of a social networking website with an exclusive focus on slimming, body toning and other fitness-related goals.

Implementing and managing the exhaustive criteria base through which the users can select their friends for similar fitness-related goals.

Providing a robust framework for supporting the smooth functioning of a comprehensive community portal accessed by thousands of users simultaneously.

Sustaining good load balance for a feature-rich website that is available 24/7.

Incorporating web usability principles while developing numerous features designed for enhancing the users' community networking experience.

Ensuring user privacy and safeguarding their content.

Technologies Used

PHP (Server-side Language)	<p>Most appropriately suited to create dynamic web pages.</p> <p>Enables fast extraction of data out of a database for presenting it on the web page.</p>
JavaScript and AJAX (Client-side Language)	<p>Crossover browser support & faster loading time with light web pages that require no plug-in downloads.</p> <p>Scalable Javascript based controls to provide flexibility and enhance user experience and involvement.</p>
MySQL Engine	<p>Versatile, low-maintenance database management system.</p> <p>Cross-platform compatible database component of the LAMP platform.</p>
Red Hat Linux	<p>License-free, sturdy platform with powerful multitasking abilities.</p> <p>Open source code allowing for extensive customization.</p>
Apache Web Server	<p>Ideal for serving static as well as dynamic content on the web in a safe and secure manner.</p> <p>Supports a variety of features while offering extendable core functionality.</p>

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:

- o The Database layer containing MySQL Server Database, Tables, stored procedures and so on.
- o The Interface layer and Database Abstraction layer for converting data between incompatible type systems in databases and accessing data from the database respectively.
- o The Business Logic layer consisting of all business logic procedures for modules like User Profiles, Invitations, Forums and Blogs etc.
- o The User Interface Layer which forms the Graphical User Interface of the website.

Architecture

The online networking characteristic of the website called for the design approach to be built around PHP and MySQL Server. Modules like User Profiles, Invitations, Forums and Blogs 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. In order to most effectively access the database in an object-oriented context, an interface translating the object logic to the relational logic was used to communicate with the relational databases in an object-oriented manner. An intermediary abstraction layer was created for accessing data from the 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

The site was equipped with a robust architecture to offer centralized access for numerous fitness monitoring statistics such as calorie counter, recipes, blogs under one roof. An extensive database of statistics and graphs was incorporated to provide systematic weight loss tracking details. Customizable viewing options were designed to enhance user experience and allow for extensive personalization of the site. Extensive pre-development research was carried out to make the entire database compatible with USDA food standards. SEO activities performed ensured high visibility for the site over the internet. Web usability guidelines were strictly followed during development and the interface was made easily navigable through judicious use of AJAX, CSS and HTML controls. The site was developed and fully functional within a span of 5 months.

Client Feedback

“The most professional and high-quality partner we have encountered so far. GMI has built a successful Social Networking Portal for us and we can safely say that are best in the field. Outsourcing at its best.”