



Case Study



Icreon

A social networking website for the real estate industry

Our client required a solution that would provide individuals and businesses, associated with the real estate industry, with an online platform to connect and interact with one another. Business could use the website as a platform to advertise and showcase their services to customers and also connect with the customers in a cost effective manner thereby helping them to expand their business. Customer can use the website as a platform to connect with and share experiences with others and also gain awareness about various services being offered. Based on the requirements, Icreon developed an online social network wherein people associated with the real estate industry could meet and connect with one another. The solution has been developed using the Ruby on Rails framework.

Business Requirements

Our client wanted a web based solution that would target the real estate industry. The solution was to provide both individuals as well as businesses with a common platform to interact with each other. Options for both free and paid membership were required, with the individuals being able to register for free and businesses being provided with the option to subscribe and create their business profiles. Standard social networking features such as the facility to upload photos, videos, contact members, friend lists, comments, rating etc were required to be built into the solution. The facility for the administrator to oversee the functioning of the website was required.

A web based solution for people and businesses to connect

Icreon developed the website using Ruby on Rails. The website provides the real estate industry with the ideal tool to build personal and professional networks.

Challenges:

Some of the challenges we faced and overcame include:

- Modifying the underlying code of the Paperclip and ImageMagick components to meet the requirements of the project
- Integrating components from the MooTool with JQuery to enable those components with JQuery

Solution:

The solution has been divided into two modules:

- **Public Website:** Used by people/business to interact with one another.

- **Administration Module:** Used by the administrators to manage the network

Public Website

Accessible to all, the public website allows individuals and businesses to register with the community, post their profile and build a network of friends/clients. Membership to the network is available free-of-cost to individuals, however businesses need to pay to create and post their business profiles. A payment gateway has been integrated with the solution allowing members to themselves pay for, manage and track their subscriptions online.

Each member of the website (both individuals and businesses) has access to a personalized area wherein they can update their profiles, send/receive messages from other members, manage their friend-lists etc. The solution provides members with the means to create exhaustive personal profiles detailing information such as work information, education, contact details, quantifications, business information, and certificates etc (the data that can be entered will vary for individual and business users).

An extensive search mechanism has been provided allowing members to find one another. Members can build their network by sending out friend requests to other members of the network or by inviting friends to sign-up. While sending out sign-up invitations, members can either manually enter the details of the contact(s) to whom the invite it sot be sent out or can import contacts from their e-mail accounts (such as yahoo, hotmail, Gmail etc). An internal messaging system has been provided allowing members to communicate with one another.

Members are provided with the facility to crate workbooks - a combination of photos (uploaded by the member) and videos (embedded you-tube videos). These workbooks can then be shared with others on the network. The workbook owner can set the sharing level (share will all, with friends only etc) for each workbook. Members visiting another's workbook can rate and post comments on the workbook as a whole or on individual photos/videos. Options to tag specific areas of a photo to specific people (on/off the network) have been provided. Members can choose to receive e-mail notifications for various events e.g. friend request sent/received, comments, photos tagged etc. Additionally members have also been provided with the facility to report offensive content to the administrator.

The solution also includes a third-party discussion forum that allows members to share their views and opinions on specific areas of interest.

Administration Module

The solution includes a web based administration panel that can be used by administrators to manage the functioning of the website. The module is password protected and can only be accessed by authorized users. Through the module the administrator can track and manage all website user accounts (i.e. edit their details, activate/deactivate/delete account etc).

All content appearing on the website can be updated and managed through the administration module. Facilities for the administrator to manage the advertisement banners appearing on various pages of the website. The administrator can monitor all the workbooks that have been created by website members.

The administrator can generate various reports to monitor the performance of the website. Some of the reports include: registered users by member type, payments due and number of friend requests sent etc. All reports can be generated for a specific time period and are available for download as a PDF document. The administrator is provided with the facility to send out newsletters to subscribed members. Options to

customize the subscriber list have been provided. The administrator can also manage the discussion forums. The admin is the only one who can create a forum.

Technical Details:

Technology Used



The solution follows MVC architecture, making it easy to maintain. Prototype framework has been used for JavaScript. SVN has been used for version control. We have made use of Capistrano deployment tool to ease the process of deploying websites on remote servers

Components Used

Various Ruby on Rails components have been integrated with the solution. These include:

Contacts:	Contacts has been used to enable users to import their contacts stored in various e-mail accounts such as Gmail, Hotmail, Yahoo etc.
WhiteList	The WhiteList component has been used to avoid malicious attacks due to HTML/JavaScript injection and CSRF (Cross-site Request Forgery)
Access Control:	Has been used to provide role based access within the website.
Paper Clip:	Has been used as an easy file attachment library for ActiveRecord.
JRails:	Has been used to provide RIA functionalities
Exception Notifier:	This component allows us to send e-mail alerts when any exception occur within the application
Action Mailer:	Action Mailer has been used to send out e-mails
Asset Packager:	Allows for compression of JavaScript and CSS files to improve performance and reduce traffic.
AuthLogic:	Is used to provide for user authentication
ReCAPTCHA:	Has been used to implement CAPTCHA technology to prevent spamming from automated scripts.