

MyFamilyReunion -- DesignFest Problem

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Abstract

The problem is to design and implement a platform for communication for family and friends. For simplicity, henceforth, the term family and group have been used interchangeably. The application should enable members of the family to post messages, share photos, maintain group calendars and address books, send group emails, view latest logins of all the other members and chat with any of the members who are online.

Description of the Domain

This is a web-based application, where members log on to the system in order to visit their family page. Initially, the group is started by one member of the family, who is given ownership status. He/she is given the privilege of adding anyone he wants to. All members can then visit the family page by selecting their family name and specifying their user name and password.

Description of the program that is wanted

When a user goes to MyFamilyReunion.com, he is given the option of creating a new family or logging on to an existing family. A user who chooses to create a new group is then taken to the registration page and is prompted to fill out the registration form. At the end of the process, he chooses his login name, password and a family name. He then logs on to the system and is taken to his family page. Here, he can add family members, post

messages, share photos, store events in the calendar, add common contacts to the address book and send emails.

To add family members, the owner should be asked to input names of family members, their email addresses, login names and passwords. These are automatically inserted into the address book and emails are sent inviting the members to join the system. Members can be added by the owner at anytime, not just his first log in. On each member's first login, he is prompted to change his password and input details about himself, including his birthday. All birthdays are inserted into the calendar.

Each time a member logs on to the system, he is taken to his family's page and can use any of the features provided by the application, the details of which are explained in the next section.

Detailed Requirements

Log of Users: Each member's latest login date and time are displayed in this section.

Currently logged on users: Each member who is logged on to the family can see a list of other family members logged in at the same time.

Change Password: The members can change their passwords at any time using the Change Password button

Posting Messages: Each member can post short messages (less than 100 words) on the bulletin board of the family. All members who log on after the message is posted can view this message and reply to it if they want.

Sharing Photos: Each member can upload photos to the webpage to be viewed by all other members. A maximum of 100 photos can be stored at any given time, since the service is free, and resources are limited.

Address Book: Every member's name, address, telephone numbers and email ids are stored in the address book, to be viewed by other members. In addition, members can input contact details of non-members as common contacts.

Email: A logged on member can send emails to anyone in the address book, anyone whose details are not in the address book, and group emails to the entire group.

Group Calendar: The calendar contains birthdays of all members who have logged on and entered this information. Other events can be input by members of the group. On any given day, if an event is stored in the calendar, that event is posted as a message. In addition, if that day is the birthday of any member of the group, and automatic email message is sent to the member, wishing him for the occasion.

Online communication: Features like 'Chat' & 'Conference' enable the members of the family to communicate with each other. They can either chat with individual members of the group or they can chat in a 'Conference' with more than one member. The user can decide who he wants to chat with from the list of currently logged on members.

Use Cases

The number of people studying and working in places far away from their loved ones is ever increasing. There are email servers, photo sharing servers, chat servers and several other means of keeping in touch. Having all these features in a common place so that all of them are accessible at the same time reduces the time and effort required to keep in touch. Besides, keeping in touch with the entire family together, rather than individually is advantageous.

Creating a New group/family:

The user goes to www.MyFamilyReunion.com. From here, he clicks on the 'Create New Group' button. He is taken to the registration page. He is prompted to enter a group name and his personal details. Once all the fields have been entered, he is asked to choose a

user name (also called login name) and a password. Once a unique user name has been approved, he can log on using that.

Adding Members:

Only the owner of the group can add members to the group. He clicks on the 'Add new members' link and is taken to a page where he can enter names, email ids, user names and passwords of his family members. Invitation emails are immediately sent to the members just added specifying the family name, user id and password assigned to them.

Logging in for the first time:

A person logging on for the first time goes to www.MyFamilyReunion.com and selects the family that he wishes to log on to. In the log in page, he enters his user name and password. Now, he is prompted to enter his personal details like address, telephone number, birthday etc. The contact details are input into the address book and the birthday is stored in the calendar. Henceforth, he can log on without these formalities.

Posting Messages:

To post a message, the member clicks on the post message link. A small window pops up with the date, time and the member's name on it. There is a text area in which the user can enter his message. When the user clicks on the 'Post' button, the message appears on the family homepage as a Post-It note. Only the latest 30 messages are saved, out of which, only 5 appear on the homepage at a time. The rest are accessed using a 'Next' button.

Replying to a Message:

The users can also reply to a posted message. To reply to a message, the user clicks on the 'Re' button below the Posted message. A text box to type in the reply, the name of the member posting the reply and the time appears in a pop-up window. After typing the reply, the member clicks on 'Post' for the message to be posted. Threads of messages can be viewed by any member of the family, as long as that thread is present in the latest 30 saved messages.

Sharing Photos:

The member clicks on the 'Photos' link and is taken to a page where there are thumbnail images of all the photos that have been uploaded thus far. Below the thumbnail image, the name of the person who uploaded the picture and the date that it was uploaded are displayed. Clicking on the thumbnail image takes the user to the full size image.

The member can upload pictures by clicking on the 'Upload' link on the photos page. In the pop-up window, he may either type the name of the file with the path, or browse and select the file name. Once the picture is uploaded, it may be viewed by any member.

Accessing the Address Book:

From the family homepage, the user is taken to the address book page by clicking on the 'Addresses' link. On the address page, contacts that have been entered as well as the contacts of members are displayed. These can be edited by clicking the 'Edit' button that appears next to the name, or new ones can be added by clicking on the 'Add New' button. A form similar to the Contacts form in Microsoft Outlook or Outlook Express appears. On filling the form and clicking on 'Save', the new contact is added to the address book or the details of an existing contact are modified.

Inputting an Event in the Calendar:

A small calendar of that particular month appears in the family homepage. To enter events into the calendar, the user clicks on this shortcut and is taken to a page with a larger calendar. In this page, the user clicks on the particular date and types a description of the event next to the date. On that date, a message is posted in the message board with the description just typed.

Viewing the Calendar:

The user clicks on the miniature calendar on the homepage to enlarge it. Here he can view the calendar and add or edit event to it as in the previous step.

If the user wants to view the calendar for the previous or next month, he clicks on the 'Previous' and 'Next' links below the miniature calendar. Similarly the entire year's calendar can be viewed by clicking on the year name (Example: 2001, 2002...)

Emails & Group Email:

Users can send mails to the other members in the group by selecting their mail addresses from the Address Book. He selects the ids by just clicking on their names in the Address Book. He composes the mail. When he clicks 'Send', his mail is sent to all the selected members.

The user can choose the 'To All Members' option on the Address Book to send an email to all the members of the group.

Chat:

A list of members, who are currently logged on, is displayed in a column labeled as 'Online'. When a user logs on, his name is added to the list & he can see which other members of his family are currently viewing the page. He can then double click on the member's name with whom he wants to start chatting. In the chat window, he can send and receive messages.

Conference:

This feature enables more than one online member to chat in a group. The user starts a conversation with any one member as in the previous use case. In the chat window that appears, he clicks on 'File', 'Add member to Chat'. From the submenu, he clicks on the particular member's name and that person is added to the Conference. All messages typed in the conference can be viewed by all members in that conference window.

Similar Web-sites:

1. www.myfamily.com
2. www.groups.yahoo.com