Social Networking Website for College: A Social Website Based Approach
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Abstract: This paper discusses about the project implementation of social networking site for teaching and learning purposes. The type of social space available to users can provide a more personalized and interactive experience for educative purpose. The growing demand of engineers in the industry makes it very important for the students to know about the practical use of technologies that are taught in the college and also to know about the latest technology and projects that the industry works with. Thus, a platform where students can interact with the industry professionals would prove to be a great benefit for them. In this project a social networking site exclusive for the college has been created whereby students, faculty and selective people from the industry would be able to socialize and share their knowledge. Also it would be a hub to share information about all the ongoing activities in the college campus. This paper describes the features implemented in this project and presents a glimpse of how the website works.

Keywords - VESIT (Vivekanand Education Society’s Institute of Technology), SNS (Social Networking Site), privacy, wall, account.

1. Introduction
We know about the increasing use of social networking sites, people use various social media platforms depending on their requirements and interest. Social media is a dynamic platform that can be used in so many ways to share news, knowledge, entertainment etc. In this project a social media platform for college campus has been created where everyone associated with the college campus such as students, staff members, associated industry professionals and passed out alumni can socialize with each other and share their knowledge about academics, projects, placements and all other activities going on in the campus. The functions of various categories of users are going to be segregated and each category of user will have its own privileged tasks. A hierarchy of these categories of users is created such as The Principal, Industry professionals, General Staff, Passed out alumni, Current Students (in descending order) where. This hierarchy is designed in Bell Lapadula Configuration. It is very inconvenient for teachers to find students’ parent contact information, our website will have an exclusive option for teachers to find parent’s contact details with a click of button. All campus students when registering will compulsorily need to fill their parent’s contact details so that it becomes easy for teachers to contact them when needed. Also taking into account the fact that parent’s contact information is something which is too personal for a student this social networking site will not be allowing a particular student to view other student’s parent contact details as it can be misused. Similarly, students would not be able to view all the personal details of faculty or industry people. They’ll be only allowed to view the details which are relevant to them from academic or professional point of view. They’ll be able to view the research conducted by teachers, their department and subjects etc. It will promote teaching and learning through a more dynamic platform without causing any threat to privacy.

2. Literature Survey
2.1. Comparison of various social networking sites
We have gone through the features of various social networking sites and made a list of some basic functions which are or are not available in these sites. This analysis helped us to understand which social media we can refer to in order to add our desired features. The following table provides an overall summary for some of the most popular sites.
Table 1. Comparison study

<table>
<thead>
<tr>
<th></th>
<th>Facebook</th>
<th>Twitter</th>
<th>Google+</th>
<th>Myspace</th>
<th>LinkedIn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Largest social network with wide appeal</td>
<td>A platform where people get updates about people/organisation they find interesting</td>
<td>Integrates Google buzz and Google profiles</td>
<td>Focuses on music, art and other entertainment</td>
<td>Focused on connecting professionals with the purpose of sharing information and opportunities</td>
</tr>
<tr>
<td><strong>Privacy settings</strong></td>
<td>Privacy settings are highly customizable, allowing users to decide which information to share with which users</td>
<td>You can choose either public(default) or private account</td>
<td>Privacy settings are highly customizable, allowing users to decide which information to share with which users</td>
<td>Users between 13-15 are automatically private accounts. Older users can choose private or public account</td>
<td>Privacy settings are highly customizable, allowing users to decide which information to share with which users</td>
</tr>
<tr>
<td><strong>Website widgets and integration</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Photo sharing</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Video sharing</strong></td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Chat features</strong></td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Private messaging</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

2.2. Potential of social networking sites in education

As this social networking site focuses on collaborative teaching and learning, the above mentioned research has been done to come across the positive and negative impacts of SNSs which formed the basis to assist us in regulating our SNS. In this research, it was found that Facebook started in the campus of Harvard University. Its usage was exclusively designed for the members of the campus. It expanded to include other educational institutions such as schools, universities, colleges and organization. It was also noted that many librarians had joined Facebook for social reasons but later on it was also used for promotion of education and library related events. To add to it, there are other psychosocial benefits of SNS such as the facilitation of identity exploration, facility of social cognitive skills such as “perspective taking”, and to fulfill the need for social support, intimacy, autonomy, etc.

2.3. Comparison of faculty and student usage of social networking sites

The above survey shows the usage of a social media platform by students and faculty members. It was concluded that while a large percentage of students were active on Facebook, the teachers comparatively showed a lesser percentage. The inference drawn was that faculty members prefer to use E-mail for educational purposes. Facebook reveals all the personal details of a particular person and has all the friends and family connections. This might be a reason behind the less usage by teachers for academic purposes. As this social networking site is confined to the college campus activities, it will increase the likelihood of usage by the faculty members. This is the major
advantage of this project as it will promote the students and faculty alike to strengthen their educational communications and collaborations.

3. Design

![Block Diagram]

Fig 1. Block Diagram
Fig 2. Level 1 Data Flow Diagram
4. Implementation

4.1. home.php

This is the first page that would be displayed when a user opens the website. User will have two options: either to sign in if he/she is already a registered user or sign up if he/she is a first time user. In case of invalid username or password, the user will be informed about the invalid input and asked to enter it again. Similarly, unless and until a new user does not enters all the required details, he/she won’t be able to create his/her account.

Sample screenshot:

4.2. send_post.php

The wall page is the place where students and teachers would be able to post the information they want to. As soon as any information is posted, it will be visible to all other users who are within a user’s friend list. The news will be visible on screen in the descending order of their post time so the latest information will be displayed first. This will ensure that all the current and forthcoming college activities are immediately visible to users.
4.3. account_settings.php

This page allows user to change his/her account settings whereby the user would be given an option to change his/her password and update their profiles.

Sample Screenshot:
5. Testing

1. Login module: Following test cases were considered to ensure the working of login module

<table>
<thead>
<tr>
<th>Test case id</th>
<th>Test case</th>
<th>Expected output</th>
<th>Actual output</th>
<th>Test case result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Valid username valid password</td>
<td>Login success</td>
<td>Login success</td>
<td>Pass</td>
</tr>
<tr>
<td>2.</td>
<td>Valid username invalid password</td>
<td>Login failure</td>
<td>Login failure</td>
<td>Pass</td>
</tr>
<tr>
<td>3.</td>
<td>Invalid username valid password</td>
<td>Login failure</td>
<td>Login failure</td>
<td>Pass</td>
</tr>
<tr>
<td>4.</td>
<td>Invalid username invalid password</td>
<td>Login failure</td>
<td>Login failure</td>
<td>Pass</td>
</tr>
</tbody>
</table>

2. Search module: Following test cases were considered to ensure the working of search module

<table>
<thead>
<tr>
<th>Test case id</th>
<th>Test case</th>
<th>Expected output</th>
<th>Actual output</th>
<th>Test case result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Searching valid profile/page</td>
<td>Redirect to the requested page</td>
<td>Redirect to the requested page</td>
<td>Pass</td>
</tr>
<tr>
<td>2.</td>
<td>Searching invalid profile/page</td>
<td>“No such page found” message</td>
<td>“No such page found” message</td>
<td>Pass</td>
</tr>
</tbody>
</table>

3. Further, testing was conducted to check for the entries/retrieval of data into/from the database. Passwords stored in the database table were in the encrypted MD5 format and thus password security is ensured. News feed and messaging options were tested and found to work in expected condition.

6. Conclusion

By creating this website for college, it is aimed to strengthen the communication among users and make campus life more lively and exciting by combining academics and cultural activities. This social media platform will become an asset for the campus and can be used for various productive purposes. This social networking site can be further expanded to all the engineering colleges in the city whereby all engineering students and faculties would be able to connect and share their knowledge with each other. Also efforts can be taken to incorporate links to various journals which students and teachers can use to publish their papers and also get an access to other research papers. An android application can be developed as well which would enable users to access this social media through their mobile devices.
7. Acknowledgement

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8. References


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