

Design and implementation of cultural portal and promotion through social networks

Master of Engineering

in

Software Engineering

Submitted By **Vijay Singh Thakur**

(Roll No. 800931023)

Under the supervision of:

Dr. Mrs Seema Bawa

Professor CSED, Thapar university, Patiala



COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

THAPAR UNIVERSITY

PATIALA – 147004

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Certificate

I hereby certify that the work which is being presented in the thesis entitled, "Design and implementation of cultural portal and promotion through social networks" in the partial fulfillment of the award of degree of Master of engineering in software engineering submitted in Computer science and engineering department of Thapar University, Patiala, is an authentic record of my own work carried out in under the supervision of Dr.(Mrs)Seema Bawa, and refers other researcher's work which are duly listed in the reference section.

The matter presented in this thesis has not been submitted for the award of any other degree of this and any other university.

Vijay 17-6-11
(Vijay Singh Thakur)

800931023

This is to certify that the above statement made by the candidate is correct and true to the best of my knowledge.

Seema Bawa
17/06/2011
Dr.(Mrs) Seema Bawa
Dean, Student affairs,
Professor, computer science and
Engineering department, Thapar University,
Patiala, Punjab

Countersigned by

Dr. Maninder Singh
17/06/11
Dr. Maninder Singh
Head, computer science department,
Thapar University, Patiala

Dr. S.K. Mohapatra
Dr. S.K. Mohapatra
Dean, Academic affairs
Thapar University, Patiala

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I am eternally grateful to my parents and God for keeping me consistent through all ups and downs

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I am eternally grateful to my parents and God for keeping me consistent through all ups and downs.

I appreciate social networks for providing some add-ons and simple API's for integration and development.

Vijay S. Thakur

Abstract

This report presents an introduction and literature survey of various social and cultural computing paradigms, whether related to conscious, subconscious and unconscious mind. Starting with the different paradigms like social computing, what is this, its effect over society, use of various social networking site and various other factors are discussed. Afterwards this report represents various records and data collected through literature survey. These records presents the various effects of social computing specially. Report targets the youth to lay the importance of cultural computing and why there is need of adoption of better approach to cultural computing to spread the awareness. Report also put some light on evolution of social and cultural computing and the technologies and platforms related to them. After concluding from several research papers report also emphasizes that why cultural computing is important for the social transformation of youths and society. From literature survey this report also concludes the eastern and western thought process and cultural aspects related to both the east and west. This report also gives examples of projects that were successfully carried by both. Apart from that it also describes various cultural theories from researchers and their way of thinking philosophically. Finally this report takes the Indian perspective and describes about Indian culture. Report also conclude to find a way to address youth and what possible implementation we should do to have it done in a better way so as we can effectively represent Indian culture worldwide.

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Introduction

Web technologies have emerged with a tremendous potential and capabilities for online environments. Most of these are capable of providing online social environment whether it will be on a large or on a small scale. There is a flood of social networking sites all around the world, many of these are very popular among the most communities in the world. Few examples include Facebook, linked in, orkut from google. There are also some various types of other social sites like myclick, flicker which allows to share your photo and multimedia at large scale. YouTube is one of the most successful site in this category.

These sites provide many facilities to share contents for each user. Users can get the free registration and start to have their own social network and groups. This sharing of content and information in social perspective led to the concept of social networking, where you can have your say. Social computing means the use of various tools, platforms and software's built over them to perform various computing tasks in a collaborative environment. We can share our data through social computing tools, all these environments support online collaboration up to certain level.

Social computing paradigms lead the way for cultural computing and its theories. We can say we can have a better representation of cultural computing and its definition with help of social computing theory.

Cultural computing is the social transformation of society or communities based over the cultural beliefs of the particular region by using various information and communication technologies. Every culture has its own beliefs and customs. So we have forwarded the concept of cultural computing with help of social computing paradigm. Cultural computing theories are still evolving and are in a pre mature era.

Here we are discussing how to use information technology to promote and understand the Indian culture. And want the people and especially youth have their say over this.

How to represent the cultural information over the web to attract and to ignite the interest of people in Indian culture.

1.1 HCI

Human-Computer Interaction (HCI) has evolved over more than five decades. Although the history of HCI[17] is rich and complex, in late nineties we experienced a flood of rich media based interactive systems. More recently, at the turn of the century, HCI was about the social computing paradigm with community mediated interaction. Social computing gives the power of collaborative computing, with many easy to use tools corporations also entered this arena and gain huge profits of social computing platforms. Social computing tools were basically built around web 2.0 model. With pervasive computing model social computing is witnessing some of the good interactive models on the move, mobile phones have the features to use social networking platforms and this can be used under most of the coverage areas. After Social computing comes the concept of cultural computing. Some time it is termed as kansei mediated communication in the eastern countries, like Japan (e.g., unconscious communication). It is a combination of Kansei Communication (i.e., ‘content’) and Kansei Media (i.e., ‘form’). [19].

Cultural aspects are dependent and different in different societies. Every custom in the society has a meaning and purpose to convey something of utter importance. Cultural representation in different societies has different way to convey the message. Rituals have different levels of importance in the society may vary from lowest to highest.

Past, Presence, and Future of HCI

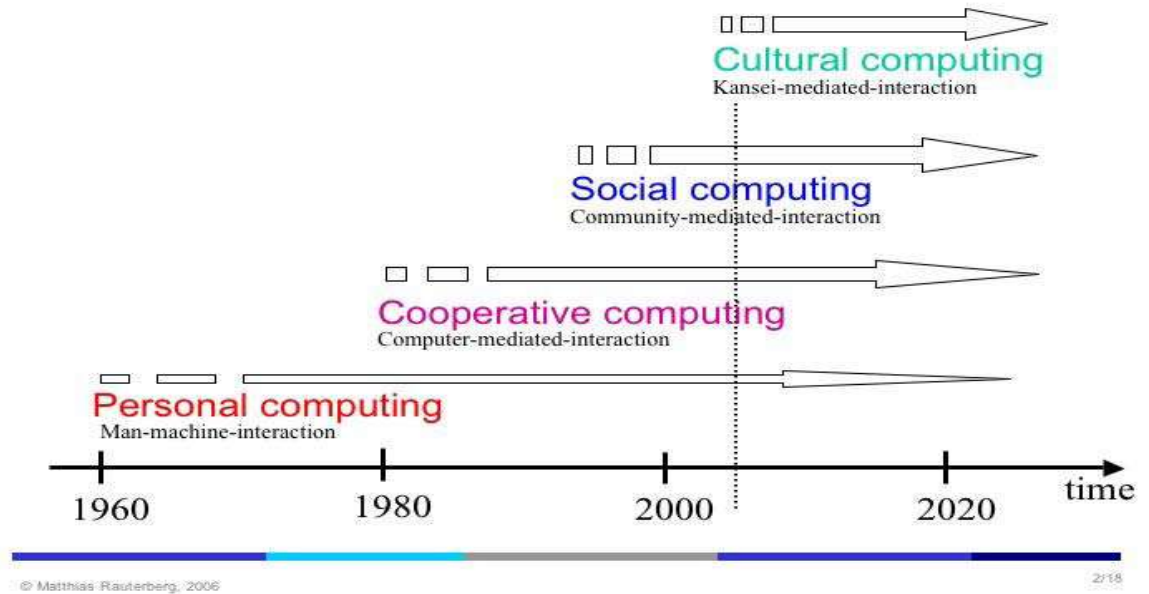


Figure : 1.1 Evolving trend of HCI[4].

1.2 What is Social Computing?

A large number of new applications and services that facilitate collective action and social interaction online are available. Rich exchange of multimedia information and evolution of aggregates which can provide information from other sites as well such as links and and social bookmarking sites.

These are variously referred to under terms such as Web 2.0, online communities and social computing. Examples include blogs, wikis, social bookmarking, peer-to-peer networks, open source communities, photo and video sharing. Communities, and online business networks, Web sites and online forums where you can discuss issues, share information. Many times in the form of communities over the web May be related to any discussion good or bad.

When a computer network connects people, it is a social network. Just as a computer network is a set of machines connected by a set of cables, a social network is a set of people (or organizations or other social entities) connected by a set of socially-meaningful relationships [9].

This field studies the aspects of technology and system design that are relevant to

people's lives. It's a new field that is still formulating theories about how social aspects relate to computing in general, trying to predict under what conditions systems might fail, or trying to understand and describe technical areas with complex or ambiguous outcomes [10].

The **CSCW community**, another growing field, looks at how technologies affect human behavior. Because the understanding of groups and organizations is just emerging (and is more limited than understanding of individual behavior), this community is looking at groups, organizations and cooperative technologies and thinking about the human contexts, analyzing individual, group/team, organization, and industry perspectives [11].

According to Whittaker[12] core attributes of an online community are:

- Members have some shared goal, interest, need, or activity that provides the primary reason for belonging to the community
- Members engage in repeated active participation and there are often intense interactions, strong emotional ties and shared activities occurring between participants
- Members have access to shared resources and there are policies for determining access to those resources.
- Reciprocity of information, support and services between members shared context (social conventions, language, protocols)

Chapter 2

Literature survey

15 out of the top 20 most popular web sites are either social networks they have embedded social networking functions in their domain to attract people [5]. Currently the most common technologies of social computing include P2P environment, IRC (internet relay chat), discussion groups, forums, discussion blogs, and content sharing platforms. Virtual community concept and the result taken out from the studies also show some interesting facts and declare discussions forums as the most powerful tool [1].

Some giants in this area are Twitter, Facebook, Ibibo, Linked-in, Orkut etc. According to the internet poll reports 20% of the respondents participated in blogging activities 28% of them were ranging in the age group of 18-29[5]. Most of the celebrities have also their accounts on them. Average 16 million daily visits to Xanga, 28 million to Blogger and Blogspot (combined).sample of Xanga users had an average age of only 16, with 13 being the minimum age to enroll. Clearly a huge amount of youth is directed towards social computing and using it today [5].

Current estimates indicate more than 130 million Europeans are involved in social computing and are interacting In a broad spectrum of commercial, leisure and social domains. The blog BoingBoing generates advertising of more than USD 1 million a year [7]. YouTube declared revenues from advertising of about USD 15 million a month before being purchased by Google [7]. as lot of business is done by these popular site we can easily estimate the no of registered users on social networking sites.

2.1 Business scenario.

The aggregated revenues of Social Computing are substantial. The combined yearly revenues of 99 Social Computing application companies in the IPTS database were estimated to be about USD 3 billion for 2007 [7]. The Social Computing industry also attracts significant capital investment. The companies in the IPTS database have attracted about USD 6 billion in cumulated venture capital investments [7]. In 2007, it amounted to about 1,350 million in the US alone (Schonfeld, 2008) [7].

2.2 Some popular sites and portals

This picture shows few of popular social and cultural sites.



Figure 2.1: Social and Cultural computing web sites and portals.

2.3 Factors that ease social networks

It is due to the wide availability of broadband connectivity and more powerful personal computers. Social computing has started growing phenomenally. Social computing represents the next step in the evolution of the Web, with great potential for social and business impact.

Empowers individual users with relatively low technological sophistication in using the Web to manifest their creativity, Engage in social interaction, contribute their expertise, share content.

2.4 Web 2.0

Web 2.0 are specifications for the web based services and collaborative environment. it accompanied service oriented architecture. Web 2.0 provided

1. The Socialization of the Web:-means now the services are more easily available and most of them are freely available.
2. A layered Visualization:- layered approach to services also described.

2.5 Technology

Syndication Standards: RSS - Really Simple Syndication - and its different flavors. Atom, the full-fledged contender. XML dialects for publishing content, and enabling an easy way of subscribing different sources.

CMS – Content Management Systems – As a simple way of automating the web publishing process & technology platform for *blogging* and *wiki* services. example Joomla, Drupal.

AJAX - Asynchronous JavaScript And XML – as a way for developing more agile Web interfaces for new services optimizing transactions between the JavaScript application within the browser and the software.

SOA - Services-Oriented Architecture - as the most suitable architectural approach for Next Generation Web. It usually serves for implementing Web Services through the use of XML, HTTP, SOAP, WSDL and UDDI.

Wikis A **wiki** is a web application that allows users to add content, as on an Internet forum, but also allows others (often completely unrestricted) to edit the content. The term Wiki also refers to the collaborative software used to create such a website. In essence, the wiki is a vast simplification of the process of creating HTML pages, and thus is a very effective way to exchange information through collaborative effort.

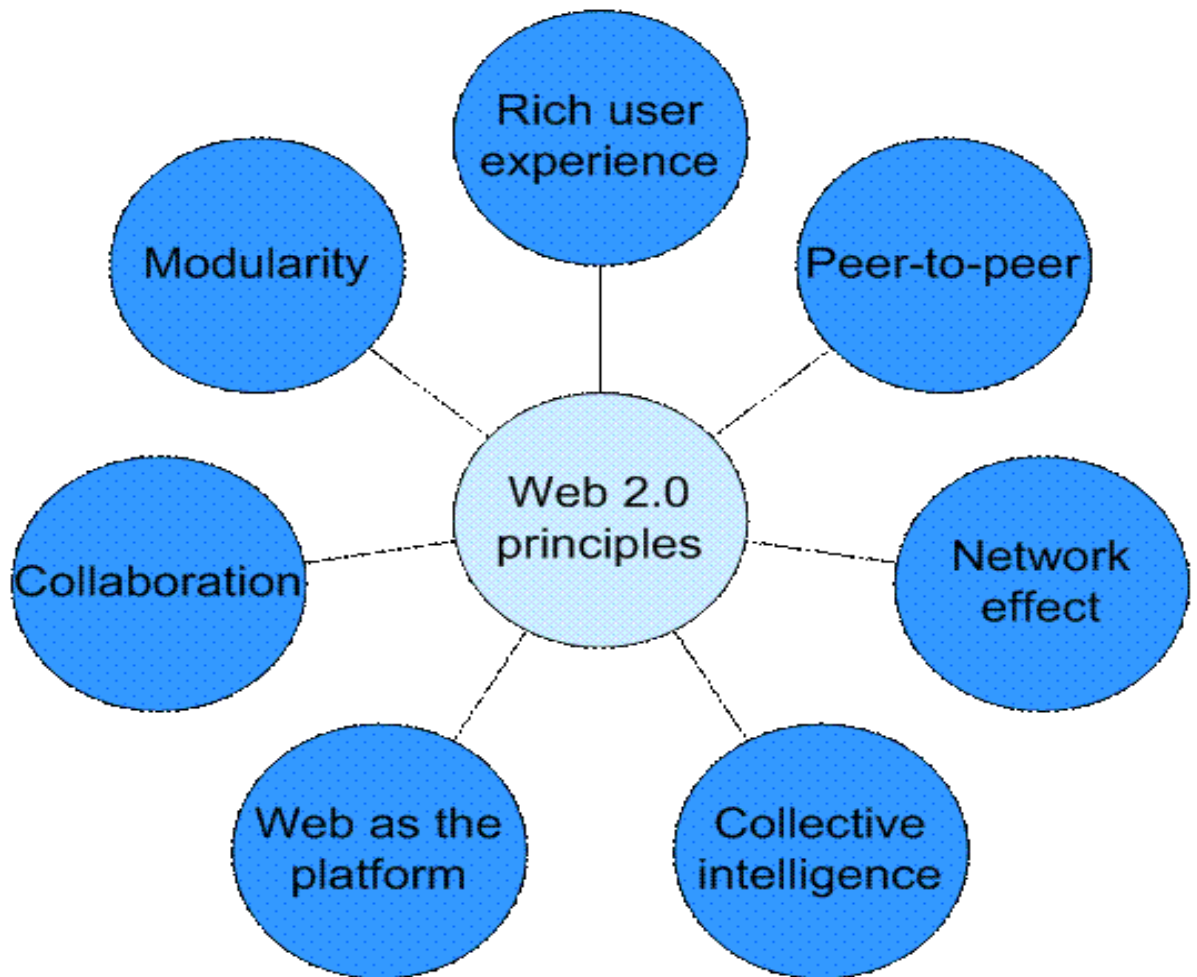


Figure: 2.2 web 2.0 paradigms

2.6 Important factors

Peer-to peer network wherein collaboration and sharing are important activities. Self managed collaboration as opposed to a central node-managed collaboration is done in these environments .Ex-Wikis [8], blogs, video sharing etc. E.g. YouTube, Flickr.

2.7 Collective intelligence

Lays emphasis on the large scale distributed intelligence of the participants in the network over central Intelligence. Users can create, modify, update content on the websites which can be published. The user can provide the tags for further reviews purposes. Continuous “Beta” allowing user participation can shape how the applications develop. Example-del.icio.us.

2.8 Web acting as a platform

Shifting from centralized computing to the distributed computing. The internet browsers act as the de facto platform. Provides lightweight programming languages for enabling PC like features. E.g. Google Docs & Spreadsheets.

2.9 Collaborations

Ease of new user participation as anyone can participate after having a normal registration or sign up. Users can share data across the web using a variety of applications like Blogs, Wikis, Podcasts, Reviews etc. Co-creating with customers and interacting with them with P2P or chat software. File transfers as support as and when needed.

Folksonomy

Collaborative categorization of content using keywords (tags). Allows users to retrieve content through user created tags.

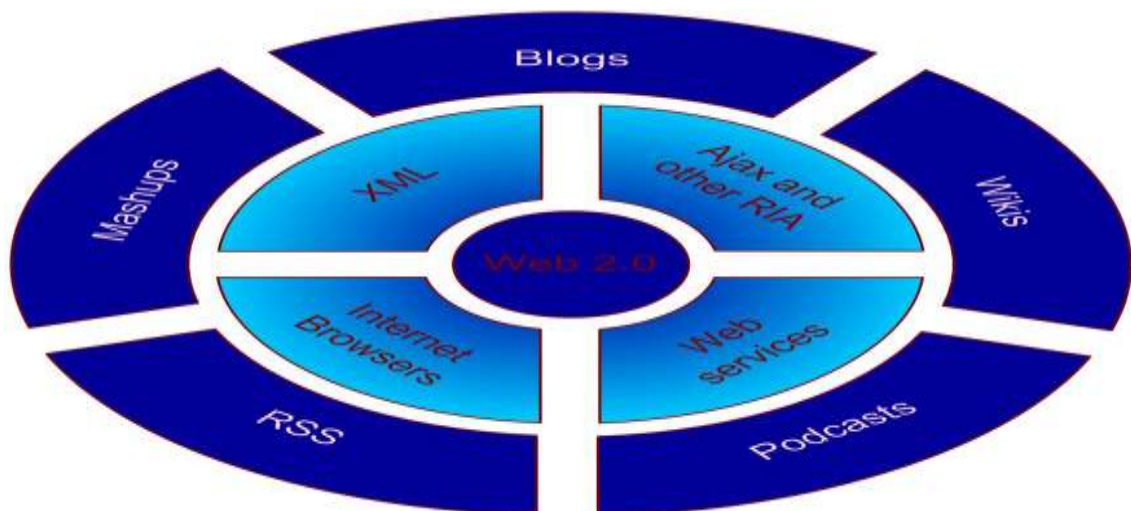
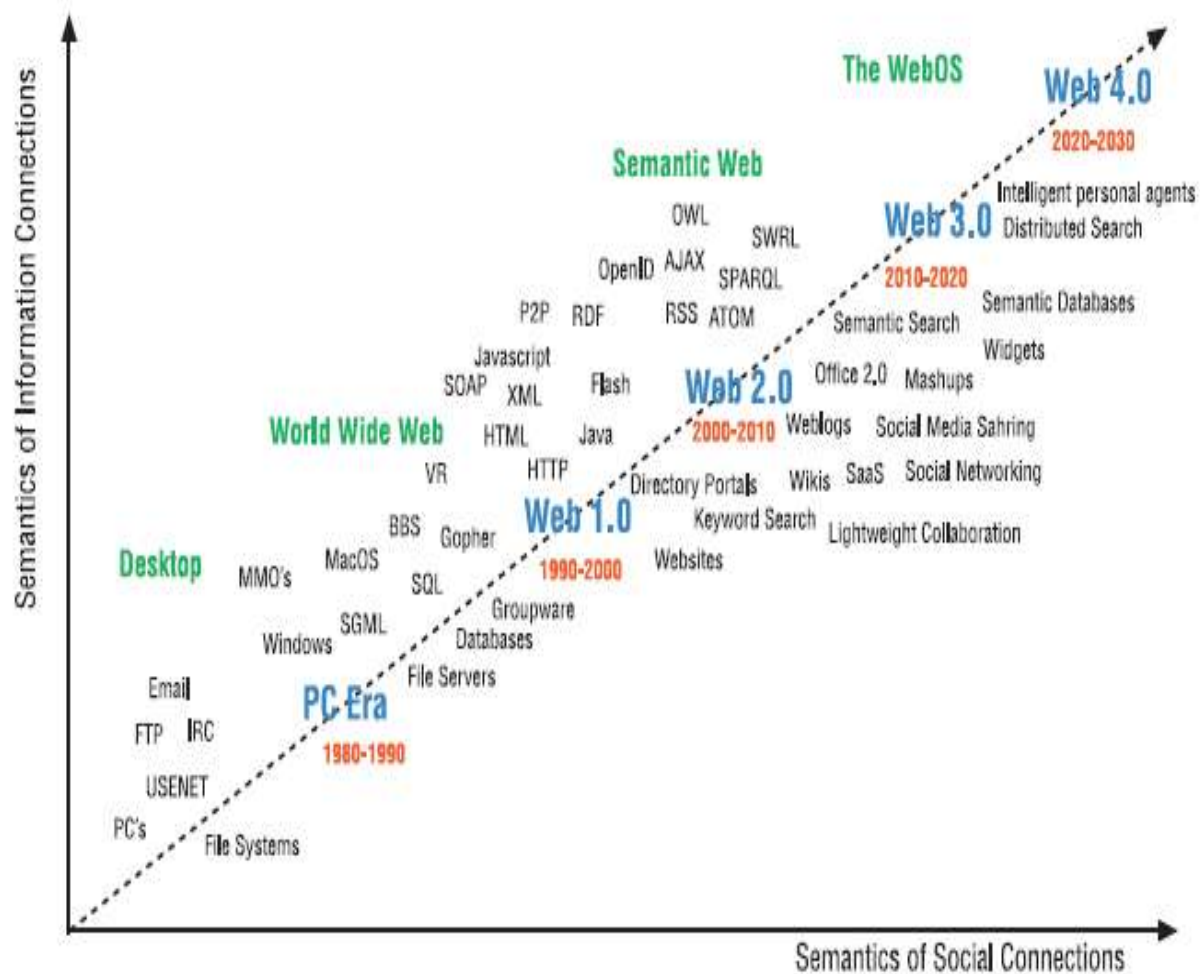


Figure 2.3 : The big picture of Web 2.0

2.10 Future of web

Figure 6: Web developments



Source: (Spivack, 2007)

Figure 2.4 : Future of the web

As we can see we are experiencing the web 2.0 technologies and paradigms. The upcoming standard is web 3.0 which will add more intelligence to the environment. Next to that will be web 4.0 specifications that will add intelligent agents to our environment to help us achieve a pervasive environment.

2.11 Visiting Patterns

Clearly social computing is a buzzword today. Concentrated mainly at youth according to most reports. Based on habit of use, users on social communities are classified into 4 types habitual, active, personal and blogging lurkers[5].

Habitual (enthusiastic) users were the highest intensity users, who apparently had formed a strong habit of visiting their weblogs or weblogs of their weblog group (subscriber list) Habitual users reported spending many hours to post their own weblog entries or to comment on their friends' postings.

Active we labeled the second user type as active users. Although they are less intensive in their weblog use or visiting any social site. This type of user would regularly visit their weblogs, once a day or twice or times more than that. They would not post entries every day, but as often as they felt the need to share.

Personal we labeled the third type of users are personal users. These users would keep weblogs as a truly personal diary, shared only partially with friends and rarely with the general public. This user type showed little concern for peer group or sharing. Might be interested in pornographic sites for personal leisure.

Blogging lurkers The fourth type of users are were blogging lurkers. These users kept a weblog but would rarely or never post to it. Oftentimes, these users had little interest to share their own stories, but were eager to learn about their friends. Overall, this was a less involved type of user, with less defined usage intensity or group belonging and correspondingly less distinct technology feature needs.

2.12 Usage pattern

Habitual users spent much of the time uselessly, Very critical concern, even might not be learning cultural value. A total waste of time, without any positive work. Active users seem concerned and also waste a considerable amount of time without any solid reasons

Other two types of users seem okay but, the question is what they are sharing. In this scenario the question arises Is it the reason enough to promote cultural computing, and the answer probably is yes. There are other solid grounds also which indicates the need for cultural computing [4].

“Shared attitudes are important for friendship. We know that people like to associate with people who are like them, a predilection termed “homophily” (love of the same). The more similar we are to our friends, the less room there is for conflicts of interest. This is why I believe that social networking will never replace face-to-face communication in the formation of close friendships. Talk is cheap. Anyone can post “u r cool” on someone’s “wall,” or “poke” them on Facebook, but genuine smiles and laughs are a much more reliable indicators of someone’s suitability as a faithful friend”[9].

-----**William Reader**, professor of psychology at Sheffield hallam university and social networking site researcher:

2.13 Potential disadvantages

Social software raises the possibility of malicious or criminal communities which can use the anonymity. May attract the hackers and we can say a hacking paradise. Can reveal personal information by social engineering. Malicious attacks, Privacy violations, Not trusted, fails to be universal and Unreliable when needed [3].

This May result into Perversions. Pornographic material seems luring but surely is a biggest threat for young ones. Loss of concentration in any work. Loss of interest in cultural activities. They are Even not interested in talking to their parents. Misuse by Terrorists & criminals Promoters of racial hatred Political oppressors. Misuse for sharing pornographic content or any other material not meant for minors. Not any defined control structures for governing the social site.

2.13.1 Psychological problems

Many psychological problems are also a critical impact emerging out of social computing. Many Facebook users are reported to have low self esteem. This may be due to comparison of themselves to their friends, their lifestyle and their luxury adding one more problem to our_society. These environments are making users habitual on a large scale. So an urgent shift is needed from social to cultural computing.

2.14 Analysis

Social network analysis conceives of social structure as the patterned organization of these network members and their relationships. Social network analysts work at describing underlying patterns of social structure, explaining the impact of such social structures on other variables and accounting for change in social structures.

There are many social and cultural theories that relate to HCI, but this relationship is not straight-forward. Social and cultural research is not "neat" scientific research: there are too many factors that complicate the research.

The **CSCW community**, another growing field, looks at how technologies affect human behavior. Because the understanding of groups and organizations is just emerging (and is more limited than understanding of individual behavior), this community is looking at groups/organizations and cooperative technologies and thinking about the human contexts, analyzing individual, group/team, organization, and industry perspectives [11].

2.15 Literature survey of cultural computing projects

2.15.1 Cultural computing

The word *culture* (from the Latin 'colo, -ere', meaning 'to cultivate', 'to inhabit' or 'to honor') has been defined and used in many ways throughout different contexts. Kroeber and Kluckhohn [21] gave many definitions of culture. culture means what are traditional thoughts that have impact over society, which can even bind different social communities, and are usually related to moral ethics. Cultural computing may be thought of as integration of cultural aspects and values in the interaction with computer. Cultural computing can also be defined as conveying the cultural philosophy through human computer interaction, utilizing our computing resources and technology.

2.15.2 Eastern culture

In eastern countries like Japan and china the cultural consciousness revolves around the Buddhist theory, they have artistic feel attached to these theories. In the East enlightenment is the state of awakening that a Buddha has attained, and is the ultimate

goal of Buddhist practice and the highest of the 'Ten Worlds'. The concept enlightenment is regarded as a state of perfect freedom, in which one is awakened to the eternal and ultimate truth that is the reality of all things. This supreme state of life is characterized by boundless wisdom and infinite compassion [18].

Tosa et al. [24] think of cultural computing as a method for cultural translation that uses scientific methods to represent the essential aspects of a culture. to convey the eastern thoughts they have developed the project Zenetic computer which convey the philosophy in the form of Sansui paintings, Poetry, kimonos, haiku poetry. They have used latest technology to convey the message in their own way thus creating a concept of self consciousness.

2.15.3 In the west

Project Alice and wonderland has implemented the same concept in their own cultural mythology, through the famous story of 'Alice in the wonderland' by Lewis Carroll.

The first interactive, but semi-immersive virtual reality system based on parts of 'Alice in Wonderland' was developed at the Entertainment Technology Center of Carnegie Mellon University. Pierce et al. [20] created a successful virtual experience based on a head mounted display to overcome some or all of the following problems: entering a virtual world is a jarring experience; people do not naturally turn their heads or talk to each other while wearing a head-mounted display.

ALICE is an augmented reality (AR) narrative with intelligent agents acting as characters who lead the user through virtual and real locations, moral choices and emotional states.

Several other projects over entertainment and arts has also been developed either at university level. The project helps the user to understand the concept of self.

2.16 Cultural theories

Examine people within in a culture and try to understand or predict how or why they act or react a certain way. In one study, Marcus and Gould looked at several dimensions of culture and applied them to global web interface design. Cultural

anthropologist Geert Hofstede outlined five dimensions of culture that Marcus and Gould used as a basis for understanding global web design. The dimensions of culture were power-distance, collectivism vs. individualism, femininity vs. masculinity, uncertainty avoidance, and long vs. short-term orientation. These dimensions can act as models or theories for understanding the user when developing HCI systems [13].

These cultural theories led to the definition of cultural computing. Cultural computing incorporates all those behaviors, collaborations, emotions, and their consequences over a particular community. it leads to different results in different communities and cultures.

Cultural Computing (CC) implies the application of information and communication technology (ICT) in the field of culture and arts.

The Need for Social Theory

Without theory, insights are *ad hoc* and, thus, not repeatable. No accumulation of insight or generalization results[14].cultural theories have effect over social theories. Sub-optimal sense theories' includes Common, *Ad hoc* rules, extrapolation of empirical generalizations. However, little effort has been invested in representing (or even understanding) underlying cultural processes [14].

2.17 Cultural differences

Different societies have different cultural aspects many societies depend and trust holistic approach, while other may trust analytic approach. The culture of India is one of the oldest and unique. In India, there is amazing cultural diversity throughout the country. The South, North, and Northeast have their own distinct cultures and almost every state has carved out its own cultural niche. There is hardly any culture in the world that is as varied and unique as India. India is a vast country, having variety of geographical features and climatic conditions. India is home to some of the most ancient civilizations, including four major world religions, Hinduism, Buddhism, Jainism and Sikhism.

2.17.1 In India

In India we have mainly 7 religions Hinduism, Sikhism, Islamism, Buddhism, Jainism, Zoroastrian, Christians. All religions have different cultural values, rituals, customs and ancient theories [22]. But the virtue of the all seems to be one. Whichever community a person belongs to they have their own customs and beliefs. Cultural computing in India is still in its evolving state. Social computing and its tools are being used by modern youth at an expensive scale in India, no actual data and survey is conducted here to acquire the bad effects of social networking and tools of social computing . Social computing provides very good technology to share your experiences but it has an equal effect on unconscious mind of youth which can be negative at many times. It may results in wastage of time without any solid reason. The old folks have no such interest in these activities and even do not know about it.

Not much amount of work has been carried out on cultural computing in India. It is in its evolution stage and people are not much aware about it. Even not much web sites are there for the purpose. If these sites exist people are not aware of these site or portals.

2.17.2 What needs to be done?

We want a major shift from social to cultural computing. Create cultural sites describing cultural importance. Create heritage sites in a tasty flavor to introduce your youth to your cultural roots Start some cultural campaigns over the social sites leading to some interesting prizes. As the work in this domain is in its starting phase we can create dynamic cultural portals that can introduce our visitors to the cultural aspects of the particular society. Cultural Consciousness and beliefs can be presented in an interesting way.

3.1 Research Gaps

- Less focus on Vedic culture, it means not specific to particular culture and beliefs.
- Needs some introductory coverage to its part.
- Use of social plug-ins to collect several data
- Use of Questionnaires through social sites.
- No or less use of technology advancements in cultural portals
- Several image text search capabilities were not available in the most of the sites.
- Most sites are still running on Web 1.0 platform.
- Blogging activity is not up to the par, most of the admin's are not technology geeks
- Shortage of funds for cultural portals results in average or low quality software.
- Most of the sites are not regular, and are running only on the wishes of administrator.
- Use of social networking sites applications to promote cultural computing
- One of the gap discovered was the less or no use of social site integration in portals developed earlier

3.2 Problem Formulation

- To represent vedic culture in a brief and easy way
- To Link various vedic resources in a lucid manner
- To apply social sites integration for famous social sites.
- To enable some kind of blogging activity.
- Statistical collection of data for various user patterns.
- Gaining social insights for the website through use of social network integration.
- To provide easy way to share activities and links with famous social networks

3.3 Objectives

- To develop a portal for vedic culture .
- To represent the vedic culture specifically.
- To integrate good vedic resources from the web
- To get user response and analyze various aspects in the portal.
- To promote the site with help of social networks
- To make sharing easy and seamless so user groups can come to know the events as and when they occur over the cultural site.
- To analyze the traffic in both the perspective either related to site or the impressions created by social networking sites over time. To gather the results over various paradigms.
- Analyzing visitor behavior by checking the contents visited by him.

3.4 Methodology

- We will use CMS systems to achieve this
- Try to integrate with popular social sites
- Brief representation of subject material
- Introduction to Vedas and its contents, and its philosophy.
- We will also develop some questionnaire to get user response.
- By provide sharing interface within site to most popular site in world
- Site will be multilingual on the basis of articles published in the site or portal
- Integration of some vedic channels into the website
- We will Analyze user pattern with help of traffic analysis tools
- Try to get feedback if possible with in time period.
- RSS Feeds from Vedic sites will also be provided.
- Developing applications for social networks to integrate the site with famous ones
- Promotion of the site or portal using social site services like Facebook pages for cause and other interface API's.

4.1 Choice of CMS:

As there were many choices available in the development of Web portal development I was looking for the best one in which I could also get good support. Moreover I was also looking for the Open source CMS as they can be customized also and can be obtained free of cost . I heard of famous CMS like Joomla and Drupal both are Open source . Both also have their merits and Demerits also. But I chose Joomla because it give more right of distribution than drupal offers. And best of All Joomla has a very huge supporting community of web developers which has a huge experience in developing and providing sophisticated Plug-ins for almost all kind of contents and technologies. So you can understand what Joomla can offer you in terms of the functionality. All you have to done is to explore the extensions developed by the community developers. Developers can also provide you technical support in Joomla forums in which you are registered. I tried my best to do justice with Joomla within the time duration I had. At times I got struck also in many plug-in parameters to set but the forum support of one or other kind provide some way to get around the problems.

I am thankful to the Joomla project Open CMS for providing CMS free of cost along with some beautiful plug-ins that I needed at times. I also thank Joomla community developer team to provide their best support without which my work couldn't have completed.

Most of the plug-ins provide were under the GPLv2 license and bears CCA license for cultural works and community works.

4.2 Why Joomla?

Joomla is so easy to use that it is a good tool for even a single individual to use when building a web site. Joomla is best supported of the more popular CMS applications.

Once your Joomla site is up and running, anyone with basic word processing skills can update it by adding content, managing images and keeping company-critical data up-to date via a simple, browser-based interface. And because it's free and easy to use, you can focus your resources on the bit that really matters the content.

4.3 Some Features of Joomla

Cost - Joomla is absolutely free.

Ease of Use – It is efficient control of users, links, content and files. It has search engine friendly URLs and it also has Image resizing option. It allows Prototyping. It also has the ability to choose WYSIWYG Editor.

Functionality - Content Syndication (RSS) enabling the incorporation of news bulletins. It allows User Profiling, Blog, Picture Galleries, Contact Management, FAQ Management, Banner Management, Document Management, Mail Form, Calendar, Polls, Built-in search facility, Search Engine visibility is easily controllable, Data manager for uploading and administering information, Archiving facility, enabling the re-use of content, Publication of content in printable, pdf or email format, Simple workflow system, Multilingual frontend, User Contributions.

Management & Performance – It has the feature of Content Scheduling, Simple and expandable template and component system, On-line Administration, Asset Management, Simple web Statistics and Caching mechanism that speeds up the site's operation.

Security – It has the feature of Content Approval, Email Verification and protection from spam robots, Login History, Session Management, Versioning and Hierarchical user groups.

Support – The Commercial Support, including Training is available for Joomla and it has large developer Community. Online Help is also available for it. It has Public forum. It has Third-Party Developers.

4.4 Design Implementation of Portal

As the design of any website or portal is important to have a sophisticated look, I tried many templates that Joomla community is offering or other sites are offering. I used the template RTnovus rocket theme template. It is has very clear and sophisticated

navigational menu which can be extended upto ant extent. I tried to keep it simple for end user ease of use. No clumsy way of navigating throughout the pages is provided. It has top menu, main menu, bottom menu by default. I have also configured the Popular menu , which shoes the most browsed or recently used articles of the site. It is good idea to keep things simple for naïve users, so they can browse through the most popular articles and links straightaway.

Most of the menus are on the left side of the portal to have a category layout view of the portal . here is the view of the front page of the the website.

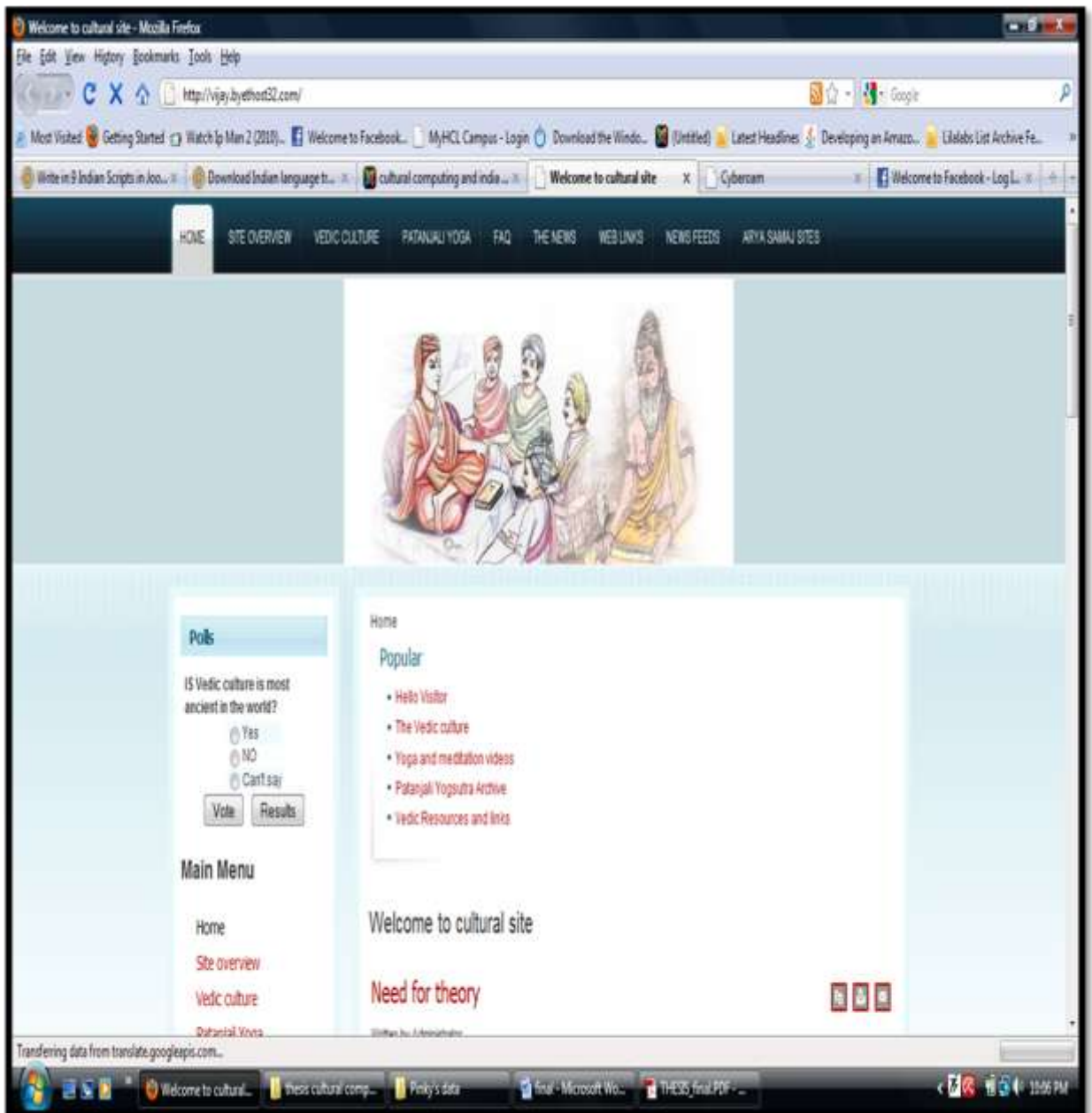


Figure : 4.1

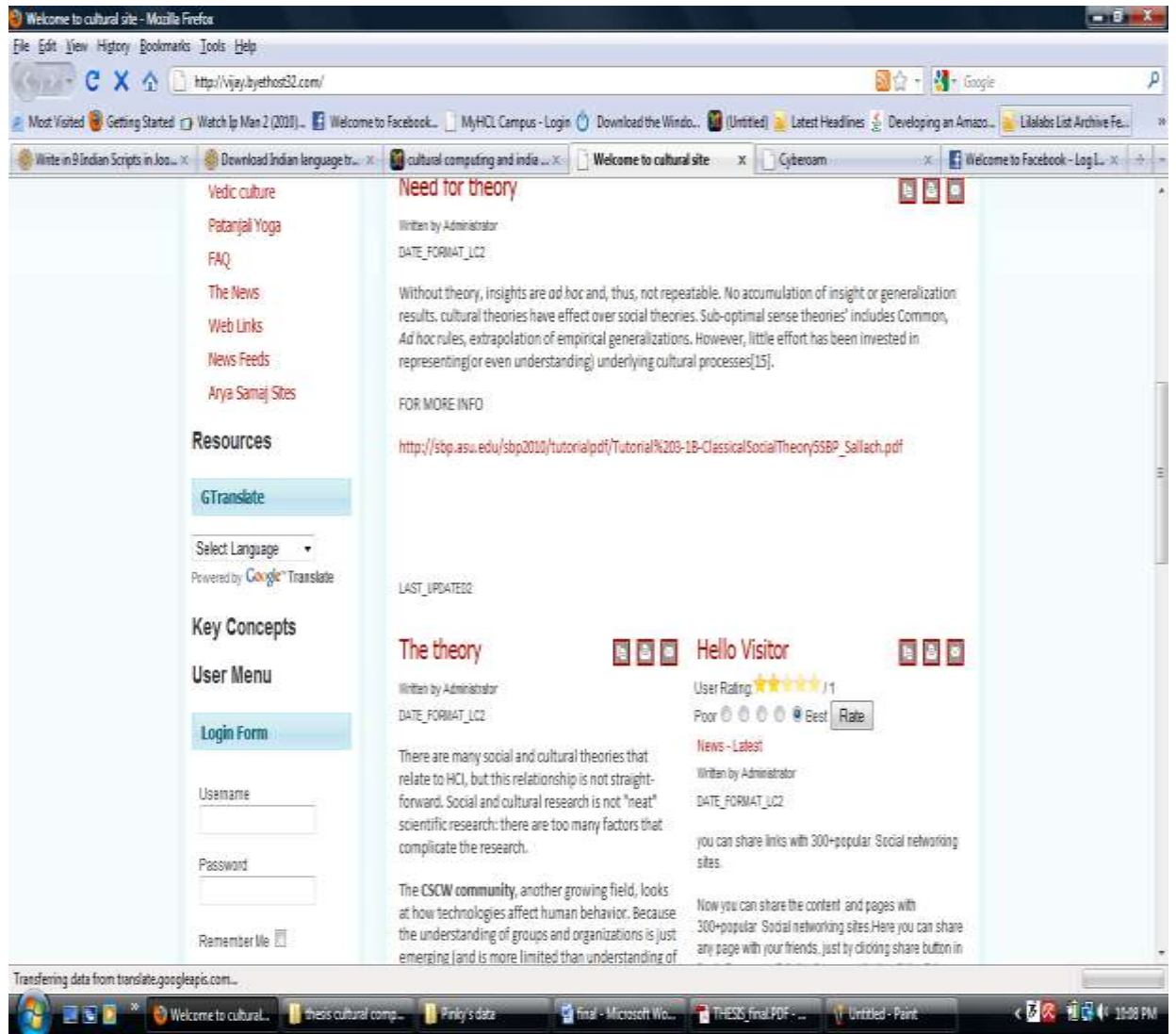
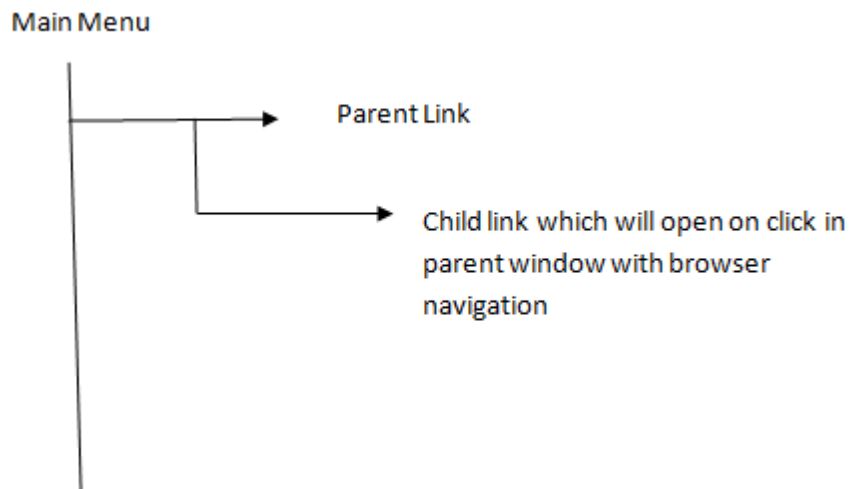


Figure : 4.2 Front view of site

As you can see the background is quite simple with a light sky blue color as it match the theme of the site and wa my last choice as a template for the site. This template provides main menu top menu breadcrumbs bottom menu design by default. All you have to customize the parameters and system parameters. Although a good knowledge of website design is needed. It may take some to learn Joomla as I took 1 month to understand its features up to average level. It will take some time to master the Joomla concept foe seamless customization. Even though its Joomla power that many enterprise application websites are also running over it.

4.5 Navigation system

It is really important to manage the navigation here — Joomla has really good features and for developing this portal these features has been used. Here it is designed using Menu Manager.



This picture shows the idea of how parent and child links can be organized in the Joomla, it shows the concept of Parent and child link. You can nest the links up to any level. Below is a picture of menu types Joomla provide for organization of your articles and links in various categories.



Figure : 4.3 Menu types organization of the Portal

4.6 Section and Category list layout system

In section manager we manage various sections for the website. A section usually consists of category and category further contains documents. So a document can relate to a category or not. An article that does not belong to a category is known as uncategorized article and we have to connect a link for that. Other articles are linked to categories in sections. A very sophisticated manner of organization of articles is provided by the Joomla .we can summarize the idea by the diagram below

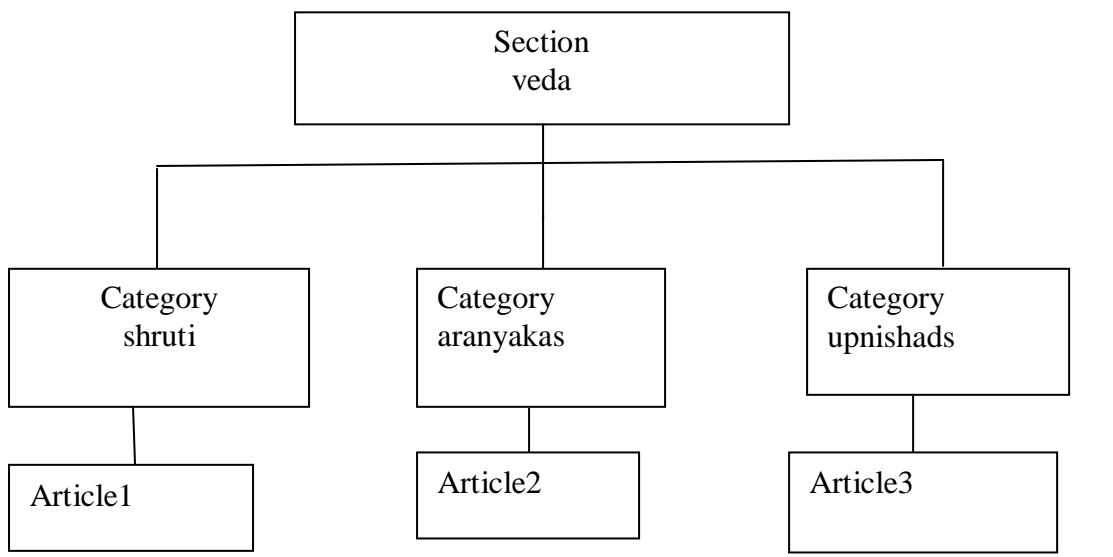


Figure 4.4 : Organization of articles under sections

Articles: articles in the site are organized as single content item in any section and category. Their layout and position in the portal can be defined at any time. Article manager makes it easy to organize articles in the desired manner. Article manager has the facility to decide the order of articles in which they are shown, we can even unpublish any article if we want to show it or not. If we want any article to be displayed on front page we can choose the option. Front page settings are done from global configuration settings of the site. Articles are usually uncategorized or categorized depending upon the requirement at any given place. Articles can be tracked for the hit counts and article rating given by the visitors. All the backend system is controlled Joomla administration interface.

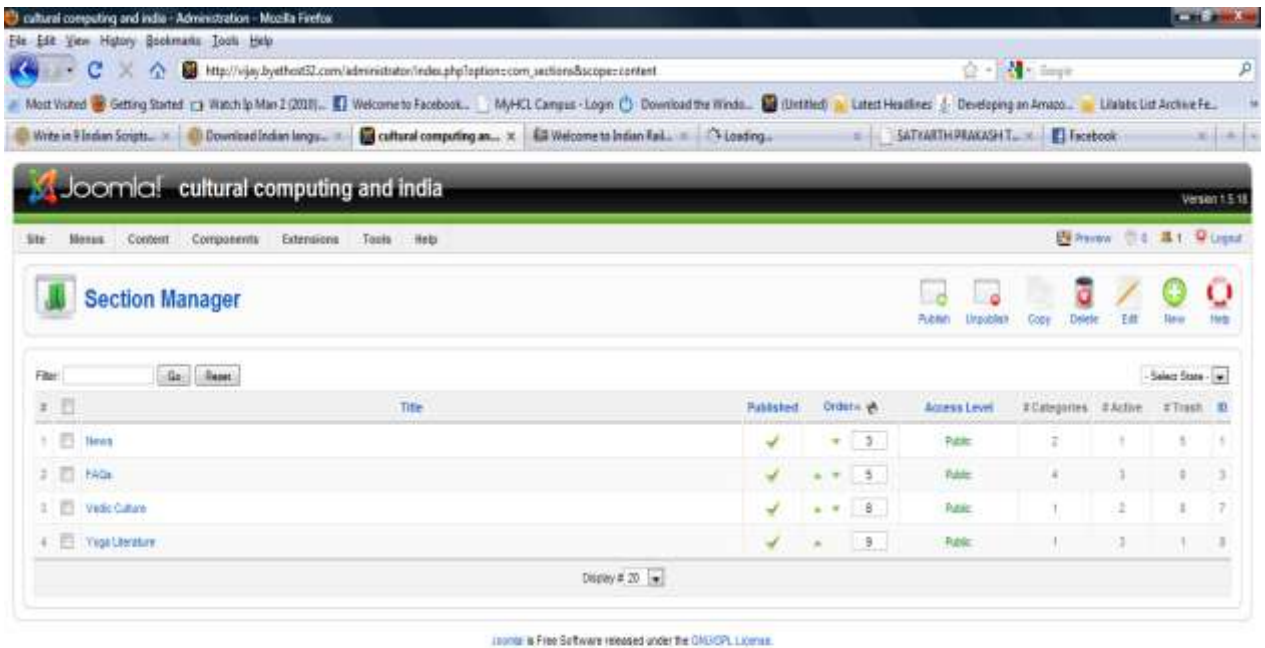


Figure 4.5 : Section manager in admin panel

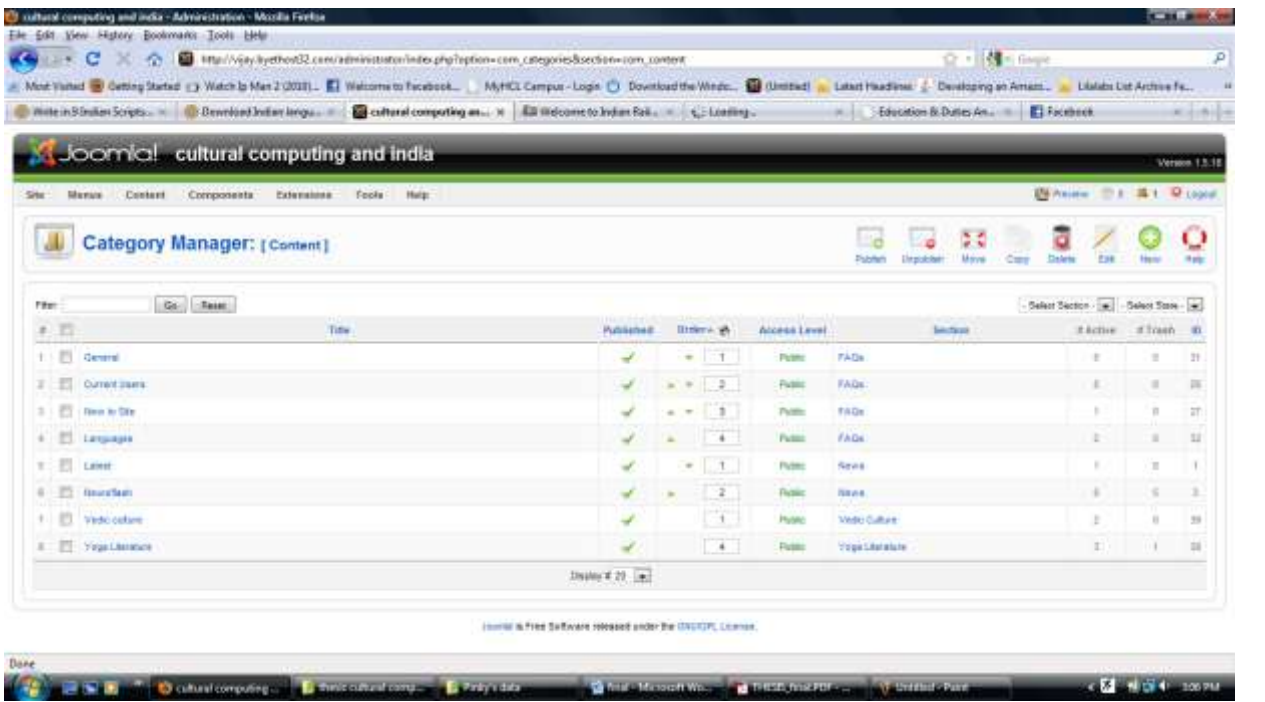


Figure 4.6 : Category manager

4.7 External links

The external link of websites that we want to publish is provided on a single page and at some places they are given on the article page itself. It is good idea to open to open links to other websites in a new window. That way the visitors can easily return to your site when they are finished browsing the external link.

4.8 Site Map and Search Feature

On this portal we have more than 16 pages, it is useful to have a site map or a Search feature to ensure the visitors can easily find what they're looking for. So Here we have used the Search module.

site map shows the navigation path from where we have come. Site map in my site contains link to the section so a user can got to any section whenever he wants. It simplifies the logic of browsing.



Figure 4.7 : Site map is shown below the image of site

4.8.1 Search option

Search option is provided with three option to get the best and efficient searching of the site. A user can make his searching more efficient by specifying the criteria of the search like if he want exact phrase then he should choose “exact phrase” option otherwise he can choose “any word” or ”All words” option. to reduce searching time user can choose from the article various parts of the site as articles, web links, category, sections, news feeds and contacts below is the diagram

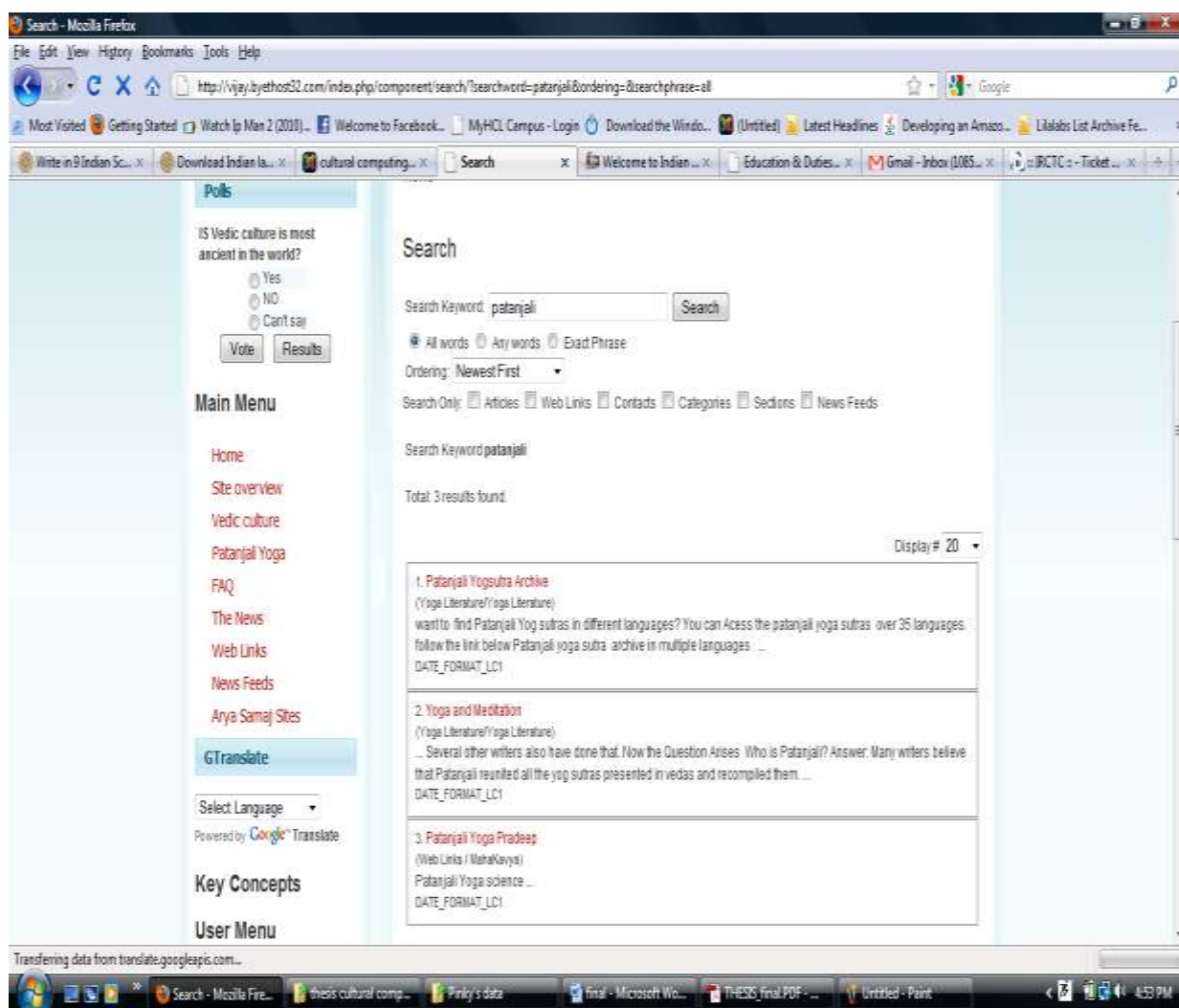


Figure 4.8 : Search option in site

As you can see option for ordering is also provided. Three articles are shown to be found.

4.9 Login Form

Here to build a relationship it's needed to form regular users so this module is also included in this portal. User can login with an open ID also. Open ID is an open source initiative for creating a public id for the user which can be used for all the sites over internet who support Open ID, Open ID is different for each user. Its like a bookmarking service where you store your public id and that can be verified against your account at open id.

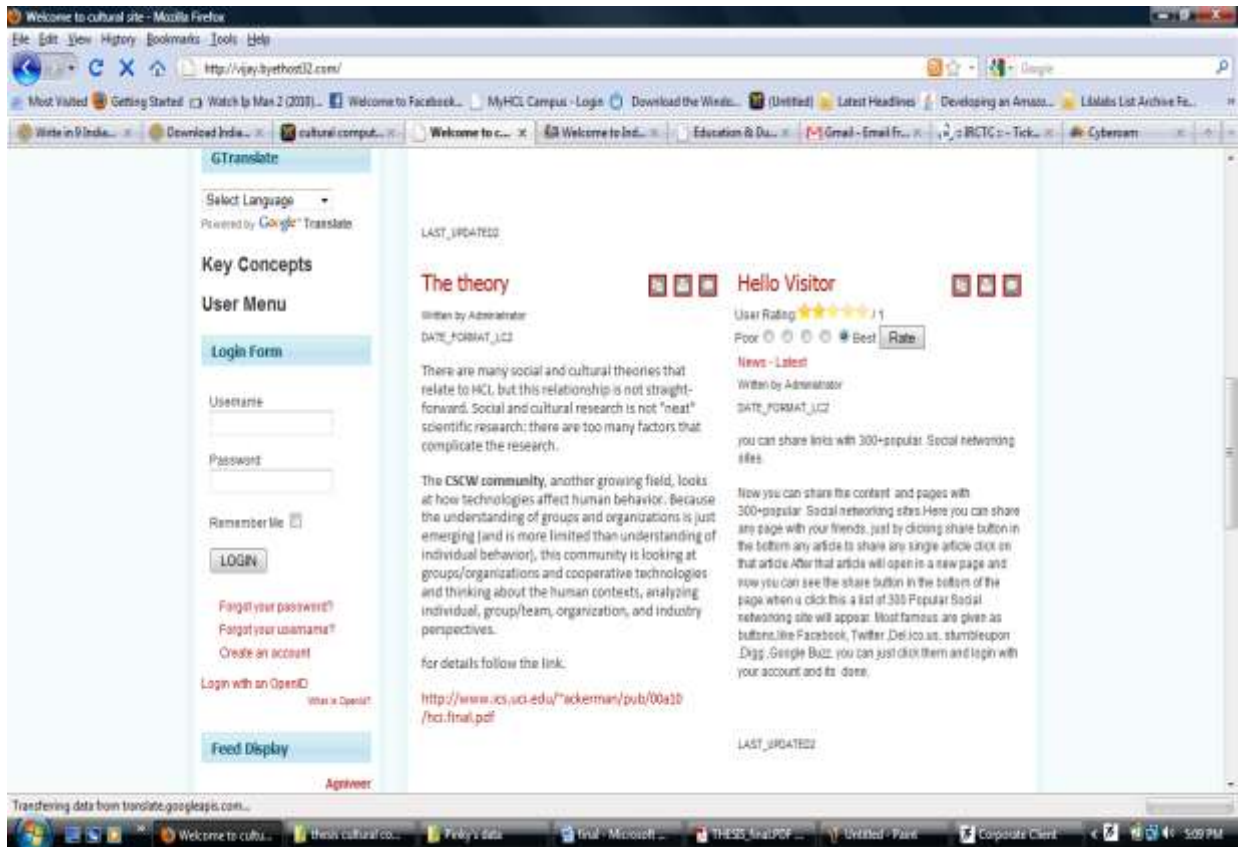


Figure : 4.9 Login form

As you can see login form is given at the left side of site under the heading User Menu. You can also see option of login with an OpenID below the create an account option. if a user logs into the portal a different user menu open up for him to check his details ,it can also provide the facility to post a link to site or portal.

4.10 Polls

Here we need the views of the users about certain issues so polls module is also included in this portal. Polls can be used to get the answers of the visitors for their experience of the site. To check the knowledge of the visitors and many popular issues. Here I have used the polls to develop some questionnaire for the user

psychology to get feedback of the site. To check visitors state of mind. Polls result are display on a separate page.



Figure : 4.10 polls

4.11 Administrator Panel

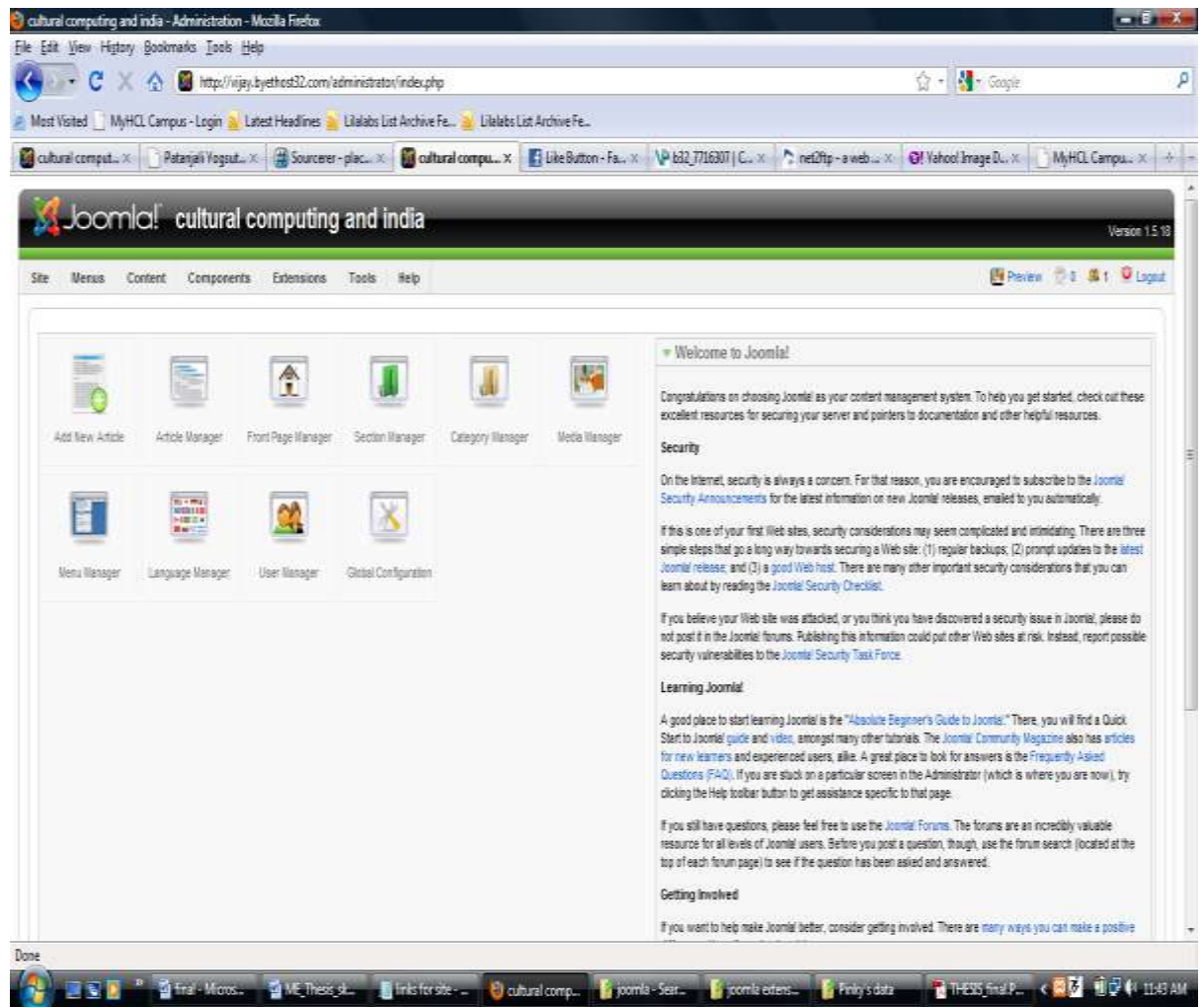


Figure 4.11 : Administrative panel for different functions.

As we can see we have an Administrative panel for the controlling of all functions that exists in Joomla CMS. These are ranging from article manager to global configuration. We have administrative functions for language manager, user manager, Menu manager ,templates, section, media, section and Category manager which has further sub functions.

As we go on to with CMS with we can explore it. Joomla Support Community has very good extension support for Joomla that provides many extensions for daily needs and we can explore some sophisticated extensions according to our requirements. for the help purposes we can go to help given in the administrative panel of Joomla. All the help provided is in 2 modes

1. Link to Joomla forum in the form of questions. You can go to the forum and and search the problem at hand
2. Basic help is given in the CMS itself, for most of the basic support.

4.12 Article Manager

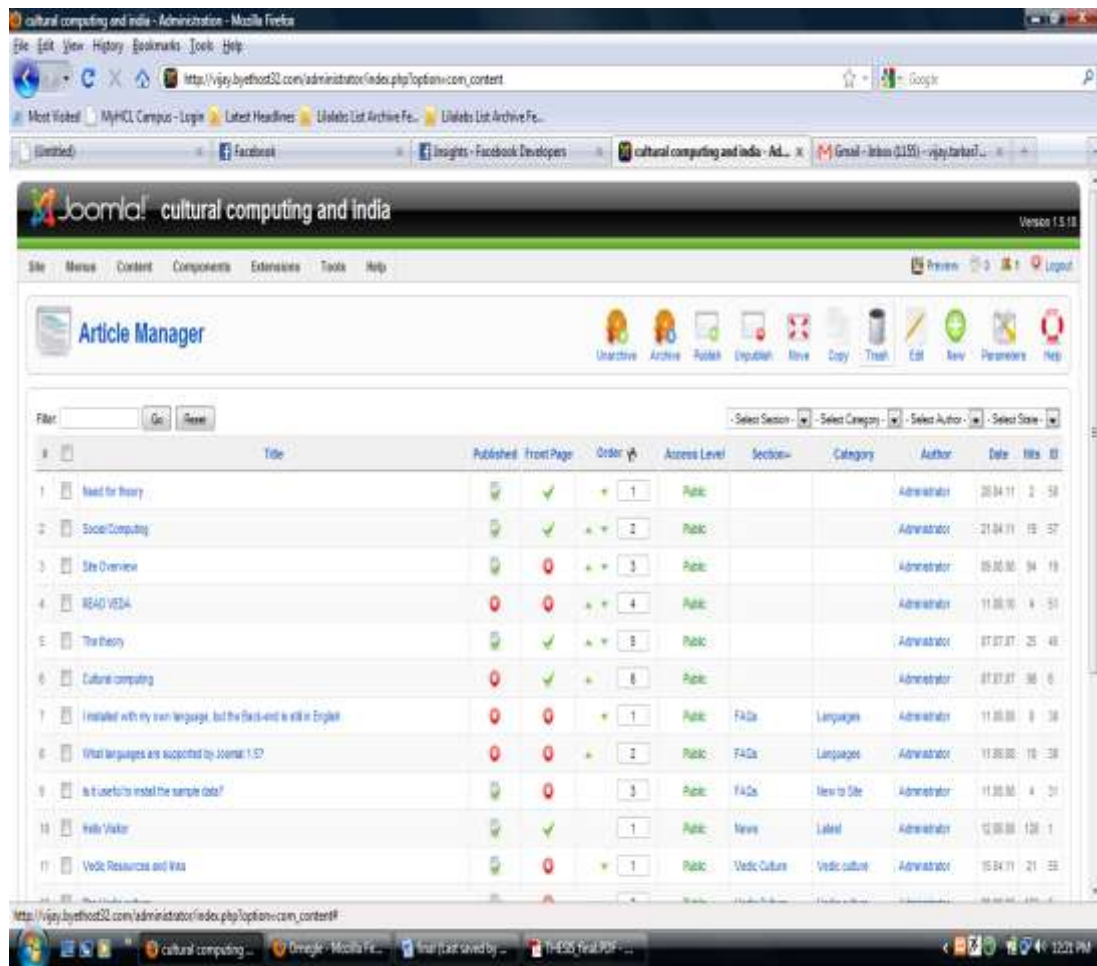


Figure : 4.12 Article manager

With installation the —Joomla has many articles so first these articles should be deleted. Select on articles and click on —Article Trash button.

Tool bar in Article Manager

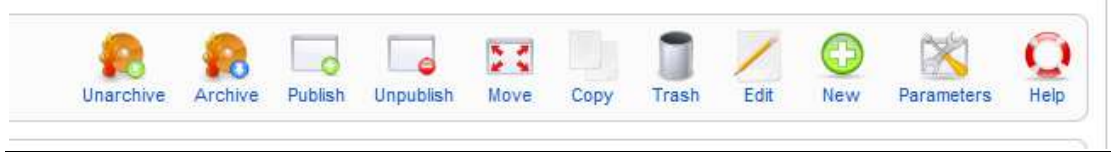


Figure : 4.13 Toolbar for Article manager

- ➔Click on Unarchive to restore files from an archive or backup to their original location.
- ➔Click on Archive to collect publications that are often cataloged or listed and made accessible in some way.
- ➔Click on Publish to publish the selected Article.
- ➔Click on Unpublish to unpublish the selected Article.
- ➔Click on Move to move the selected Article.
- ➔Click on Copy to copy the selected Article.
- ➔Click on Trash to move the selected Article to trash.
- ➔Click on Edit to edit the selected Article.
- ➔Click on New to create a new Article.
- ➔Click on parameters to change the Global formulation.
- ➔Click on help if any type of help related to article manager is needed.

4.13 Sections

This site about Indian culture consist many articles. To publish an Article about.First we need to form a section and respective category for the article.

- ➔Go to the control panel and click on —Section Managerl.
- ➔Click on —Newl.
- ➔Type the name of Title and Alias in the given blanks.
- ➔Fill the description of the section at the given place.

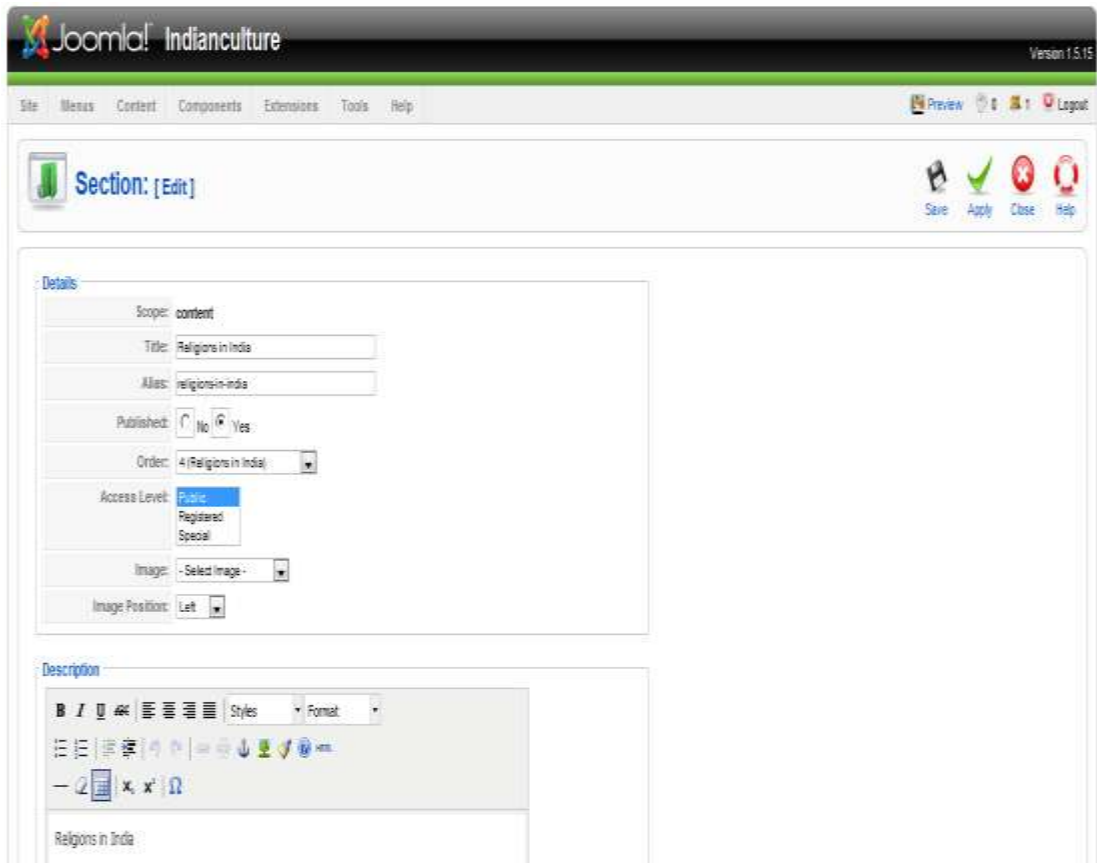


Figure : 4.14 Create New Section

- ➔To create categories go to the control panel and click on the —Category Manager.
- ➔Now click on —New to form new category and fill the name of —Title and alias of the category. Fill the description of the particular category.
- ➔Click on —Save Button.



Figure : 4.15 Tool bar of Category edit

- ➔Select any Category and click on —Publish to publish it.
- ➔Select any Category and click on —Unpublish to unpublish it.
- ➔Select any Category and click on —Move to move the Category.
- ➔Select any Category and click on —Copy to copy the Category.
- ➔Select any Category and click on —Delete to delete the Category.
- ➔Select any Category and click on —Edit to edit the Category.
- ➔Select any Category and click on —New to form a new Category.
- ➔Click on —Help for any kind of help.

Section Edit also has the same toolbar and same step should also be followed there to make change in existing sections or to form new sections.

4.14 Media Manager

In some articles the pictures are needed to describe them properly. To insert any picture in an article click on —Insert image.

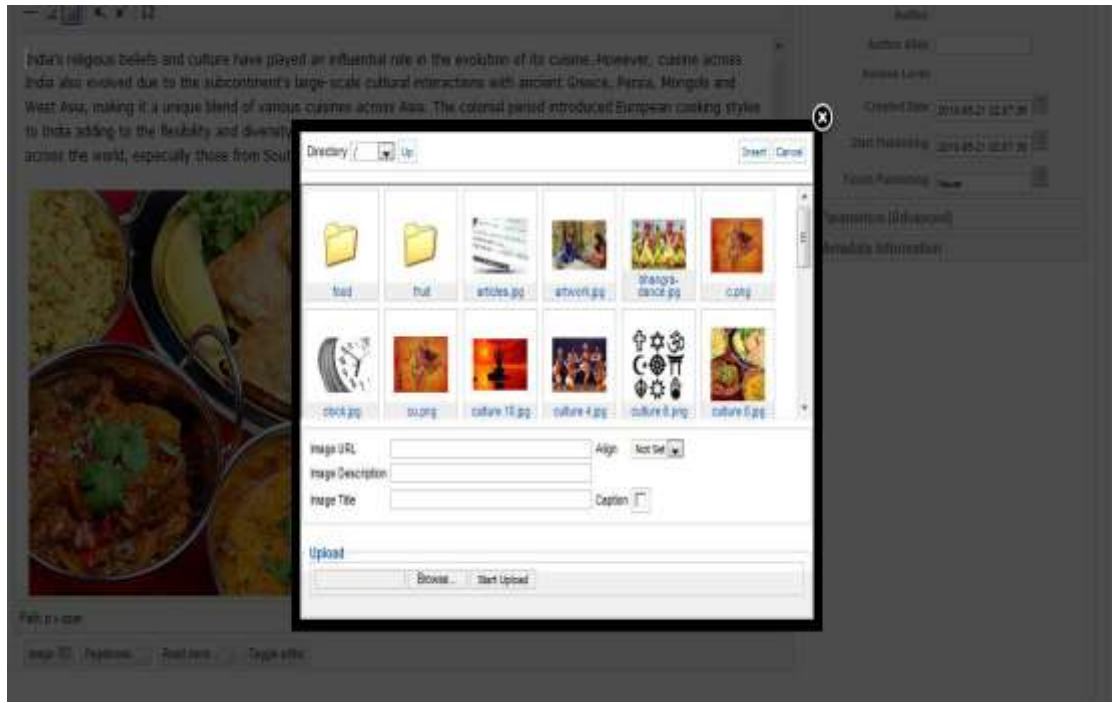


Figure : 4.16 Insert Image in any article.

→ Now image can be inserted from the available images in the gallery, from the URL and can also be first uploaded and then inserted can be inserted in the article.

Images are needed at various places so it's better to upload the images and form a folder in the media manager.

→ Go to the control panel and click on the —Media Managerl.

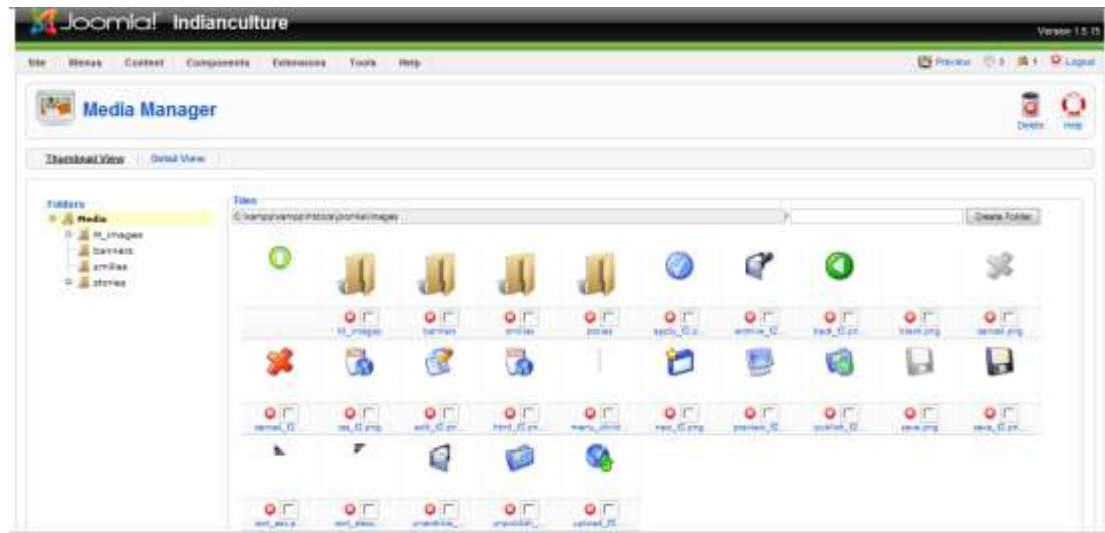


Figure : 4.17 Media Manager

- ➔ Give the name to folder and click on —Create Folder.
- ➔ If deletion of any image is needed then select the image and then click on —delete.
- ➔ Some times in website we need new pictures other than existing ones then click on Browser and then select the images from the destination folder click on —open and then click on —upload images.

4.15 Menu manager

To edit the menu.

- ➔ Go to the control panel and click on the —Menu Manager
- ➔ In this website, here we have three types of menus, a user menu, resources and main menu.

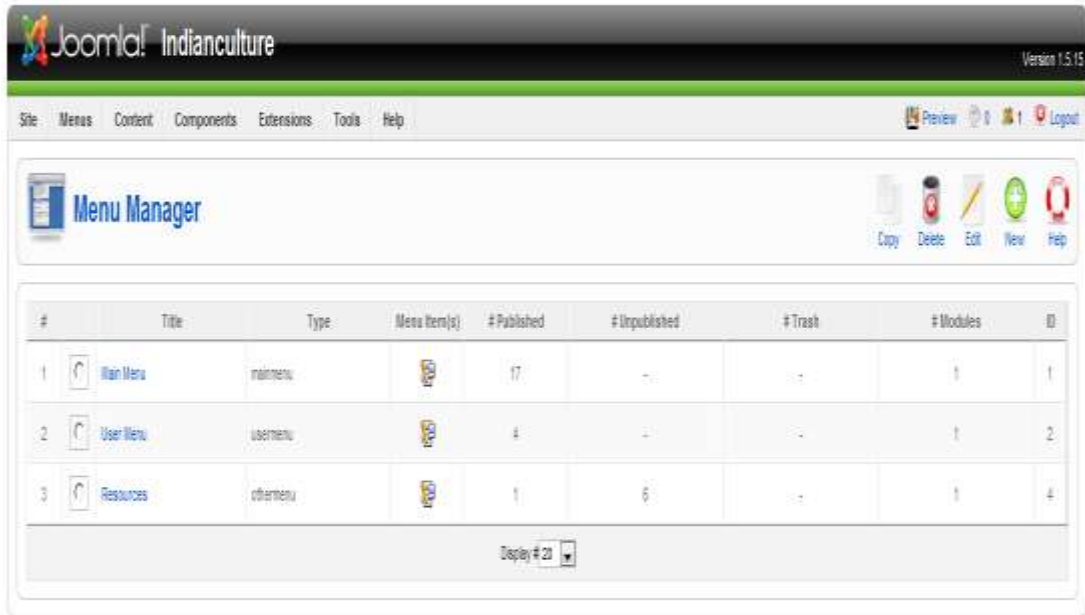


Figure : 4.18 Menu Manager

→ To edit the given menu first select any menu and click on —Edit.

→ To form a menu other than these menus click on —New

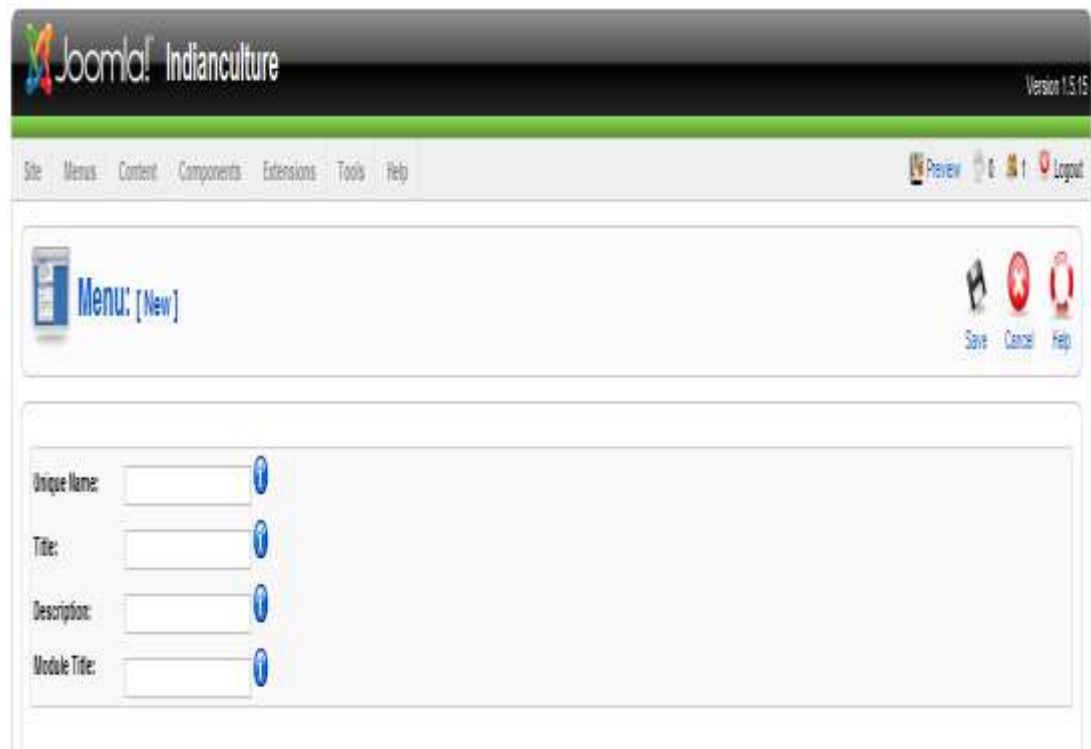


Figure : 4.19 Form to make new menu.

→ Fill the unique name, Title, Description and Module Title and then click on- save.

→ To cancel the changes click on —Cancel.

→ Click on —help if any type of help is needed.

Steps. To edit the existing menu.

We already have some items in the menu like home.Website need more menu items like —Arya Samaj links, site overview, vedic culture.

→Click on apply icon before main menu.

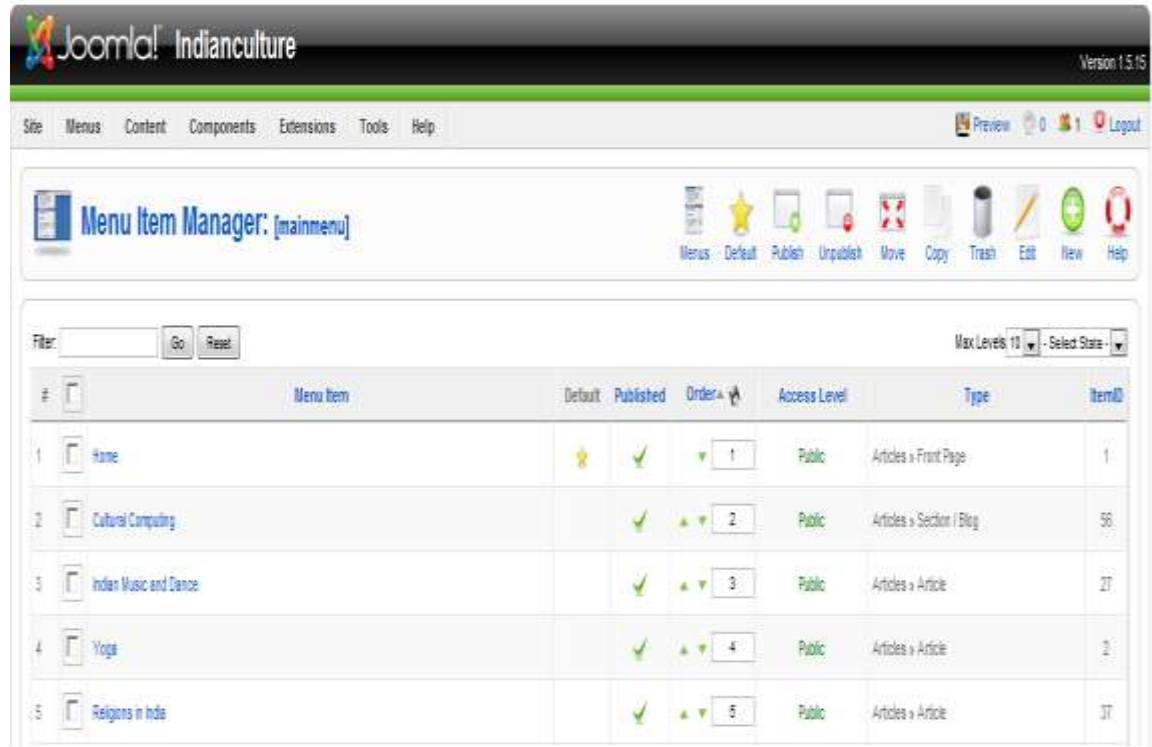


Figure : 4.20 Menu Item Manager

→Click on —New.

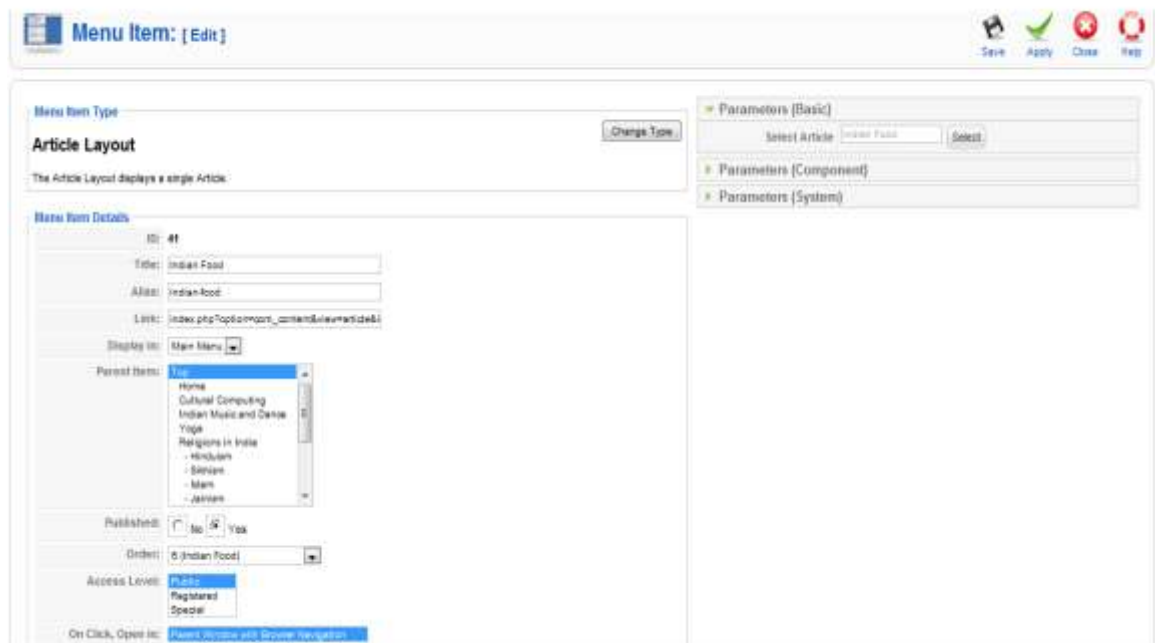


Figure : 4.21 Menu Item (edit)

- ➔ Fill the Title, Alias, choose the parent item, and choose the type of —Menu Item.
- ➔ For Menu Item —Indian Food the Menu Item type is Article Layout. The Article Layout displays a single Article.
- ➔ Choose the article from the list of article that should be published in menu item
- ➔ Click on —save to save the Menu Item.



Figure : 4.22 Select Menu Item Type

4.16 Poll Manager

Website needs a component poll to know the views of users.

- ➔ Go to control panel and click on —Components.
- ➔ Select polls from drop down menu and click

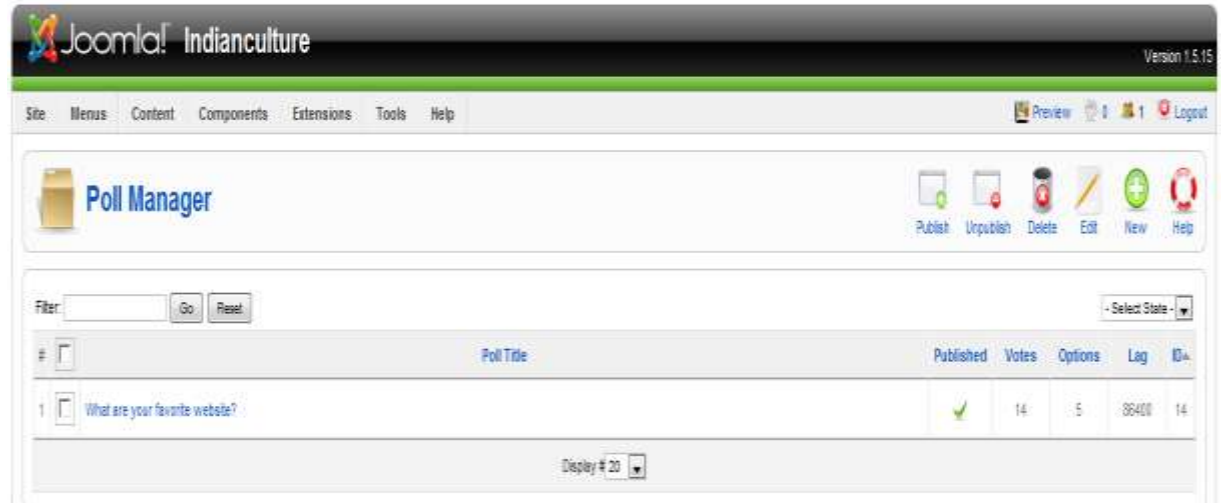


Figure : 4.23 Poll Manager

→ To create a new poll click on —New.

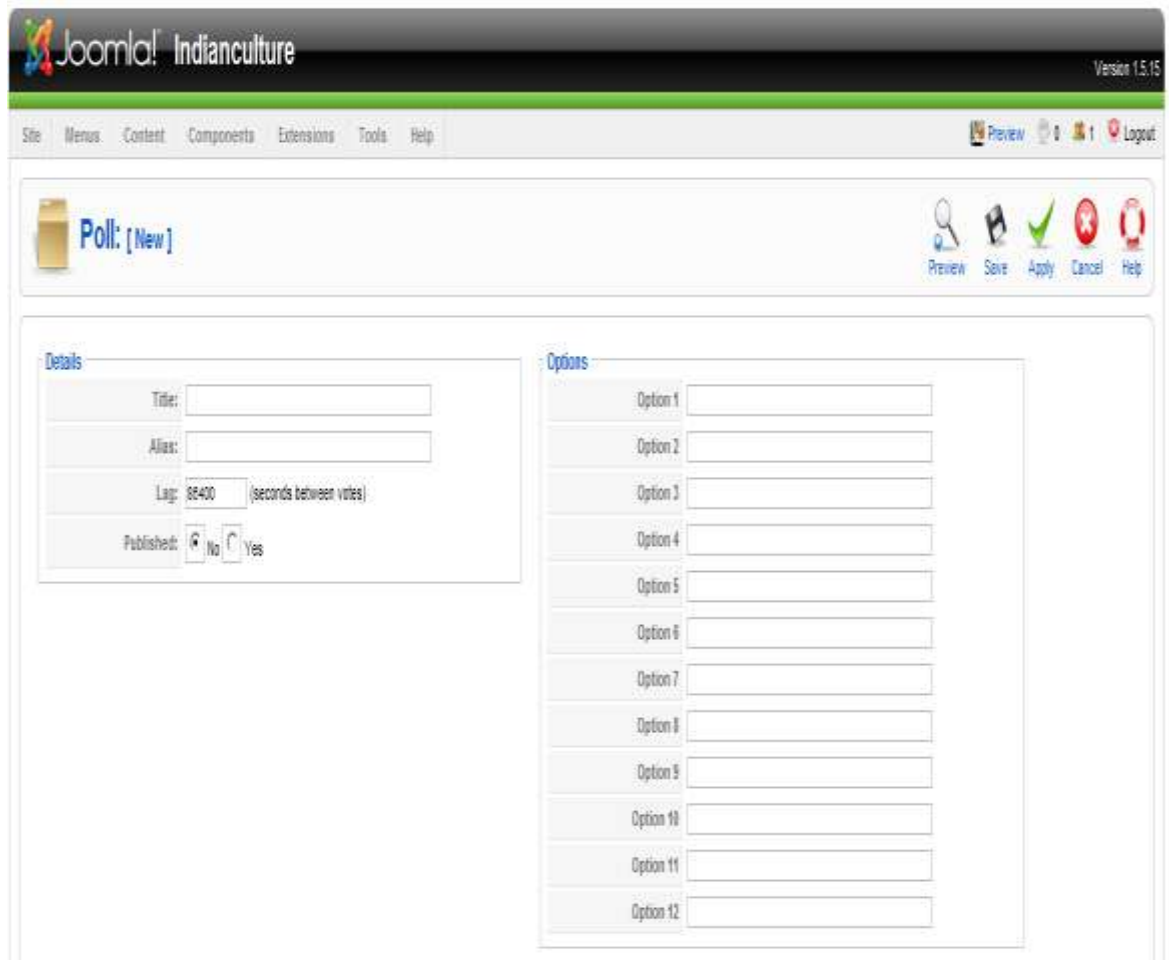


Figure : 4.24 Create New Poll

→ Fill the Title, Alias and options and then click on Save

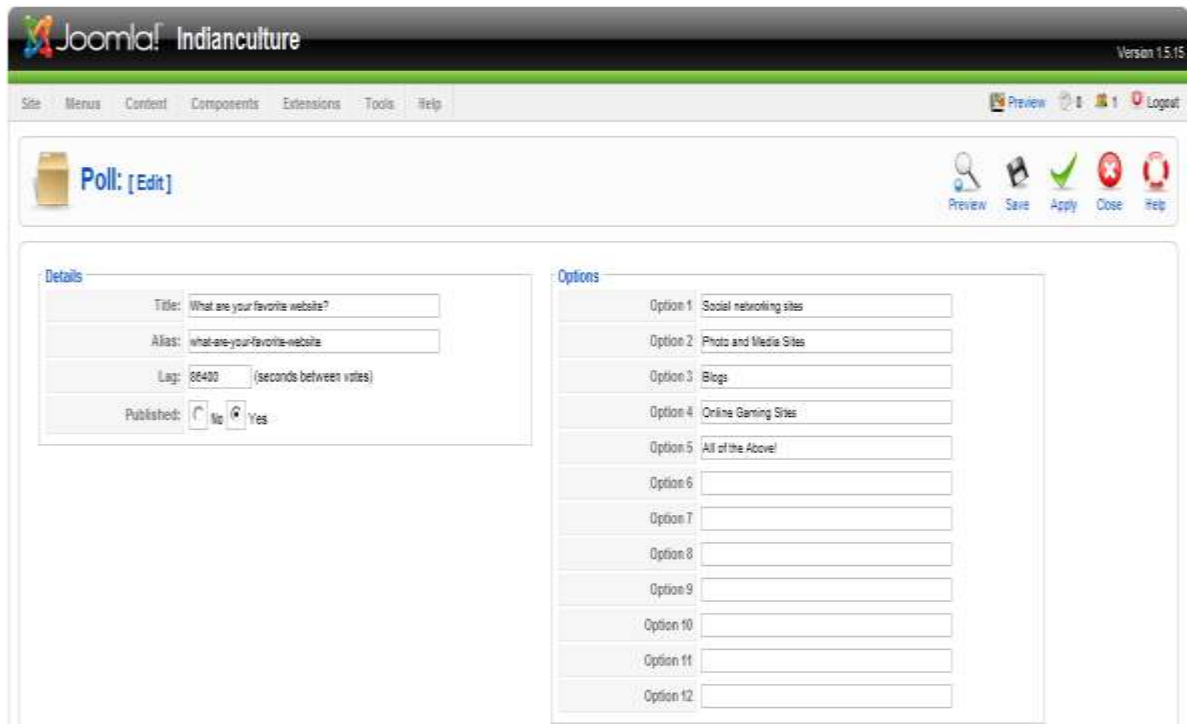


Figure : 4.25 Poll Example

4.17 Select the template for the website.

- ➔Go to the control panel and click on —Extensions.
- ➔Select —Template Manager| from the drop down menu of —Extensions and click on it.

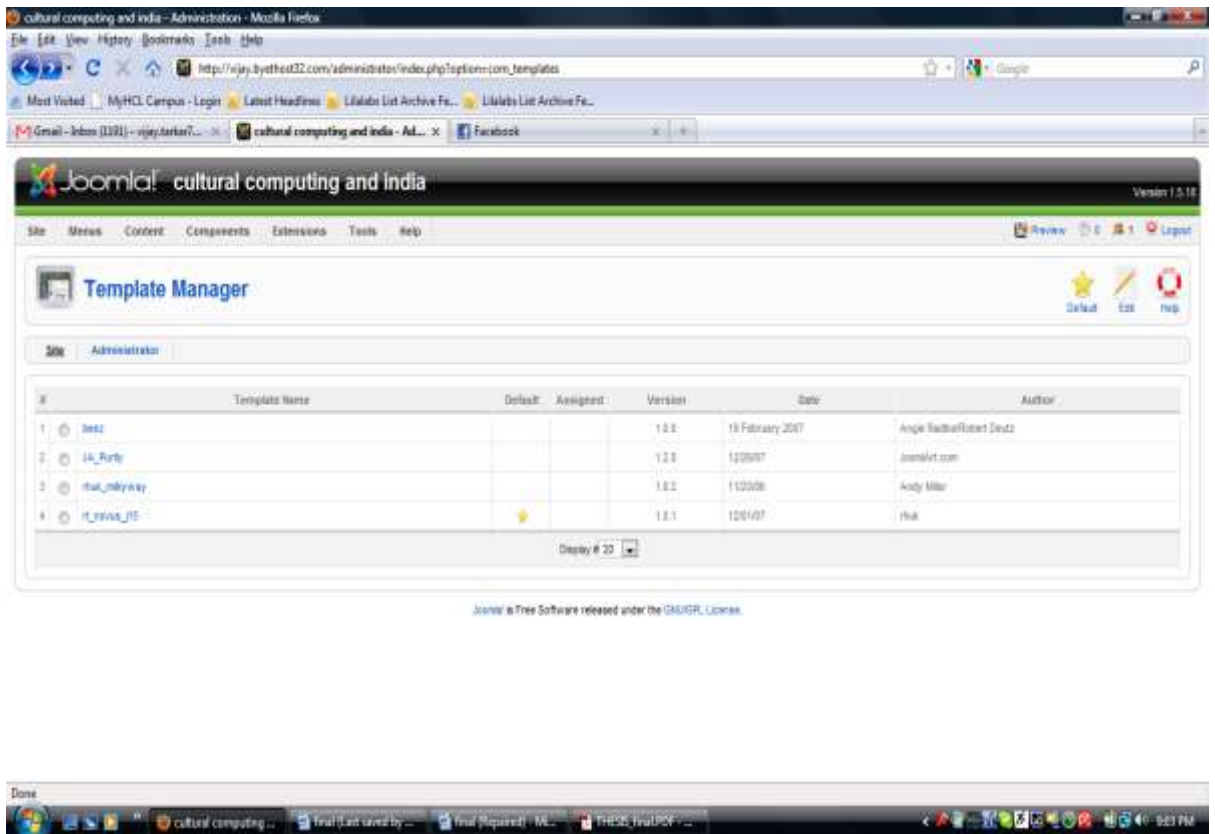


Figure : 4.26 Template manager

- ➔To edit the template select the template and click on —EditItl.
- ➔To choose the template for website select-rt_novus_j15” template from the list and then click on —Default.
- ➔To edit the logo of the template choose logo type.
- ➔Here for this website the logo type is —Image then type the —Logo Text in the given space which is —Cultural site .
- ➔Select navigation type to —Specified in Percentage.
- ➔Choose the color of header theme, background theme and primary element.
- ➔Click on save to change in the template.

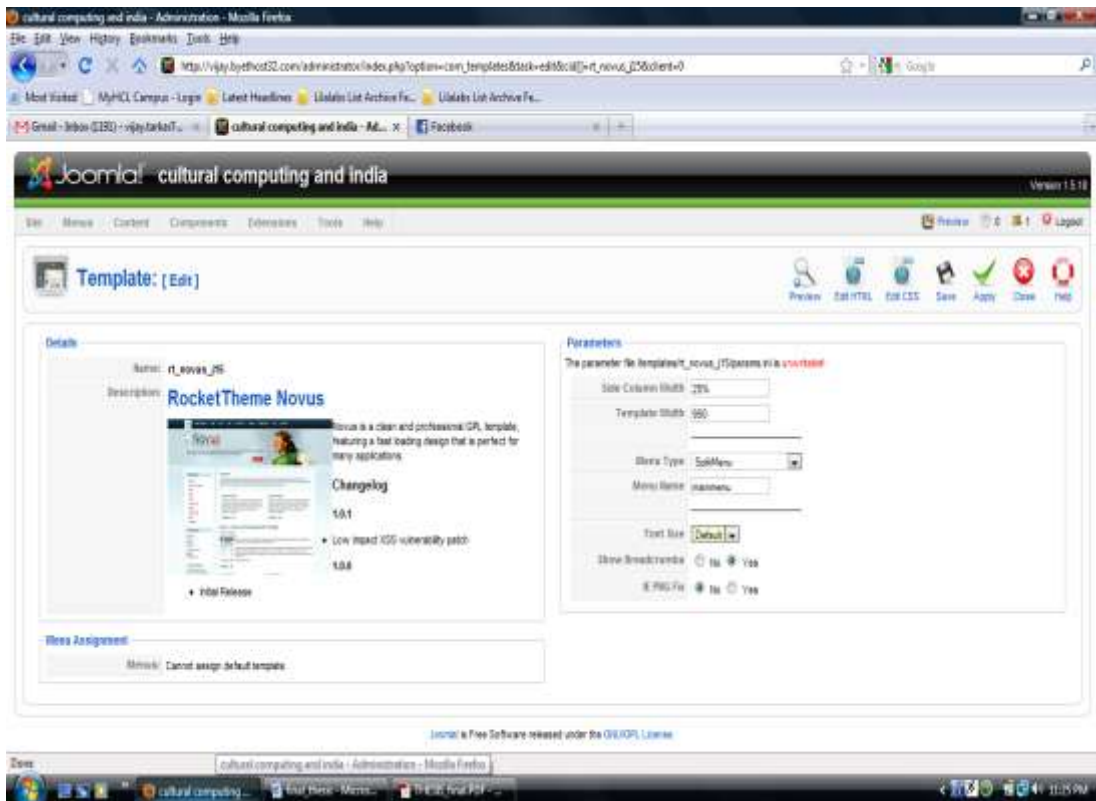


Figure : 4.27 Template edit

4.18 Edit Global Configuration of the website.

- ➔ Go to the control panel and click on —Global Configuration.
- ➔ Write the offline message when the website is out of service for the maintenance.
 - Type the name of the website
- ➔ Write all the info related to your site in the Global site Meta description.
- ➔ Write keywords representing your site in brief in, Global site meta keyword.
- ➔ Click on -Save.

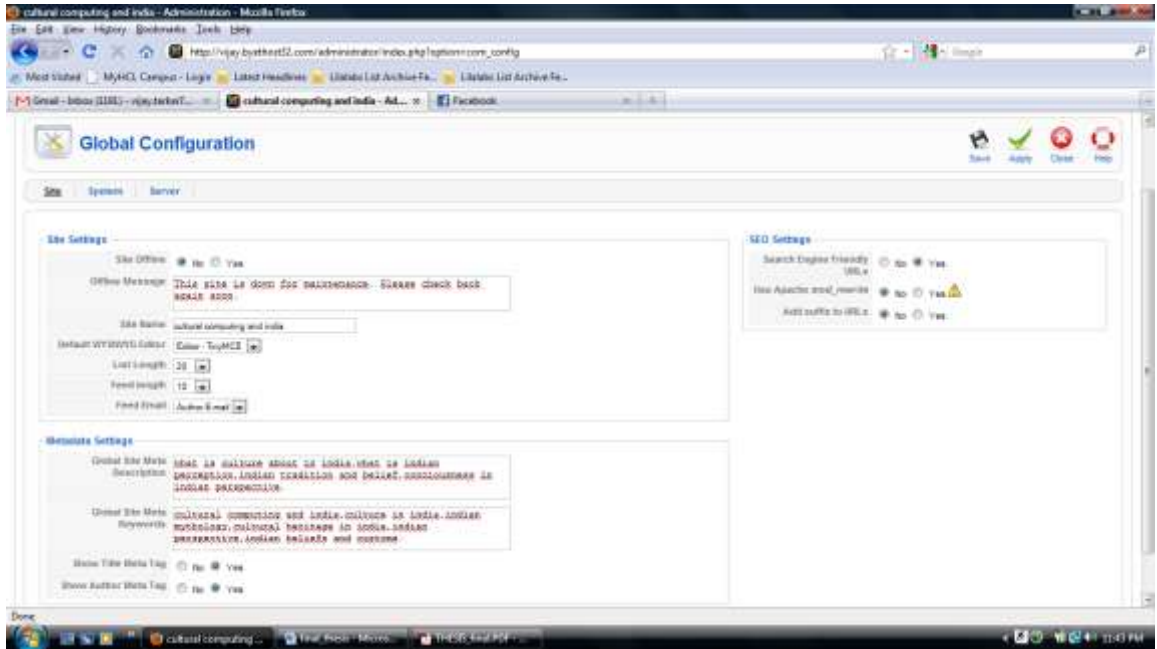


Figure : 4.28 Global site configuration

4.19 Module Manager

is used to manage the modules.

→ Go to the control panel and click on Module Manager.

→ Tool bar

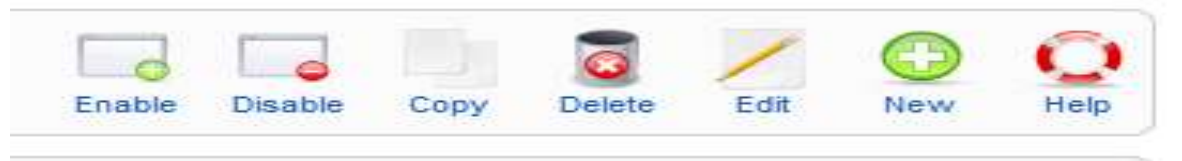


Figure : 5.29 Tool bar of Module Manager

→ To disable any module first select the module and then click on —Disable.

→ To delete any module first select the module and then click on —Delete.

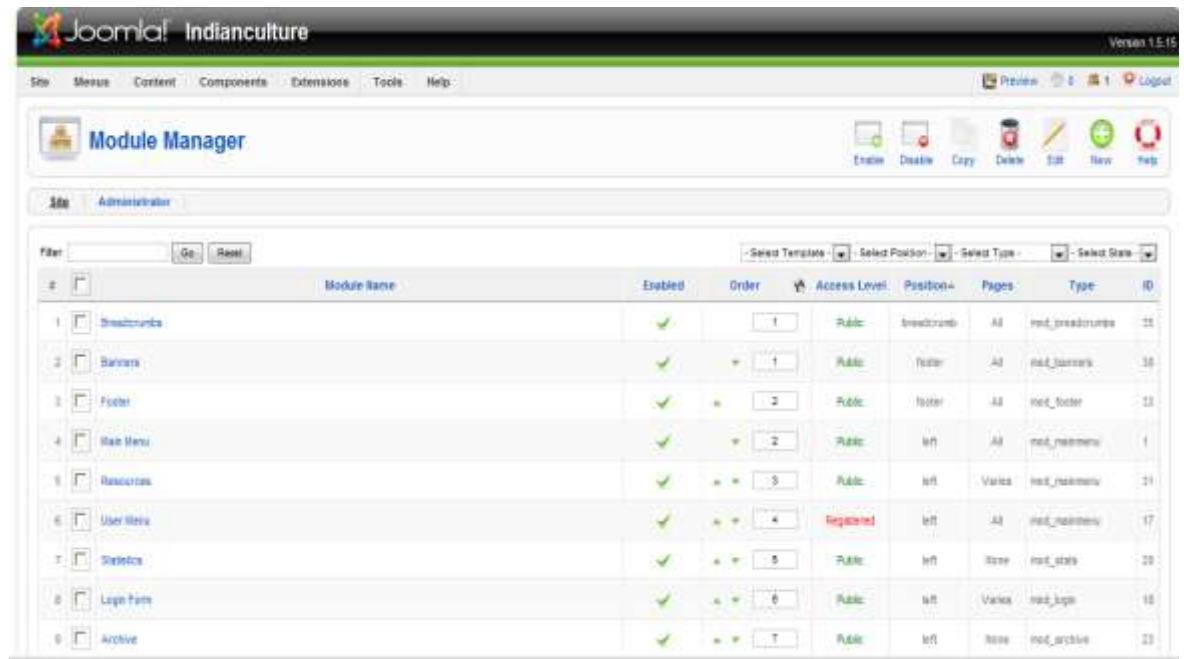


Figure : 4.30 module manager

- ➔ To edit any module first select that module and then click on —Edit.
- ➔ To create a new module click on —New.
- ➔ To copy a module click on —Copy.
- ➔ Click on Help If any type of help is needed.
- ➔ you can get help about module usage online by following the links given, you can even search for Joomla extensions for modules you want.

4.20 Extension Manager

Extension manager is used to install uninstall and set the new plug-ins and modules you desire for your Joomla platform. Since Joomla has a vast developer community they keep on providing latest features for your CMS so it's a gateway to extend the capabilities of your Joomla CMS.

4.20.1 Steps to install extensions and modules

- ➔ find out the required plug-in that match your requirement at Joomla extensions site, or you can google the plug-ins which you want. There are many sites and communities that support Joomla development process. all these have their terms to supply a Joomla plug-in.

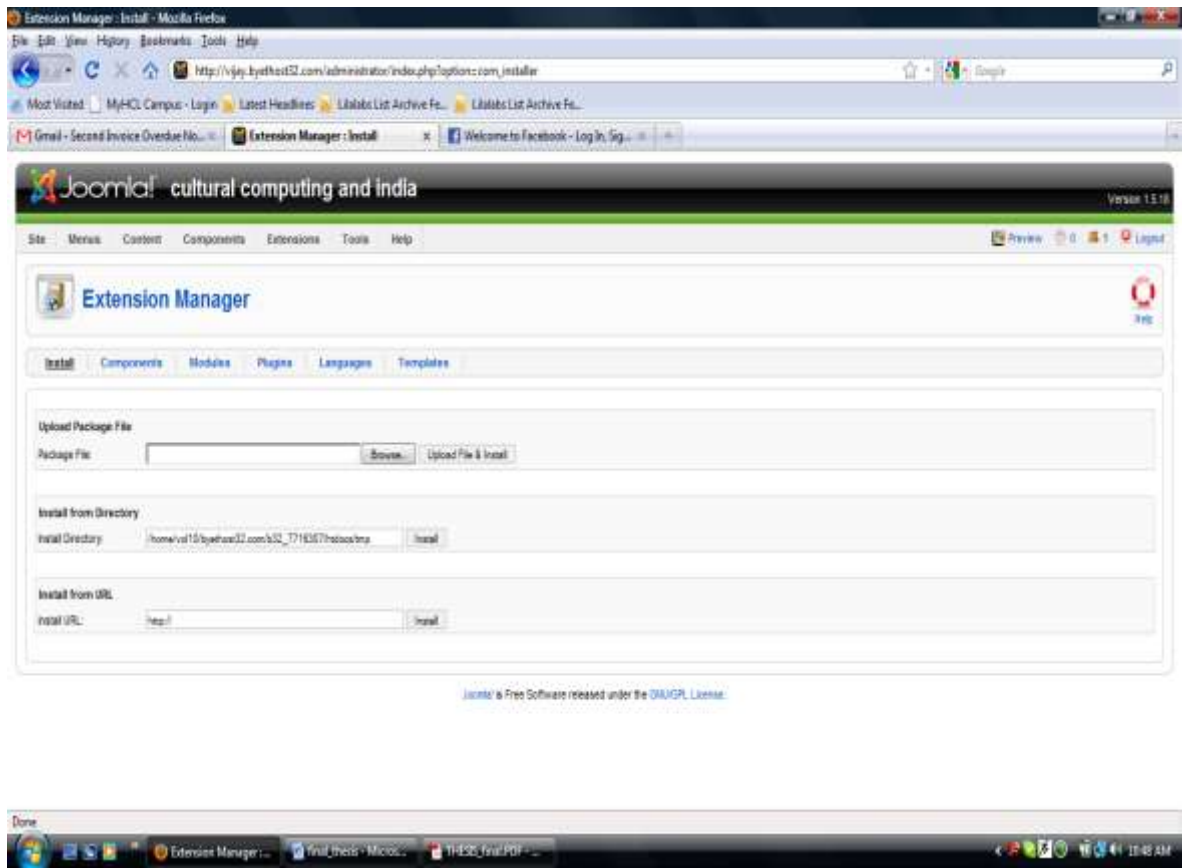


Figure : 4.31 Extension manager

- ➔ You can download the plug-ins in Zip or Rar compressed format
- ➔ After that select the downloaded package file from your computer using browse button in Package file option.
- ➔ Click on upload file and install, if all goes well behind scenes your file will be decompressed and installed. For any problem you can refer Joomla community forum.

4.20.2 configure modules and extensions

Before you can make use of any module or plug-in you have to enable and configure it, so here are the steps used to do that. Each module has different settings and parameters values to use. For checking any modules setting always download the documentation along with the package. It provides all the details and sometimes it may provide you with troubleshooting tips also

- ➔ Go to extensions menu-click module manager
- ➔ Find the module you installed and click on enabled column next to it, a check mark will show that module is enabled.
- ➔ You can filter out the modules based upon the templates, position, type and state

given above the table.

- ➔ You can set Position, order and Access level of modules according to your Requirements.
- ➔ Access levels are public, administrator and registered, referring to the group of users who can access the modules over your pages.
- ➔ IDs have their utilities in maintaining parameters and arguments as in many modules we have supply with ID to work it properly. ID plays important role on configuration of any module or plugin at back end of Joomla.
- ➔ Number of modules or plug-ins may depend upon your requirements as you may have hundreds of the depending upon the requirements.

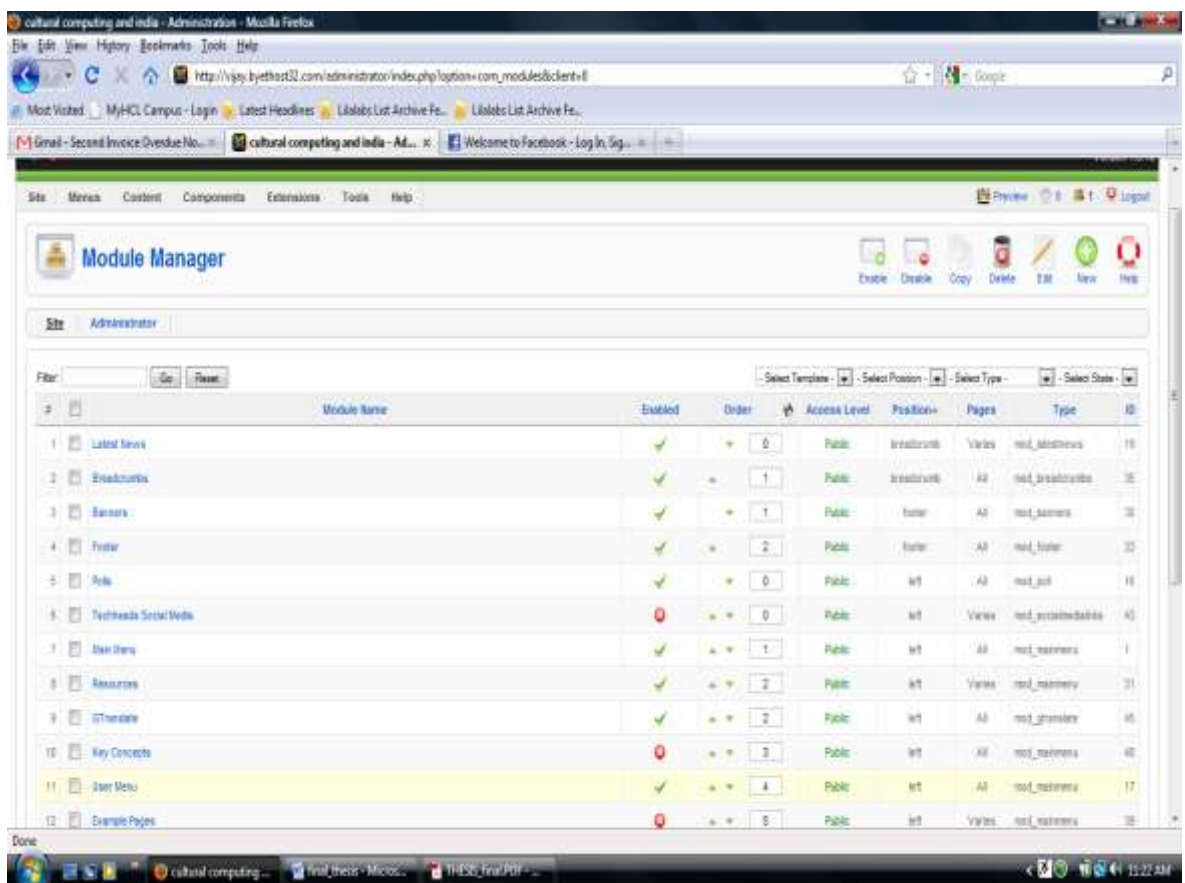


Figure : 4.32 Module manager

4.20.3 Edit a Module

each module has different type of settings depending upon the Joomla framework and position where it goes.

- ➔ Normally it has details, menu assignment, Module parameters and advanced Parameters.

- ➔ here we are taking Gtranslate module to show this , write title, select position of module, click enabled, click show title in details settings. set the Access level.
- ➔ In menu assignment settings select all as we want it to be displayed at all the pages of the site.
- ➔ Select the orientation as you want, in language option select the language you want your site should be diaplyed, select the radion button against language you want to show directly, otherwise user can select it from dropdown box
- ➔ In advanced settings select the cache settings and cahe time for the module to exist during a session.
- ➔ Module class suffix settings should we used only if you have expertise over Joomla backend code management.
- ➔ There is one setting for translation method choose one you want,if you want your page to be redirected to google then choose redirect but this is not desirable in many cases.

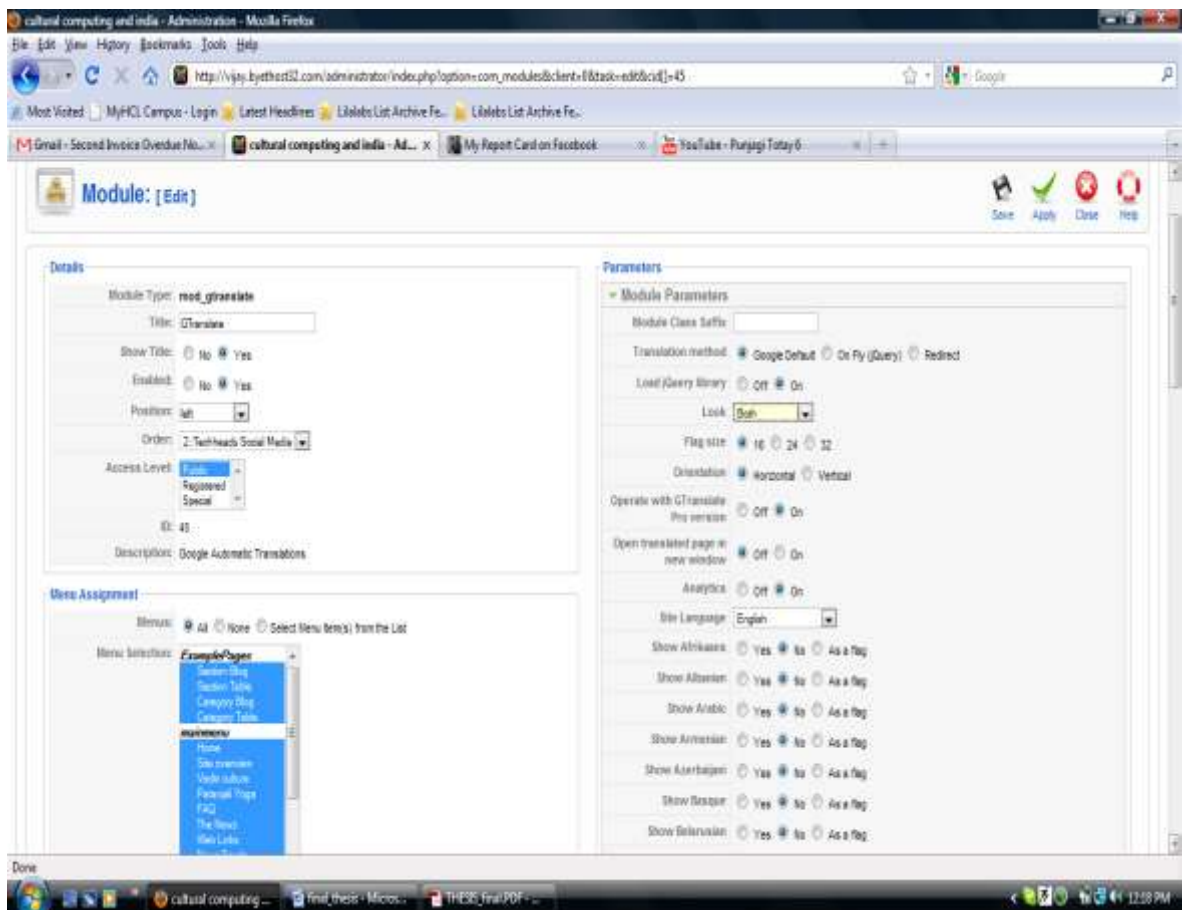


Figure : 4.33 Module edit.

4.21 The Way I propose to tackle the problem

As we know social computing is buzzword these days. So can we make the use of social computing to promote cultural computing and ethics among youth. here I proposed a solution to this question and presented a way so that we can make best use of social computing paradigms and social networking. Here I am presenting work that I consider is effective to improve the results to develop cultural computing paradigm much stronger and effective, because our culture matters.

As we know many social sites provide developer options to develop the portals along side with social computing. Most of the popular sites do this and provides a different section for developing the network along side their consumers and users and portals.

It benefits the both consumer of services provided by the social network and the social networks itself. Both can participate to develop their interests using social networking. Social network provide the facility to create page for brand or website promotion and we can create the pages to create the groups for any special cause or community. We can promote the cause with specialized ads provided by social networking if we have ample amount of money.

Social networking sites work along different platforms for their development purposes. But the most famous ones like Facebook and Twitter uses AJAX and PHP as their development platforms. There is no restriction to use any of the combinations of the technologies and sites like Facebook, Twitter and google are leveraged with wide range of technologies.

So we have ample opportunities to find a solution to our problem or to represent a thing in other way. Its your idea that works because you know the domain of problem. The question I am answering here represent a way for using one social networking site.

Believe me it was quite interesting to find something like Facebook developer network where you can participate to develop applications and seamless integration of

your product or portals. As it increases the chances of promotion over the web via social reach.

4.22 Things I used to develop my portal using Facebook developer

Facebook developer is a platform that provides various types of support API's to either embed or make use of social plug-ins. Social plug-ins may vary in their functionality depending upon the settings you chose.

Social plug-ins are the small applications which can be embedded in your website or portal. For setting social plug-ins you have to make application page for your site and register it with the Facebook .there are whole lot of settings you have to do to before you can make use of the plug-ins in a controlled fashion. Facebook developers section provides code snippets and API for customized application developed for Facebook or the entire set of plug-ins for any website or portal. But it require a lot of experience with customizing your web source code and the making plug-ins work exactly as you want.

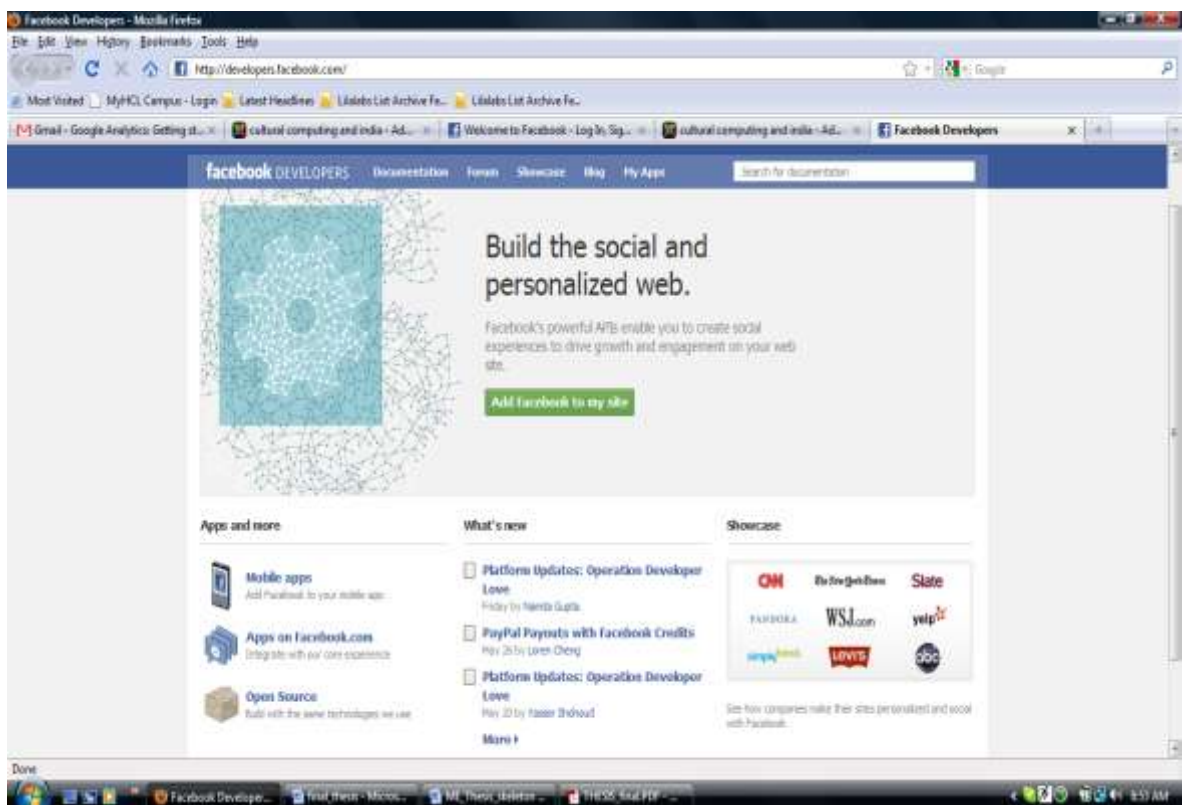


Figure : 4.34 Facebook developer platform

Facebook provides platforms to develop applications for wide variety of communication devices. The concept I am explaining here is an example and there are other social sites available that provides some sort of support for your website and devices all have their own development API and interfaces for the consumer needs. So it's a better way to engage a user in social environment while promoting cultural values and cultural computing. Users feel like they are engaged in social blogging while they are learning about culture.

Social plug-ins can increase your reach as they support commenting ,liking, and other notifications features. Initially they are visible to your friends and social groups. If you or your friend share the thing it can further increase the reach through the process of notifications and referrals.

I used the features available to integrate Facebook social-plug-ins.now question arises what are these social plug-ins. Social plug-ins are way or a small application that can be fitted to your customized web components and pages. It requires some sort of technical specifications to be integrated to any web developer platform or web portal or websites. There are many in-depth features available to track your plug-in activities and notifications via Facebook. It also provides support to check the traffic activities of plug-ins within your website or portal.

40.23 Example of the some of the plug-ins used

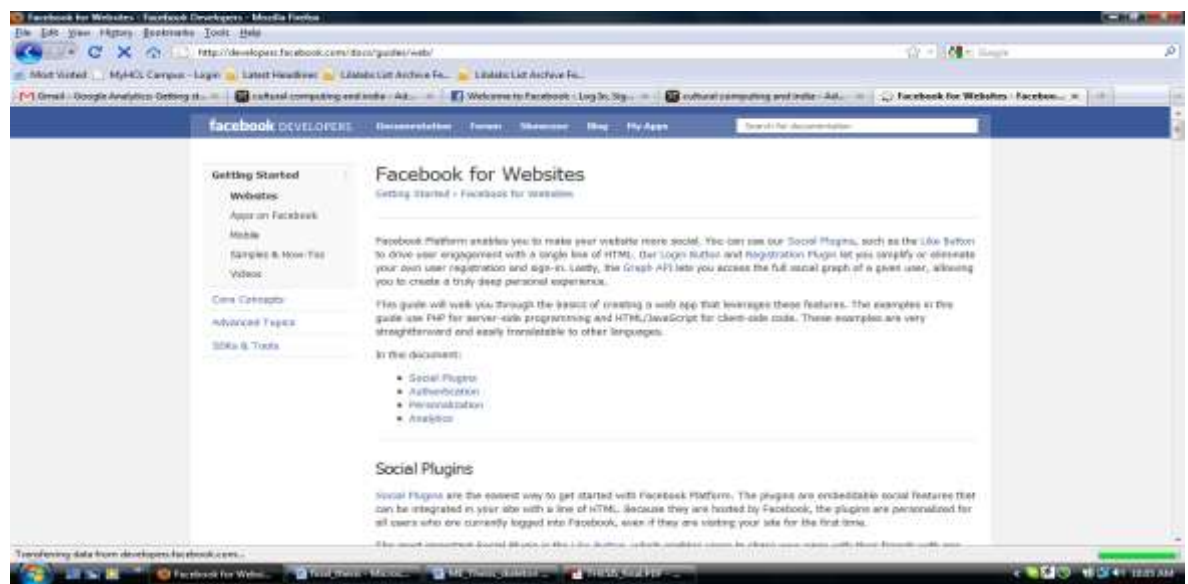


Figure : 4.35 Facebook page to support websites activities

Here I am considering the Facebook plugins that you can add and customize your web environment. As we can see in the figure Facebook provides four type of support for websites as basic platform.

1. **Social plugins-** plug-ins like comment box,like buttons, sharing options,like box,facepile, notifications and other basic tools to support sites
2. **Authentication-** authentication for valid transactions over the site using Facebook. Facebook uses specialized modules to authenticate web applications over the web and identification of correct authors of the site.
3. **Personalization support-** provides some custom environment for author of the web portals depending the needs of the author or developer.
4. **Analytics** – provides the tools and support for the administrative interface of the website ,as it provides analysis of traffic patterns, traffic reports of social plug-ins, user impressions and the demographics of the web portals.

4.23.1 Social plugins

Now I am explaining how to make good use of the plug-ins provide by the Facebook developers platforms. I will explain all the plug-ins one by one and some insight about them. How we can integrate them inside our applications and web pages to provide a social experience to the users of user your site. I am considering an introductory level only as a developer may go on getting different customizations and administrative interfaces from Facebook. Every day something new could be added and provided to your visitors of the site to have a nice socialized experience ,as Facebook has become a part of their life.



Figure : 4.36 Facebook social plug-ins

Figure above describes the sample code for webpages to embed the plugins inside the pages. It could be as simple as that or as customized as I m using inside my pages as I worked upon template framework inside my portal.

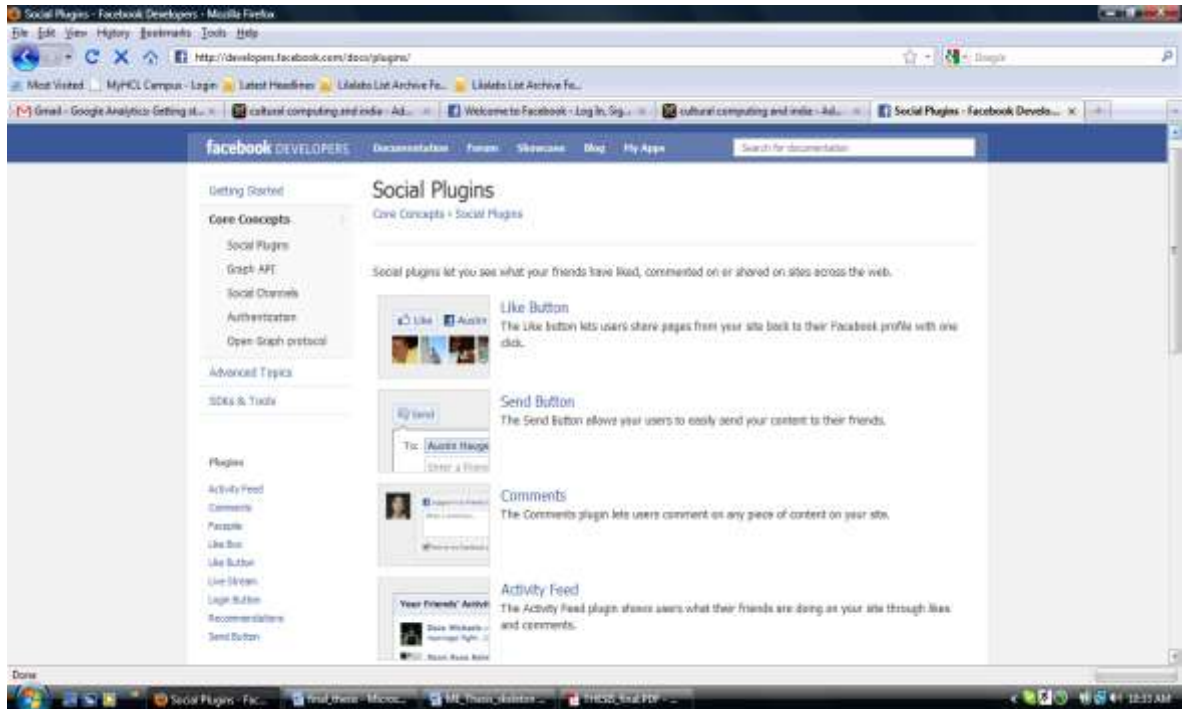


Figure : 4.37 Options for social plugins

As we can see the figure above shows various plugins to integrate in your site. You may try any one of them or all depending upon your choice. All you have to do is to customize and adjust the web code of you pages according to plugins code and put the at proper palces inside your websites or portals.

4.23.2 Like button

I am presenting an example and not going in the depth of plug-in and technical specifications. I am just presenting a way to that an be useful for site. Like button can be integrated at any place inside your web page ,but I recommend to embed it inside the body part of your pages at required position of the articles.

It enables to share to share content with your friends and friends of the friend depending upon you profile settings. More visible it is to public more useful it will be. Its as simple as that. When a user clicks a like button on your site, a news story

appears in the Facebook profiles of the user's friends. It shows that your friend liked one article that can link back to your site.

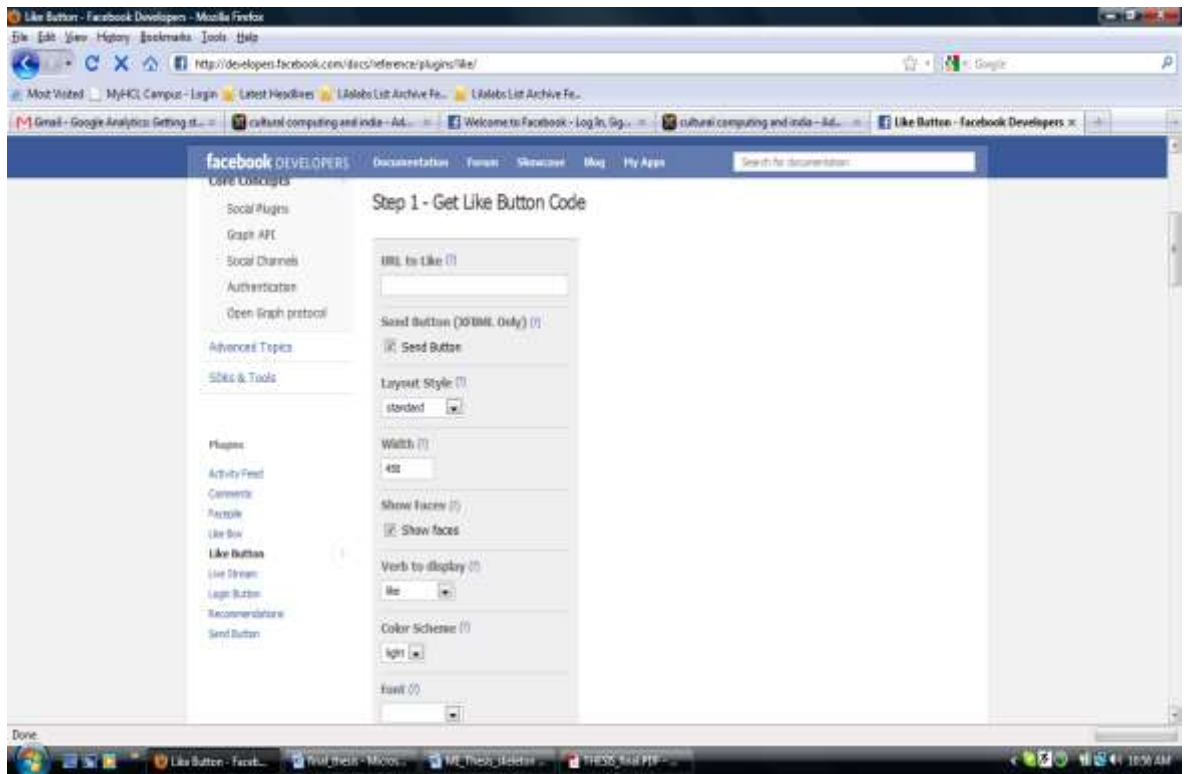


Figure : 4.38 Like button settings

4.23.3 Send button

The send button allows your users to send the content link to their friends using email id. They can send the link to social groups having group mail ids or they can send the links to the mailing lists of an organization. the Send Button allows them to send a private message to just a few friends or all as the need is. it may be useful for a Facebook user group who all are a members of the group all all of them will get notifications about the links a friend send to them. Equally useful for the organizational groups having the different domains. You can also get a combined like and send button at one place.

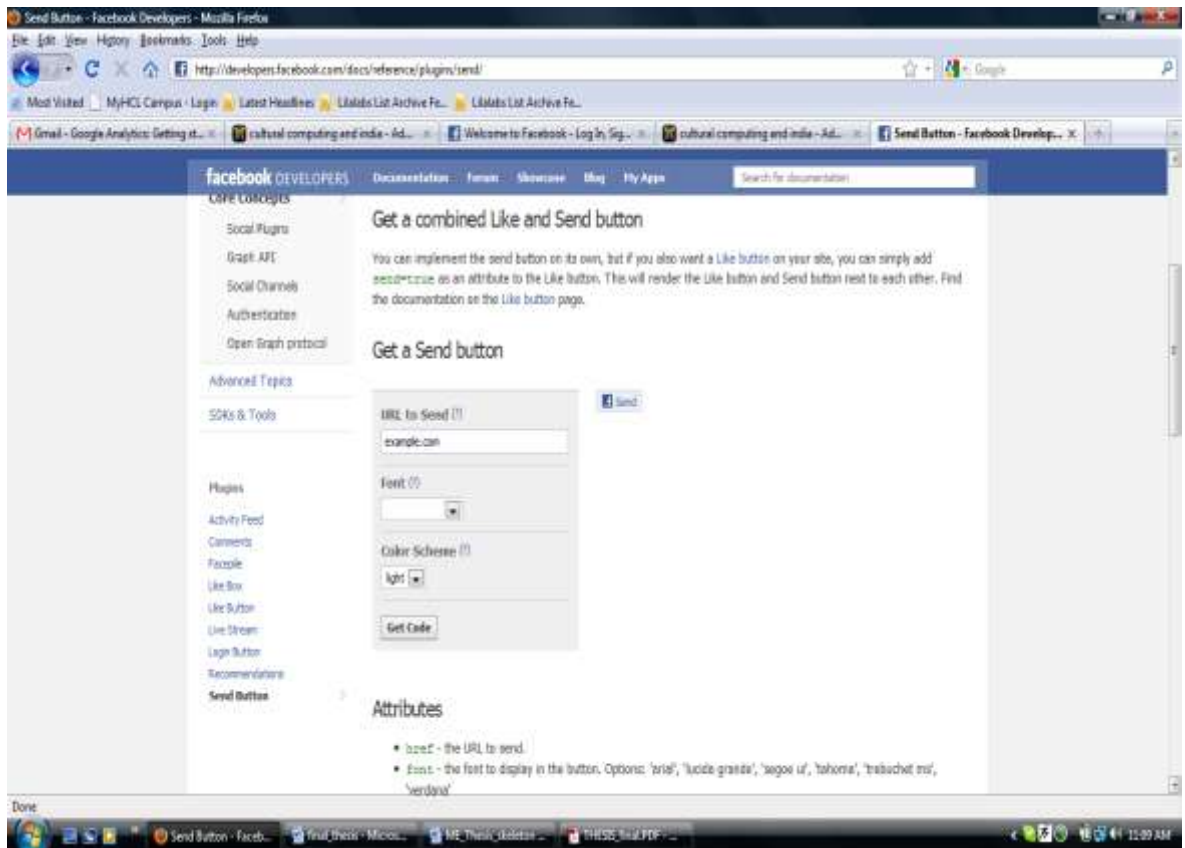


Figure : 4.39 Get send button

4.23.4 Comment box

Comment box provides the facility to embed the plugin in your site at places where you want to place it. You may desire to put at the end of articles to provide your users to have their say about nay featured content or article. The benefit of comment box is that a news feed story appears in the profile of friends of the users as he comment on something over your article at your site. It may create interest for his friends also and may refer them to your site. It will link back to the url of user comments if friends and thus can increase the traffic over your site.



Figure : 4.40 Settings for comment box

4.23.5 Activity feeds

Activity feeds show the most recent activities going over your site. If a user shares something it could be shown there and it also show the urls of the things recently shared. You can see the activities of your friends after logging into your account. If any of your friend has done something over site it will show you in the activity feed over your site.

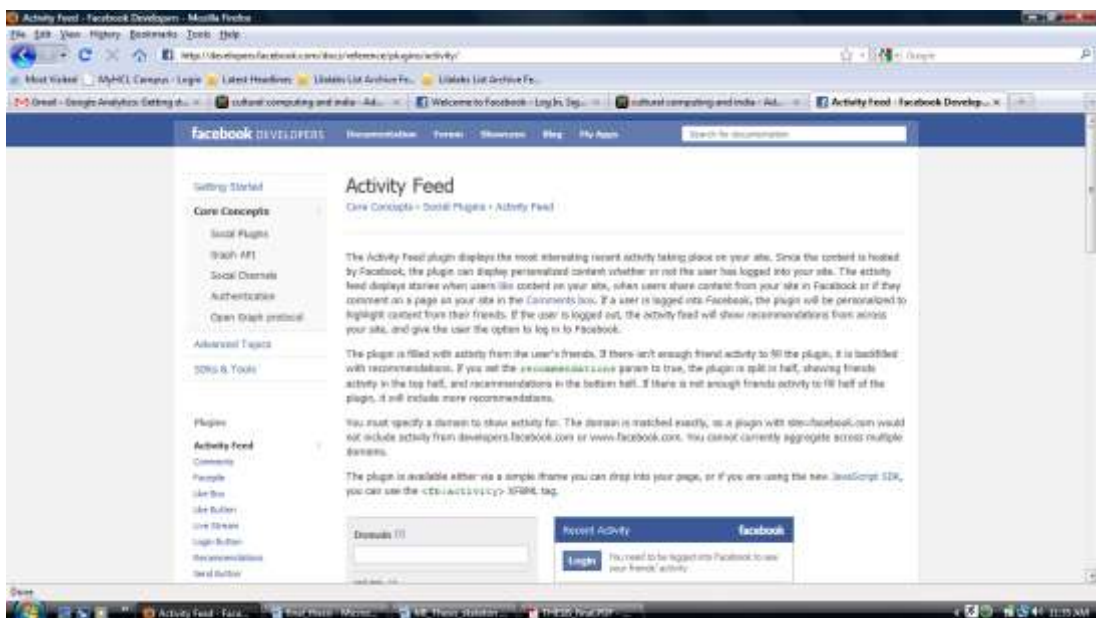


Figure : 4.41 Activity feed plug-in settings

If there is not enough activity of your friend in the activity feed, it will fill the box with recommendations for the content that others have shared and may show the count for the people who shared any article with a link to that page.

4.23.6 Like box

Like box is a social plug-in that may attract visitors to the Facebook page or application of the site author. If a user clicks like box on your site, he will become member of your Facebook group page. After that any status update on your Facebook page or application will be shown in the profile of your Facebook page members thus spreading the word.

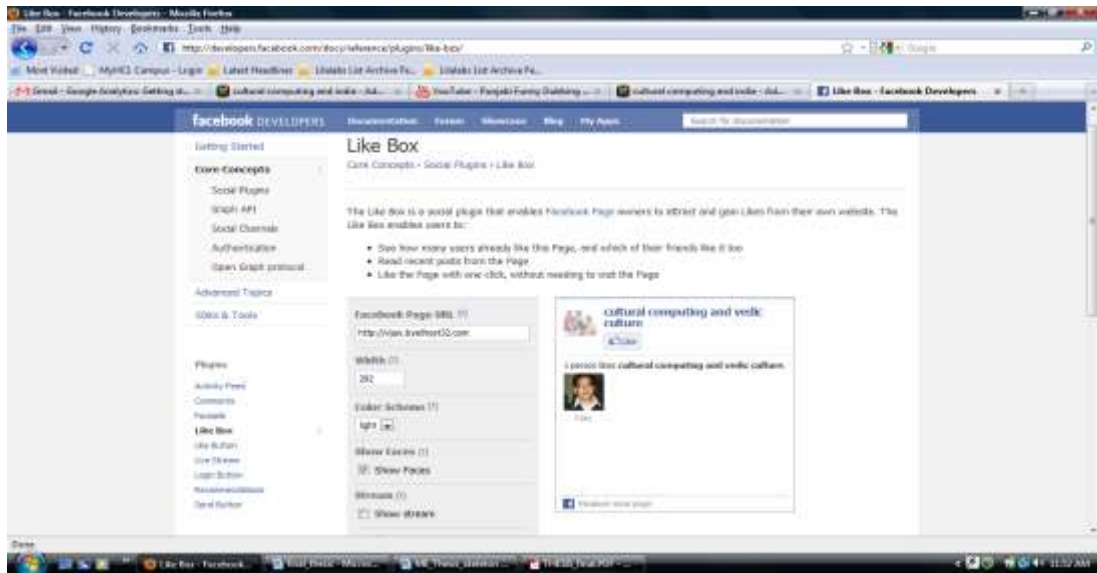


Figure 4.42 Like box settings

4.23.7 Recommendations

This plugins provides recommendations to the articles other people have shared, so user can easily find out the interesting material that others have shared also shows the count of people who shared this. If no one has shared anything it may show you the most visited pages of the site. You can see what your friend has shared after login with your account.



Figure : 4.43 Recommendations settings.

4.24 Snap shots of my site after integrating the plug-ins



Figure : 4.44 Shows integrated like box and recent activitybox



Figure : 4.45 Integrated comment boxes and other options

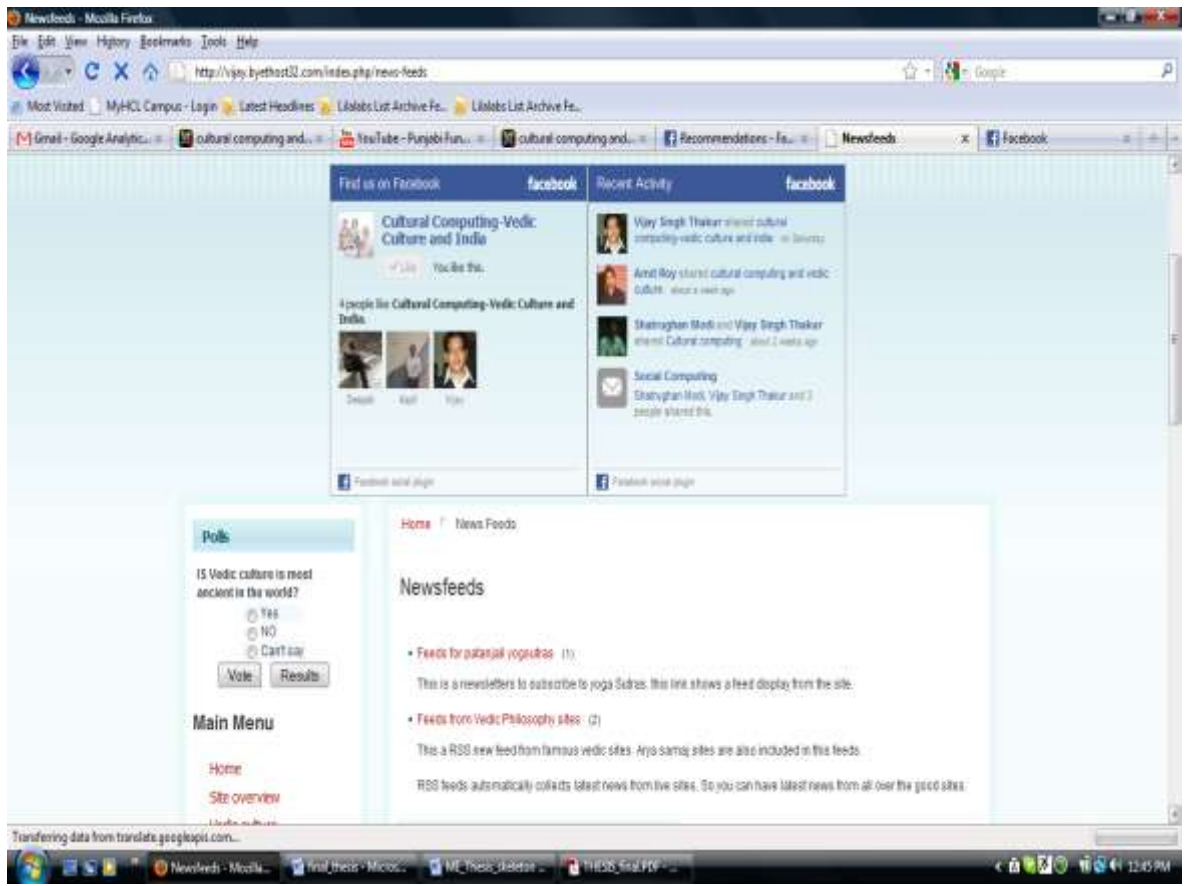


Figure : 4.46 News feeds from other sites

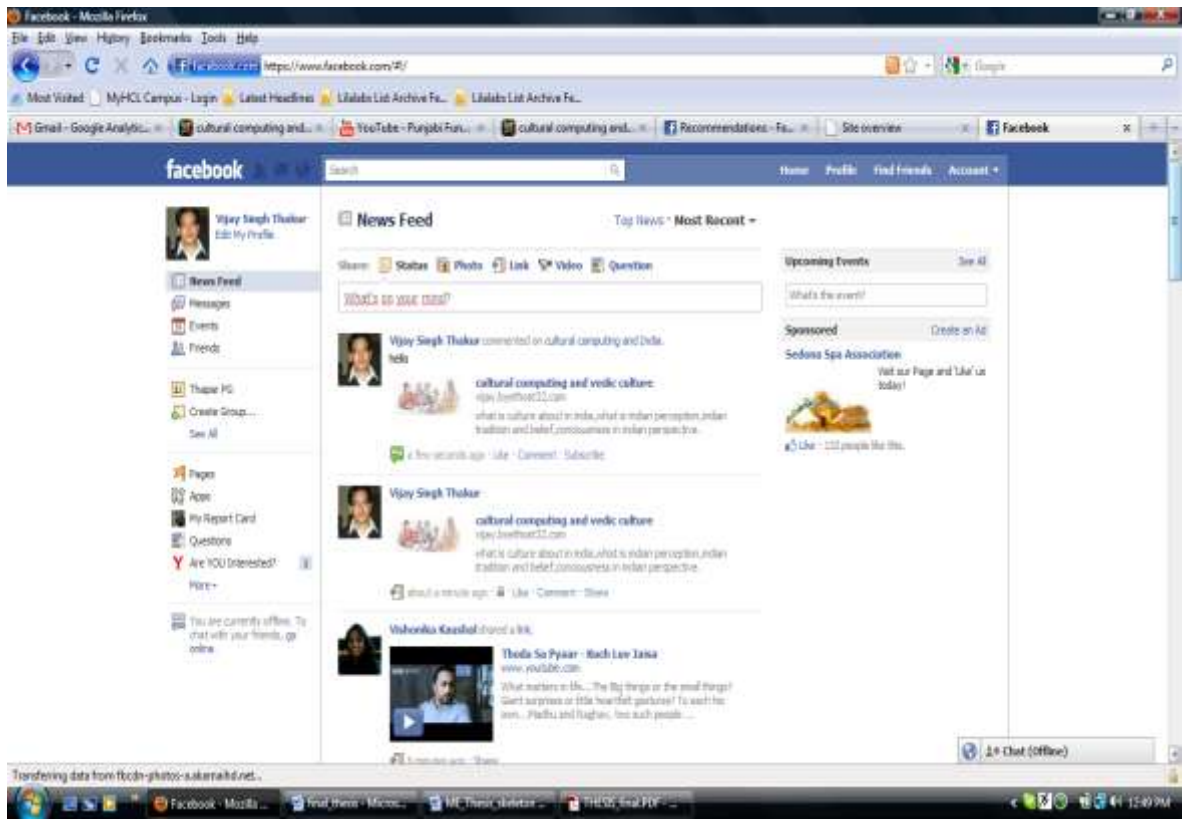


Figure : 4.46 News feeds showing comments over the site



Figure : 4.47 Like notifications shown in the news feed

Chapter 5 experimental results and findings

In this chapter I have represented some of the testing results of the the portal I have developed . here I tried to explain what were the initial results and why. As we know a website or portal may take some time to grow its popularity,as the quality of content and the way of presentation may vary from site to site. One thing may be attractive for one user while other don't not think so. I had already described that if we can do the thing I have tried in this portal for around most popular social networks it can be useful to promote culture and hence cultural computing would be justified.

5.1 Analysis of traffic for website

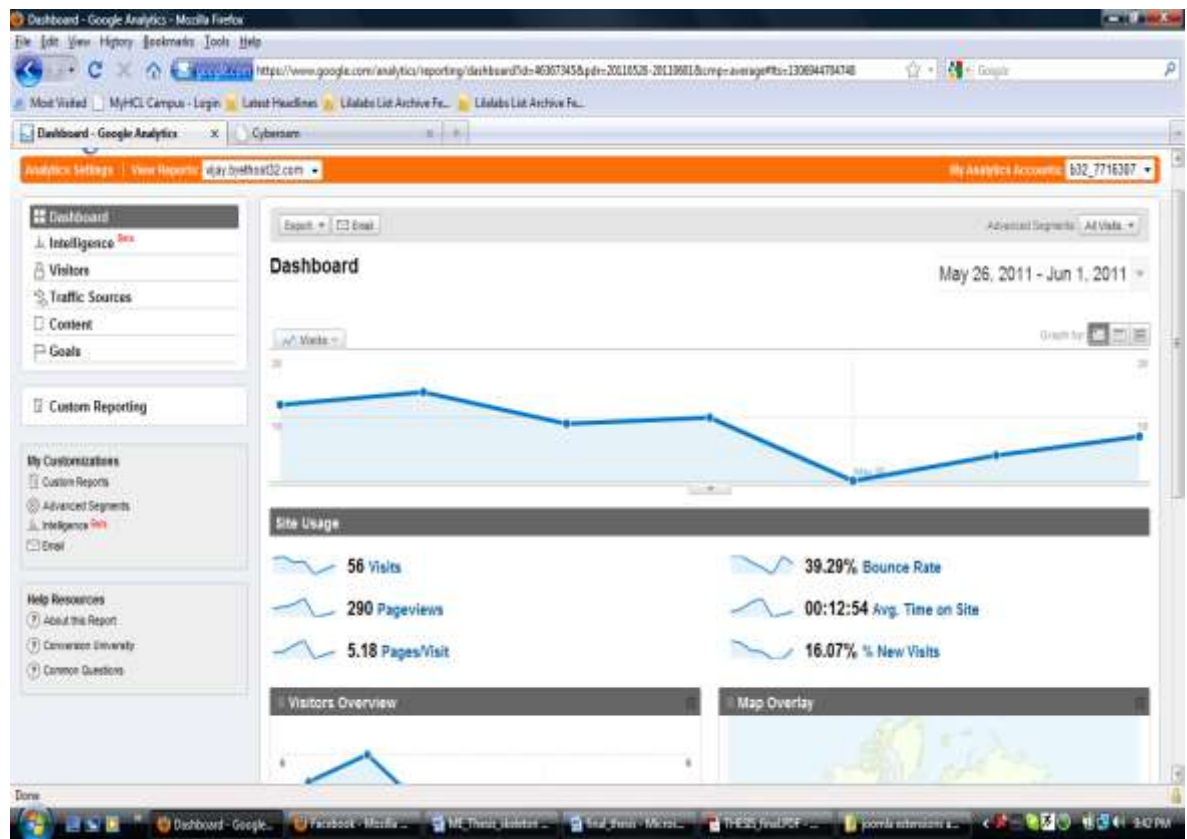


Figure : 5.1 Site usage overview

As the picture above shows there were total 56 visits for the site. Bounce rate shows how many of visitors immediately navigated to other sites after landing to the side. It is around 39.29%, which may be considered as not bad. Total page views are 290 for the period of 5 days, as we can notice it at the top right corner of the snapshot. Average time was around 13 minutes and it seems good. Every visitor visited an

average of 5 pages per visit. Out of these visits 16.07% were new visits. So the trends I wrote here are just for 5 days and it may with time as the social network impressions for the website increases.

5.2 Map overlay

Map overlay shows the geographic traces of visits across the globe. It shows the visits from countries/ territories and may tune upto network area level. the data for visits from country can be refined upto some details.

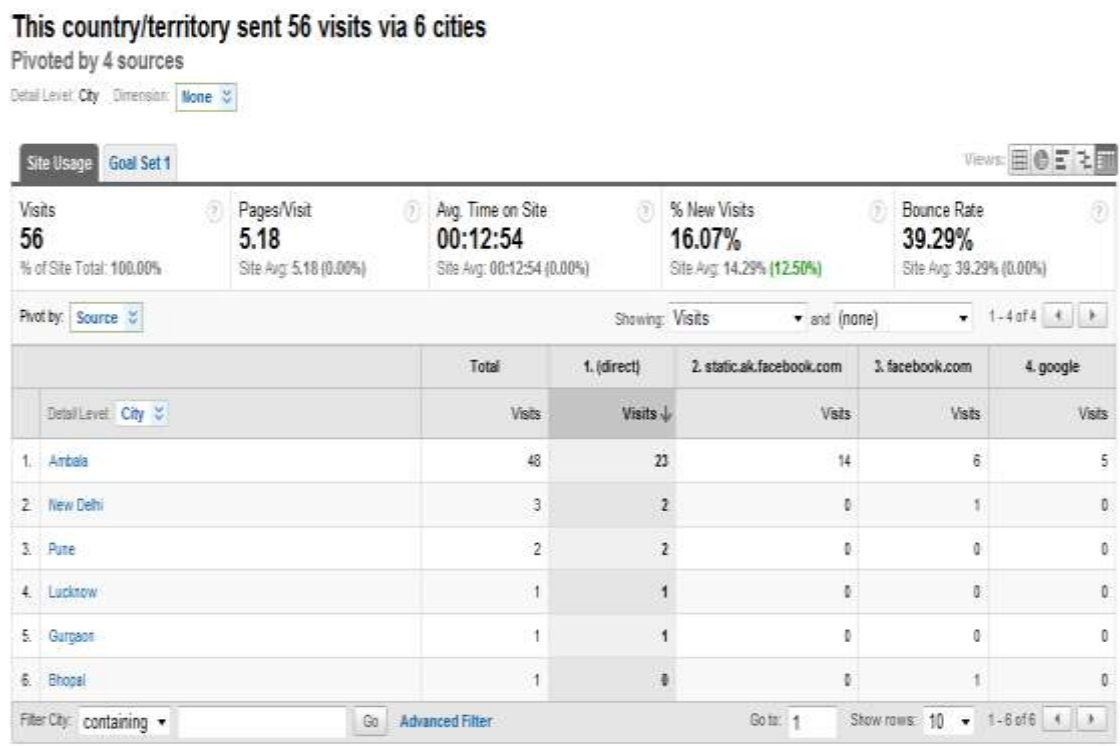


Figure : 5.2 Visit overview city wise

The figure above show the number of visits from the different cities across india, as my friends are from Patiala region currently it showing highest visit from ambala network circle for the national network. Then this picture also displays direct vists, visits from Facebook ,visits from Facebook application and google search engine. You may notice a total of 17 visits in 5 days were from Facebook as Facebook integration is provided in the portal. The idea shows that using the social networks we can make a good promotion of cultural computing and information. As the shared links grows it may stand a good chance for people to see it and follow. They can be made aware of the cultural information

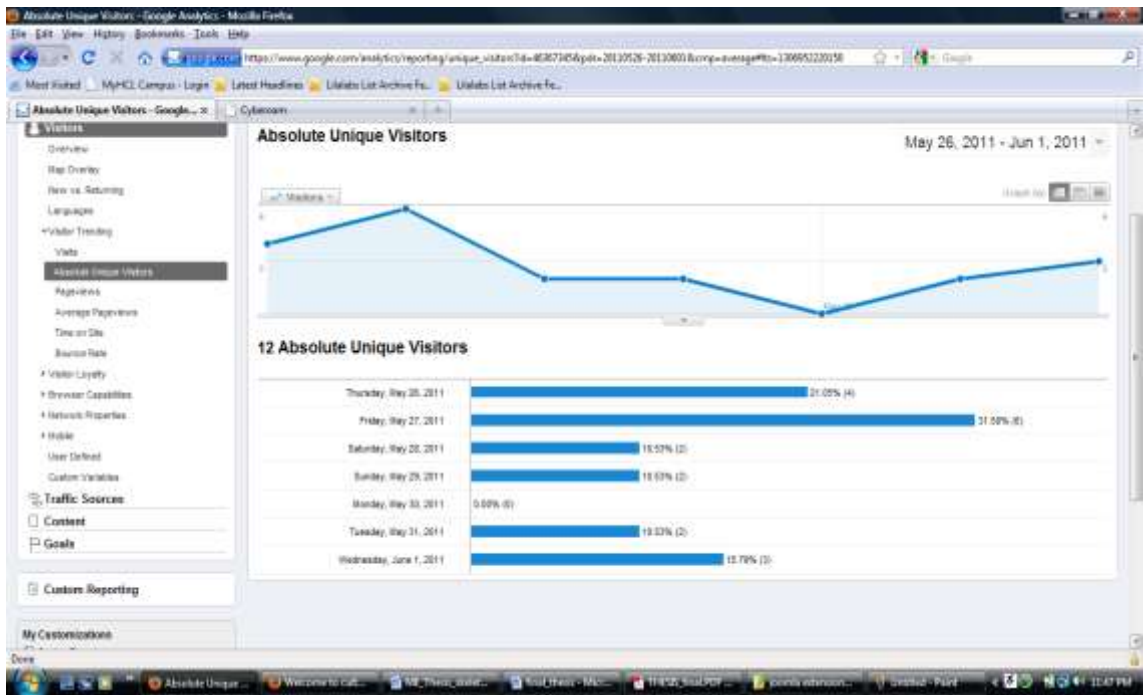


Figure : 5.3 Absolute unique visitors in 5 days

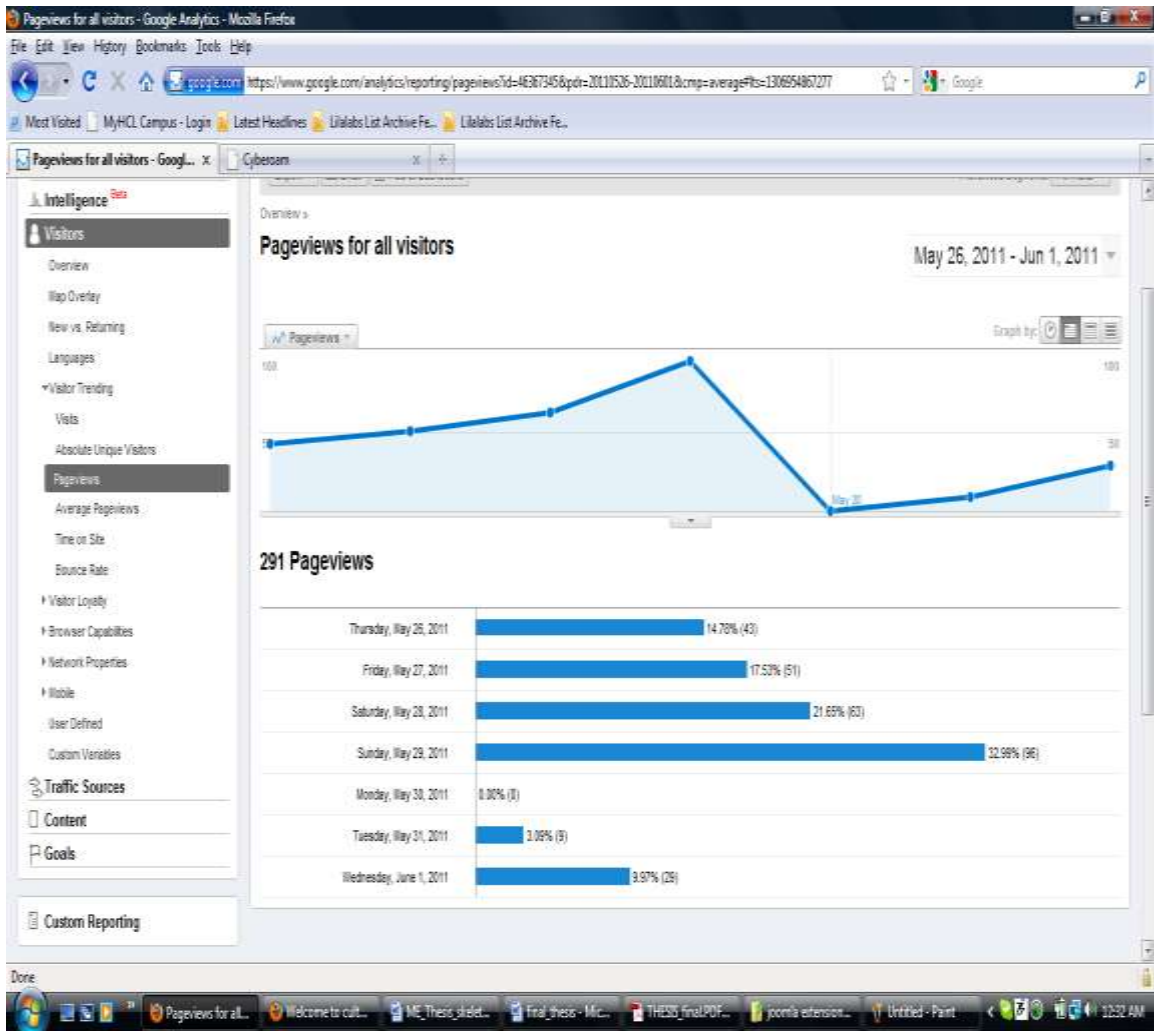


Figure : 5.4 Showing 291 pageviews for sample of 5 days

5.3 Traffic Sources overview

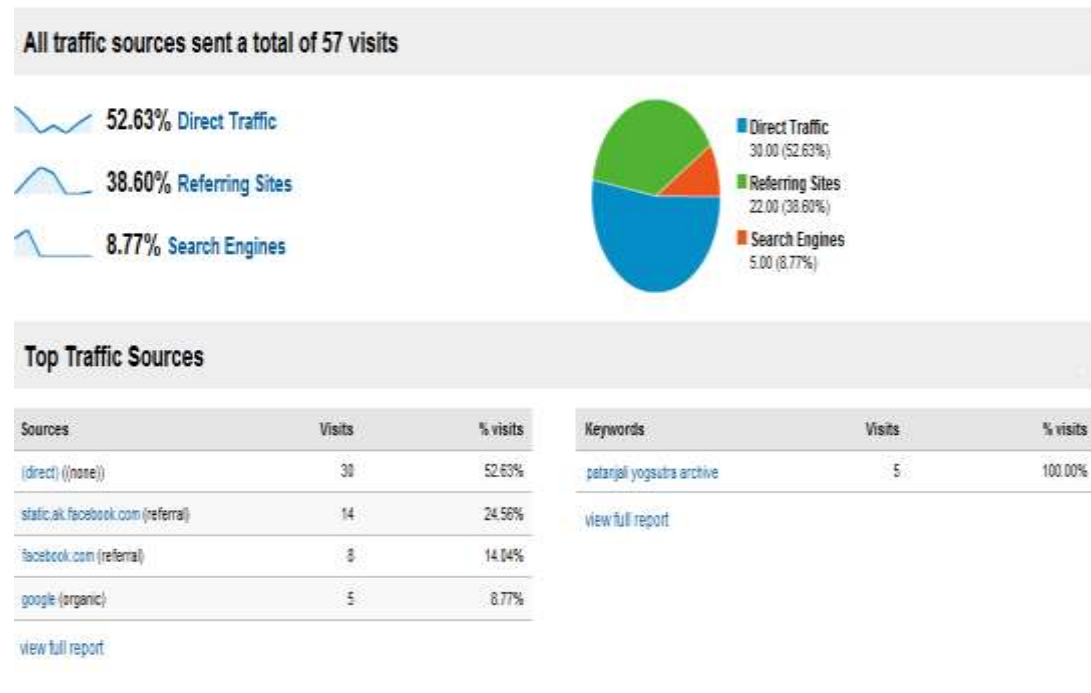


Figure : 5.5 Traffic Source overview

As figure represents 52.63% traffic is direct traffic for site. 38.60% traffic is showing from referring site. in my case it is Facebook application and Facebook general site, as tried experiment with Facebook. Referrals may increase if we can develop and integrate more social sites. As the level of integration increases it may possibly increase the traffic. Then in last it shows the google organic search via keyword that I tried.



Referring sites sent 22 visits via 2 sources

Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate		
22 % of Site Total: 38.60%	8.55 Site Avg: 5.11 (67.39%)	00:22:13 Site Avg: 00:12:41 (75.24%)	9.09% Site Avg: 14.04% (-35.23%)	22.73% Site Avg: 40.35% (-43.68%)		
Source	None	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
1. static.ak.facebook.com		14	10.57	00:30:06	0.00%	14.29%
2. facebook.com		8	5.00	00:08:26	25.00%	37.50%

Figure : 5.6 Showing details of visits from referring site in 5 days

5.4 Top Content

Top content shows the pages that were visited most number of times in rankwise format. The page url having most visits from visitors is rated as top ranked page of website

Page Title	None	Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit	\$ Index
1. Welcome to cultural site		136	54	00:03:41	37.50%	18.38%	\$0.00
2. Vedic Culture		62	24	00:02:50	0.00%	11.29%	\$0.00
3. Site overview		25	12	00:04:18	75.00%	36.00%	\$0.00
4. Vedic Resources and links		20	7	00:02:35	50.00%	10.00%	\$0.00
5. Newsfeeds		16	8	00:00:40	0.00%	20.00%	\$0.00
6. Yoga and Meditation		7	7	00:07:27	100.00%	85.71%	\$0.00
7. cultural computing and india		7	4	00:02:52	0.00%	28.57%	\$0.00

Figure : 5.7 Top content by title

34 pages were viewed a total of 291 times

Content Performance							
Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit	\$ Index		
291	139	00:03:05	40.35%	19.59%	\$0.00		
% of Site Total: 100.00%	% of Site Total: 100.00%	Site Avg: 00:03:05 (0.00%)	Site Avg: 40.35% (0.00%)	Site Avg: 19.59% (0.00%)	Site Avg: \$0.00 (0.00%)		
Page	Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit	\$ Index	
1. /	122	44	00:03:46	37.50%	17.21%	\$0.00	
2. /index.php/vedic-culture	45	15	00:02:57	0.00%	13.33%	\$0.00	
3. /index.php/site-overview	25	12	00:04:18	75.00%	36.00%	\$0.00	
4. /index.php/vedic-culture/39-vedic-culture/55-vedic-resources	16	5	00:03:00	50.00%	12.50%	\$0.00	
5. /index.php/vedic-culture/39-vedic-culture	9	5	00:01:17	0.00%	0.00%	\$0.00	
6. /index.php/yoga-and-meditation/38-yoga-literature/53-yoga-a	7	7	00:07:27	100.00%	85.71%	\$0.00	
7. /?ref=notif¬if_type=like	5	3	00:02:15	0.00%	0.00%	\$0.00	
8. /index.php/news-feeds	5	4	00:00:52	0.00%	20.00%	\$0.00	
9. /index.php/vedic-culture/39-vedic-culture/5-the-vedic-culture	5	5	00:00:26	0.00%	20.00%	\$0.00	
10. /index.php?option=com_googlebooksearch&domains=kissu.c	5	2	00:02:27	0.00%	20.00%	\$0.00	

Figure : 5.8 Top content url's and their pageviews

The figure above shows that index page was visited most as it is starting point of the site. After that the top most rated content page was vedic culture page, which describes vedic philosophy in brief. Then it shows site overview as visitors wanted to know about the site. visits are affected by the sharing of any article on any given page or liking of any page over Facebook. It may also be affected by comments over article. Top 10 page url's are shown here. Exit rate is around 20 percent, it means 20 % of the visitors are exited directly from that page article, 80% of them were interested to navigate to other pages on site.

Note:- results shown here shows only a trend for 6 days. Traffic may increase as the impressions over Facebook increases. Experiment with other social site will definitely increase traffic.

5.5 Traffic insights and overview of site over Facebook(experimental)

The trend of traffic shown here is only for one social network in experiment in this thesis. I have set an insight page for my website as Facebook application. My site acts as Facebook application as I have integrated it into Facebook. Visitors who want to go to application are directed to the site. Insights are available on Facebook page of the website used for promotional purposes.



Figure : 5.9 Site engagement over Facebook

As figure shows there were total 84 actions ,means the number of times people posted a link to your site via use of social plugins, status updates or wall posts of the user profiles. 5310 total impressions indicate the number of times people viewed stories that links to your site in news feeds, profile wall's and page wall's. Its really looks good and positive for promotional purposes and may provide a large audience. Because the data here is for 5 days recording only, certainly it may increase in amonth or so. Number of clicks shows the times visitor is directed to the site from Facebook.

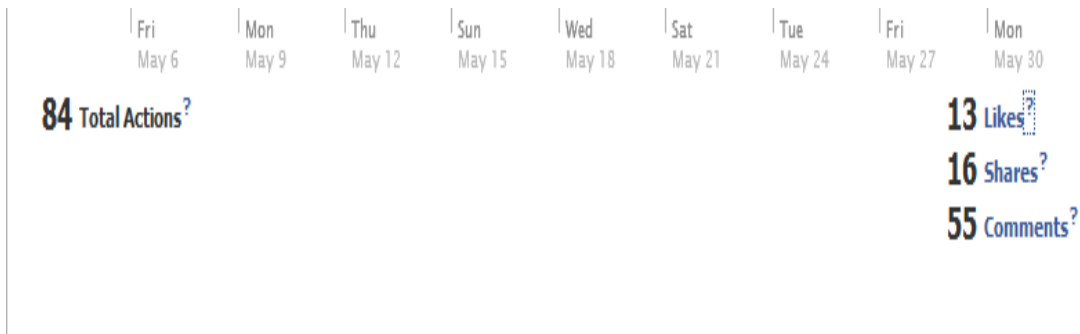


Figure : 5.10 Total actions distribution

The figure above distributes the total actions over Facebook in three categories. 13 times people clicked like button on any wall page, profile page or news feed. 16 times they shared any story in all above and 55 comments were there in total (5 days data).

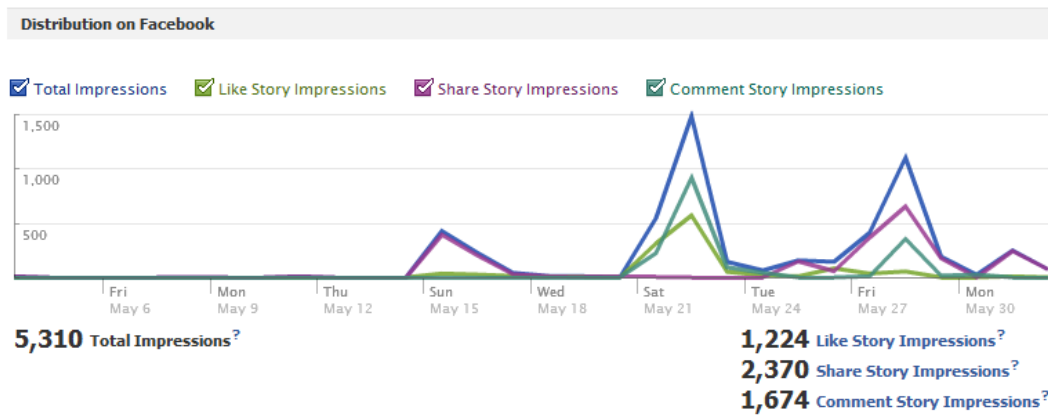


Figure : 5.11 Total impressions category wise

Figure above depicts the total impressions on Facebook in three category of social plugins namely like, share and comment. 1224 times people viewed stories generated from like button clicked on website, 2370 times people viewed stories generated from share activity done from my site. 1674 times people viewed stories over Facebook that were generated from comments in comment box's over the site. It looks a bit positive step for promotion of the site.



Figure : 5.12 Referral traffic clicks category wise

Image above distributes the clicks that sent the traffic to my site social plugin wise. 1 time the traffic is sent to my site by click on like story in news feeds, wall pages or profile walls. 5 times the visitor is directed to the site by clicks on share story on Facebook. 13 times it is due to comment story on Facebook.

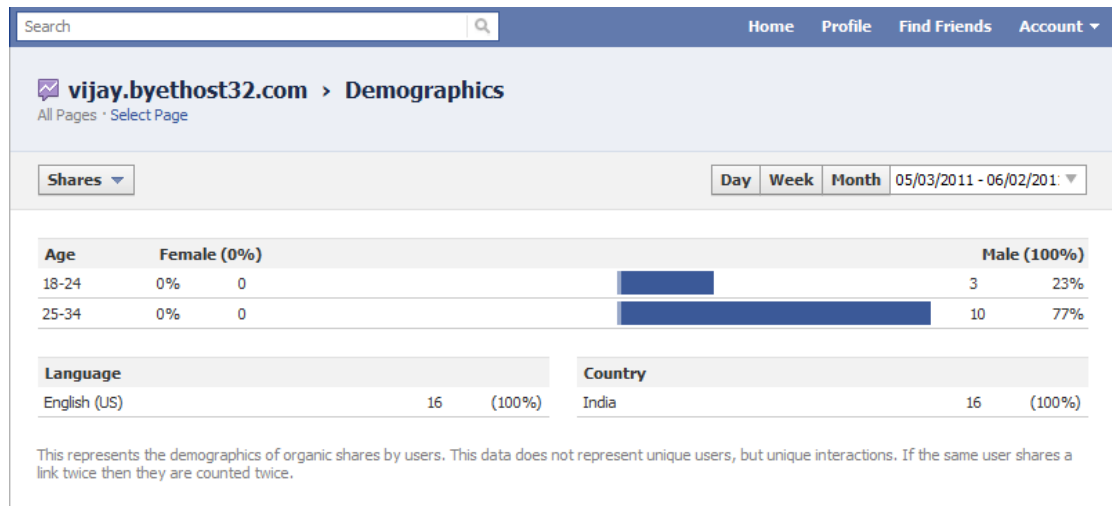


Figure : 5.13 Demographics of visitors via Facebook.

Figure shows 3 males who visited the site via Facebook were aged between 18-24 years and 10 males who visited the site were aged between 25-34 years. No female yet visited the site. It's the data sample for 5 days only.

The results shown here were concluded for the time period of 5 days only at the time of documentation. One should keep in mind that this trend may increase depending upon the impressions created over social networks each day and hence helps in promotion of cultural information, that's why it's called cultural computing.

Chapter 6

Conclusion and future work

Conclusion 6.1

As the social networks are growing day by day our youth is also seem to be engaged in all these activities at a rapid pace. They may indulge in any sort of activities either good for them or bad. These activities may result in any of outcomes like wastage of time, no interests in social activities or no knowledge of cultural ethics and practices. Some of them may not even have knowledge of Indian and vedic culture,if we see by Indian perspective. If we see positive effects of social computing it provides a chance to collaborate share the ideas and thoughts which may be positive by virtue, they indulge in collective learning and many more.

If we can promote cultural information by leveraging the social network itself ,then it may prove to be of immense help for the youth to know about the culture and ethics. Using social networks may be a interesting tool to divert the youth towards cultural information. The question itself may become answer to the problem.

I tried social network as a tool to identify the potential of networking to promote cultural computing. The experiment was brief for the subject matter and if we want to do promotion of cultural computing then we may have to apply efforts at bigger platforms and before a wider audience. A paid promotion of the site with help of social networks pages has a global reach throughout the world and it will surely help to spread the word.

On the level of contents provide in the website the articles were brief and concise to have an idea of the information. Links provided in the site for online resources were restricted to vedic culture only and it would be much better if we can provide much more related to the subject matter. Representation of the work may also be created in a much lucid manner which will surely help to spread the word.

Social plug-ins used here were created with the help of Facebook developers works to promote and integrate it with the Facebook. We can easily realize the power of social

networks if we can do the experiment on the bigger and wider scale. By bigger scale I mean to say if we can do it for even top 20 social sites, it will clearly make a difference clearly.

6.2 Future work

A list of future works that may provide better results and wide promotion to the cause

1. Use of semantic web components to make data machine readable
2. Integrated use of cloud computing at storage of huge cultural web, it will decrease the response time, and will be efficient throughout the world
3. Wide variety of social network applications can be embedded to the site to represent information in an interesting manner. To maximize the reach
4. A directory of cultural information site for vedic culture may support the cultural computing
5. Any sort of games that provide cultural information in an interesting way may also help
6. Integration of the website with most popular social networks will surely help for example Twitter, buzz, Digg, xanga etc.

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- some[3-4] direct URL may not work as they were articles and may be removed (web sites exist).

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