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Web Wizard: The Online Web Discussion Forum

Akshatha Samanth [1], Ramya [2], Suraj [3], Vignesh Karkera [4], Prof Alok Ranjan [5]

Department of Computer Science and Engineering

Canara Engineering College - Benjanapadavu

Karnataka- India

ABSTRACT

Web Wizard is a powerful Internet and intranet solution that allows you to easily build a community. By this there occurs a great meeting place for all users/visitors of the web site. The purpose of this online community portal is to offer a powerful tool to enhance collaboration between people who share a common interest which is related to specific topic. Categories are divided into blocks and are clearly displayed on the home page so that selection of various categories will be done by the user based on their interest. Posting queries or answering for an existing query can be done by the user. The web wizard is made user friendly and mobile responsive so that, the users can view or make use of this discussion forum through any smart phone available with internet access. Web Wizard provides offline notification when other user replies to the particular user's post through SMS to their contact number. Simultaneously an Email notification is sent to the user.

Keywords :— Mobile responsive, Online notification, Offline notification, Word filter, Bootstrap.

I.   INTRODUCTION

An online community, also called as an internet community is a virtual community where members interact with each other primarily via the Internet. For many, online communities may feel like home, consisting of a "family of invisible friends". Those who wish to be a part of an online community usually have to become a member through a specific site and necessarily need an internet connection. An online community can act as an information system where members can post, comment on discussions, give advice or collaborate. Commonly, people communicate through social networking sites, chat rooms, forums, e-mail lists and discussion boards. People may also join online communities through video games, blogs and virtual worlds.

The purpose this online community portal is to offer a powerful tool to enhance collaboration between people who share a common interest which is related to specific topic. The notion of community has been at the heart of the Internet since its inception. For many years, scientists have used the Internet to share data, collaborate on research, and exchange messages. In essence, scientists formed interactive research communities that existed not on a physical campus but on the Internet.

Within the last few years, millions of computer users worldwide have begun to explore the Internet and commercial on-line services such as Prodigy and Online. Many have joined one or more of the communities that have sprung up to serve consumer needs for communication, information, and entertainment. One of the oldest virtual communities is the Well, launched in 1985 by a group of high-tech enthusiasts located primarily near San Francisco. Over the past decade, thousands of computer users have communicated with one another through the well and over time, developed strong personal relationships off-line.

The literature reviewed suggests that content included in consumer-oriented online discussions may have greater credibility and relevance and may generate more empathy compared to marketer-generated web content. Thus, we hypothesize that exposure to online discussions related to a specific topic should result in greater interest in the topic than exposure to marketer-generated Web-based information on the same topic.
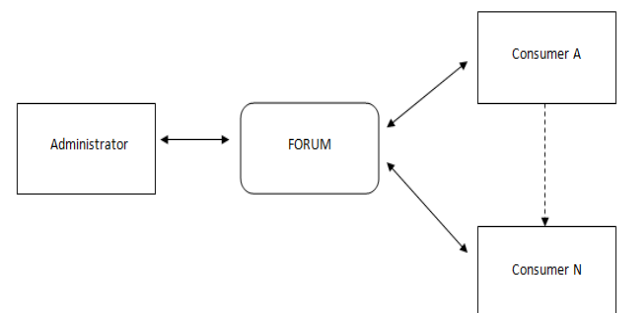

Figure 1: Communication in Web Forum

Figure 1 shows the communication in the Web Forum. Web Wizard application is a platform where consumers can post queries as well as replies to other's queries. This is possible because this application is based on two way communication. The administrator has the authority to control the

communication that takes place within this application. The administrator is able to manage the consumer's accounts/profile, consumer's status and also discussion topics. An administrator also has a right to delete a question or an answer posted by the consumer in the discussion forum if it seems inappropriate. Consumers are able to view the homepage of the discussion forum; there can one or N number of consumers that can communicate in the discussion forum. The consumers can also communicate with each other.

II.   IMPLEMENTATION
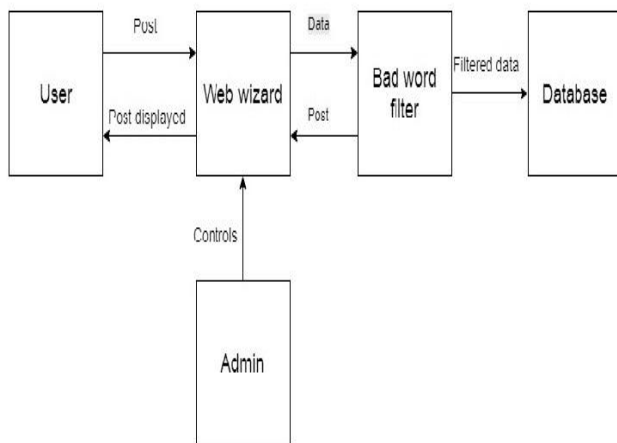
A.   *Architectural Design*

Figure 2: Architectural Design for Web Wizard application

Architectural Design has emerged as a crucial part of design process. The architectural design of a system is the early stage of the system design process. It involves identifying major system components and their communication.

The Figure 2 gives the detailed description about the architectural design of the system where the user posts queries to the forum which is updated to the database. All the posts are updated and displayed only after the bad word filtration.

B.   *Data Flow Diagram*

A data flow diagram is a graphical representation of flow of data which illustrates how the data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored. A new user must register to post queries or replies on the Web Wizard. Once the user registers, a login page displays where he has to login which leads to the home page. There exists several categories from which user can select the field of interest. Once the user enters the category he will be able to see already existing posts. If he

wishes to post a query or reply to already existing query there is a separate text area and submit button for it. The query posted will be stored in the database once it is verified for bad words. Now the user can logout from the website.
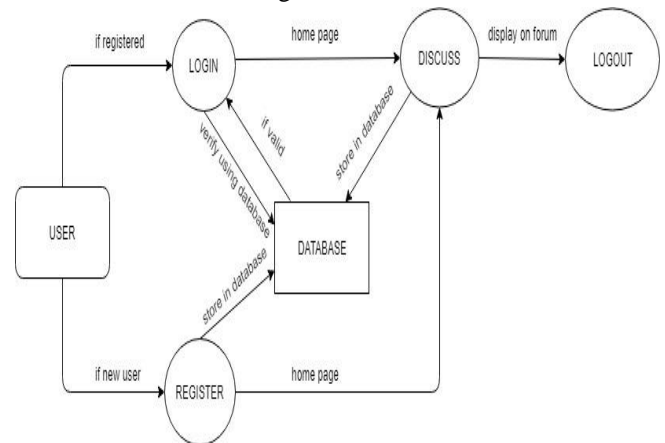

Figure 3: Data flow Diagram for Web Wizard

C.   *Algorithm for Logic Implementation*

1)   *Algorithm for registration:*
- Start.
- Request and obtain the appropriate details from user.
- Insert the details of the user in the database.
- Verify email address.
- Display the Registration successful message.
- Stop.

2)   *Algorithm for Posting a Question:*
- Start.
- Request and obtain the Username of the user who wants to post a Question.
- Retrieve the category (cat_id) in which the user wants to post.
- If the Question doesn't contain bad words then, store it in the Database and display it on the forum.
- Stop.

3)   *Algorithm for Answering a Question:*
- Start.
- Get the username for the user who wants to post an answer.
- Get the question ID of the question for which to reply.
- If the answer doesn't contain bad words store it in the database and display it on the forum.
- Stop.

D.   *Flow Chart for Web Wizard*

The Figure 4 shows the Flow Chart for Web Wizard. Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice,

iteration and concurrency. They are intended to model both computational and organizational processes (i.e., workflows), as well as the data flows intersecting with the related activities.
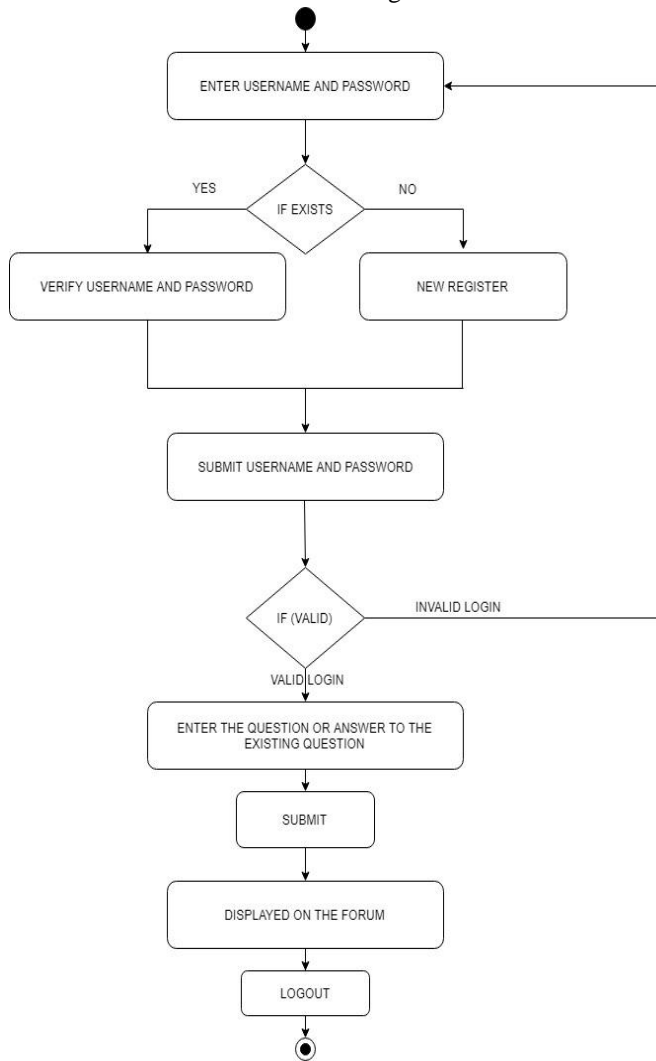

Figure 4: Flow Chart for Web Wizard

The programming language used for the implementation of the modules is HTML, CSS, JAVASCRIPT, BOOTSTRAP, MYSQL and PHP. PHP[1] libraries, their modules and built-in functions are used for the module functionality.

E. Different modules:

1) User creating an account: Users must create an account before they are allowed to post or reply to an queries. Once all the details entered by the users are valid, access to the web forum is given. Now the user can post any queries or reply to an existing query.

Registration(): It is used to accept credentials from the user and this function checks whether the user id is already taken or not . Users need to click the checkbox before signing in, this will not allow the robots to access the web forum thus spam can be avoided. Password entered by the user is verified. On successful registration user will get an email from which the user can activate the account.

2) Email verification: Once user enters the mail ID, verification is done by sending confirmation mail to that particular account. When the user receives the confirmation mail, a link will be present in it by clicking which his/her account will be activated.

3) Selection of category: Various categories are available for discussion such as educational, technology, sports, health, tourism, entertainment, food, automobile, news, culture. For a discussion on any other topic the user can use category called as other.

4) Posting a query or replying to the existing query: After selecting the category of interest the user can post queries by using post button. This module includes character count which returns the number of remaining characters. Since bad word collection is there in the database users are not allowed to use any of it during the discussion.

5) Bad word filter: When a user posts a question or a reply on the Web Wizard, each sentence of the post is divided into array of words and compared with the list of previously stored bad words in the database. If the comparison results true then the post is blocked and thus not stored in the database. If the comparison results false, the post is directly stored in the database and thus displayed on the user interface.

6) Admin Activities: The admin is a user with special privileges. Blocking of user who posts unwanted message, checking for number of posts, adding new admin these are the activities carried using PHP code snippets.

7) Mobile Responsive: Web Wizard is a mobile responsive[2][3] website i.e., it supports any display irrespective of its size such as Smartphone, tablet, computer, PC, laptop etc. To support this feature we must use bootstrap which consists of below line of code in the head tag:
<meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1, user-scalable=no">
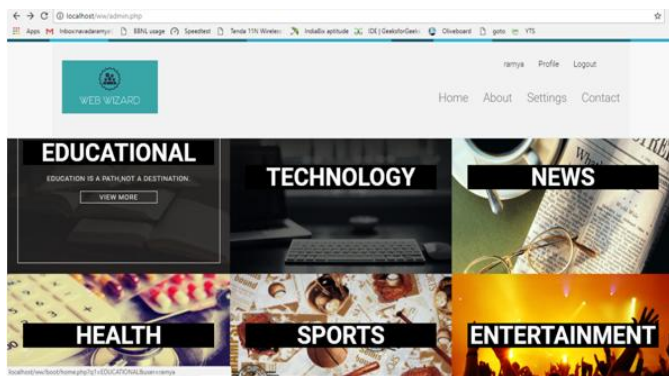
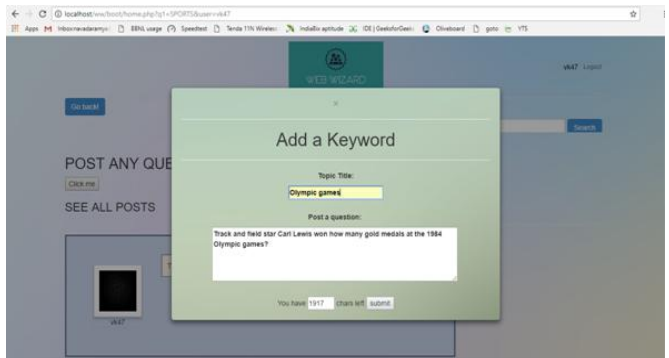## III.   RESULTS

Figure 5: Snapshot of Home page
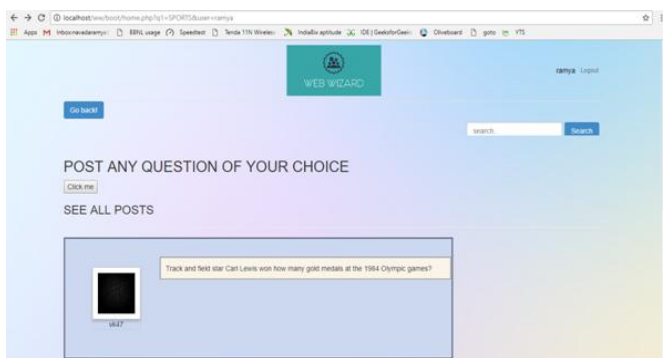

Figure 6: Snapshot of question being posted
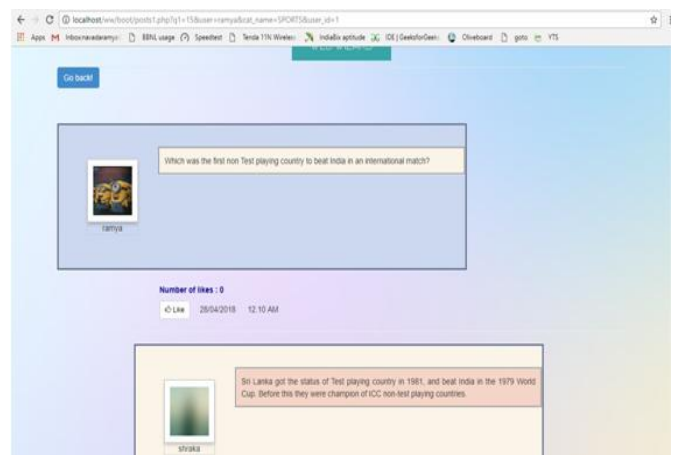

Figure 7: Snapshot of posted question

Figure 8: Snapshot of reply for a post

IV. CONCLUSIONS

The web wizard system can be useful for those who need to gain knowledge. They can access the website by using any web browser. Selection of various categories will be done by the user based on their interest. Posting queries or answering for an existing query can be done by the user. User can also like the post.

The implementation of web wizard system will not allow the user to use any of the bad words. A confirmation mail will be sent to the users account while registering. Only if that link is confirmed then user will be authenticated user. User will get a notification to his registered Mail Id and mobile number if any other authentic user replies to his or her post.

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