

Technical Discussion Support System

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Abstract

In this technological era, the use of advance technologies are increasing day by day. Each and every day new discoveries are taking place which are satisfying the user's need. The main aim of the project is to provide an online platform for various users through which they can discuss and communicate their thoughts and ideas and thus transfer of knowledge would also take place. Technical Discussion Support System encourages reflection and deeper thinking and also focusses on peer to peer communication among the members in the form.

Keywords—Web Technology, PHP, JavaScript

I. INTRODUCTION

Nowadays e-learning platform is becoming more and more famous. The project is also towards e-learning. It's a PHP based project named "Technical Discussion Support System" is the place where persons after creating their account can share their ideas and make discussions on various topics. In this project CSS, JavaScript, Bootstrap and etc are used. This project aims to increase the interest of users regarding any particular topics. This project is on the perspective of students. Expert thinking about the topic can be modelled and learned and useful information is shared among the users. Database connectivity is also used which records the activity performed by the member in the forum. Discussion System motivates learners since active discussion forum have every minute new content and thus

can be more would become more attractive to the users.

II. OBJECTIVE

A discussion system contributes to the development of an individual's cognitive and critical thinking skills, allows time for thoughtful, in-depth reflection on course topics, facilitates exploratory learning by allowing you to review and respond to the work of others and paves the way for you to approach your own learning in diverse ways. It provides a platform for users to spread knowledge and also provides an effective communication and discussion among the users. Effective forum topics are open-ended and designed to encourage students to take a position on issues.

III. BACKGROUND

In this technological era, the use of advance technologies are increasing day by day. Each and every day new discoveries are taking place which are satisfying the user's need. The main aim of this project is to provide an online platform for various users through which they can discuss and communicate their thoughts and ideas and thus transfer of knowledge would also take place between them. Online discussion system encourages reflection and deeper thinking and also focuses on peer to peer communication between the members in that forum. The main motive is to provide a wide platform for the users to explore the field of transfer of knowledge through which they would build interest in various topics and can discuss and communicate among themselves related to that particular topic. In future, some features will be added in the

discussion forum to overcome the drawbacks in the previous year research papers.

IV. LITERATURE SURVEY

During this phase certain research papers are studied and some of the key findings, research gaps are obtained which can be overcome during the implementation of the project.

Neil Harris and Maria Sandor Developing online discussion forums as student centred peer e-learning environments. It deals with peer based approaches to learning in the e learning environment. Use of discussion board as an assessment. The gap which is observed is that it is limited to use by e learning environment and can be used in other fields also.

Alabo .H. Biriya and Emmah .V. Thompson Online Discussion Forum a tool for effective teacher student interaction. They used PHP and javascript for creation of the forum. Moderators are used to grant access to the post and are also used to respond to the user's questions and control the content of the discussion forum. It is only limited for teacher and student interaction and is limited to a certain extent.

Ankita Singhal and Brij Mohan Karla Review of online discussion forum in e learning scenario. Web technology is the domain which is used for implementation of the forum. Novek method is proposed to determine post usage to evaluate quality of content in the forum. Removal of error URLs for efficient searching. The paper only suggests the methods of improving forum and does not implement any new feature in the forum.

Jenny McDougall A Study of online discussion forum and needs of adult learners. Concept of authenticity is used. The concept of authentic discussion in classroom study can be replaced by online discussion forum. The paper is only limited to the online discussion at the university level.

Ravi Seethamraju Effectiveness of using Online Discussion Forum for case study

analysis. Quantity of responses, Quality of responses and improvement in overall learning. It is reduced structure but a bit complicated to use.

Suryakumari Lane Effective Online discussion forum as an effective learning space. The research methodology is theoretical and empirical. The paper discusses about majority of students having a good learning experience. The author suggest way forward for traditional universities to have blended learning.

V. METHODOLOGY

Technical Discussion Support System focuses on improving cognitive and critical thinking of an individual. Firstly the user needs to login if he/she is the member of the discussion system. If the user is not a member, then he needs to register himself in the forum. Once registered, a wide range of categories is displayed to the user through which he can discuss on his topic of interest. The user can post question and answers and can refer chatbot in case of query. The chatbot consists of predefined set of questions which would help user in case of any issue. User can also read the latest news from the news feed section. Admin has overall control of the activities that is performed by the user. Database connectivity is done which tracks or keeps the record of the activities that are performed by the user in the forum. Web technology is used as a domain and PHP used at front end.

Fig 1 shows the flow of the system and various parameters that are considered in the system. Fig 2 displays the use case diagram of the system which involves various actors in the project along with their respective roles. Fig 3 represents the dataflow diagram of the admin which consists of various functions carried out by admin. Fig 4 represents the dataflow diagram of the question module. Fig 5. Represents the login module through which the user can access the system. Fig 6 shows the dashboard which consists of the pending questions. Fig 7 has the record of the user information which are the part of the forum. Fig 8 represents the various categories in the discussion forum.

Fig 9 shows the questions that are asked by the registered user in the forum.

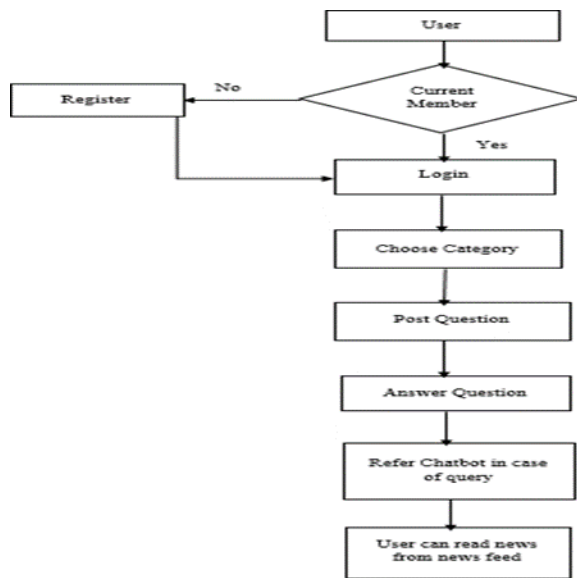


Fig 1: Flowchart of Technical Discussion Support System

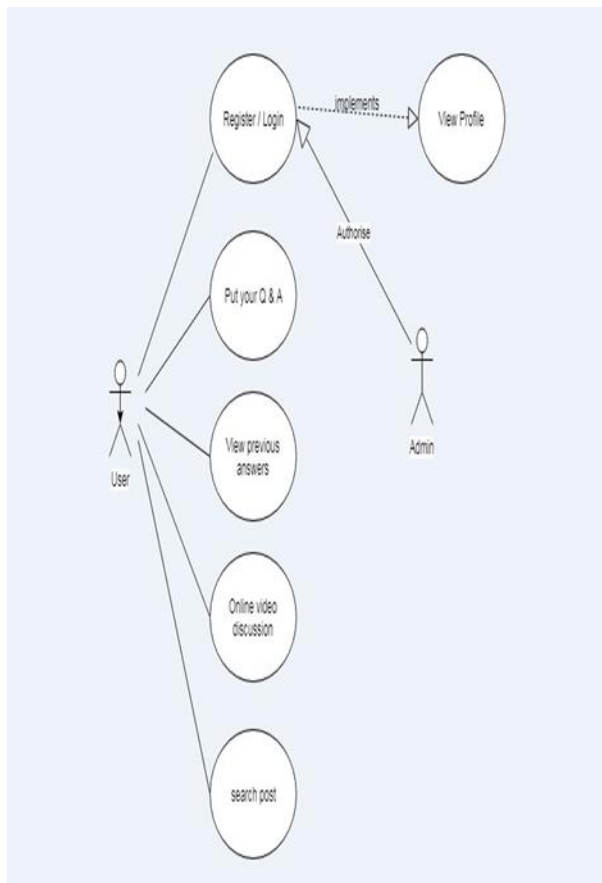


Fig 2: Use case diagram

The Use Case diagram consists of two actors and their respective functionalities.

User- User acts as an actor who firstly register via login and then become a registered user in the discussion forum. Following are the activities that are performed by user as an actor:

1. Register and login
2. Post Questions and answers
3. View Answers
4. Online video discussion
5. Search posts

Admin- Admin takes the control of the discussion forum.

1. Admin can check the question answers posted by user.
2. Has right to accept the post by the users or not

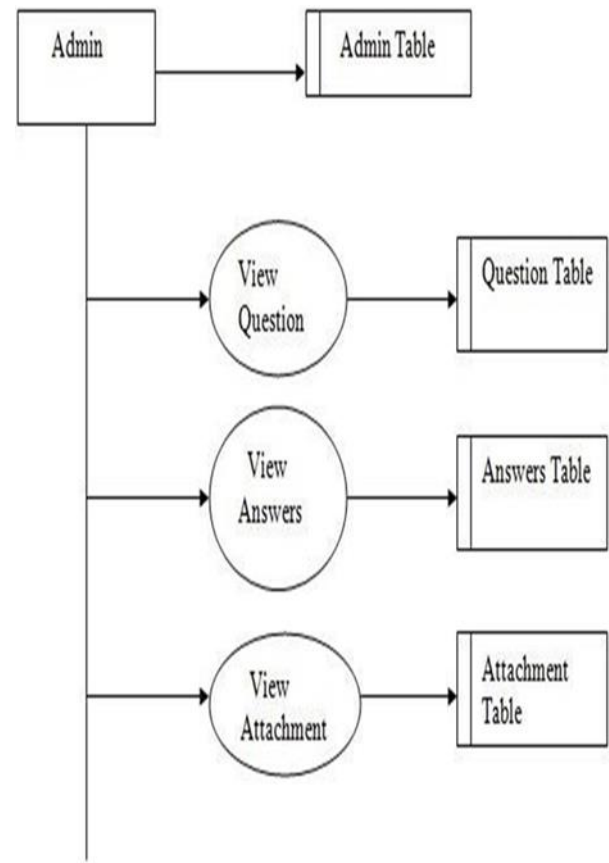



Fig 3: Block DFD diagram of admin module

The admin has the right to view the questions that have been asked, view the answers and also have a role in which he would decide whether the post is relevant or not. The questions that have been asked and answered is stored in the database.


Forum

- Dashboard
- Users**
- Categories
- Questions
- Notes
- Logout

Users

Show 10 entries

User ID	Name	Email	Date of Registration
1	Sam	sam@example.com	2008-02-01
2	Kate Francis	kate@example.com	2008-02-02
3	Kurt Finney	kurt@example.com	2008-02-02
4	Eva Sloan	eva@example.com	2008-02-04
5	Aaron Pontre	aaron@example.com	2008-02-05


Showing 1 to 5 of 5 entries

The figure represents the information of the registered users that is stored in the technical discussion system. The information portal consists of the user id, name of the user, email address of the registered user and the date of registration of the user.

The screenshot displays a web application for a forum. The interface is divided into a dark sidebar on the left and a main content area. The sidebar contains navigation links: Dashboard, Users, Categories (highlighted in blue), Questions, News, and Logout. The main content area features a 'Categories' section with a table listing categories. The table has columns for Category Id, Category Name, and Actions. The categories listed are Python, Java, Ruby, HTML, CSS, JQuery, and Javascript. Each category has a 'Delete' button in the Actions column. The top navigation bar includes a 'Forum' title and a 'Add Category' button.

Category Id	Category Name	Actions
1	Python	Delete
2	Java	Delete
3	Ruby	Delete
4	HTML	Delete
5	CSS	Delete
6	JQuery	Delete
7	Javascript	Delete

The category portal consists of various categories in the technical discussion system. It has category id, Category name and the action


Forum


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- Logout

Questions

Show 10 entries

Search

Question ID	User Name (ID)	Category Name (ID)	Title	Desc	Date Posted	Status	Action
1	Sam	Python	How to convert String into Ascii	How can I convert a String say HELLO into something like this Ascii as a string 0x48,0x4c,0x4c,0x4f,0x4f,0x4f for e in string but it returns a list	2020-02-05	1	Answer UnAnswer
2	Kyle Francis	Java	How to extract image bytes out of JPG efficiently	Is there a way to extract image bytes out of <code>POimageObject</code> for different image types without loading them into a <code>BufferedImage</code> ? A <code>20mb TIFF</code> file takes up <code>200mb</code> in memory when loaded into <code>BufferedImage</code> , which is awful slow to avoid (I have found an example for <code>JPG</code> files, but I have no idea what it's doing or if it's possible to do the equivalent for other file types: <code>PNG</code> , <code>GIF</code> , <code>TIFF</code> etc.) I don't really understand this, but it works for <code>JPG</code> (as private static final <code>List<Png_Png_STOP_AU7985> = Arrays.asList(COName.<ACT_DECODED.getFullName(), COName.<ACT_DECODED_ABBREVIATION.getFullName(), public void extractImage(StorageObject storage, OutputStream base) { if (Png.isImage(storage.getFullName())) { try { outputStream</code>	2020-02-07	0	Answer UnAnswer



The above figure represents the question portal in the technical discussion support system. The question portal consists of the questions that are asked by the user in the forum. The format of the question portal has question id, user id i.e. the id of user who post question, category id, title, date on which the question is posted along with the status. The admin has right whether to approve the question posted by the user or to unapproved the post.

Technical Discussion Support System acts as an interactive tool for knowledge sharing purposes. PHP and database connectivity is used and thus provide a wide platform for the users to explore the field of transfer of knowledge through which they would build interest in various topics and can discuss and communicate among themselves related to that particular topic. News feed section is also provided through which the user would be aware of the daily happenings that are

going all around in the world. Chatbot mechanism is going to be incorporated. If a user is having certain doubts while using the technical discussion forum, he can get it cleared via chatbot mechanism which consists of predefined sets of questions along with the answers. A discussion system contributes to the development of an individual's cognitive and critical thinking skills, allows time for thoughtful, in-depth reflection on course topics, facilitates exploratory learning by allowing you to review and respond to the work of others and paves the way for you to approach your own learning in diverse ways. It provides a platform for users to spread knowledge and also provides an effective communication and discussion among the users. Effective forum topics are open-ended and designed to encourage students to take a position on issues.

VIII. FUTURE SCOPE

Further planning involves introduction of video function and Google voice assistance in project so users can discuss the things online and it would be more convenient and working to make an app for it. Our aim is to make the application on current situations and demand.

IX. ACKNOWLEDGEMENT

The quality and ultimate outcome of this paper involved a great deal of support and expertise from many people and we are incredibly privileged to have successfully completed the paper. We take this opportunity to thank everybody for their support. We sincerely thank our principal Dr. B. K. Mishra, vice Principal, Dr. Deven Shah, Mentor Dean Dr. Kamal Shah and HOD Dr. Rajesh Bansode for always guiding us to paths that were right for us. We are grateful to our guide Mrs. Pranjali Kasture who supported and constantly monitored this work and helped us in not only completing this project but also providing us with basic knowledge with their practical aspect that really proved beneficial to us. We are forever thankful and fortunate enough to receive constant encouragement, support and guidance from all IT department faculties that helped us finalize our paper work successfully. We would also like to extend our sincere gratitude to all the laboratory support staff for their timely support.

We would like to convey our heartfelt thanks to our parents for their kind cooperation and encouragement without which none of this was possible.

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