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# Study Circle Connect 4U

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**Abstract:** Knowledge is the key resource for most modern organisations. Without a platform to capture and share that knowledge, it's putting your most valuable asset into the hands of luck. Sometimes, it is possible to meet eminent people online whose interest align with ours. This system brings people having same interest together by breaking any geographical or social barriers. This Web Application will work as a bridge between people from different areas having same interest and will help to share their wisdom with each other. This Web Application will provide Easy to use User Interface which will bring not only the expert users to the platform but also the beginner level user. This application also tries to keep distraction as low as possible to maintain a closed ecosystem, Chatting, youtube & mock test is a method of using technology to bring people and ideas together despite of the geographical barriers. This system will help people with same interest to express their thoughts and ideas. The system is a project to connect people via all these things while keeping the distraction to the minimal. and if people want to do some relaxation they can listen music on this web application

## I. INTRODUCTION

Study circle connect 4U is a platform which allows communities to form and engage with each other. It has different types of calls we call them rooms. Which allow you to have a chat with each other. Whether you are in high school, university, or maybe studying on the side of your work we provide a space where you can focus and stay motivated with others. Knowledge is the key resource for most modern organisations. Without a platform to capture and share that knowledge, it's putting your most valuable asset into the hands of luck. The unique features and capabilities of online learning are built on the ability to connect to a wider range of learning resources and peer learners that benefit individual learners, such as through discussion forums, collaborative learning, and community building. In today's world knowledge is the key resource for most modern organisations. Without a platform to capture and share that knowledge, it's putting your most valuable asset into waste. We can break this chain by exchanging the knowledge with the help of our platform having user-friendly design and minimal distraction. Where they can search or create a space of their interest and can start expressing their knowledge with just few clicks. This application can be used in various fields for e.g. Studies, Fitness, Mental Care, etc. Our primary aim is to provide user with a web application space where they can discuss, Question and Answers on topic of their choice without any distractions. The conventional application is filled with distraction and its also not very user-friendly. But in our implemented application it's easy to used, simple and less distraction. Due to lack of communication many people lack the understanding of the topics, be it related to any field due to Introvert Nature or Socially Non-Active. Many platforms which can provide such types of service are too generalized with other non-important/irrelevant activities. Hence, results in a Distraction and lack of concentration. Most of the web apps are complex for the regular users

## II. MOTIVATION

Our project solves this problem by providing a one-stop platform to provide the necessary information. Our platform encourages the user to express their knowledge to other individuals without any physical interaction the student, gamers, different communities people find a difficult to study due to unhealthy environment because there is no system present that that can give good atmosphere for the people so we come with this project and we used new technologies so World is moving rapidly where daily new kind of technology is getting developed. And it is important for us to stay relevant in his age of technology. This will help us in putting into practice of various Software Engineering principles, Database Management concepts, etc. This project gave us insights about various technologies such as Django, HTML, CSS, JavaScript, etc.

Following are the Objectives of the project: -

- 1) To provide a platform for all kinds of discussions available for all communities For example: Student, Gamers, University, etc.
- 2) To Exchange the information at a tip of your hand.
- 3) To give a better environment for healthy discussions/communications.

- 4) To be able to search for required topic and filtered through many available topics and if not available you can create your own room.
- 5) .If the users have any doubt during study session if he cannot understand the thing the users can directly see the video on youtube to understand the doubts which help them to gain the knowledge easily
- 6) Also if the users want to practice the test he can give mock exam directly on same platform for instant revision
- 7) If the users get tired of due to continuous study they want some relaxation and mind fresh (peace) they can listen music on same platform without switching to another tab

### III. LITERATURE REVIEW

Knowledge Sharing in Online Community (2020) Sharing of knowledge, informations, ideas and experiences is essential to all human being as it may close knit community or people who in physical close contact only. But after the existence of internet, a new category of community has emerged, that is, virtual community consists of a pool of variety of people not restricted to the same country, yet extend beyond the country border. The above findings indicated that research on virtual community lead to user's attitude towards knowledge sharing which focus on several factors: knowledge sharing on prepurchase decision making, technology intention to use, community participation satisfaction level, identification, trust, culture sharing and knowledge content. It can be concluded that virtual community is very important to people with similar passion and interest regardless of nationality, where these people can get together to share knowledge and experiences. Informations and knowledge gain from all around the world can be discussed real time to determine its accuracy and effectiveness.

On the downside, the use of server and browser technologies make web applications particularly error-prone and challenging to test, causing serious dependability threats. A 2003 study conducted by the Business Internet Group San Francisco (BIG-SF) (BIG-SF, 2003) reported that approximately 70% of websites and web applications contain defects. In addition to financial costs, defects in web applications result in loss of revenue and credibility.

The difficulty in testing web applications is many-fold. First, web applications are distributed through a client/server architecture, with (asynchronous) HTTP request/response calls to synchronize the application state. Second, they are heterogeneous, i.e., web applications are developed using different programming languages, for instance, HTML, CSS, JavaScript on the client-side and PHP, Ruby, Java on the server-side. And third, web applications have a dynamic nature; in many scenarios they also possess nondeterministic characteristics the Decision Tree algorithm and Multinomial Regression. This paper mainly contained the analysis of air pollution and prediction of air pollutants using machine learning algorithms. The proposed system was to build a best fit machine learning algorithm to analyze and predict the air pollutants [6]. In the previous work, Multinomial Logistic Regression (MLR) and Decision Tree (DT) models were used for the analysis of air pollution. The result obtained was, MLR model was found to be the best fit model by providing the better accuracy when compared to DT model.

During the past decade, researchers in increasing numbers, have proposed different techniques for analyzing and testing these dynamic, fast evolving software systems. As the research area matures and the number of related papers increases, it is important to systematically identify, analyze and classify the state-of-the-art and provide an overview of the trends in this specialized field. In this paper, we present a systematic literature review (SLR) of the web application testing (WAT) research domain.

### IV. REQUIREMENT ANALYSIS:

Due to lack of communication many people lack the understanding of topics, be it related to any field due to Introvert Nature or Socially Non-Active. Many platforms which can provide such types of service are too generalized with other non-important/irrelevant activities. Hence, results in a Distraction and lack of concentration. Most of the web applications are too complex for the regular users to use Software and hardware requirements :

Following are the details of all the software and hardware needed for the development and implementation of our project.

#### A. Hardware Requirements

- 1) A good PC/Laptop which can take load of Python and Django. 2. Updated OS (Recommended)
- 2) Memory: 4GB
- 3) CPU: Intel Core i3-2340UE or above
- 4) Storage: Atleast 10 GB

**B. Software Requirements**

- 1) Software Development Tool: Visual Studio Code
- 2) Python (Latest Version Recommended)
- 3) Django (Latest Version Recommended)
- 4) Front End: HTML, CSS, Bootstrap

**V. PROJECT DESIGN**

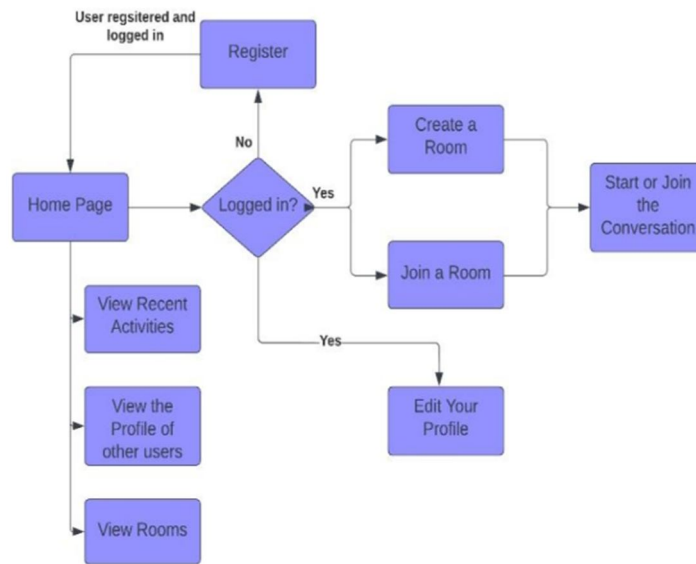


Figure 1 : Flowchart of Study circle connect 4u

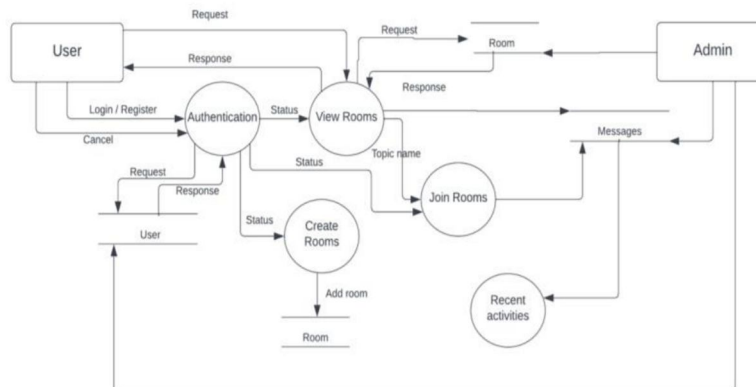


Figure 2 : DFD of Study Circle connect 4U

The process of project is as follows:

- 1) The first user will go to home page. the System will check the user is valid or not.
- 2) After that user will have two option register and logged in
- 3) If the user select the register select option they can see view the recent activities, view the profile of other users and view rooms.
- 4) If the user logged in then it will happen has many option has many option like create a room , join room etc
- 5) The user can also edit his/her profile according to convenient 6. Also it have the option of start the conversation or join the conversation and many more.



## VI. TECHNOLOGIES USED

### A. Python (Django)

Django has continued to grow and improve, from its first milestone release (1.0) in September 2008 through to the recently-released version 3.1 (2020). Each release has added new functionality and bug fixes, ranging from support for new types of databases, template engines, and caching, through to the addition of "generic" view functions and classes (which reduce the amount of code that developers have to write for a number of programming tasks). Django is now a thriving, collaborative open-source project, with many thousands of users and contributors

### B. HTML5

HTML5 was first released in a public-facing form on 22 January 2008, with a major update and "W3C Recommendation" status in October 2014. Its goals were to improve the language with support for the latest multimedia and other new features; to keep the language both easily readable by humans and consistently understood by computers and devices such as web browsers, parsers, etc., without XHTML's rigidity; and to remain backwardcompatible with older software. HTML5 is intended to subsume not only HTML 4 but also XHTML 1 and DOM Level 2 HTML. HTML5 includes detail processing models to encourage more interoperable implementations;

### C. CSS3

Cascading Style Sheets (CSS) is a language that is used to illustrate the look, style, and format of a document written in any markup language. In simple words, it is used to style and organize the layout of Web pages. CSS3 is the latest version of an earlier CSS version, CSS2. A significant change in CSS3 in comparison to CSS2 is the introduction of modules. The benefit of this functionality is that it allows the specification to be finalized and accept faster, as segments are finalized and accepted in portions. Also, this allows the browser to support segments of the specification

### D. JavaScript

JavaScript is a scripting or programming language that allows you to implement complex features on web pages — every time a web page does more than just sit there and display static information for you to look at — displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc. — you can bet that JavaScript is probably involved. It is the third layer of the layer cake of standard web technologies, two of which are HTML5 and CSS3.

### E. SQLite (Lite)

SQLite is an in-process library that implements a self-contained serverless, zero configuration, transactional SQL database engine. The code for SQLite is in the public domain and is thus free for use for any purpose, commercial or private. SQLite is the most widely deployed database in the world with more applications than we can count, including several high-profile projects. SQLite is an embedded SQL database engine. Unlike most other SQL databases, SQLite does not have a separate server process. SQLite reads and writes directly to ordinary disk files. A complete SQL database with multiple tables, indices, triggers, and views, is contained in a single disk file. The database file format is crossplatform - you can freely copy a database between 32-bit and 64-bit systems or between big-endian and little-endian architectures. These features make SQLite a popular choice as an Application File Format.

## VII. RESULTS

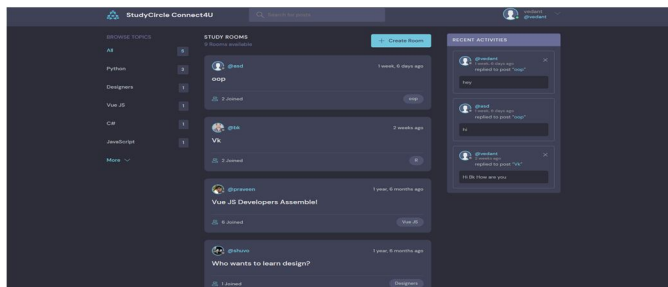


Figure 3: created different rooms for study purpose

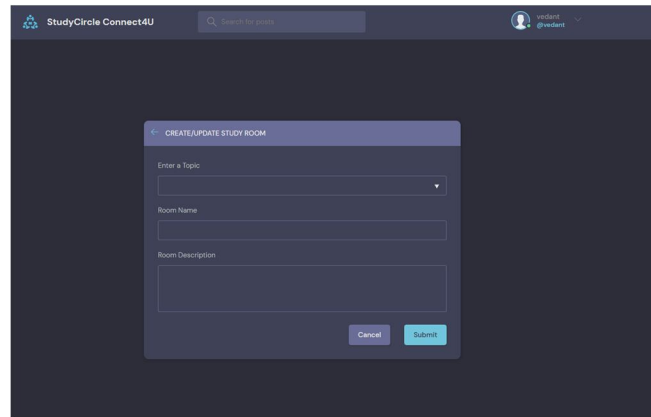


Figure 4: Edit/ update study room

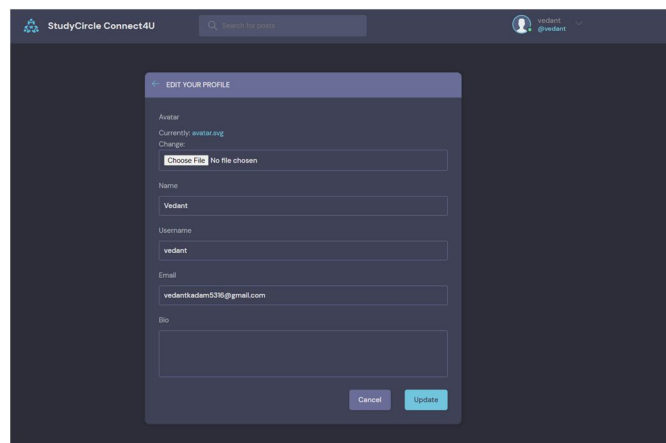


Figure 5: user can create own profile

## VIII. FUTURE SCOPE

There is always a room for improvements in any software package, however good and efficient it may be done. But the most important thing should be flexible to accept further modification. Right now we are just dealing with text communication. In future this software may be extended to include features such as video chats, voice chats

- 1) *File Transfer*: This will enable the user to send files of different formats to others Via the application.
- 2) *Voice Chat*: This will enhance the application to a higher level where communication will be possible via voice calling as in telephone.
- 3) *Video Chat*: This will further enhance the feature of calling into video communication.

And as a future scope this application holds many possibility use cases and not only in the study area also mental therapy, gaming community, and other areas too. We can add other modules such as a live video functionality for tutorials, mental health or physical fitness tips, etc. We can also conduct a Question - Answer sessions occasionally with the experts in a particular field which might result as a good practice for some users

## IX. CONCLUSION

We can successful develop a platform which will can allow the communities to share their knowledge, experience and wisdom with the help of our simple user-friendly User Interface while keeping the distraction to it's minimal. So by develop this system we can solve the problem of communication between different people having same topic of interest. Our project can help the people from different areas connect with each other without any geographical or social barrier

In our system our objective was to create an application with minimal distraction which includes necessary features so we have kept the communication medium to it's minimum. If the participants in the room may get beyond the small group then it may become wildy and it can be easy for everyone to keep up with the chats.



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