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Virtual Classroom

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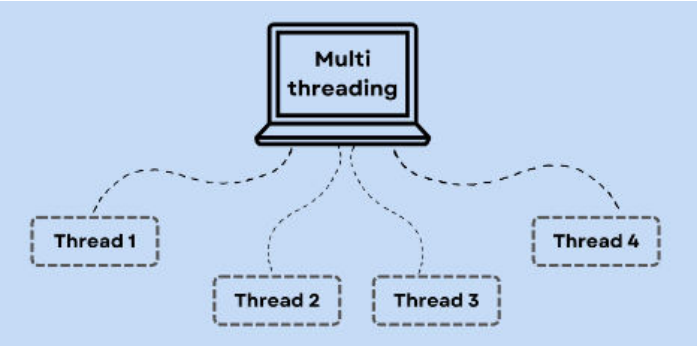
ABSTRACT: Virtual classrooms level the playing field of education, allowing scholars from each over the world to pierce intriguing classrooms anyhow of where they live or work. Virtual classrooms can condense being education structures or be used as the main structure for conducting knowledge.
Virtual classrooms promote inclusive and popular literacy, and also help reduce the costs of largely coveted educational courses and instruments. And, seeing as how traditional classrooms have closed down across the world for the foreseeable future, virtual classrooms and online virtual meeting platforms insure education continues online and at home.

KEYWORDS: virtual classroom; virtual education; open education; tutoring terrain .

I. INTRODUCTION

Revolutionizing Education through VR classroom software can give a further immersive and interactive literacy experience for scholars.
With the eventuality to pretend real- world scripts, scholars can learn by doing and retain information more.
Distance literacy allows scholars to pursue academics while working a job or carrying out their particular schedules. It facilitates learning from home without the fresh costs of accommodation and trip. This is done through the use of virtual meeting platforms and virtual conference software that mimic face- to- face relations, albeit digitally.



- Client-server concept :-

To manage the multiple accounts we use the client server concept .
The teacher account works as a server and the students account works as a client so it is easy to manage them .
Client requests are fulfilled by the server means by the teacher .

IV. OBJECTIVES AND SCOPES

I. Problem Statement
It isn't possible for everyone to go far down for education because of his/ her family condition or family's fiscal condition.
So numerous scholars aren't going to learn, to avoid these we're making this app for education purposes.
Another thing is some scholars are doing jobs for their farther studies so they aren't suitable to do both. but now they can join classes from their job place or see the recorded lectures.

II. **Methodology**

- Multi-threading concept :-

In virtual classroom we need to manage multiple classes contemporaneously so multithreading conception is used in our operation to manage that.

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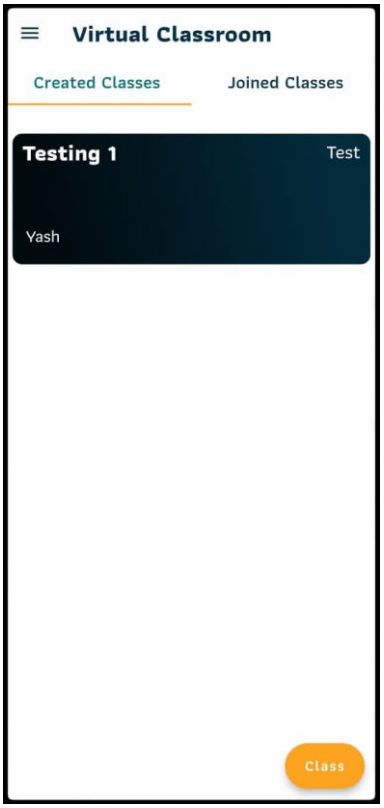
1. videotape conferencing
2. Digital whiteboards
3. Instant messaging
4. videotape recording
5. End- to- end encryption

The future of VR Classroom Software is promising, with the eventuality to give indeed more immersive and interactive literacy gests .
The virtual classroom makes learning intriguing so
the education rate can be increased heavily.
significant shifts will be made to how we acquire knowledge. Recent developments in digital media, communication, and bandwidth have made it doable to give education at a important- reduced cost compared to further conventional styles.

scholars have access to a wide variety of accoutrements on the internet, including textbook, audio, and videotape content, as well as interactive and cooperative tools. When polled, eighty- five per cent of moment's online scholars responded appreciatively to whether or not they allowed distance literacy was on par with or indeed better than conventional classroom- grounded courses. The mortal connection is an essential element of classroom instruction that videotape- on- demand or virtual classroom courses don't have and oppressively miss.



V. SOFTWARE AND HARDWARE REQUIREMENTS

Software requirement:-

1) Android Studio.
2) Flutter Framework.
3) Dart Programming language

Hardware requirements:-

Android 10 or above
Network connection

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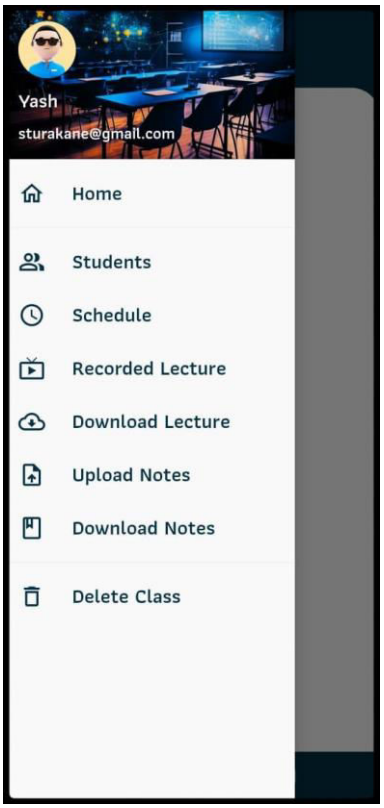

VI. FUNCTIONALITIES

1. Live Lectures :

a) Virtual classrooms include the function of live lectures so scholars can attend the classes from home or any of their places. There's no need to go council or if you aren't suitable to.

b) Live lectures can be accessed from anywhere with an internet connection, making education more accessible to students who are unable to attend traditional classes due to distance, travel restrictions, or other commitments.

c) Live lectures often offer more flexibility in terms of scheduling, allowing students to attend classes at times that are convenient for them. This flexibility can be particularly beneficial for working professionals or students with busy schedules.

2. Test Materials : -

In virtual classroom we're furnishing online tests and question banks for tests of each subject. So the pupil can prepare for the test and perform well in the test.

a) **Assignments**: These can include written assignments, projects, or presentations. Assignments are used to assess students' ability to apply concepts learned in the virtual classroom to real-world scenarios.

b) Exams: Virtual classrooms can administer exams in a similar format to traditional exams, with timed questions and a mix of question types. Exams are used to assess students' overall understanding of the course material.

c) Interactive Activities: These can include simulations, virtual labs, or group activities that require students to collaborate and solve problems together. These activities are used to assess students' ability to apply theoretical knowledge in practical situations.

d) Feedback Mechanisms: Virtual classrooms often include mechanisms for providing feedback to students on their performance. This can include automated feedback on quizzes and assignments, as well as personalized feedback from instructors.

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3. Study materials :-

In our operation, we give the section for study accoutrements where we're uploading the notes, reference books, assignments, workbooks and further.

a) Lecture Notes: Virtual classrooms often provide students with access to lecture notes, either in written form or as multimedia presentations. These notes summarize key concepts and provide a reference for students to review after the lecture.

b) Textbooks and Readings: Virtual classrooms may require students to purchase or access textbooks and other readings relevant to the course. These materials provide additional context and depth to the course content.

c) Videos and Multimedia: Virtual classrooms often incorporate videos, animations, and other multimedia elements to enhance learning. These materials can help explain complex concepts visually and engage students in different ways.

d) Discussion Forums: Virtual classrooms often include discussion forums where students can ask questions, discuss course material, and collaborate with their peers. These forums can be a valuable resource for clarifying concepts and gaining different perspectives.

4. Attendance :-

scholars can attend the lecture from there favored places and their attendance is participated to schoolteacher and full stats of it.it .

a) Login Records: Virtual classroom platforms can track when students log in to the system, providing a basic record of attendance. However, this method may not accurately reflect active participation in the course.

b) Live Attendance Monitoring: In live virtual classrooms, instructors can monitor attendance in real-time by tracking students' presence in the session. This can be done through the use of attendance tracking features in the virtual classroom platform.

c) Attendance Check-ins: Some virtual classrooms require students to check in at the beginning of each class session to confirm their attendance. This can be done through a simple form or by responding to a prompt in the virtual classroom platform.

d) Assignment Submission: Attendance can also be tracked based on students' submission of assignments or assessments. Regular submission of assignments can indicate that students are actively participating in the course.

5. Public Chat Room :-

We're furnishing converse apartments that are public. It's a negative point for scholars but from the view of education it's ok for no distraction.

Because of private exchanges, scholars can get distracted and can not concentrate on studies.

a) Real-time Communication: Public chatrooms allow for instant communication between participants, enabling quick exchanges of ideas and information.

b) Collaboration: Chatrooms facilitate collaboration among students, allowing them to work together on projects, discuss course materials, and share resources.

c) Engagement: Chatrooms can help keep students engaged during lectures or presentations by providing a space for them to ask questions and participate in discussions.

d) Accessibility: Chatrooms are accessible to all participants, making them an inclusive platform for communication and collaboration.

e) Record Keeping: Chatrooms often have a log of all messages sent during a session, which can be useful for reviewing discussions or referencing information at a later time.

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f) Moderation: Instructors can moderate chatrooms to ensure that discussions remain focused and respectful, creating a safe and inclusive learning environment.

VII. FUTURE SCOPES

The future of Virtual Classroom Software is promising, with the
implicit to give indeed more immersive and interactive
literacy gests .
In the future, virtual classrooms will come virtual reality classrooms. VR is coming to digitalization. It'll make the education more, amusing, and interacting
.

VIII. CONCLUSION

VR Classroom Software has the implicit to revise education by furnishing further immersive, interactive, and substantiated learning gests .
Understanding what's important to you, your facilitators, preceptors, and scholars should come first. I 've preliminarily mentioned brainstorming sessions with your platoon's professionals and the criteria- setting procedure. But if you have no idea or need partial help with this issue, let us guide you through the process of choosing virtual classroom software.

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