# LIVE SCHOOL FOR WORLD CLASS FREE EDUCTION

#### A PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the

degree of

#### **BACHELOR OF TECHNOLOGY**

IN

**COMPUTER ENGINEERING**[Artificial Intelligence and Machine Learning]



PRESIDENCY UNIVERSITY
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# PRESIDENCY UNIVERSITY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING CERTIFICATE

This is to certify that the project report "LIVE SCHOOL FOR WORLD CLASS FREE EDUCATION" being submitted by DEVATHI VENKATA SAI SUBHASH (20201CEI0004), TARIGONDA SOWMYA (20201CEI0016), KONDA BHAVYA (20201CEI0017), KURRA BHARGAV REDDY (20201CEI0058), in partial fulfilment of requirement for the award of degree of Bachelor of Technology in Computer Engineering [Artificial Intelligence and Machine Learning] is a bonafide work carried out under my supervision.

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#### **DECLARATION**

We hereby declare that the work, which is being presented in the project report entitled LIVE SCHOOL FOR WORLD CLASS FREE EDUCATION in partial fulfillment for the award of Degree of Bachelor of Technology in Computer Engineering [Artificial Intelligence and Machine Learning], is a record of our own investigations carried under the guidance of Mr. MOHAMED SHAKIR, Asst.Professor, School of Computer Science And Engineering, Presidency University, Bengaluru. We have not submitted the matter presented in this report anywhere for the award of any other Degree

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#### **ABSTRACT**

In the world, education is essential to living or to improve our stage of technology, but not all are getting a quality education Those who are living in the orphanage there is no chance to improve their skills only a few places are giving quality education to improve themselves and many counties had the low literacy rate and there is no age limit for education the like Afghanistan(under 25year's-47%, under 45year's-31.7%, 60+-20.3%), Benin (under 25year's-52.5%, under 45year's-32.9%, 60+-7.0%) like this there are many counties and education for every one and free of education and every day the technology is keep getting improve so we developed this project to give skills there needed to improve them self's, In this project we combining the all the world to share and to get the skills there need in this project, There no need to pay any fee for the subscription to get the membership this is free of cost, In our project the classes will be 24/7 live all our the world any time there need to know or try to learn there will be classes available not only the classes there can chat with the faculty in the live session and there can share the notes ect.

In our project the faculty will be from all over the world, in the world there are many people with more knowledge than other people and they need to share the knowledge they have for that purpose our project, we can give education to poor people(can't afford) and children in the orphanage as the right to get the education as the others with the quality education and with this we can increase all counties literacy rate by giving the free education to all, No matter what age we are we have the right to educate, For the founders we collaborate with industries to pay for the faculty(no one share there knowledge for free) now it is only under the academic level we need to develop for the world

*Keywords*— High Literacy Rate, Free Education No Matter The Age, 24/7 Live Class In World, Quality Education

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#### LIST OF FIGURES

Sl.	Figure	Caption	
No.	Number		No.
1	Fig-1	Gantt Chart	26
2	Fig-2	Front page of the project	28
3	Fig-3	Login Page Of The Project	54
4	Fig-4	Singup Page Of The Project	54
5	Fig-5	Faculty Home Page	54
6	Fig-6	File Folder In Faculty	54
7	Fig-7	Homework Page In Faculty	54
8	Fig-8	Notification Page In Faculty	54
9	Fig-9	<b>Delete Account Page In Faculty</b>	55
10	Fig-10	Live Session Page In Faculty	55
11	Fig-11	Homepage In Student	55
12	Fig-12	Faculty Or Subject Search Bar In Student	55
13	Fig-13	Faculty Display Page In Student	55
14	Fig-14	Homework Page In Student	55
15	Fig-15	Files And Folder Page In Student	56
16	Fig-16	Notification Page In Student	56
17	Fig-17	Account Deletetion Page In Student	56
18	Fig-18	Session Join Page In Student	56
19	Fig-19	Student said live-session page	56
20	Fig-20	faculty said live-session page	56
21	Fig-21	All the faculty and student chat and	29
22		decesion page	(2
22		Sustainable Development	62

### **TABLE OF CONTENTS**

CHAPTER	TITLE	PAGE
NO.		NO.
	ABSTRACT	iv
	ACKNOWLEDGMENT	V
1	INTRODUCTION	10
	1.1 Aim of the project	11
	1.2 project scope	11
2	Literature Survey	12-16
	2.1 Online learning and Education Technology	12
	2.2 Global Education Disparities	12
	2.3 Live Class Models	13
	2.4 Quality of Education	13
	2.5 Sustainability And Scalability	14
	2.6 Future Trends in Free Education	15
3	RESEARCH GAPS OF EXISTING	17-18
	METHODS	
	3.1 EXISTING METHOD	17
	3.2 Research Gaps	18
4	PROPOSED MOTHODOLOGY	19-20
	4.1 Learning Content Management Module	19
	4.2 Student Portal and Engagement Module	19
	4.3 Learning Analytics and Progress Tracking	19
	Module	

	4.4 Curriculum Management and Delivery	19
	Module	
	4.5 Security and Privacy Module	19
	4.6Progress Reporting and Communication	20
	Module	
5	OBJECTIVES	21-22
	5.1 Accessible Quality Education	21
	5.2 Inclusive Learning Environment	21
	5.3 Real-time Interactivity	21
	5.4 Teachers evaluation	21
	5.5 Continuous Improvement and Updates	21
	5.6 Global Reach and Impact	22
	5.7 Technological Infrastructure	22
	5.8 Promotion of Lifelong Learning	22
	5.9 Sustainability and Scalability	22
6	5.9 Sustainability and Scalability  SYSTEM DESIGN & IMPLEMENTATION	22 23-26
6	, ,	
6	SYSTEM DESIGN & IMPLEMENTATION	23-26
6	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE	23-26
6	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector	23-26 23 23
6	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP	23-26 23 23 24
7	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP  6.4 Access phpMyAdmin	23-26 23 23 24 24
	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP  6.4 Access phpMyAdmin  6.5 Creating a Dynamic Web Project	23-26 23 23 24 24 25
	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP  6.4 Access phpMyAdmin  6.5 Creating a Dynamic Web Project  TIMELINE FOR THE EXECUTING OF	23-26 23 23 24 24 25
7	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP  6.4 Access phpMyAdmin  6.5 Creating a Dynamic Web Project  TIMELINE FOR THE EXECUTING OF  PROJECT	23-26 23 24 24 25 27
7	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP  6.4 Access phpMyAdmin  6.5 Creating a Dynamic Web Project  TIMELINE FOR THE EXECUTING OF  PROJECT  OUTCOMES	23-26 23 24 24 25 27 28-29
7	SYSTEM DESIGN & IMPLEMENTATION  6.1 Installing Eclipse IDE  6.2 Installing MySQL Connector  6.3 Installing XAMPP  6.4 Access phpMyAdmin  6.5 Creating a Dynamic Web Project  TIMELINE FOR THE EXECUTING OF  PROJECT  OUTCOMES  8.1 Accessible Education For All	23-26 23 24 24 25 27 28-29 28

	8.5 Partnerships and Sponsorships	29
9	RESULTS AND DISCUSSIONS	30-31
	DISCUSSION	30
	RESULT	30-31
10	CONCLUSION	32
11	REFERENCES	33-35
	APPENDIX-A PSUEDOCODE	36-55
	APPENDIX-B SCREENSHOTS	56-58
	APPENDIX-ENCLOSURES	58-62

#### INTRODUCTION

Until 2020 we knew that education was only reachable through education institutes but from 2020 when The COVID-19 pandemic affected our world in that time education entered a new stage called **ONLINE EDUCATION**(real-time video and voice communication). In that time many families fell into the economic crisis and were unable to afford education, education is becoming more and more expensive to afford online education. Online education for only Particular members. There need to pay for online education which is as expensive as normal education. Higher education is also expensive so many people can't afford it, and the literacy rate is also down and we need to improve, Technological barriers, Economic disparities, lack of quality teachers, etc., this are a few problems for not getting 100% literacy(education).

And we lack of quality Education and a lack of devoted teachers (no way to improve their skills), and many people can't understand the topic as they understand in their native language there do.

Our project will help all the problems we discuss in above by giving world-class free education for everyone no need to pay any money anyone can use it by just login to the application and there can find the subjects in there own native language so there can understand easily and even poor people can use this application for improve the skills, there is no limitation for the age to learn there can get from this application.

In every time the curriculum is getting upgrading in some places the upgraded curriculum are already in some other places, the teachers in that place can help you to gain the knowledge you need get from the upgraded curriculum. Education is a fundamental human right and a powerful tool for addressing inequality, promoting economic growth, fostering innovation, and ultimately achieving sustainable development goals. In this context, advocating for free education on a global scale is a call to action, aiming to ensure that every person, regardless of their socio-economic background, has the opportunity to receive a quality education without financial constraints. This concept encompasses primary, secondary, and higher education, encompassing both formal and informal learning environments

#### 1.1 Aim of the project

Our project aims to make an equal society regardless of the age, gender, place, or status of their family we need to provide education to every person. To increase the literacy rate in every country to 100%, with the help of our project we can accomplish our aimed goal by providing free education for everyone. To provide quality education for the orphanage children(homeless children). The place where the teachers can upgrade their skills every time the curriculum is upgraded so that every teacher can be devoted (no lack of knowledge). We want to provide quality education for higher education so that they can graduate with a complete understanding of their curriculum. To make a application to provide education for the household with there own understanding language. To make a application without suffering for there education funding

#### 1.2 Project Scope

Live school for world class free education is the free class for the entire world with out any difference between the rich and poor in the education regardless of there age and place there from to provide online education (real-time communication with chat with the teacher to clarify the doubt there getting from the subject from the class) and provide the assignment for improve the knowledge of that subjects and share the important data or important notes from the class and choose the best teacher on the topic by checking the qualification of the teacher

#### LITERATURE SURVEY

#### 2.1 Online learning and Education Technology:-

Online learning and education technology have become integral components of modern education, transforming the traditional classroom model and providing new avenues for learning. Numerous studies have delved into the effectiveness of online learning platforms, seeking to understand their impact on student outcomes. Research consistently suggests that well-designed online learning experiences can be as effective, and sometimes even more so, than traditional classroom instruction. Factors such as personalized learning paths, interactive content, and real-time feedback contribute to the success of online education platforms. One key advantage of online learning is its flexibility, allowing students to access educational materials at their own pace and convenience. This flexibility accommodates diverse learning styles and schedules, making education more accessible to a broader audience. However, challenges such as maintaining student engagement and addressing technological disparities need to be considered to ensure the success of online education initiatives. the integration of technology in education extends beyond online platforms to include virtual classrooms, interactive tools, and multimedia resources. Virtual classrooms enable real-time interaction between teachers and students, fostering a sense of community and collaboration. Interactive tools, such as simulations and educational games, enhance the learning experience by providing hands-on and engaging activities. Multimedia resources, including videos, animations, and interactive presentations, cater to varied learning preferences, making the educational content more dynamic and compelling.

#### 2.2 Global Education Disparities:-

Global education disparities remain a critical challenge in today's world, with millions of children and young adults facing barriers to accessing quality education. Numerous studies highlight the persistent gaps in educational opportunities, resources, and outcomes among countries, regions, and socio-economic groups. These disparities are often exacerbated by factors such as poverty, gender inequality, and lack of infrastructure. In addressing global education inequalities, the role of free education emerges as a key focal point. Many experts argue that providing free education is a fundamental step toward mitigating disparities, as it removes financial barriers and promotes inclusivity. Countries that have implemented comprehensive free education policies have witnessed positive impacts on enrollment rates, literacy Page 12 of 62

levels, and overall educational attainment.

Case studies from around the world provide valuable insights into the effectiveness of free educational initiatives. For instance, countries like Finland and Germany have successfully implemented policies that prioritize free education, contributing to their high-quality education systems and equitable outcomes. Additionally, initiatives such as the Global Partnership for Education (GPE) have played a pivotal role in supporting low-income countries in expanding access to education through financial aid and policy assistance. Success stories within individual nations and regions further underscore the transformative potential of free education. Examining specific programs and interventions, such as scholarship schemes, school infrastructure development, and community engagement initiatives, sheds light on the multifaceted approach required to address education disparities comprehensively.

#### 2.3 Live Class Models:-

Live school models, encompassing virtual classrooms and real-time educational interactions, have become increasingly prevalent, especially in response to the global shift towards remote learning. These models leverage various technologies to emulate traditional classroom experiences, striving to provide students with meaningful engagement and interaction. The effectiveness of these models varies based on the integration of live streaming, video conferencing, and collaborative tools. Live streaming in education involves broadcasting live lessons or events, offering students the opportunity to participate in real-time discussions and receive immediate feedback from instructors. Video conferencing platforms facilitate face-to-face interactions, enabling teachers to conduct live lectures, host virtual office hours, and encourage peer collaboration. Collaborative tools, such as virtual whiteboards and document sharing platforms, promote active engagement and group work in the digital space. Research indicates that well-implemented live school models can enhance student engagement and foster a sense of community among learners. Real-time interactions allow for instant clarification of doubts, increased student-teacher rapport, and the creation of a dynamic learning environment. Additionally, the use of collaborative tools can promote teamwork, critical thinking, and problem-solving skills.

#### 2.4 Quality of Education:-

Quality of education is a critical aspect that directly impacts the development and success of learners. With the rise of free educational platforms, there has been an increased accessibility to learning resources, breaking down barriers to education globally. However, assessing the quality of education provided by

these platforms poses several challenges. One key concern is the lack of standardized evaluation mechanisms, making it difficult to measure the effectiveness of teaching methodologies and the learning outcomes. Additionally, the absence of qualified instructors and personalized feedback can hinder the overall educational experience. It is essential to address these issues to ensure that free educational platforms maintain high standards. Maintaining quality in a live school environment involves a multifaceted approach. First and foremost, recruiting and retaining qualified and passionate educators is crucial. Teachers play a pivotal role in shaping the learning experiences of students. Continuous professional development programs can further enhance their skills and keep them abreast of the latest educational methodologies. Implementing a well-structured curriculum aligned with educational standards helps ensure that students receive a comprehensive and rigorous education. Technology integration is another key strategy to enhance the quality of teaching and learning. Utilizing interactive tools, multimedia resources, and online platforms can make lessons more engaging and cater to diverse learning styles. Moreover, regularly assessing student progress through formative and summative assessments allows educators to identify areas of improvement and adapt their teaching strategies accordingly. In a live school environment, fostering a positive and inclusive school culture is vital for creating an environment conducive to learning. This involves promoting open communication between teachers, students, and parents, as well as addressing the diverse needs of students through differentiated instruction and support services. Furthermore, incorporating extracurricular activities and real-world applications into the curriculum can provide students with practical skills and a well-rounded education.

#### 2.5 Sustainability And Scalability:-

Community engagement plays a pivotal role in the success of free education programs, serving as a linchpin for their effectiveness and sustainability. Numerous studies have highlighted the positive correlation between active community involvement and the overall success of educational initiatives. When communities are engaged, they become invested in the educational process, fostering a sense of ownership and commitment. This involvement goes beyond mere participation; it extends to collaboration in decision-making processes, ensuring that the educational programs align with the specific needs and values of the community. Furthermore, partnerships with various stakeholders, including governments, non-governmental organizations (NGOs), and local communities, are essential for the comprehensive development and support of free education programs. Collaborating with governments can provide the necessary resources, infrastructure, and policy support to scale up educational initiatives. NGOs often

bring expertise, innovation, and additional resources to the table, contributing to the program's overall effectiveness. Local communities, being the direct beneficiaries, offer invaluable insights into the unique challenges and opportunities that shape the success of the education programs at the grassroots level. The importance of these partnerships lies not only in the pooled resources but also in the collective wisdom and diverse perspectives they bring. Government involvement ensures a systemic and structured approach, while NGOs can inject flexibility and innovation into program design and delivery. Local communities, being intimately familiar with their socio-cultural context, can contribute insights that may be overlooked in a top-down approach. Therefore, successful free education programs necessitate a harmonious collaboration among these stakeholders to address multifaceted challenges and create a sustainable impact.

#### 2.6 Future Trends in Free Education:-

In the rapidly evolving landscape of education, several trends are shaping the future of free education. One significant development is the integration of artificial intelligence (AI) into educational platforms. AI has the potential to revolutionize the learning experience by providing personalized and adaptive content. Through machine learning algorithms, educational platforms can analyze individual student performance, identify areas of strength and weakness, and deliver customized learning materials to enhance comprehension. This not only caters to diverse learning styles but also ensures that each student progresses at their own pace, fostering a more inclusive and effective learning environment. Adaptive learning is another trend gaining prominence in free education. This approach tailors instructional methods and materials based on individual learner needs. By continuously assessing and adjusting the learning experience, adaptive learning systems enable students to focus on areas that require improvement, resulting in a more efficient and targeted educational journey. This trend is particularly crucial in the context of free education, as it helps maximize the impact of limited resources by providing precisely tailored content to learners. Personalized education is a broader concept that encompasses not only adaptive learning but also factors in individual interests, preferences, and goals. Emerging technologies enable the creation of highly customized learning paths that cater to students' unique needs. This trend reflects a shift from the traditional one-size-fits-all approach to education, promoting a more student-centric model. As free education platforms embrace personalized education, learners can engage with content that resonates with their interests, making the learning experience more enjoyable and motivating. The future of free education is also closely linked to policy and technological developments.

Governments and educational institutions are increasingly recognizing the importance of open access to knowledge and are implementing policies to promote free education initiatives. This includes the development of open educational resources (OER) and the removal of barriers that hinder access to quality education. Additionally, advancements in technology, such as improved internet connectivity and the proliferation of affordable devices, contribute to the democratization of education by making it accessible to a broader audience. Furthermore, the use of blockchain technology is emerging as a potential gamechanger in the verification of educational credentials, reducing the reliance on traditional institutional validation. Blockchain can enable the creation of decentralized, transparent, and secure systems for recording and verifying academic achievements, fostering greater trust and recognition for free educational initiatives.

#### RESEARCH GAPS OF EXISTING METHODS

#### 3.1 EXISTING METHOD

- **1. Khan Academy:** Khan Academy, a non-profit educational platform, offers a diverse range of free online classes, courses, and practice sessions. Covering subjects such as science, math, economics, and the humanities, it aims to make education accessible to everyone.
- **2. edX:** Serving as a global marketplace for Massive Open Online Courses (MOOCs), edX provides a mix of free and paid courses from universities and various organizations. While auditing some courses is free, certain certifications may involve associated fees.
- **3. Coursera** (**Audited Courses**): Coursera, another prominent MOOC platform, grants access to a wide array of courses from global colleges and organizations. Many courses are available for free if you wish to audit the material without pursuing a degree.
- **4. MIT OpenCourseWare:** MIT OpenCourseWare offers an extensive collection of free course materials from MIT, including homework assignments, tests, and lecture notes across various topics.
- **5. OpenStax:** Operated by the non-profit organization OpenStax, this platform provides openly licensed and peer-reviewed textbooks for college courses, covering a diverse range of subjects.
- **6. YouTube Educational Channels:** Numerous organizations and educators on YouTube share instructional content. Channels like TED-Ed and CrashCourse offer engaging videos on a variety of subjects, contributing to the wealth of educational resources.
- **7. Google Classroom:** Google Classroom integrates Google Workspace for Education features, offering a free platform for educational institutions. It facilitates the creation, assignment, and grading of homework digitally, reducing reliance on paper.
- **8. UNESCO's Global Education Coalition:** UNESCO initiated the Global Education Coalition to assist nations in expanding their best distance learning methods, particularly targeting vulnerable children and youth. The coalition brings together a broad spectrum of partners to address educational challenges on a global scale.

#### 3.2 Research Gaps

- **1. Assessing the Impact of Face-to-Face Learning:** Explore how interactive, real-time teaching influences traditional classroom settings. Investigate how in-person interactions between educators and students contribute to enhanced learning outcomes compared to asynchronous methods.
- **2. Overcoming Access Challenges:** Investigate the obstacles students face in different geographic regions, considering factors like device accessibility, internet connectivity, and variations in educational levels. Examine the difficulties associated with ensuring equal access for all students.
- **3. Creating Inclusive Learning Spaces:** Study the inclusivity of live classrooms, focusing on how well these platforms cater to students with diverse needs, including those from underrepresented groups or with impairments.
- **4. Identifying Effective Teaching Methods:** Examine the most successful pedagogical strategies for face-to-face learning environments. Consider the impact of these strategies on students' retention of material and how they strike a balance between teacher-led and student-centered approaches.
- **5. Assessing Technology Reliability:** Evaluate the effectiveness and dependability of the technological infrastructure supporting live classes. Address concerns about platform usability, server stability, and the impact of technical malfunctions on the learning process.
- **6. Teacher Training and Growth:** Investigate the effectiveness of teacher training programs in real-world classrooms. Focus on teachers' adaptability to remote instruction and the influence of ongoing professional development on the quality of instruction.
- **7. Boosting Student Engagement:** Examine the elements of gamification, peer collaboration, interactive content design, and other factors influencing student motivation and engagement in traditional classroom settings.
- **8. Real-time Assessment Methods:** Analyze the suitability and efficiency of live school assessment methods, including how well-aligned real-time quizzes, exams, and other evaluation procedures are with learning objectives.
- **9. Long-term Educational Impact:** Explore the enduring educational outcomes of students participating in live school programs, including academic performance, skill development, and overall readiness for future pursuits.
- **10. Community and Parental Support:** Investigate how communities and parents can contribute to their children's education in a traditional school setting. Research the collaborative efforts between teachers, students, and parents that contribute to the success of the educational model.

School of Computer Science and Engineering, Presidency University

#### PROPOSED METHODOLOGY

#### 4.1 Learning Content Management Module

The proposed approach for the Live School's World-Class Free Education initiative centers around developing a user-friendly Learning Content Management System (LCMS). It utilizes Java for efficient data management and relies on cloud services, such as AWS, for storing educational content securely. The system ensures smooth content retrieval through React JS for user input and integrates SQL connectors for precise searches within the educational materials.

#### 4.2 Student Portal and Engagement Module

The Student Hub and Interaction component play a crucial role in reshaping how users engage with the education platform. By implementing secure authentication mechanisms through the Amazon Management Console and SSL certificates, we guarantee secure and streamlined student logins. This commitment to data security creates a trustworthy and easily accessible environment.

#### 4.3 Learning Analytics and Progress Tracking Module

The Learning Analytics Module serves as the backbone for informed decision-making within the educational system. Leveraging Python for data analysis and visualization, this module extracts actionable insights from student performance data. Integration with tools like Power BI provides an intuitive interface for educators and students to understand progress easily. The approach prioritizes simplicity and effectiveness, ensuring comprehensive yet straightforward data analysis that resonates with users of varying technical expertise.

#### 4.4 Curriculum Management and Delivery Module

Traceability and transparency in the educational environment are facilitated by the Curriculum Management and Delivery component. Using a practical methodology, the program incorporates tracking techniques to monitor students' progress across the curriculum. This guarantees complete transparency and provides teachers and students with instant insights into the learning process.

#### 4.5 Security and Privacy Module

The Security and Privacy Module acts as the guardian of data integrity and user confidentiality. Implementing robust security measures, including two-factor authentication (2FA), ensures secure data transmission. Regular security reviews using straightforward tools strengthen the system's resilience, identifying and mitigating potential security vulnerabilities proactively.

#### 4.6 Progress Reporting and Communication Module

The Progress Reporting and Communication component aims to present insights that are easy to understand from complex data sets. The module raises stakeholder awareness by using reporting technologies like JasperReports to send out email alerts with significant updates. Teachers, students, and other stakeholders can grasp the information using simple dashboards that prioritize user understanding. Effective and inclusive communication remains a top priority throughout the learning environment.

#### **OBJECTIVES**

- **1. Facilitating Universal Access to Quality Education:** Our foremost objective is to eliminate barriers and offer free educational access to individuals globally, irrespective of their location, economic background, or cultural affiliations. It's not just about providing education; it's about delivering top-notch, insightful knowledge to ensure students receive meaningful and valuable information.
- **2. Fostering an Inclusive Learning Environment:** We aim to create a learning environment that embraces diverse learning styles, skill levels, and cultural perspectives. The goal is to make every student feel valued, comfortable, and capable of fully engaging in the learning process. Employing various teaching strategies and resources accommodates different learning styles, recognizing that individuals absorb information in diverse ways.
- **3. Enhancing Real-time Interactivity:** Our focus is on using real-time interactivity to make learning lively and dynamic. We strive to facilitate direct communication between students and educators through interactive features and live sessions, creating a flexible and dynamic learning environment. This involves activities such as live video conferences, student participation in debates, and immediate responses from instructors during interactive components like group projects, exams, and surveys.
- **4. Empowering Teachers through Evaluation:** Our Teacher Evaluation initiative aims to equip educators with the skills and knowledge essential for thriving in the ever-evolving realm of online learning. Recognizing the pivotal role educators play in shaping futures, we are committed to ensuring teachers are proficient in the latest online teaching methods and technological advancements. Our comprehensive training program aims to be both beneficial and engaging, providing teachers with the tools to create dynamic online learning environments.
- **5.** Continuous Improvement and Updates: We are dedicated to continually updating and improving our instructional materials, ensuring they remain effective, current, and dynamic. Seeking insightful feedback from teachers, students, and stakeholders, we strive to meet individual requirements and preferences, creating a more personalized and engaging learning environment.

- **6. Global Outreach and Impact:** Our overarching goal is to enhance global outcomes and broaden access to education for people worldwide. We are committed to removing obstacles to education, ensuring that students globally, regardless of their location or financial status, have access to educational opportunities and resources.
- **7. Robust Technological Infrastructure:** Our focus is on establishing and maintaining a strong foundation for reliable access to live sessions, content, and interactive features for all users. This involves implementing a resilient system that can seamlessly cater to diverse user needs, incorporating cuttingedge hardware, software, and network components.
- **8. Encouraging Lifelong Learning:** We aim to instill a mindset among students that values continuous education throughout their lives. This involves developing essential skills such as critical thinking and problem-solving, crucial for navigating the challenges of an ever-evolving world. Creating an educational environment that goes beyond traditional classrooms, fostering curiosity, exploration, and self-directed learning, enables students to adapt to new situations and solve complex problems.
- **9. Ensuring Sustainability and Scalability:** Our goal is to establish a sustainable framework for the live school, ensuring its long-term viability and impact. This involves exploring potential partnerships, diverse funding sources, and effective scalability strategies to reach a broader audience over time. Seeking collaborations with like-minded organizations, educational institutions, and businesses will not only enhance our offerings but also provide mutual support in terms of resources and expertise.

#### SYSTEM DESIGN & IMPLEMENTATION

#### **6.1 Eclipse IDE Installation**

#### **6.1.1 Downloading Eclipse**

- Visit the officiall Eclipse website: https://www.eclipse.org/downloads/).
- - Select the version compatible with your operating system (e.g., Windows 64-bit, macOS, Linux).
- - Click the "Download" button associated with your choice.

#### **6.1.2 Installing Eclipse**

- After the download completes, locate the downloaded file.
- Extract the downloaded archive to a designated location on your computer (e.g., C:\Program Files for Windows).
- Eclipse doesn't require a formal installation process; it's a portable application that runs directly from its folder.
- Launch Eclipse.

#### 6.1.3 Navigating to Eclipse Folder

- Inside the Eclipse folder, double-click on the executable file named eclipse (or eclipse.exe for Windows) to initiate Eclipse.
- 6.1.4 Setting Up Workspace
- Upon the first launch, Eclipse will prompt you to choose a workspace directory for storing your projects.
- Choose an appropriate folder location and click "Launch" to proceed.

#### 6.1.5 Java Development Kit (JDK) Setup

- Ensure the Java Development Kit (JDK) is installed on your system. If not, download and install it from Oracle's website.
- Open Eclipse, go to Window > Preferences.
- Navigate to Java > Installed JREs, and add your installed JDK by clicking "Add" and selecting the JDK folder.

#### **6.2 MySQL Connector Installation**

#### 6.2.1 Downloading MySQL Connector/J

- -Visit the MySQL Connector/J download page: [MySQL Connector/J](https://dev.mysql.com/downloads/connector/j/).
- - Choose the appropriate platform and download the ZIP archive.

#### 6.2.2 Extracting MySQL Connector/J

- Once the download finishes, locate the downloaded ZIP file.
- Extract the contents of the ZIP archive to a known location on your computer.

#### 6.2.3 Adding MySQL Connector/J to Eclipse Project

- - Open Eclipse IDE where your project is located.
- Right-click on your project in the Project Explorer, select Properties.
- Navigate to Java Build Path > Libraries > Add External JARs.
- Browse and select the mysql-connector-java-x.x.xx.jar file you extracted earlier.
- - Click "Apply" and then "OK" to add MySQL Connector/J to your project's build path.

#### **6.3 XAMPP Installation**

#### **6.3.1 Downloading XAMPP**

- -Visit the official XAMPP website:[XAMPPOfficial Website](https://www.apachefriends.org/index.html).
- - Download the version suitable for your operating system (e.g., Windows, macOS, Linux).

#### 6.3.2 Installing XAMPP

- Once the download is complete, locate the downloaded file and run the installer.
- - Follow the provided installation instructions.
- - Choose the components to install (Apache, MySQL, PHP, etc.).
- - Select the installation directory (usually the default is recommended).
- Complete the installation by clicking "Next" and then "Finish."

#### 6.3.3 Setting up MySQL in XAMPP

Start XAMPP and launch MySQL from the XAMPP Control Panel.

- Open a web browser and go to http://localhost/phpmyadmin/.
- Log in using the default username (root) and leave the password field empty (if no password was set during XAMPP installation).

#### **6.4 Creating a Database**

- Inside phpMyAdmin, click on the "Databases" tab.
- Enter a name for your database in the "Create database" field and choose a collation (usually utf8\_general\_ci).
- - Click "Create" to create the database.

#### 6.5 Setting Up Eclipse for Dynamic Web Project

- - Open Eclipse IDE if not already open.
- Create a Dynamic Web Project by going to File > New > Dynamic Web Project.
- Enter a project name, select the target runtime (e.g., Apache Tomcat), and set the Dynamic web module version.
- - Click "Next" and configure additional settings if necessary.
- Click "Finish" to create the Dynamic Web Project.

#### **6.5.1 Importing Your Project**

- If your project is not within the Eclipse workspace, go to File > Import.
- - Choose General > Existing Projects into Workspace.
- - Click "Next," select the project root directory, and click "Finish" to import it into Eclipse.

#### 6.5.2 Configuring Apache Tomcat Server

- Go to the Servers tab at the bottom of the Eclipse window (if not visible, go to Window > Show View > Servers).
- Right-click in the Servers tab area and select New > Server.
- Choose the installed Apache Tomcat version and click "Next."

#### **6.5.3 Set Tomcat Installation Directory**

Click "Browse" next to the "Tomcat installation directory" field.

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- Navigate to the Apache Tomcat installation directory and select it.
- Click "Finish" to add the Tomcat server to Eclipse.

#### **6.5.4** Configure Project to Use Tomcat

- Right-click on your Dynamic Web Project in Eclipse.
- Select Properties > Project Facets.
- - Check the box for "Dynamic Web Module" and click "Further configuration available..."
- Choose the installed Apache Tomcat server from the dropdown and click "OK."
- - Click "Apply" and then "OK" to close the project properties.

#### 6.5.5 Running Your Project

- Right-click on your project in Eclipse.
- - Select Run As > Run on Server.
- Choose the configured Tomcat server and click "Finish" to deploy and run your project.

#### 6.5.6 Accessing Your Project

- Once your project is running on Tomcat, open a web browser.
- Enter the URL provided in the Console window of Eclipse (usually http://localhost:8080/FarmToFork).

## CHAPTER-7 TIMELINE FOR EXECUTION OF PROJECT (GANTT CHART)

	Sept 09-Sept 13	Nov 6 -Nov 10	Nov 27 -Nov 30	Dec 26 - Dec 30	Jan 8 - Jan 12
Review 0	Title Finalization Literature Survey Finalizing objectives Deciding the methodology				
Review 1		Research and design			
Review 2			50% demonstration		
Review 3				100% demonstration	
Review 4					Final viva voice

Fig-1 Gantt Chart

#### **OUTCOMES**

- **8.1 Universally Accessible Education:** At the Live School, we have a very clear mission: to remove all obstacles to education and provide free, high-quality learning tools. We think that everyone should be able to access top-notch education, irrespective of financial limitations. Our goal is to promote diversity and give all students, wherever, equal chances to succeed.
- **8.2 Skilled Teachers:** Experienced educators who are experts in their industries should be the first to establish a good learning environment. Our goal is to choose teachers who have real-world experience and practical expertise in their respective fields in addition to a solid academic background. Our aim is to bring together a varied group of educators who understand the importance of various viewpoints and experiences.
- **8.3 Interactive Learning Platforms:-** Because they provide cutting-edge resources to encourage students to actively participate in their education, interactive learning platforms are essential to the current educational landscape. These platforms use technology to create a dynamic and engaging learning environment, going beyond conventional approaches. The use of multimedia tools, such as simulations and movies, which bring subjects to life and accommodate different learning styles, is one important aspect. This improves memory and understanding while simultaneously making learning more fun.
- **8.4 Free Access and Open Resources:-** Promoting open access and free materials is a crucial endeavor in the field of education that seeks to dismantle obstacles and provide learning opportunities to all. This entails providing students and learners with unrestricted access to educational resources, including textbooks. Working with open educational resource (OER) providers—organizations committed to producing and sharing openly available educational resources—is essential. Educational institutions may greatly expand the range of materials available by collaborating with these suppliers, guaranteeing that students have access to a wide variety of resources.
- **8.5 Partnerships and Sponsorships:-** We must aggressively seek partnerships and sponsorships that will

	order to create cooperative enterprises, we	
	al institutions. We may take use of their varies with these organizations.	ned resources and imancial assistance
y forming conaboration	is with these organizations.	

#### RESULTS AND DISCUSSIONS

#### **DISCUSSION:-**

everyone can access high-quality education at no cost through a traditional school setting. Interested in learning and studying without age limitations? With this platform, teachers can sign up, participate, and instruct students in the subjects they wish to learn using real-time voice and video communication (live sessions between the teacher and student). During these sessions, students can utilize the chat feature to ask questions and receive prompt and accurate answers. This service is accessible globally and is not confined to any specific region.

The instructor and subject matter are organized within what our project refers to as a 'file folder.' Teachers can upload educational materials to this folder, granting subject learners easy access. Educators can share assignments with learners, providing them with a deeper understanding of the subject matter. Furthermore, educators can disseminate various notifications, with relevance determining their significance. Students can search for educators by name or subject, and both students and educators have the option to delete their accounts.

This encapsulates the essence of the initiative named 'Live School For World Class Free Education.' In the teacher's account, there's an option to initiate the class. Once started, students can join the session. A chat option is available for students to pose questions, which can be answered, including unmuting the microphone if needed. Finally, students can enroll with educators to stay updated on any announcements.

#### **RESULT:-**

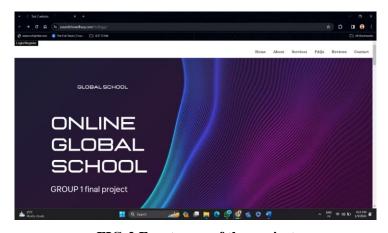


FIG-2 Front page of the project



Fig-21 All the faculty and student chat and decesion page

### CHAPTER-10 CONCLUSION

In summary To put it plainly, the "Live School for World-Class Free Education" initiative is highly significant within the field of education. It aims to provide access to high-quality education for all people worldwide. To manage educational resources, maintain student interest, monitor progress, and ensure safety, the project makes use of an intelligent system. The goal is to create an easily navigable platform that would enable people from all backgrounds to access education. The initiative is a step toward removing obstacles to education and developing an inclusive learning environment for all individuals, regardless of their background or level of technical proficiency. It's an ongoing endeavor that strives to deliver excellent quality while adjusting to the shifting demands of education.

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### APPENDIX-A PSUEDOCODE

#### 1.login page

```
// Get the username and password from the request parameters
USERNAME = GET_PARAMETER "usernameLogin" FROM REQUEST
PASSWORD = GET_PARAMETER "passwordLogin" FROM REQUEST
// Database connection parameters
URL = "jdbc:mysql://localhost:3306/school"
DB_USER = "root"
DB_PASSWORD = ""
TRY:
 // Load the MySQL JDBC driver
 LOAD_JDBC_DRIVER "com.mysql.cj.jdbc.Driver"
 // Establish a connection to the MySQL database
  CONNECTION = ESTABLISH_CONNECTION URL, DB_USER, DB_PASSWORD
 // Prepare a SQL query to select records from the 'accounts' table
  SQL_QUERY = "SELECT * FROM accounts WHERE username = ? AND password = ?"
  PREPARED_STATEMENT = PREPARE_STATEMENT CONNECTION, SQL_QUERY
  SET_STRING 1, USERNAME TO PREPARED_STATEMENT
  SET_STRING 2, PASSWORD TO PREPARED_STATEMENT
 // Execute the query and get the result set
 RESULT SET = EXECUTE QUERY PREPARED STATEMENT
 // Check if there is a matching record in the result set
 IF HAS_NEXT RESULT_SET:
    // User authentication successful
    USER_TYPE = GET_STRING "type" FROM RESULT_SET
```

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```
SESSION = GET_SESSION FROM REQUEST
SET_ATTRIBUTE "username", USERNAME TO SESSION
```

IF USER\_TYPE EQUALS "student":

REDIRECT\_TO "student.html" IN RESPONSE

ELSE IF USER\_TYPE EQUALS "teacher":

REDIRECT\_TO "teacher.html" IN RESPONSE

ELSE IF USER\_TYPE EQUALS "admin":

REDIRECT\_TO "admin.html" IN RESPONSE

ELSE:

// Redirect back to sign-in page if credentials don't match

REDIRECT\_TO "stree.html" IN RESPONSE

// Close resources

CLOSE RESULT\_SET

CLOSE PREPARED\_STATEMENT

**CLOSE CONNECTION** 

### CATCH CLASS\_NOT\_FOUND\_EXCEPTION | SQL\_EXCEPTION EX:

// Print the stack trace if there's an exception

PRINT\_STACK\_TRACE EX

# 2. Signup page

```
// Get user details from the request parameters
USERNAME = GET PARAMETER "usernameSignup" FROM REQUEST
PASSWORD = GET_PARAMETER "passwordSignup" FROM REQUEST
USER_TYPE = GET_PARAMETER "userType" FROM REQUEST
SUBJECT = GET PARAMETER "subject" FROM REQUEST
EMAIL = GET_PARAMETER "email" FROM REQUEST
PHONE = PARSE_LONG(GET_PARAMETER "phone" FROM REQUEST)
COLLEGE = GET PARAMETER "college" FROM REQUEST
AGE = PARSE_INT(GET_PARAMETER "age" FROM REQUEST)
SEC_QUESTION = GET_PARAMETER "secQuestion" FROM REQUEST
SEC_ANSWER = GET_PARAMETER "secAnswer" FROM REQUEST
QUALIFICATIONS = GET_PARAMETER "qualifications" FROM REQUEST
// Get the current date
CURRENT DATE = GET CURRENT DATE()
DATE_OF_JOINING = CONVERT_TO_DATE(CURRENT_DATE)
// Database connection details
JDBC_URL = "jdbc:mysql://localhost:3306/school"
DB_USERNAME = "root"
DB_PASSWORD = ""
TRY:
 // Load the MySQL JDBC driver
 LOAD_JDBC_DRIVER "com.mysql.jdbc.Driver"
 // Establish a connection to the MySQL database
  CONNECTION = ESTABLISH CONNECTION JDBC URL, DB USERNAME, DB PASSWORD
 // Prepare and execute the SQL query to insert a new user
  SQL_QUERY = "INSERT INTO accounts (username, password, type, subject, email, phone, college, age, secqn,
secans, qualifications, doj) VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?)"
```

```
PREPARED_STMT = PREPARE_STATEMENT CONNECTION, SQL_QUERY
SET_STRING 1, USERNAME TO PREPARED_STMT
SET_STRING 2, PASSWORD TO PREPARED_STMT
SET_STRING 3, USER_TYPE TO PREPARED_STMT
SET_STRING 4, SUBJECT TO PREPARED_STMT
SET_STRING 5, EMAIL TO PREPARED_STMT
SET_LONG 6, PHONE TO PREPARED_STMT
SET_STRING 7, COLLEGE TO PREPARED_STMT
SET INT 8, AGE TO PREPARED STMT
SET_STRING 9, SEC_QUESTION TO PREPARED_STMT
SET_STRING 10, SEC_ANSWER TO PREPARED_STMT
SET_STRING 11, QUALIFICATIONS TO PREPARED_STMT
SET_DATE 12, DATE_OF_JOINING TO PREPARED_STMT
// Execute the query and get the number of rows inserted
ROWS INSERTED = EXECUTE UPDATE PREPARED STMT
// Check if the signup was successful
IF ROWS INSERTED > 0:
  // Create a session and set the 'username' attribute
  SESSION = GET_SESSION FROM REQUEST
  SET ATTRIBUTE "username", USERNAME TO SESSION
  // Create a folder with the username on the desktop
  FOLDER_PATH = "C:\\Users\\Administrator\\Desktop\\ff\\" + USERNAME
  FOLDER = CREATE_FOLDER FOLDER_PATH
  IF NOT EXISTS FOLDER:
    MAKE_DIRECTORIES FOLDER // Create the folder if it doesn't exist
  // Redirect based on user type
  IF "student" EQUALS USER_TYPE:
    REDIRECT_TO "student.html" IN RESPONSE
  ELSE IF "teacher" EQUALS USER_TYPE:
    REDIRECT_TO "teacher.html" IN RESPONSE
               School of Computer Science and Engineering, Presidency University
```

// Close resources

CLOSE PREPARED\_STMT

**CLOSE CONNECTION** 

 $CATCH\ CLASS\_NOT\_FOUND\_EXCEPTION\ |\ SQL\_EXCEPTION\ E:$ 

// Print the stack trace if there's an exception

PRINT\_STACK\_TRACE E

// Handle exceptions and errors accordingly

### 3. Search Function

```
// Set response content type and get PrintWriter
SET_CONTENT_TYPE "text/html" IN RESPONSE
OUT = GET_WRITER FROM RESPONSE
// Get search term from request parameter
SEARCH TERM = GET PARAMETER "searchField" FROM REQUEST
TRY:
 // Load MySQL JDBC driver and establish connection
 LOAD_JDBC_DRIVER "com.mysql.jdbc.Driver"
  CONNECTION = ESTABLISH_CONNECTION "jdbc:mysql://localhost:3306/school", "root", ""
 // Prepare SQL query to select teachers matching the search term
  QUERY = "SELECT * FROM accounts WHERE username = ? OR subject = ?"
  PREPARED STMT = PREPARE STATEMENT CONNECTION, QUERY
  SET_STRING 1, SEARCH_TERM TO PREPARED_STMT
  SET_STRING 2, SEARCH_TERM TO PREPARED_STMT
  RESULT_SET = EXECUTE_QUERY PREPARED_STMT
 // Display search results
  OUT.println("<html>")
  OUT.println("<head>")
 // Add CSS styles
  OUT.println("<!-- CSS styles go here -->")
  OUT.println("</head>")
  OUT.println("<body>")
 // Loop through result set
  WHILE RESULT_SET.NEXT:
    USERNAME = RESULT_SET.GET_STRING "username"
    SUBJECT = RESULT_SET.GET_STRING "subject"
```

```
// Display teacher information
    OUT.println("<div class='teacher-tile'>")
    OUT.println("Teacher Name: " + USERNAME + "")
    OUT.println("Subject: " + SUBJECT + "")
    OUT.println("<form action='JoinServlet' method='post'>")
    OUT.println("<input type='hidden' name='teacherName' value="" + USERNAME + "">")
    OUT.println("<input type='submit' value='Join'>")
    OUT.println("</form>")
    // Additional form for enrolling
    OUT.println("<form action=" method='post' style='display: flex; justify-content: space-between; align-items:
center; margin-top: 20px;'>")
    OUT.println("<input type='hidden' name='teacherName' value="" + USERNAME + "">")
    OUT.println("<input type='submit' name='enrollButton' value='Enroll'>")
    OUT.println("</form>")
    OUT.println("</div>")
  // Check if enroll button is clicked
  ENROLL_BUTTON = GET_PARAMETER "enrollButton" FROM REQUEST
  IF ENROLL BUTTON NOT NULL:
    // Get session and student username
    SESSION = GET_SESSION FROM REQUEST
    USERNAME = CAST SESSION.GET ATTRIBUTE "username" TO STRING
    // Get teacher name from request parameter
    TEACHER_NAME = GET_PARAMETER "teacherName" FROM REQUEST
    // Prepare SQL query to enroll student with the teacher
    ENROLL QUERY = "INSERT INTO teacher student (teacher, student) VALUES (?, ?)"
    PREPARED_ENROLL_STMT = PREPARE_STATEMENT CONNECTION, ENROLL_QUERY
    SET_STRING 1, TEACHER_NAME TO PREPARED_ENROLL_STMT
    SET_STRING 2, USERNAME TO PREPARED_ENROLL_STMT
    // Execute the enrollment query
                   School of Computer Science and Engineering, Presidency University
```

```
INSERTED_ROWS = EXECUTE_UPDATE PREPARED_ENROLL_STMT

// Display enrollment result

IF INSERTED_ROWS > 0:

OUT.println("Successfully enrolled with the teacher.")

ELSE:

OUT.println("Failed to enroll with the teacher.")

OUT.println("</body>")

OUT.println("</html>")

// Close resources

CLOSE RESULT_SET

CLOSE PREPARED_STMT

CLOSE CONNECTION
```

**CATCH CLASS** 

# 4. Homework page

```
// Set the response content type to HTML
SET_CONTENT_TYPE "text/html" IN RESPONSE
// Get the session from the request
SESSION = GET_SESSION FROM REQUEST
// Check if the session is not null
IF SESSION IS NOT NULL:
 // Get the username from the session
  USERNAME = GET_ATTRIBUTE "username" FROM SESSION
  TRY:
    // Establish a connection to the MySQL database
    CONNECTION = ESTABLISH_CONNECTION "jdbc:mysql://localhost:3306/school", "root", ""
    // Prepare and execute a query to get distinct teachers for the student
    TEACHER_STUDENT_STMT = PREPARE_STATEMENT CONNECTION, "SELECT DISTINCT teacher
FROM teacher student WHERE student = ?"
    SET STRING 1, USERNAME TO TEACHER STUDENT STMT
    // Get the result set of distinct teachers
    TEACHER_RESULT = EXECUTE_QUERY TEACHER_STUDENT_STMT
    // Loop through each teacher
    WHILE TEACHER RESULT HAS NEXT:
      // Get the teacher's name
      TEACHER_NAME = GET_STRING "teacher" FROM TEACHER_RESULT
      // Prepare and execute a query to get homework notifications for the teacher
      NOTIFICATION_STMT = PREPARE_STATEMENT CONNECTION, "SELECT * FROM notification
WHERE teacher = ? AND type = 'homework' ORDER BY id DESC"
      SET_STRING 1, TEACHER_NAME TO NOTIFICATION_STMT
```

```
// Get the result set of homework notifications
  NOTIFICATION_RESULT = EXECUTE_QUERY NOTIFICATION_STMT
  // Print the teacher's name
  PRINT("<div style='text-align: center; border: 1px solid black; margin: 10px; padding: 10px;'>")
  PRINT("<h3>" + TEACHER_NAME + "</h3>")
  // Initialize a counter
  COUNT = 1
  // Loop through each homework notification
  WHILE NOTIFICATION_RESULT HAS NEXT:
    // Get information and topic from the notification
    INFO = GET_STRING "info" FROM NOTIFICATION_RESULT
    TOPIC = GET_STRING "topic" FROM NOTIFICATION_RESULT
    // Print the homework details
    PRINT("" + COUNT + ") HOMEWORK: " + INFO + "")
    PRINT(" Topic: " + TOPIC + "")
    // Increment the counter
    INCREMENT COUNT
  END WHILE
  // Print the closing div tag
  PRINT("</div>")
  // Close resources for the homework notifications
  CLOSE NOTIFICATION RESULT
  CLOSE NOTIFICATION_STMT
END WHILE
// Close resources for the distinct teachers
              School of Computer Science and Engineering, Presidency University
```

```
CLOSE TEACHER_RESULT
CLOSE TEACHER_STUDENT_STMT
```

// Close the database connection

**CLOSE CONNECTION** 

CATCH SQL\_EXCEPTION E:

// Print the stack trace if there's a SQL exception

PRINT\_STACK\_TRACE E

### ELSE:

// Redirect to the login page if the session is not available

REDIRECT\_TO "login.html" IN RESPONSE

## 5. Notification page

```
// Set the response content type and get the PrintWriter
SET_CONTENT_TYPE "text/html" IN RESPONSE
OUT = GET_WRITER FROM RESPONSE
// Get the current session
SESSION = GET SESSION FROM REQUEST
IF SESSION IS NOT NULL:
  // Retrieve the username from the session
  USERNAME = GET_ATTRIBUTE "username" FROM SESSION
  // Output HTML and CSS for notification display
  OUT.println("<html><head><title>Display Notifications</title>")
  OUT.println("<style>")
  OUT.println("body { display: flex; justify-content: center; align-items: center; height: 100vh; margin: 0; font-
family: Arial, sans-serif; }")
  OUT.println(".notification-container { text-align: center; border: 1px solid #ccc; border-radius: 5px; padding:
10px; margin: 10px; }")
  OUT.println(".notification { border: 1px solid #ddd; border-radius: 5px; padding: 10px; margin: 10px 0; }")
  OUT.println("</style></head><body>")
  OUT.println("<div class='notification-container'>")
  OUT.println("<h1>NOTIFICATIONS</h1>")
  TRY:
    // Establish a connection to the MySQL database
    CONNECTION = ESTABLISH_CONNECTION "jdbc:mysql://localhost:3306/school", "root", ""
    // Prepare and execute the SQL query
    QUERY = "SELECT teacher, info, urgency FROM notification WHERE teacher IN (SELECT teacher FROM
teacher_student WHERE student = ?) AND type = 'notification' ORDER BY id DESC"
    STATEMENT = PREPARE_STATEMENT CONNECTION, QUERY
    SET_STRING 1, USERNAME TO STATEMENT
```

```
// Execute the query and process the result set
    RESULT_SET = EXECUTE_QUERY STATEMENT
    NOTIFICATIONS = CREATE_EMPTY_LIST OF STRING ARRAYS
    WHILE RESULT_SET HAS NEXT:
      // Extract data from the result set and add to the notifications list
      TEACHER = GET STRING "teacher" FROM RESULT SET
      INFO = GET_STRING "info" FROM RESULT_SET
      URGENCY = GET STRING "urgency" FROM RESULT SET
      ADD [TEACHER, INFO, URGENCY] TO NOTIFICATIONS
    FOR EACH NOTIFICATION IN NOTIFICATIONS:
      // Output HTML for each notification
      OUT.println("<div class='notification'>")
      OUT.println("<h3>Teacher: " + NOTIFICATION[0] + "</h3>")
      OUT.println("Details: " + NOTIFICATION[1] + "")
      OUT.println("Urgency: " + NOTIFICATION[2] + "")
      OUT.println("</div>")
    // Close resources
    CLOSE RESULT_SET
    CLOSE STATEMENT
    CLOSE CONNECTION
  CATCH SQL_EXCEPTION E:
    // Print the stack trace if there's an SQL exception
    PRINT_STACK_TRACE E
 // Output closing HTML tags
  OUT.println("</div>")
  OUT.println("</body></html>")
ELSE:
 // Redirect to login page if session is not available
  REDIRECT_TO "login.html" IN RESPONSE
```

## 6. File Viewer page

```
// Define constants
FILE_DIRECTORY = "C:/Users/Administrator/Desktop/ff"
// Override the doGet method to handle GET requests
DO_GET(request, response):
  // Set the content type of the response
  SET_CONTENT_TYPE "text/html" IN RESPONSE
  // Get a PrintWriter for writing HTML content to the response
  OUT = GET_WRITER FROM RESPONSE
  // Write HTML header
  OUT.println("<html><head><title>File Viewer</title></head><body>")
  OUT.println("<h1>File Viewer</h1>")
  // List files in the specified directory
  DIR = NEW FILE OBJECT WITH FILE_DIRECTORY
  FILES = LIST_FILES IN DIR
  IF FILES IS NOT NULL AND FILES.LENGTH > 0:
    OUT.println("<h2>Files:</h2>")
    OUT.println("")
    FOR EACH FILE IN FILES:
      FILE_NAME = GET_NAME FROM FILE
      OUT.println("<a href="" + request.getContextPath() + "/FileViewerServlet?fileName=" +
FILE_NAME + "'>" + FILE_NAME + "</a>")
    END FOR
    OUT.println("")
  ELSE:
    OUT.println("No files found.")
  END IF
  // Display file content if a specific file is clicked
```

```
FILE_NAME = GET_PARAMETER "fileName" FROM REQUEST
  IF FILE NAME IS NOT NULL AND NOT FILE NAME.IS EMPTY():
    SELECTED_FILE = NEW FILE OBJECT WITH FILE_DIRECTORY + File.separator + FILE_NAME
    IF SELECTED_FILE.EXISTS():
      OUT.println("<hr>")
      OUT.println("<h2>File: " + FILE_NAME + "</h2>")
      // Determine MIME type of the file
      MIME TYPE = GET MIME TYPE FROM SERVLET CONTEXT FOR FILE NAME
      IF MIME TYPE IS NOT NULL:
        // Handle different file types
        IF MIME_TYPE.STARTS_WITH "text":
          // Display text files
          READER = NEW BUFFERED READER WITH NEW FILE READER WITH SELECTED_FILE
          OUT.println("")
          WHILE (LINE = READ LINE FROM READER) IS NOT NULL:
            OUT.println(LINE)
          END WHILE
          OUT.println("")
          CLOSE READER
        ELSE IF MIME_TYPE EQUALS "application/pdf":
          // Display PDF files
          OUT.println("<embed src="" + request.getContextPath() + "/download?fileName=" + FILE_NAME +
"' type='" + MIME_TYPE + "' width='100%' height='800px' />")
        ELSE IF MIME_TYPE.STARTS_WITH "image":
          // Display image files
          OUT.println("<img src="" + request.getContextPath() + "/download?fileName=" + FILE_NAME + ""
alt='Image' style='max-width:100%; height:auto;'>")
        // Handle other file types...
        ELSE:
          OUT.println("File type not supported for online viewing.")
        END IF
      ELSE:
        OUT.println("Unable to determine the file type.")
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```

```
END IF

ELSE:

OUT.println("File not found.")

END IF

END IF

// Write HTML footer

OUT.println("</body></html>")

// Implement doPost method for handling file uploads if needed
// ...
```

## 7. Join meeting page

```
// Set the response content type to HTML
SET_CONTENT_TYPE "text/html" IN RESPONSE
// Get the teacher's name from the request
TEACHER_NAME = GET_PARAMETER "teacherName" FROM REQUEST
// Initialize a flag to check conditions for showing the "Watch Now" button
SHOW WATCH BUTTON = FALSE
TRY:
  // Load the MySQL JDBC driver
  LOAD_JDBC_DRIVER "com.mysql.jdbc.Driver"
  // Establish a connection to the MySQL database
  CONNECTION = ESTABLISH_CONNECTION "jdbc:mysql://localhost:3306/school", "root", ""
  // Retrieve teacher's information based on the username
  PREPARED_STMT_TEACHER = PREPARE_STATEMENT CONNECTION, "SELECT * FROM accounts
WHERE username = ? AND type = 'teacher'"
  SET_STRING 1, TEACHER_NAME TO PREPARED_STMT_TEACHER
  RESULT_SET_TEACHER = EXECUTE_QUERY PREPARED_STMT_TEACHER
  // Display HTML head and style
  OUT.println("<html>")
  OUT.println("<head>")
  OUT.println("<title>Teacher Information</title>")
  OUT.println("<meta name=\"viewport\" content=\"width=device-width, initial-scale=0.2\">")
  OUT.println("<style>")
  OUT.println(".teacher-info { padding: 20px; background-color: #f0f0f0; margin-bottom: 20px; }")
  // ... (other style definitions)
  OUT.println("</style>")
  OUT.println("<script>")
```

```
OUT.println("function toggleIframe() {")
OUT.println("var iframeContainer = document.getElementById('iframeContainer');")
OUT.println("if (iframeContainer.style.display === 'none') {")
OUT.println("iframeContainer.style.display = 'block';")
OUT.println("} else {")
OUT.println("iframeContainer.style.display = 'none';")
OUT.println("}")
OUT.println("}")
OUT.println("</script>")
OUT.println("</head>")
OUT.println("<body>")
// Display teacher's information
OUT.println("<div class='teacher-info'>")
OUT.println("<h1>Teacher Profile: " + TEACHER_NAME + "</h1>")
IF RESULT_SET_TEACHER.NEXT():
  // Retrieve teacher's details
  SUBJECT = RESULT_SET_TEACHER.GET_STRING("subject")
  DOJ = RESULT SET TEACHER.GET DATE("doj")
  EMAIL = RESULT_SET_TEACHER.GET_STRING("email")
  PHONE = RESULT SET TEACHER.GET LONG("phone")
  COLLEGE = RESULT_SET_TEACHER.GET_STRING("college")
  AGE = RESULT_SET_TEACHER.GET_INT("age")
  QUALIFICATIONS = RESULT_SET_TEACHER.GET_STRING("qualifications")
  // Display teacher's details
  OUT.println("Subject: " + SUBJECT + "")
  OUT.println("Date of Joining: " + DOJ + "")
  OUT.println("Email: " + EMAIL + "")
  OUT.println("Phone: " + PHONE + "")
  OUT.println("College: " + COLLEGE + "")
  OUT.println("Age: " + AGE + "")
  OUT.println("Qualifications: " + QUALIFICATIONS + "")
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```

```
// Check if the corresponding 'val' part of the table has a value
    PREPARED_STMT_STREAMING = PREPARE_STATEMENT CONNECTION, "SELECT * FROM
streaming WHERE username = ?"
    SET_STRING 1, TEACHER_NAME TO PREPARED_STMT_STREAMING
    RESULT_SET_STREAMING = EXECUTE_QUERY PREPARED_STMT_STREAMING
    IF RESULT_SET_STREAMING.NEXT():
      VAL = RESULT_SET_STREAMING.GET_STRING("val")
      IF VAL IS NOT NULL AND NOT VAL.IS EMPTY():
        SHOW_WATCH_BUTTON = TRUE
    // Display "Watch Stream" button if conditions are met
    IF SHOW_WATCH_BUTTON:
      OUT.println("<div'>")
      OUT.println("<h2>Teacher is having a class: </h2>")
      OUT.println("<form action='tryy' method='get'>")
      OUT.println("<input type='hidden' name='teacherName' value='" + TEACHER_NAME + "'>")
      OUT.println("<input type='submit' value='Watch Now'>")
      OUT.println("</form>")
      OUT.println("</div>")
  ELSE:
    OUT.println("Teacher details not found!")
 // Close the teacher-info div
  OUT.println("</div>")
 // Button to toggle display of iframe
  OUT.println("<button onclick=\"toggleIframe()\">Show/Hide File Operations</button>")
  OUT.println("<div id='iframeContainer' style='display:none'>")
 // Get the session and username
  SESSION = GET SESSION FROM REQUEST
  IF SESSION IS NOT NULL:
    USERNAME = SESSION.GET_ATTRIBUTE("username")
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```

```
IF USERNAME IS NOT NULL:
                         // Define the file path
                         FILE_PATH = "C:\\Users\\Administrator\\Desktop\\ff\\" + TEACHER_NAME
                         // Display iframe for file operations
                         OUT.println ("<i frame id='fileOperations' src='ListFilesServlet?filepath="+ENCODE\_URL(FILE\_PATH, INCODE\_URL(FILE\_PATH, INCODE_URL(FILE\_PATH, INCODE_URL(FILE\_PATH, INCODE_URL(FILE\_PATH, INCODE_URL(FILE\_PATH, INCODE_URL(FILE\_PATH, INCODE_URL(FILE\_PATH, INCODE_URL
"UTF-8") + "' width='100%' height='300'></iframe>")
        // Close HTML body and document
        OUT.println("</div>")
        OUT.println("</body>")
        OUT.println("</html>")
        // Close database resources
        CLOSE PREPARED_STMT_TEACHER
        CLOSE RESULT_SET_TEACHER
        CLOSE PREPARED_STMT_STREAMING
        CLOSE RESULT_SET_STREAMING
        CLOSE CONNECTION
        // Close the PrintWriter
        OUT.CLOSE()
CATCH EXCEPTION E:
        // Print the stack trace if there's an exception
        E.PRINT_STACK_TRACE
```

# APPENDIX-B SCREENSHOTS



Fig-3 Login Page Of The Project



Fig-4 Singup Page Of The Project



Fig-5 Faculty Home Page



Fig-6 File Folder In Faculty

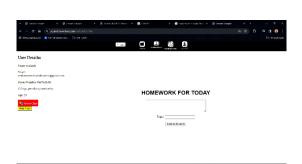
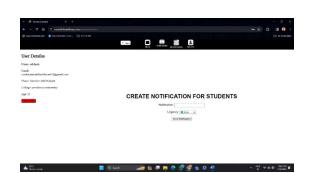
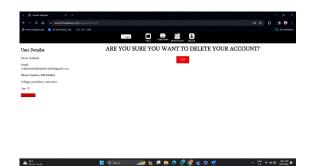


Fig-7 Homework Page In Faculty



**Fig-8 Notification Page In Faculty** 





**Fig-9 Delete Account Page In Faculty** 

Fig-10 Live Session Page In Faculty





Fig-11 Homepage In Student

Fig-12 Faculty Or Subject Search Bar In Student

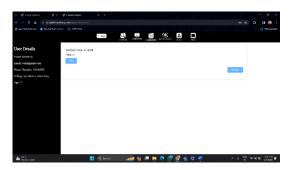


Fig-13 Faculty Display Page In Student



Fig-14 Homework Page In Student



Fig-15 Files And Folder Page In Student



Fig-16 Notification Page In Student



Fig-17 Account Deletetion Page In Student

Fig-18 Session Join Page In Student



Fig-19 Student said live-session page

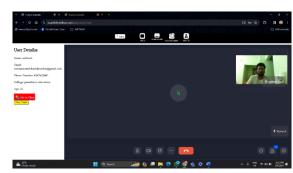


Fig-20 faculty said live-session page

# APPENDIX-C ENCLOSURES

### Conference Paper submission summary

1/9/24, 11:08 AM

Conference Management Toolkit - Submission Summary

### **Submission Summary**

#### **Conference Name**

International Conference on Communications and Computer Science

#### Paper ID

84

#### Paper Title

LIVE SCHOOL FOR WORLD CLASS FREE EDUCATION

#### Abstract

In a global landscape marked by socio-economic disparities, access to quality education remains a critical concern. This paper introduces a groundbreaking concept - a Live School model designed to provide world-class education freely to learners across the globe. The Live School transcends traditional barriers, utilizing cutting-edge technology to create an interactive, real-time educational experience.

Our approach integrates live streaming, interactive assessments, and collaborative tools, fostering an engaging learning environment. Leveraging the power of the internet, this model aims to democratize education, ensuring that geographical constraints no longer impede access to knowledge. The curriculum spans diverse subjects, tailored to meet the needs of a broad and varied audience, from primary education to advanced courses.

Through case studies and pilot programs, we demonstrate the feasibility and effectiveness of the Live School model. We explore the impact on learner outcomes, highlighting the potential for increased retention and comprehension. Additionally, we address the challenges and ethical considerations inherent in such a system, emphasizing the importance of inclusivity and accessibility.

The paper concludes by envisioning the broader implications of implementing this Live School model on a global scale. By making high-quality education freely accessible, we argue for a transformative shift in societal paradigms, unlocking the untapped potential of learners worldwide and fostering a more equitable future.

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#### Authors

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#### Submission Files

LIVE SCHOOL FOR WORLD CLASS FREE EDUCATION.docx (101.8 Kb, 1/9/2024,

https://cmt3.research.microsoft.com/ICCCS2024/Submission/Summary/84

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Quality education is the cornerstone of personal and societal development. It goes beyond the mere transmission of knowledge, encompassing critical thinking, problem-solving, and character development. A robust education system should foster creativity, curiosity, and a lifelong love for learning. Equitable access to quality education is essential for breaking the cycle of poverty and promoting social mobility. It empowers individuals to contribute meaningfully to society, driving innovation and progress. Governments, communities, and individuals must collaborate to ensure that education is not only accessible but also of high quality, preparing students for the challenges of the rapidly evolving world.