# Enhancing Digital Learning: Talky Community – A Platform For Trainer Visibility And Student Engagement

E. Sinega<sup>1</sup>, J. Sowmiya<sup>2</sup>, S. Dhulasilinkam<sup>3</sup>, K. M. Anbu<sup>4</sup>, K. Kavipriya<sup>5</sup>

<sup>1, 2, 3, 4</sup> Dept of Computer Science and Engineering <sup>5</sup>Dept of Information Technology, <sup>1, 2, 3, 4, 5</sup> Tamilnadu College of Engineering, Coimbatore

Abstract- TalkyCommunity.com is an all-in-one learning solution, providing holistic education that is interactive. The program's integration of social interaction with learning activities gives individuals the chance to discover new concepts, sharpen existing skills, and engage in educational discourse. Talky Community enables formal and informal learning through its multifunctional interface, including discussion boards, resource repositories, event calendars, and peer networking. This journal investigates the platform's impact on enhancing equitable education, supporting selfpaced development, and cultivating a welcoming online environment that encourages exploration, teamwork, and development. The platform's design emphasizes engagement, making learning more collaborative and enjoyable. Its flexible structure caters to a wide range of learning styles and educational backgrounds. By encouraging learners to share knowledge and experiences, Talky Community creates a vibrant ecosystem of peer support. It also plays a vital role in bridging educational gaps by making resources accessible to diverse communities. As a result, learners are empowered not only to absorb information but also to actively contribute to the learning journey of others.

**Keywords**- Online Learning, Digital Education, Skill Development, Virtual Learning Platform, Learner Engagement, Educational Resources, Interactive learning platform, Demo classes, Flexible time options.

# I. INTRODUCTION

TalkyCommunity.com is an automated platform designed to deliver rich learning experiences by connecting students with diverse educational resources to enhance their skills. It offers a wide range of tools, allowing users to access valuable content across various topics. With its user-friendly and resourceful design, the platform ensures a smooth learning experience while helping students achieve their academic goals efficiently. TalkyCommunity.com supports participation in multiple courses and promotes self-driven learning, empowering students to take control of their educational

journey. In today's digital era, where remote learning is essential, the platform bridges the gap between traditional education and modern virtual classrooms, allowing learners to study anytime, anywhere. Through interactive resources and a collaborative community, students deepen their understanding and engage meaningfully with peers. The platform evolves with technological trends to ensure continued access to toptier tools, playing a vital role in shaping the future of online education.

#### 1.1 PURPOSE

Talky Community is a platform built for bridging people through learning and personal development. By enabling accessible mobile learning, we actively engage in making education fun and interactional. Active participation is encouraged by courses, lectures, discussions, and live sessions. We harness a community to motivate and strengthen one another because we understand cooperation helps discover untapped potential. Every person in the world has infinite knowledge to share and tap into; therefore, as a society, we continuously learn together. In every interaction, through collaborative learning and by forming new ideas, we foster innovation. Our platform encourages learners to step out of their comfort zones and embrace diverse perspectives. We believe that education should be inclusive, dynamic, and ever evolving. By connecting individuals with shared goals, Talky Community transforms learning into a social experience. We are committed to building an environment where curiosity is celebrated and ideas are valued. With every new user, our community grows stronger, more diverse, and more impactful. The platform offers personalized learning experiences, easy course access, and real-time engagement tools. Talky Community is not just a tool for education — it's a gateway to meaningful collaboration and lifelong growth.

#### 1.2 PROBLEM STATEMENT

Learning something new these days can feel overwhelming. A lot of people want to grow their skills, but

Page | 244 www.ijsart.com

they either can't afford traditional education or don't feel connected in big, impersonal online courses. It's easy to feel stuck or alone in the process. Many platforms focus on content but forget about real interaction and community support. People need a space where learning feels more personal, flexible, and encouraging—somewhere they can connect with others, share knowledge, and grow together. The truth is that a lot of learners just want to feel seen and understood. They don't want to be another number in a massive online class. They want encouragement, connection, and a little inspiration along the way. When learning lacks that human touch, it's easy to lose momentum. That sense of community can make all the difference. That's exactly the gap Talky Community is here to fill—by turning learning into something social, meaningful, and empowering.

## 1.3 BACKGROUND

In today's fast-paced world, the need for continuous learning and skill development has become more important than ever. With industries evolving rapidly and technology shaping the way we live and work, people are looking for flexible ways to grow and stay relevant. However, access to quality education remains a challenge. Traditional learning can be expensive, time-consuming, and often out of reach for many individuals with limited resources or busy lives. Online learning has opened new doors by offering more convenience and variety. But even with this progress, many platforms still miss something crucial—human connection. Learners often find themselves alone, overwhelmed, and disconnected in large digital classrooms. There's a growing need for learning environments that not only provide information but also foster genuine interaction, support, and a sense of community.

# 1.4 RELATED WORKS

With the rise of digital technology, online learning platforms have become a popular alternative to traditional education. Platforms such as Coursera, Udemy, edX, and Khan Academy have made significant strides in offering flexible, self-paced learning options to a global audience. These platforms provide access to a wide range of subjects and expert-led courses, making education more inclusive and convenient. However, many of these systems primarily focus on content delivery rather than enhancing the overall learning experience through engagement and interaction. According to studies like Clark & Mayer (2016) on e-learning design, learners are more likely to retain knowledge when they are actively involved in the learning process. Interactive elements such as quizzes, video-based instruction, and modular course design help, but often lack real-time responsiveness or personalized support. Research on digital

environments (Sun et al., 2008) also suggests that usability, accessibility, and learner motivation are critical factors in achieving educational outcomes. While many platforms offer quality content, their interfaces can be overwhelming or not user-friendly enough for beginners. Furthermore, learners may struggle to stay motivated without feedback, goal-setting tools, or a sense of progress. Talky Community seeks to address these limitations by providing a more engaging and accessible experience. While not community-based in structure, the platform offers interactive learning through features such as lectures, discussions, live sessions, and mobile accessibility. Its design emphasizes ease of use, helping learners navigate their educational journey more effectively while focusing on personal development and academic achievement.

#### II. SYSTEM DESIGN

The Talky Community web application follows a modular client-server architecture where the frontend is entirely built using React.js, handling around 40% of the system's functionality by managing dynamic user interfaces, component rendering, and real-time UI updates for students, trainers, and administrators. The backend is implemented using PHP Laravel, accounting for approximately 60% of the system's workload, which includes handling server-side business logic, API routing, form validation, and direct interaction with the MySQL database managed phpMyAdmin. The application is deployed on hostinger through the File Manager, making it a cost-efficient and straightforward hosting solution for small to medium-scale web platforms. User credentials are protected using hashed passwords stored in the database, with a basic role-based access control system that restricts access based on user types—admin, trainer, and student—without incorporating advanced authentication protocols like OAuth, two-factor authentication, or JWT tokens.

The system includes several key functional modules: user authentication for login and registration; a course management module allowing admins and verified trainers to add, edit, or delete courses; a trainer profile module where trainers can update their skills, experience, and availability, with admin-level verification; a review and feedback module for students to share course or trainer experiences, moderated by the admin; and dynamic forms for both student and trainer registrations, enabling document uploads and status tracking. The admin dashboard serves as a control hub, offering features such as course approval, user communication, and trainer verification. Compared to microservices or decoupled cloudnative designs, this monolithic structure simplifies deployment and reduces inter-service latency, though it may pose limitations in high-concurrency scenarios. Despite the lack of

Page | 245 www.ijsart.com

multi-layered authentication, the use of hashed passwords and strict user-role validation provides a foundational level of security. Overall, Talky Community's architecture balances simplicity, modularity, and functionality, making it well-suited for educational platforms in early or moderate growth stages. Talky Community is a web and mobile-based learning platform that offers an engaging, interactive educational experience. The system supports multiple forms of learning—live sessions, pre-recorded lectures, resource sharing, and discussion boards. It is designed to be intuitive and scalable, ensuring that both students and instructors can easily navigate the platform.

#### 2.1 USER ROLES

In the Talky Community web application, the user role system is designed to manage access and functionalities based on three distinct roles: Admin, Trainer, and Student. Each user is assigned a role at the time of registration or by administrative approval, and this role determines the level of access and permissions within the system. The admin has the highest level of control, with capabilities such as managing all user accounts, approving or rejecting trainer profiles, adding or deleting courses, and moderating reviews and feedback. Trainers are authorized to manage their own profiles, submit courses for approval, and view feedback from students, but they cannot access administrative controls or student data beyond their own interactions. Students have access to view available courses, enrol in them, provide reviews, and interact with trainer profiles, but cannot modify or manage course content. This role-based access control (RBAC) ensures that users interact only with the features relevant to their roles, maintaining the integrity, security, and smooth functioning of the application.

#### 2.2 REGISTRATION PROCESS

The registration process in the Talky Community web application is designed to be user-friendly and role-specific, allowing new users to sign up either as a student or a Trainer through dedicated registration forms. During the process, users are required to provide essential details such as name, email, password, and role selection, along with additional information relevant to their role—such as qualifications and experience for trainers. The system uses client-side and server-side validation to ensure the accuracy and completeness of submitted data. Passwords are securely hashed before being stored in the MySQL database, enhancing security. Once the registration form is submitted, the user details are stored, and access is granted based on their role. Trainers may be marked as "pending" until approved by the admin, whereas students can typically access the platform

immediately. The admin panel provides tools to view and manage all registered users, ensuring controlled onboarding and maintenance of a trusted community environment.

#### 2.3 CORE FEATURES

The Talky Community web application offers a range of core features designed to facilitate seamless interaction between students, trainers, and administrators. One of the central features is course management, allowing admins to create, update, or delete courses, while trainers can submit their courses for approval. The trainer profile module enables trainers to showcase their qualifications, skills, and availability, helping students make informed choices. Student registration and enrolment functionalities allow students to sign up, explore courses, and participate in learning activities. The review and feedback system encourages students to share their learning experiences, promoting quality and trust within the community. Additionally, the admin dashboard serves as a control hub where administrators can manage users, moderate reviews, verify trainers, and oversee all content and activity on the platform. These core features are integrated through a well-structured interface, making the platform efficient and easy to use for all roles.

#### 2.4 SYSTEM ARCHITECTURE

The system architecture of the Talky Community web application is based on a three-tier client-server model, ensuring a clear separation of concerns and efficient communication between components. The frontend layer, developed using React.js, handles the presentation logic and provides an interactive user interface for students, trainers, and admins. It communicates with the backend layer, which is built using PHP Laravel, responsible for processing business logic, handling requests, validating data, and managing sessions. The data layer uses MySQL as the relational database management system, accessed and managed through phpMyAdmin for storing structured data such as user information, course details, reviews, and registration forms. The application is hosted on hostinger, with deployment managed through its File Manager, making the system easy to maintain and update. All communication between frontend and backend is facilitated via RESTful APIs, and user passwords are stored in a hashed format to enhance security. This architecture ensures scalability, maintainability, and a smooth user experience while keeping the system organized and secure.

# 2.5 USERFLOW

Page | 246 www.ijsart.com

The user flow in the Talky Community web application is designed to be simple, intuitive, and roledependent, ensuring clarity and ease of use for all types of users-Students, Trainers, and Admins. When a new user visits the website, they can register by choosing their role and filling out the appropriate form. The system captures essential details, and passwords are securely hashed before being stored in the database to enhance security. Students can immediately begin using the platform after registration without the need for admin approval. Their flow is straightforward—they can browse the list of approved courses, view detailed trainer profiles, view course deatils, book demo classes and submit feedback or reviews upon completion of a course. They do not have a personal dashboard but interact directly with course and profile pages through the public interface. Trainers, however, undergo an additional verification step. After registering, their profile is marked as "pending" until an admin reviews and approves their information. Once approved, the trainer gains access to a dedicated dashboard where they can edit their profile, upload or manage course content, track enrolment activity, and read student reviews. This dashboard serves as a control panel to maintain their presence on the platform and stay updated on their teaching activities. The admin plays a critical role in maintaining the quality and trust of the platform. After logging in, the admin accesses a comprehensive dashboard that allows them to oversee all activity within the system. This includes managing user accounts, verifying trainer applications, approving or rejecting course submissions, and moderating student reviews for appropriateness. Admins can also update or delete courses and communicate with users when necessary. The role-based navigation ensures that each user only sees and interacts with features and data relevant to their access level, improving both usability and security across the platform. This structured and secure user flow helps maintain a well-organized educational environment that supports scalable community learning.

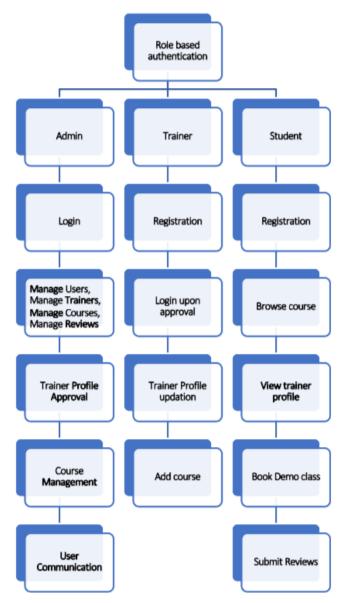


FIGURE 1. USER FLOW DIAGRAM

#### III. EXISTING SYSTEM

Existing online learning platforms like Udemy, Coursera, edX, skillshare, and Khan Academy offer diverse models but have drawbacks compared to community-driven systems. Udemy supports self-paced learning but lacks personalization, enforces strict content guidelines, and takes a large cut from instructors. Coursera and edX are costly, focus on formal education, and offer limited opportunities for individual trainers. skillshare's subscription model and inconsistent course quality may not suit all users, and Khan Academy is limited to school-level subjects with no trainer flexibility. These platforms restrict trainer autonomy, limit customized course delivery, and prioritize scalability over personalized learning.

Page | 247 www.ijsart.com

#### IV. PROPOSED SYSTEM

The proposed system is a community-based online learning platform designed to bridge the gap between trainers and students through a personalized and simplified approach. Unlike large-scale learning platforms that focus on mass education, this system prioritizes direct engagement, local trainer visibility, and admin-controlled quality management. Built using React.js for the frontend, PHP Laravel for the backend, and MySQL for data management, the system ensures secure access through hashed passwords and rolebased navigation. It offers separate workflows for trainers (with admin approval and dashboard access), students (with immediate access to courses and trainer profiles without a dashboard), and an admin (with full control over user management, course moderation, and platform content). Trainers can register, create profiles, and submit courses, while students can browse and enrol in courses and submit reviews. The platform is hosted on hostinger using File Manager, making it cost-effective and easy to deploy. The proposed system aims to maintain simplicity while offering essential features like modular content management, rolespecific access, and user-generated feedback—delivering a structured yet community-centric learning experience.

#### 4.1. FRONTEND DEVELOPMENT

The implementation of the proposed system is carried out using a layered approach, covering frontend, backend, UI/UX, database design, and deployment infrastructure. The frontend is built with React.js, enabling a fast, component-based interface that supports dynamic rendering of content like trainer profiles, course lists, and registration forms. It ensures responsive design across devices and handles role-specific views using conditional rendering based on user roles.

#### 4.2. BACKEND DEVELOPMENT

The backend is developed using PHP Laravel, following the MVC architecture for clean separation of concerns. Laravel handles routing, form validation, business logic, and secure communication with the database. Passwords are stored using built-in Laravel hashing mechanisms, and user sessions are maintained to control access based on roles (Admin, Trainer, Student).

## 4.3. UI/UX DESIGN

The database is managed with MySQL, structured with key relational tables such as users, trainers, students, courses, and reviews, with well-defined foreign key relationships to maintain data consistency. For instance,

courses are linked to trainers, and reviews are linked to students, ensuring referential integrity and enabling efficient, optimized queries for role-based content retrieval and seamless data navigation.

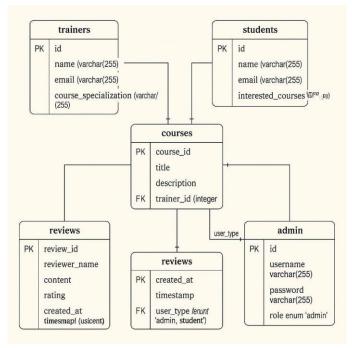


FIGURE 2. DATABASE SCHEMA

# 4.5. HOSTING AND DEPLOYMENT

For hosting and deployment, the entire application is deployed on hostinger using its File Manager, making it easy to upload Laravel backend files and React build outputs. The database is managed via phpMyAdmin, where data tables can be monitored and managed. Environment configurations are maintained in .env files, and the React app is built and served through Laravel's public directory, ensuring seamless full stack integration during production.

# V. RESULT

The result of implementing this system is a fully functional, role-based web application that successfully connects students and trainers within a community learning environment. Students can register and instantly access available courses, view trainer profiles, and submit feedback without needing a dedicated dashboard, making the experience simple and intuitive. Trainers can create and manage course content through their personal dashboard, but only after admin approval, ensuring quality control and authenticity. The admin, with complete control over users, content, and reviews, ensures the platform remains organized and trustworthy. The system performs efficiently due to the use of React.js on the frontend, which allows fast rendering and smooth user

Page | 248 www.ijsart.com

interaction. Backend operations are securely handled by Laravel, with hashed passwords and structured data flow. The MySQL database design supports relational mapping and efficient data retrieval, while deployment via hostinger ensures stable hosting and easy maintenance. Overall, the project demonstrates how a community-centred educational platform can be implemented with open-source tools, rolebased access, and a scalable structure, delivering a secure and user-focused experience.

#### VI. CONCLUSION

In conclusion, the proposed system successfully creates a simple, community-driven online learning platform with secure user access, role-based interactions, and easy content management. By leveraging React.js, PHP Laravel, MySQL, and cost-effective hosting on hostinger, it delivers an efficient and scalable solution for connecting students and trainers, ensuring a personalized and organized learning experience. The system is designed to be flexible, secure, and easy to maintain, making it suitable for small to medium-sized educational communities.

#### VII. FUTURE WORK

Future enhancements for the platform include several key features to improve functionality and user engagement. Online payment integration would allow students to securely pay and enrol in courses directly through the platform, streamlining the registration process. A certification system could issue digital certificates upon course completion, adding value to the learning experience. To enhance accessibility, mobile application development for both Android and iOS would provide students and trainers with on-the-go access. Introducing live classes and video conferencing would enable trainers to conduct interactive sessions directly through the platform, offering a more dynamic learning experience. AIbased course recommendations could personalize the learning journey by suggesting relevant courses based on students' interests and past activity. To foster engagement, gamification features like badges, leaderboards, and rewards could be implemented to encourage active participation. Additionally, multi-language support would broaden the platform's reach by making it accessible to a diverse, global audience. Finally, providing advanced analytics for trainers would give them detailed insights into student engagement, course popularity, and feedback trends, allowing them to improve their content and teaching strategies.

#### REFERENCES

- [1] W3Techs. (2021). "Usage Statistics and Market Share of Web Technologies."
- [2] Eckerson Group. (2020). "Web Application Development: A Guide to Key Technologies and Best Practices." Eckerson Group.
- [3] Cesaroni, F., & Cuccureddu, G. (2019). "The Role of Web Applications in Business Processes." Procedia Computer Science, 154, 91-98.
- [4] Fitzgerald, B. (2020). "Web Development for Beginners: The Essential Guide to Building Web Applications." Packt Publishing.
- [5] Rahman, M., & Hossain, M. (2021). "Comparative Study of Web Application Development Frameworks." International Journal of Computer Science and Network Security, 21(4), 70-77.
- [6] Roush, C. (2019). "Designing Scalable Web Applications." O'Reilly Media.
- [7] Zhao, K., & Li, X. (2020). "A Review on Web Application Security: Concepts, Technologies, and Approaches." Journal of Network and Computer Applications, 146, 102396.
- [8] Stack Overflow. (2021). "Developer Survey Results 2021." Stack Overflow.
- [9] Bassil, Y., & Alwani, M. (2018). "Performance Comparison of Web Development Technologies Using Web Framework Benchmarks." Journal of Computer Sciences and Applications, 6(2), 47–52.
- [10] Richardson, C., & Smith, F. (2021). "Microservices Patterns: With Examples in Java." Manning Publications.
- [11] W3C. (2020). "Web Architecture Principles." World Wide Web Consortium (W3C).
- [12] Mozilla Developer Network (MDN). (2022). "HTML, CSS, and JavaScript Guide."
- [13] Pautasso, C., Alonso, G., & Pedrinaci, C. (2019). "REST vs. SOAP: Making the Right Architectural Decision." ACM Computing Surveys, 51(2), Article 30.
- [14] Google Developers. (2021). "Progressive Web Apps (PWA) Guide."
- [15] Krill, P. (2020). "Top Web Development Trends for 2021."
- [16] Kumar, A., & Sharma, R. (2022). "Modern Web Frameworks: A Comparative Analysis."

Page | 249 www.ijsart.com