

**A PROJECT REPORT
ON**

**PeerVerse – A Peer-to-Peer Mentorship Platform
Using Modern Web Technologies**

SUBMITTED TO
MIT SCHOOL OF COMPUTING, LONI, PUNE IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE

**BACHELOR OF TECHNOLOGY
(Computer Science & Engineering)**

BY

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Under the guidance of

Dr. Mayuresh Gulame



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**MIT School OF COMPUTING
MIT Art, Design and Technology University
Rajbaug Campus, Loni-Kalbhor, Pune 412201**

2025-26



**MIT SCHOOL OF COMPUTING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MIT ART, DESIGN AND TECHNOLOGY UNIVERSITY,
RAJBAUG CAMPUS, LONI-KALBHOR, PUNE 412201**

CERTIFICATE

This is to certify that the project report entitled

“PeerVerse – A Peer-to-Peer Mentorship Platform Using Modern Web Technologies”

Submitted by

Ninad Khopade MITU22BTCS0484
Yash Bhardwaj MITU22BTCS1024
Shriyanshi Jain MITU22BTCS0799
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is a bonafide work carried out by them under the supervision of Dr. Mayuresh Gulame and it is submitted towards the partial fulfillment of the requirement of MIT ADT university, Pune for the award of the degree of Bachelor of Technology (Computer Science and Engineering)

Dr. Mayuresh Gulame
Guide

Prof. Dr. N Kulkarni
Head of Department

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Chief Coordinator-PBL

Dr. Ganesh Pathak
Dean

Seal/Stamp of the College
Place: PUNE

DECLARATION

We, the team members

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| Yash Bhardwaj | MITU22BTCS1024 |
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Hereby declare that the project work incorporated in the present project entitled **“PeerVerse – A Peer-to-Peer Mentorship Platform Using Modern Web Technologies** is original work. This work (in part or in full) has not been submitted to any University for the award or a Degree or a Diploma. We have properly acknowledged the material collected from secondary sources wherever required. We solely own the responsibility for the originality of the entire content.

Date: __/__/2025

Name & Signature of the Team Members

| Name | Signature |
|------------------|-----------|
| Ninad Khopade | _____ |
| Yash Bhardwaj | _____ |
| Shriyanshi Jain | _____ |
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Seal/Stamp of the College

Place: Pune

Date:



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
MIT SCHOOL OF COMPUTING,
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PUNE – 412201

EXAMINER’S APPROVAL CERTIFICATE

The project report entitled “PeerVerse – A Peer-to-Peer Mentorship Platform Using Modern Web Technologies ” submitted by, Ninad Khopde (MITU22BTCS0484), Yash Bhardwaj(MITU22BTCS1024),Shriyanshi Jain(MITU22BTCS0799), Madhusudan Ladda (MITU22BTCSD033) in partial fulfillment for the award of the degree of Bachelor of Technology (Computer Science & Engineering) during the academic year 2025-26, of MIT-ADT University, MIT School OF COMPUTING, Pune, is hereby approved.

Examiners:

1.

2.

ACKNOWLEDGEMENT

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I am grateful to Principal, MIT School of Engineering, MIT-ADT University, Pune, for providing the facilities to carry out my project work.

I also thank all the faculty members in the Department for their support and advice.

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ABSTRACT

In modern higher-education environments, students frequently struggle to make informed academic and career decisions due to limited access to affordable, structured, and experience-based guidance. Many students are unaware of the right paths to pursue, lack clarity regarding opportunities, or face confusion while selecting courses, internships, or career tracks. Traditional mentoring and professional counseling services are often costly, time-consuming, and sometimes disconnected from the real challenges faced by learners, making them inaccessible or less effective for a large segment of students.

To address this gap, a peer-driven micro-mentorship model has emerged as an effective and relatable support mechanism, where guidance is delivered by peers who have recently overcome similar educational or career hurdles. This project presents PeerVerse, a real-time peer-to-peer mentorship platform designed to democratize academic and professional guidance. PeerVerse enables students to discover and book short, focused video consultation sessions with verified senior peers from their own or related domains. These mentors provide practical insights, share personal experiences, recommend resources, and offer tailored suggestions that resonate with the mentees' current situation. By leveraging the relatability of peer interactions and the flexibility of on-demand micro-sessions, PeerVerse creates a supportive ecosystem where students can access meaningful guidance at minimal cost, ensuring informed decision-making and improved career readiness.

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Chapter 1 INTRODUCTION

1.1 Introduction

Mentorship plays a vital role in shaping academic and professional growth by offering guidance, knowledge sharing, and real-world perspectives that help students make better decisions. However, traditional mentorship models often come with several limitations, such as geographical constraints, scheduling difficulties, lengthy session formats, and high consultation fees, making quality mentorship inaccessible for many learners. In today's fast-paced education system, students increasingly require quick, reliable, and easily accessible support from peers who have already gained experience in internships, placements, competitive examinations, and skill-building journeys.

To address these challenges, PeerVerse introduces an innovative peer-to-peer micro-mentorship model that enables short, focused, and affordable guidance sessions. Through live video interactions and real-time messaging, students can connect with verified senior peers for fast problem-solving and personalized advice. The platform is built using WebRTC for seamless low-latency video calls, Socket.IO for instant communication, ReactJS and ExpressJS for an efficient front-end and backend workflow, and Neon Serverless PostgreSQL to ensure scalable and secure database management.

Ultimately, PeerVerse aims to create a dynamic mentorship ecosystem where learners can instantly reach out to mentors, gain clarity on academic or career-related doubts, improve skill development, and make well-informed choices that accelerate their growth.

1.2 Existing Systems

- Current mentorship and learning platforms include:
 - **LinkedIn Learning & Coursera** — structured courses but lack personalized live interaction.
 - **MentorCruise, GrowthMentor** — offer mentorship but are expensive and aimed at professionals.
 - **Upwork & Fiverr consultancy** — freelance-based consultation but lacks academic guidance focus.
 - **College seniors & informal networks** — useful but unorganized and unreliable availability.
- These systems are not optimized for:
 - Quick 10-minute sessions
 - College student affordability
 - Real-time instant mentorship
 - Peer-to-peer experience-based guidance

1.3 Motivation

Surveys conducted among hundreds of students revealed several recurring challenges in their academic and career journey. Many students lack clarity on how to prepare for internships, while others struggle to choose the right career path—whether to pursue higher studies or enter the job market. There is also significant confusion regarding resume building, participating in hackathons, conducting research, and developing the right technical or soft skills. Additionally, students often find it difficult to connect with experienced seniors due to lack of contact networks or availability. In many cases, learners feel shy, hesitant, or intimidated when approaching teachers or seniors for guidance, which further restricts their access to valuable support.

Existing mentorship platforms are either expensive or designed for premium users, making them unaffordable and inaccessible for a large portion of Indian students. These challenges clearly highlight the need for a low-cost, simple, and instant-connect mentorship system that allows learners to communicate freely, without hesitation. This gap motivated the development of a student-friendly platform that ensures fast guidance, easy access to experienced peers, and a supportive environment for continuous learning.

1.4 Objectives

- **Primary Objectives**
 - To develop a peer mentorship platform with real-time communication features.
 - To offer **affordable and time-efficient** micro sessions (10 minutes each).
 - To design a **WebRTC-based video calling system** for live mentorship.
 - To build a seamless **payment and wallet system** using Razorpay.
 - To allow mentors to earn while sharing knowledge.
- **Secondary Objectives**
 - Build a blog & resource sharing space.
 - Provide rating system for trust & quality assurance.
 - Maintain scalable architecture using cloud & serverless DB.

1.5 Scope

- **User Groups**
 - Students preparing for placements, exams, or internships
 - Freshers entering technical fields
 - Beginners in tech skills like coding, AI, web dev, cloud etc.

- **Features Included**
 - Real-time calling
 - Chat and blogs
 - Peer matchmaking
 - Payment & earning module
- **Scalability**
 - Future mobile app
 - University integration
 - AI-based mentor recommendation

Chapter 2 CONCEPTS AND METHODS

2.1 WebRTC

- WebRTC enables **private scheduled one-to-one video mentoring sessions**, not media streaming.
- It establishes a **peer-to-peer encrypted video call** between mentor and mentee.
- Key Real Use in Platform:
 - Scheduled mentorship call sessions
 - Auto session timer and controlled call duration
 - Secure and private interaction
 - Camera/mic control and permission handling
 - Efficient handling of poor network conditions
- WebRTC ensures that video calls remain **low latency, secure and real-time**, similar to tele-consultation apps (e.g., AstroTalk, Practo Video Consult).

2.2 Socket.IO

- Enables **real-time chat communication** between mentor and mentee.
- Manages live events like:
 - Session join notifications
 - Call ring/accept signal exchange
 - In-session chat for notes & links
 - Post-session follow-up chat
- Ensures **seamless live interaction** even if network fluctuates.

2.3 Serverless Database (Neon PostgreSQL)

- Automatically scales based on traffic
- Reduces server maintenance cost
- Suitable for student-first platforms with inconsistent traffic patterns
- Optimized for real-time queries (sessions, booking, chat logs)

2.4 Payment Gateway (Razorpay)

- Facilitates secure payment processing for booking sessions
- Mentor earnings are credited to wallet
- Wallet withdrawal options provided
- Helps establish a monetization ecosystem for mentors

2.5 Methodology

The methodology adopted in this project consists of requirement analysis, system design, development, and iterative testing to ensure continuous improvement and user-centered refinement. A large-scale survey of more than 500 students and professionals was conducted to understand real challenges related to mentorship accessibility, usability, and engagement. The platform is developed using modern web technologies: React.js for building a responsive and intuitive user interface, Express.js for backend logic and APIs, and PostgreSQL for secure, reliable data storage. The concept is rooted in digital peer mentorship, where individuals with similar academic or career experiences can support one another through short, focused interactions.

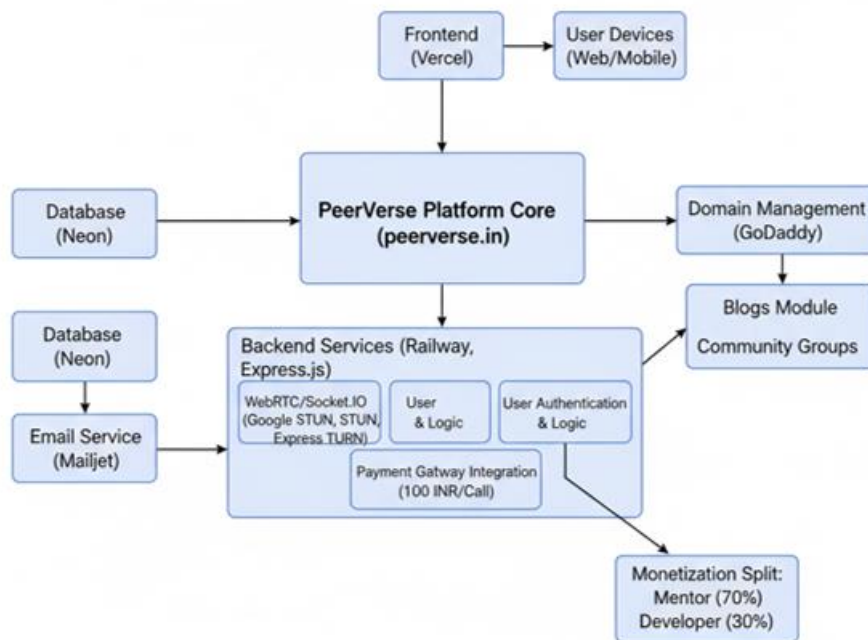
Agile development methodology is employed for its flexibility and ability to rapidly integrate feedback from testing phases. Real-time communication is achieved using WebRTC for audio-video media streaming and Socket.IO for data signaling, enabling smooth and synchronized live sessions between mentors and mentees. The system emphasizes performance optimization, strong data privacy controls, and seamless deployment using serverless architecture. Additionally, AI-based analytics are integrated to measure mentorship effectiveness, suggest relevant mentors, and enhance user experience. With a modular and scalable code architecture, the platform remains easy to maintain, expand, and adapt to future enhancements and increased user demand.

Chapter 3 LITERATURE SURVEY

| Sr. No. | Focus Area | Key Findings / Insights | Technologies / Concepts Referenced | Relevance to PeerSync System |
|---------|--|---|---|--|
| 1 | Shift in Learning Paradigms | Modern education is transitioning from traditional, instructor-centred methods to interactive, personalized, and student-driven learning. Learners now require real-time support and contextual guidance for academic and career development. | Digital learning systems, personalized education models | Establishes the need for personalized and interactive mentorship platforms like PeerSync. |
| 2 | Peer-to-Peer Mentorship Effectiveness | Studies show peer mentoring—between individuals close in age or experience—enhances understanding, emotional connection, and relatability compared to hierarchical models. Improves academic confidence and skill development. | Peer-learning environments, mentorship models | Supports PeerSync’s peer-based mentorship model aimed at relatable and empathetic guidance. |
| 3 | Emergence of Micro-Mentoring | Micro-mentoring (short, focused sessions) offers flexibility, reduced cognitive load, and higher engagement. Preferred by students for its adaptability and frequent feedback opportunities. | Micro-mentorship, short-duration learning interventions | Validates PeerSync’s design of short, time-bound video sessions and chat-based follow-ups. |
| 4 | Impact of Online Micro-Mentorship Programs | Online micro-mentorship improves decision-making, internship preparedness, project guidance, and exam/placement strategies. Encourages continuous learning and community interaction. | Online mentoring platforms, feedback loops | Strengthens PeerSync’s objective to enhance academic and career guidance through online mentoring. |
| 5 | Use of Real-Time Communication Technologies | Tools like WebRTC provide secure, low-latency video communication, while Socket.IO supports seamless messaging and notifications. Widely used in online tutoring and consultation platforms. | WebRTC, Socket.IO, real-time communication | Justifies PeerSync’s use of real-time video and chat systems for smooth mentor-mentee interaction. |
| 6 | Cloud-Native and Serverless Architectures | Cloud-native solutions provide auto-scaling, cost efficiency, and high availability, supporting applications with variable usage patterns common in education. | Cloud-native architecture, serverless computing | Aligns with PeerSync’s backend design for scalability and reliability in digital mentorship. |

Chapter 4 ARCHITECTURE AND IMPLEMENTATION

PeerVerse Platform Architecture



PeerVerse Platform Workflow

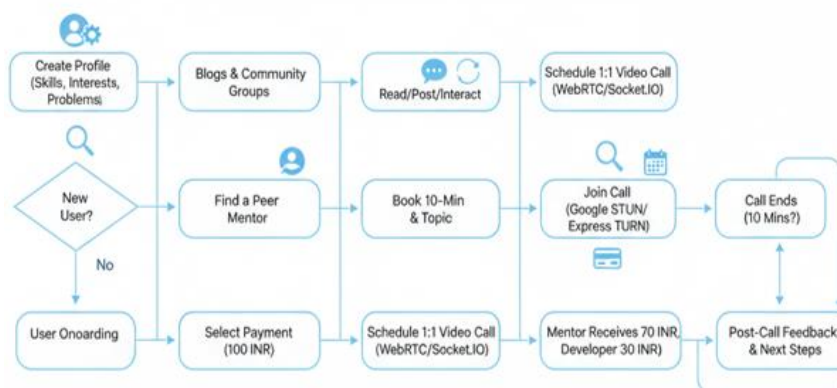


Figure 4.1: Architecture


Architecture:

The PeerVerse platform is designed with a seamless workflow and robust system architecture to ensure smooth, real-time mentorship experiences for students. The journey begins with user onboarding, where a new student signs up and creates a profile by adding skills, interests, goals, and specific guidance needs such as career planning, internships, placements, or skill development. Once onboarded, users can explore the platform through mentor blogs, community groups, and discussion forums, helping them understand available opportunities before requesting guidance. For mentorship, students browse verified mentor profiles using filters such as skills, domain expertise, experience, ratings, and reviews. After selecting a mentor, the user books a focused 10-minute micro-session by choosing a session topic and completing a ₹100 online payment, which is securely distributed as ₹70 to the mentor and ₹30 to the platform. The system then schedules the call and sends automatic notifications to both mentor and mentee. During the session, WebRTC handles secure one-to-one video calling while Socket.IO enables real-time messaging, signaling events, and live connection updates. Google STUN and Express TURN servers ensure smooth connectivity even behind network firewalls or NAT restrictions. The video call launches in a virtual meeting lobby where both users join, and a timer strictly maintains the 10-minute micro-mentorship limit.

After the session ends automatically, the mentor receives earnings while the mentee provides feedback and ratings. Any additional links, notes, or follow-up instructions can be sent via the built-in chat system. This entire workflow is supported by a highly scalable architecture. The front-end is built in React.js and deployed on Vercel for fast loading and mobile-responsive access, handling features such as mentor discovery, booking interface, video calling UI, community dashboards, and blogs. The backend, implemented in Node.js and Express.js and hosted on Railway, manages authentication, session scheduling, payment logic, and review systems. WebRTC and Socket.IO together form the communication engine that powers the live call experience. Neon Serverless PostgreSQL serves as the main database layer, storing user profiles, session bookings, chat history, transactions, ratings, and reviews with cost-efficient auto scaling. Payment processing is managed using Razorpay, enabling seamless wallet crediting and secure money transfer between users and mentors. Mailjet sends automated confirmations, reminders, and post-session emails to maintain user engagement. The platform uses a GoDaddy-registered

domain and can be accessed through peerverse.in or peersync.in. Additionally, community spaces, mentor blogs, and shared resources create a collaborative learning ecosystem that goes beyond one-to-one mentorship.

Chapter 4 RESULTS



Yash Bhardwaj
Mentor

[Home](#)
[Edit Profile](#)
[Sessions](#)
[Blogs](#)
[Community](#)
[Wallet](#)
[Feedback](#)
[Notifications 2](#)
[Settings](#)

Profile Completion: 100%

Complete Profile

Total Sessions
1


Completed Sessions
1

Total Blogs
0

Wallet Balance
₹70

Upcoming Sessions
No pending session requests

Recent Notifications
Payment of ₹100.00 received for your session. You earned ₹70.00.
NinadFounderMentee wants to book a session with you for ₹100



Yash Bhardwaj
Mentor

[Home](#)
[Edit Profile](#)
[Sessions](#)
[Blogs](#)
[Community](#)
[Wallet](#)
[Feedback](#)
[Notifications 2](#)
[Settings](#)

Edit Profile
Complete your mentor profile to attract more mentees

Basic Info

Education

Skills


Background


Interests


Languages

Availability

Basic Information







Yash Bhardwaj
Mentor

Home

Edit Profile

Sessions

Blogs

Community


Wallet

Feedback

Notifications 2


Settings

Booking Requests



No Pending Requests
You don't have any pending booking requests at the moment.

Video Call Sessions



NinadFounderMentee
Incoming Call Request

Meeting Completed

Created: 2 Nov 2025, 08:01 pm

Ended: 2 Nov 2025, 08:03 pm

COMPLETED

Notifications

Clear All

Payment Received


Payment of ₹100.00 received for your session. You earned ₹70.00.

Nov 2, 08:02 PM



New Session Request

NinadFounderMentee wants to book a session with you for ₹100

Nov 2, 08:01 PM



Home
Mentors
Blogs
Community
Sessions
Profile
Favorites
Payments



Yash Sanjay Bhardwaj
Logout

5 Available Mentors

0 Favorite Mentors

4 Completed Sessions

0.7 Hours Learned

Search by name, education, skills, background, languages, interests...

Search

Browse by Interest

All Mentors

JavaScript

Python

DSA

Recommended for You

Mentors matching your interests

NinadFounder
Not specified

★ 5 (15 reviews)

Skills: java

Book Session Message View Profile

TrialMentorOne
Not specified

★ 4.8 (25 reviews)

Skills: arts

Book Session Message View Profile

Yash
Not specified

★ 4.8 (25 reviews)

Skills: C++

Book Session Message View Profile

Techy Bhardwaj
Not specified

★ 4.8 (25 reviews)

Skills: Python, Frontend Developer, Api Designer, UI/UX

Book Session Message View Profile

All Available Mentors

5 mentors found

Shreeja G.
MIT ADT

★ 4.8 (25 reviews)

Skills: Cyber Security Analyst

Book Session Message View Profile

NinadFounder
MIT ADT

★ 5 (15 reviews)

Skills: java

Book Session Message View Profile

Techy Bhardwaj
MIT ADT University

★ 4.8 (25 reviews)

Skills: Python, Frontend Developer, Api Designer, UI/UX

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Yash
Mit

★ 4.8 (25 reviews)

Skills: C++

Book Session Message View Profile

TrialMentorOne
PCCOE

★ 4.8 (25 reviews)

Skills: arts

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Yash Sanjay Bhardwaj
[Logout](#)

Browse Communities

My Communities (1)

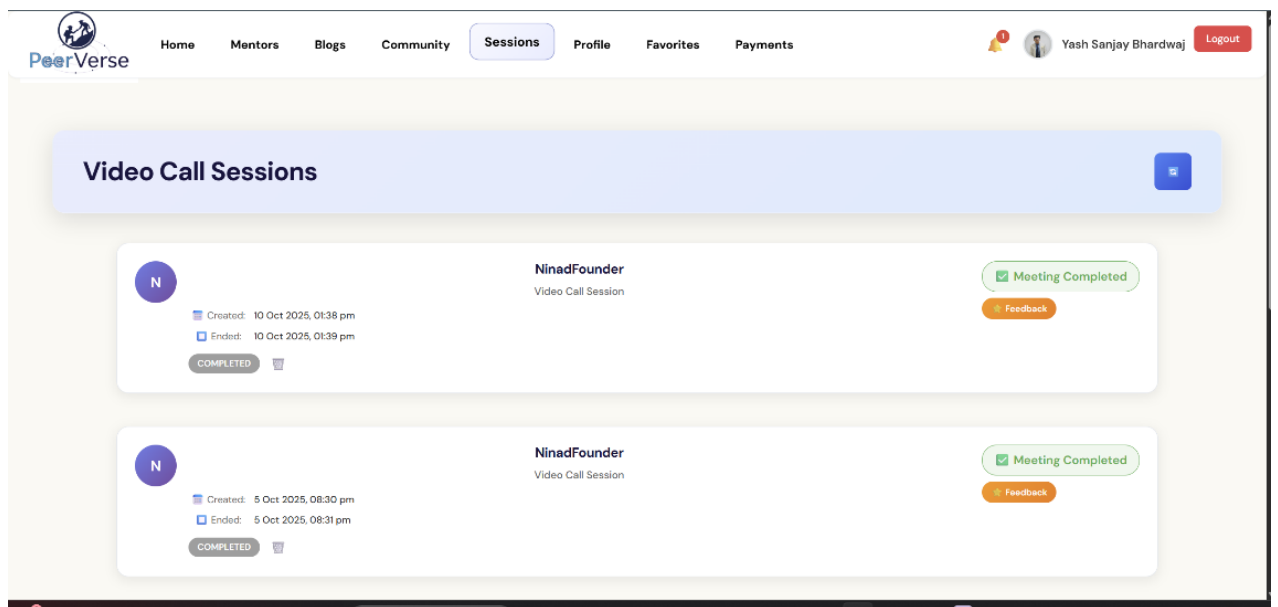
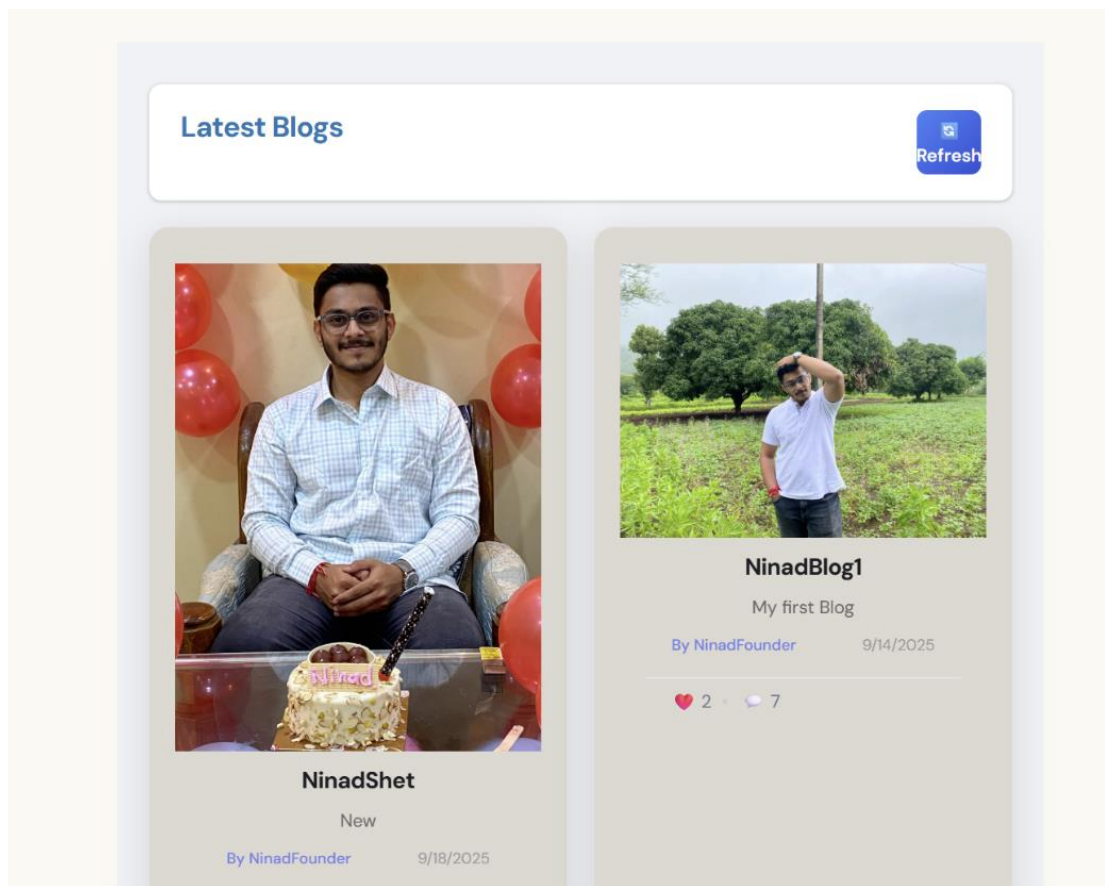
Available Communities

NinadFounder1 Interview Prep

My first Community

Owner: NinadFounder 3 members

✓ Joined – View



Chapter 5 CONCLUSION AND FUTURE WORK

Conclusion

The development of the PeerVerse/PeerSync platform has successfully demonstrated the potential of peer-to-peer micro-mentoring as a scalable and impactful model for student guidance. Traditional mentoring systems are often expensive, inaccessible, and time-consuming, creating barriers for students seeking timely academic, career, and skill-based support. This project bridges that gap by enabling learners to connect with experienced peers for short, structured, and highly focused mentorship sessions using a seamless digital interface. Through the integration of WebRTC-based video calling, real-time chat via Socket.IO, secure payments, mentor wallets, and community interactions, the platform delivers a complete mentorship ecosystem tailored to student needs.

The platform's architecture — built on React, Node.js, serverless Neon PostgreSQL, Vercel, and Railway — has proven efficient in handling real-time communication and user scalability while maintaining cost-effectiveness. The 10-minute mentorship model was validated through pilot testing, showing strong engagement, high session completion rates, and positive feedback from users. Mentors benefited from recognition and micro-earning opportunities, while mentees reported improved clarity in academic and career decisions. Overall, the project meets its objectives of accessibility, affordability, relatability, and technological innovation in the modern EdTech space. It establishes a foundation for democratized learning, empowering students with guidance at the right time, from the right people, and through the right medium.

Future Work

Although the platform has achieved its core goals, several enhancements can significantly extend its functionality and impact. One major improvement direction is the incorporation of **AI-powered mentor-mentee matching**, which can automatically recommend the best mentor based on skill requirements, goals, ratings, and previous session outcomes. Additionally, **AI-based call summarization and resource suggestions** can assist students in retaining actionable insights after mentorship sessions. A dedicated **mobile application** with real-time notifications, push alerts, and offline note capabilities will further increase accessibility and convenience for users, especially college students who prefer on-the-go usage.

Future upgrades may also include **group mentorship rooms**, where 1 mentor interacts with multiple students simultaneously for workshop-style sessions, similar to virtual bootcamps. **Gamification features** like badges, ranks, learning streaks, and mentor reliability scores can further motivate user engagement. To ensure long-term credibility, the platform may integrate **blockchain-based certificate validation** for mentor credentials and mentorship history. At scale, PeerVerse can collaborate with universities, career-development cells, and tech communities to formalize peer mentoring as part of institutional programs. With continuous refinement, data insights, and academic partnerships, the system can evolve into a comprehensive global student mentorship network that ensures no learner remains confused or unsupported in their academic or career journey.

ANNEXURE A. BIBLIOGRAPHY

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Research Papers & Journals

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ANNEXURE B: List of Publications and Research Paper

Dear Yash Bhardwaj Greetings from IJIRT!

Your manuscript was successfully submitted to IJIRT.

Paper ID: 187005

Your paper will soon be reviewed and will be provided with further updates. Track your paper with your paper id and email id using following link.

Track Paper: <https://ijirt.org/AuthorHome>



Congratulations Yash Bhardwaj !!

- ✓ Paper submitted successfully.
- ✓ Paper ID generated: **187005** (Please note)
- ✓ Track Paper [Track Paper](#)
- ✓ SMS sent on **7744055799**

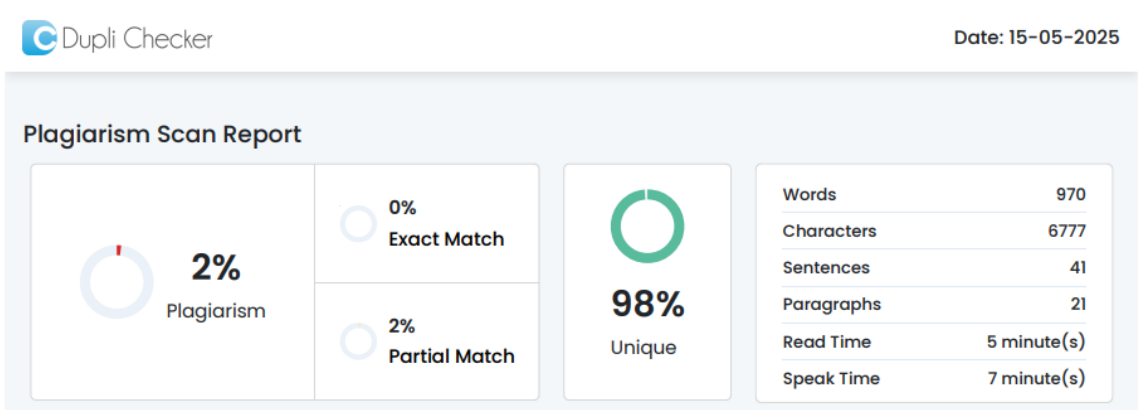
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ANNEXURE C: Plagiarism Report



ANNEXURE D: Project Tracker

| | | | |
|---|--|----------------------------|-------------|
| Project ID: | LYAIEC13 | Class | LY-AIEC |
| Project Domain | Data Science | Specialization | AIEC |
| Problem Statement Existing mentorship systems are often constrained by cost, accessibility, and scalability. | | | |
| | Enrollment Number | Name of Students | Class |
| Project Development Student Team Members Project Guide Industry Mentor | MITU22BTCS1024 | YASH SANJAY BHARDWAJ | LY-AIEC |
| | MITU22BTCS0484 | NINAD SANTOSH KHOPADE | LY-AIEC |
| | MITU23BTCS0033 | MADHUSUDAN GIRIDHARI LADDA | LY-AIEC |
| | MITU22BTCS0799 | SHRIYANSHI ANKUL JAIN | LY-AIEC |
| | Prof. Mayuresh Gulame | | |
| | | | |
| | Review Date | Comment by Jury/ Mentor | Review Link |
| Review-1 | 19-08-2025 | | |
| Review-2 | 10-10-2025 | | |
| Review-3 | | | |
| | | | |
| | | | |
| Epic: | Developing a Real-Time Peer-to-Peer Mentorship Platform with Integrated Community Features | | |
| Story 1: | As a mentee, I want to connect instantly with mentors for 1:1 video calls so that I can get personalized guidance. | | |
| Story 2: | As a mentor, I want to manage my availability, community memberships, and blogs via a dashboard. | | |
| Story 3: | As an admin, I want to monitor system performance and user engagement to ensure scalability. | | |
| Task1: | WebRTC and Socket.io Setup for Real-Time Video and Messaging | | |
| Task2: | Backend API Development with Express and TURN Server Configuration | | |
| Task3: | Payment Integration using Razorpay with Split Commission Logic | | |
| Task4: | Frontend Deployment on Vercel and Backend Deployment on Railway | | |
| Task5: | Database Design and Management on Neon | | |
| Task6: | Email Notifications Setup using Mailjet for OTPs and Alerts | | |
| Task7: | Community and Blog Features Implementation | | |
| Task8: | Session Tracking and Analytics for Mentor-Mentee Interactions | | |
| Task9: | Testing & Deployment across all services and platforms | | |
| Acceptance Criteria | | | |
| 1 | Users can successfully initiate, conduct, and end 10-minute 1:1 mentor sessions using the platform. | | |
| 2 | Payments for sessions are processed via Razorpay, and commissions are split and logged accurately. | | |
| 3 | Mentors can create and manage communities and publish blogs accessible to mentees. | | |
| 4 | Email notifications for OTP, session schedules, and reminders are sent reliably via Mailjet. | | |
| 5 | Backend APIs are performant and support all real-time communication and payment workflows. | | |
| 6 | The system tracks session details and user engagement with accurate analytics dashboards. | | |

This is actual Development planning and tracking. Don't

| Sprint No. | Task Name | Sub Tasks | Task Status |
|-----------------|--------------------------------------|---|-------------|
| Sprint 1 | Project Initialization | Define requirements, define user s | Complete |
| 18-08-2025 | | Setup version control, CI/CD pipeli | Complete |
| | Infrastructure Setup | Deploy frontend on Vercel, backen | Complete |
| | | Setup Neon database and Mailjet | Complete |
| Sprint 2 | Real-Time Communication | Integrate WebRTC peer-to-peer vi | Complete |
| 2025-08-31 | | Setup Socket.io for signaling and T | Complete |
| 2025-09-20 | Payment Integration | Integrate Razorpay for session pay | Complete |
| | | Implement payment splitting and logging logic | Complete |
| Sprint 3 | Community Features | Build community join/leave functio | Complete |
| 2025-10-10 | | Enable mentor blogs creation and | Complete |
| 10-20-2025 | Session Management and Notifications | Build session scheduling and 10-m | Complete |
| | | Integrate Mailjet notifications for s | Complete |
| Sprint 4 | Analytics & Monitoring | Implement real-time session analy | Complete |
| 2025-10-28 | | Set up error tracking and system h | Complete |
| 2025-11-01 | Testing & Deployment | Conduct end-to-end testing includ | Complete |
| | | Final deployment, rollout, and pos | Complete |

Publication Details

| Sr. No | Paper Title | Name of Journal | Year |
|--------|-------------|-----------------|------|
| 1 | | | 2025 |
| 2 | | | |

Patent Details

| Sr. No. | Title | Inventors | Application No. |
|-------------------|-------|-----------|-----------------|
| 1 | | | |
| Copyright Details | | | |

| Sr. No. | Title of work | Name of Applicants | Registration No. |
|---------|---------------|--------------------|------------------|
| 1 | | | |

Event and Participations Details

| Sr. No. | Name of Event | Type of Event | Date |
|---------|---------------|---------------|------|
| 1 | | | |
| 2 | | | |

Add Weekly Meetings Details [Minimum 12 meetings]

| Date | Attendees with commas | Agenda points with commas | A |
|------------|-----------------------|---|---|
| 18/08/2025 | Ninad,Yash,Madhusudan | Project kickoff, requirement gathering | |
| 25/08/2025 | Ninad,Yash,Shriyanshi | Finalize tech stack and deployment strategy | |
| 01/09/2025 | Ninad,Yash,Madhusudan | Vercel frontend & Railway backend setup | |
| 08/09/2025 | ALL four menbers | WebRTC integration discussion | |
| 15/09/2025 | ALL four menbers | Socket.io signaling and TURN server config | |

| | | |
|------------|-----------------------|--|
| 22/09/2025 | Ninad,Yash,Madhusudan | Razorpay payment integration planning |
| 29/09/2025 | Ninad,Yash,Madhusudan | Community features and mentor profile design |

| | | |
|------------|------------------|--|
| 06/10/2025 | ALL four members | Blog feature implementation discussion |
| 31/10/2025 | ALL four members | Final deployment and rollout planning |
| | | |
| | | |
| | | |

Figure D.1 Tracker Sheet