

SKILLSwap

A web app for users to learn and teach skills

INTRODUCTION

In today's fast-paced world, learning new skills and sharing knowledge have become essential for both personal and professional growth. However, finding the right people to learn from—or to teach—can often be challenging.

SkillSwap is a web-based platform designed to bridge this gap by connecting learners with individuals who are willing to share their expertise. It creates a community-driven space where people can exchange skills, collaborate, and grow together.

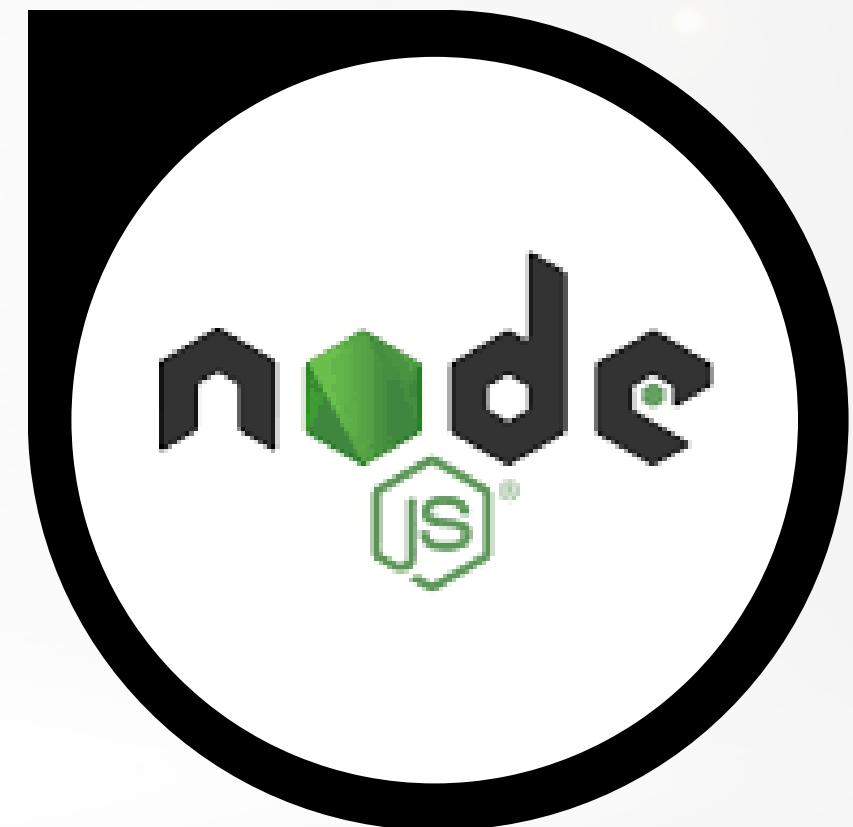
With SkillSwap, users can create personalized profiles to showcase their skills, highlight what they want to learn, and connect with others who match their interests. The platform features secure login and signup, smart skill matching, and an intuitive dashboard to manage all skills and requests in one place.

By making learning accessible, collaborative, and organized, SkillSwap encourages meaningful connections and empowers individuals to pursue their learning goals with ease.

Whether you want to share your knowledge or pick up a new skill, SkillSwap makes it simple to find the right match and start your learning journey.

PROBLEM STATEMENT

People often possess valuable skills but lack access to the skills they wish to learn. Traditional courses are expensive and not always flexible. There is no simple peer-to-peer platform where users can exchange skills directly

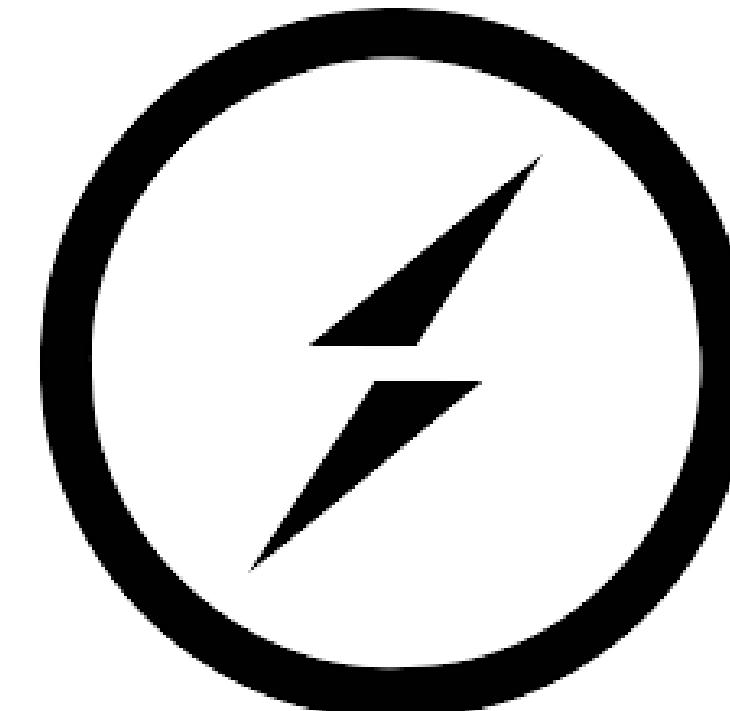
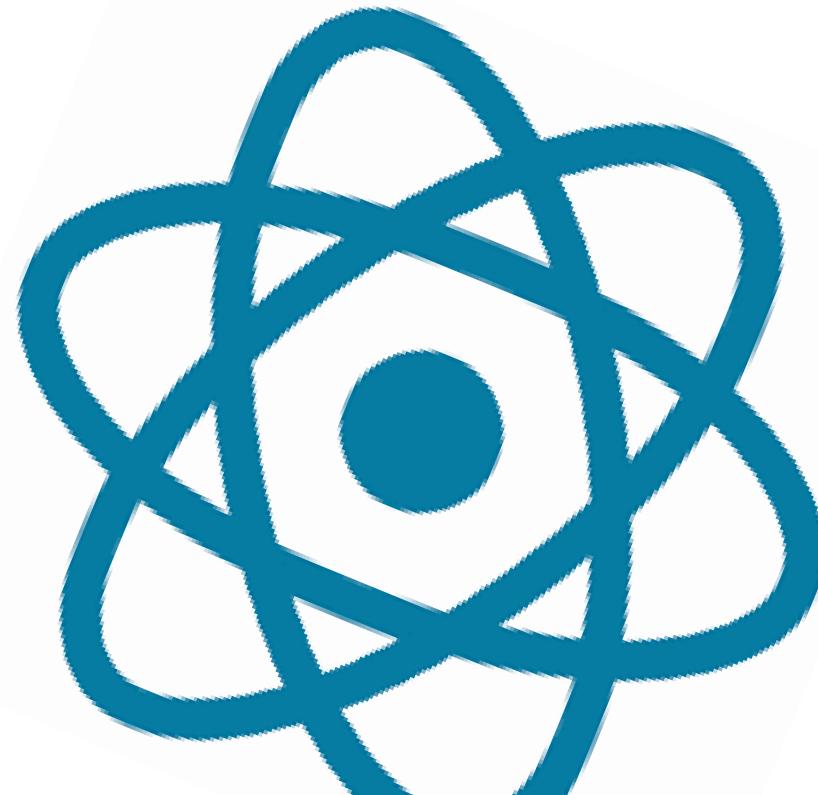


Objectives

- To create a web platform where users can both teach and learn skills.
- To provide efficient skill-matching between users.
- To integrate real-time communication for effective collaboration.
- To encourage community-driven knowledge sharing and personal growth.

System Architecture

- Frontend: React.js for interactive UI.
- Backend: Node.js with Express for APIs.
- Database: MongoDB for user, skills, and chat data.
- Real-time Features: Socket.IO for chat and notifications.



Modules / Workflow

User Registration & Authentication

1

Profile Setup (Teach & Learn Skills)

2

Skill Matching & Recommendations

3

Chat and Session Scheduling

4

Ratings & Feedback System

5

Implementation

The screenshot displays the SkillSwap application interface. At the top, the header includes the logo "SkillSwap", navigation links for "Dashboard", "Skill Match", "Messages", and "My Profile", and a user profile section for "Mounika" with a "Logout" button.

The main content area features several sections:

- Welcome back, Mounika!**: A greeting message with a subtext "Ready to learn something new or share your expertise?". To the right is a purple "Find Matches" button.
- Skills You Offer**: Shows the skill "Machine Learning" and a "Manage Skills" button.
- Skills You Want**: Shows the skill "Java" and a "Update Learning Goals" button.
- Recommended Matches**: Lists two profiles:
 - Latha**: Skills you need: Java; Skills they need: Machine Learning
 - Bhavana**: Skills you need: ; Skills they need: Machine Learning
- Recent Requests**: Lists a single request from "Bhavana → Mounika" for "General Guidance → Machine Learning" with a status of "ACCEPTED".

M

Mounika

Bhimavaram

Mounika@gmail.com

 [Edit Profile](#)**1**

Skills Taught

2

Skills Learned

Oct 2025

Member Since

1

Credits

Skills I Can Teach

Share your expertise with others and earn credits

[Machine Learning](#)**Skills I Want to Learn**

Areas where you're looking to grow and improve

[Java](#)

Find Your Perfect Skill Match

Connect with others who can teach you new skills while learning from your expertise

2 matches found

 **Latha**
Bhimavaram

Can teach you:

Java

You can teach:

Machine Learning

[View Profile](#) [Chat](#) [Send Request](#)

 **Bhavana**
Bhimavaram

You can teach:

Machine Learning

[View Profile](#) [Chat](#) [Send Request](#)

Advantages

**Cost-free,
peer-to-peer
learning.**

**Promotes
collaboration
and community
building**

**Real-time
interaction
improves
engagement**

**Builds trust
through
ratings and
reviews**

Future Enhancements

- Mobile app version for wider access.
- AI-based smart skill matching.
- Integrated video call feature.
- Group learning sessions.
- Premium features for scalability.

CONCLUSION

SkillSwap provides a collaborative platform where users can both teach and learn skills in a cost-free, peer-to-peer environment. Built with the MERN stack, it enables secure authentication, efficient skill matching, and real-time interaction through chat. By promoting community-driven knowledge exchange, SkillSwap bridges the gap between learners and teachers, making skill development more accessible, interactive, and sustainable.



THANK YOU