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## **FULL STACK PROJECT MODULES**

### **PROJECT TITLE -**

SkillSwap (A Peer-to-Peer Learning Platform)

### **1. Authentication and User Management Module**

***Features:***

- User registration, login with JWT sessions
- Profile management with credits and history
- Role-based access (Learner/Teacher/Admin)

Frontend	React/Next.js - Registration forms, dashboards
Backend	Node.js/Express - Authentication APIs, session handling
Database	MongoDB/PostgreSQL - User data, credits, history
Status	Pending

### **2. Skill Listings Module**

***Features:***

- Add new skills to teach
- Search and filter skills to learn
- Smart skill suggestions

Frontend	Skill listing pages, search filters
Backend	APIs for skill CRUD operations
Database	Skills collection/table
Status	Pending

### **3. Transactions Module**

***Features:***

- Handle credit earning when teaching
- Credit spending when learning
- Maintain transaction history

Frontend	Credit wallet UI, transaction history
Backend	APIs for credit transfer and balance

Database	Transactions collection/table
Status	Pending

## 4. Communication Module

### **Features:**

- Real-time chat using WebSockets
- Video calls using WebRTC/Twilio API
- Session booking with calendar integration

Frontend	Chat UI, video call interface, calendar booking
Backend	WebSocket server for chat, video session APIs
Database	Messages, session bookings
Status	Pending

## 5. Reviews and Recommendation Module

### **Features:**

- Give ratings and feedback after sessions
- Badges and leaderboards for active users
- Recommendation engine for matching learners with teachers

Frontend	Review forms, leaderboard UI
Backend	Recommendation microservice using ML/NLP
Database	Reviews, ratings, leaderboard data
Status	Pending

## 6. Admin Panel Module

### **Features:**

- Manage users (approve/block learners/teachers)
- View reports on skill exchanges, credits, user activity
- Monitor platform activity logs

Frontend	Admin dashboard with reports and controls
Backend	Admin APIs for monitoring and reports
Database	Admin logs, reports collection
Status	Pending