A Major Project Synopsis on

**SkillSync**

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Towards the partial fulfillment for the Award of the Degree of

**MASTER OF COMPUTER APPLICATIONS**

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by

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1. **Introduction**

SkillSync is a web-based platform that connects users based on their skills, learning interests, and professional goals. Whether users are looking for study partners, mentors, or project collaborators, SkillSync intelligently matches them based on their expertise and learning goals.

Why Choose SkillSync?

1. For Learners and Professionals:
   1. Find the perfect mentor or study partner.
   2. Get AI-based skill recommendations.
   3. Expand your professional or academic network.
2. For Recruiters & Companies:
3. Identify skilled individuals for internships or jobs.
4. Create skill-based project teams.
5. Reduce hiring costs with direct networking.
6. **Motivation**
7. Many people struggle to find **study partners, mentors, or collaborators** with matching skill levels.
8. LinkedIn and other platforms focus on resumes rather than **skill-based real-time networking**.
9. This platform will help **students, freelancers, and professionals** connect based on common skills and learning goals.
10. **Problem Statement**
11. Users face challenges in:
    1. Finding peers with the same skills or learning goals.
    2. Discovering mentors without formal job-seeking platforms.
    3. Building real connections beyond static resumes.
12. **Methodology/ Planning of work:**
13. ⁠Creating the UI using React.js. The frontend will include different components:
    1. **Home Page** – Overview and login/signup.
    2. **Dashboard** – User profile and skill management.
    3. **Matchmaking System** – AI-driven skill-based matching.
    4. **Chat Feature** – Connect and communicate with matched users.
    5. **Projects & Opportunities** – Users can collaborate on projects or find learning groups.
14. Backend Development using Node.js & Express.js:
    1. **Authentication:** OAuth and email-based login.
    2. **AI Matching Algorithm:** Uses AI to match users based on skills and interests.
    3. **Messaging System:** Real-time chat for seamless communication.
    4. **Data Management:** Stores user profiles, skills, and activity logs.
15. ⁠Database Implementation using MongoDB:
16. **User Profiles** – Stores skill sets and learning interests.
17. **Matches & Connections** – Saves previous interactions.
18. **Chat History** – Manages real-time conversations
19. **Requirements for proposed work:**
20. Software Requirement:
    1. Operating System: Windows, Linux, MacOS
    2. User Interface: ReactJS
    3. Database: MongoDB
    4. Backend: NodeJS with ExpressJS
21. Hardware Requirement:
    1. Hardware: Intel i3 or better
    2. RAM: 4GB (minimum)
    3. Hard Disk: 20 GB Hard Disk Space