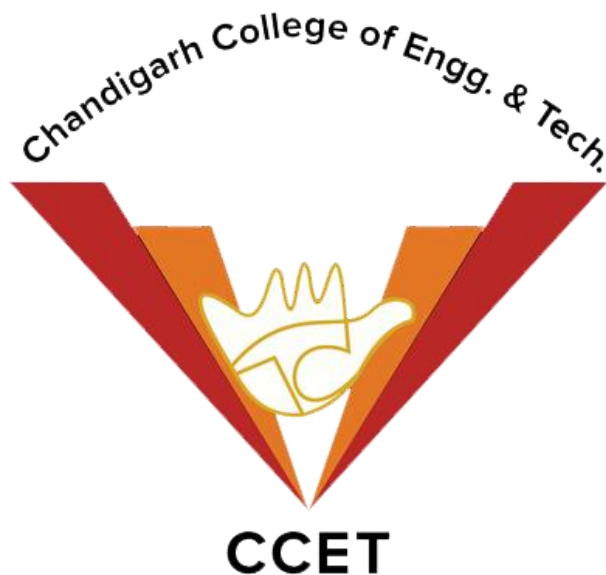# MAJOR PROJECT SYNOPSIS

Submitted To:
Dr. Santosh Kumar Yadav
Lecturer
CSE Department

Name	Roll no.	Class
Aaryan	9501/22	6th Semester
Rahul	9526/22	6th Semester
Kshitij	9517/22	6th Semester
Rohit Singh	9533/23	6th Semester

Project Synopsis
Team Sync

➤ **Introduction**

The Team Sync project is designed to improve team collaboration and productivity by providing a centralized platform for task management and real-time communication. Built using HTML, React, and MongoDB, the platform allows teams to seamlessly organize their tasks, track progress, and synchronize efforts in real-time. With an intuitive user interface powered by React and a flexible, scalable database system through MongoDB, Team Sync aims to simplify the way teams manage projects and stay aligned, regardless of location. This project focuses on providing a solution that enhances communication and efficiency within teams, making it easier to stay on top of deadlines and collaborate effectively.

➤ **Objective**

- **Simplify Task Management:** Provide an intuitive platform that allows users to easily create, assign, and track tasks, helping teams stay organized and focused.

- **Enhance Team Communication:** Facilitate seamless communication through real-time updates, messaging, and notifications to keep everyone on the same page.

- **Improve Collaboration:** Enable efficient collaboration by offering tools that support teamwork, file sharing, and project updates in one centralized platform.

- **Boost Productivity:** Help teams prioritize tasks, set deadlines, and stay on track to ensure projects are completed on time and within scope.

- **Increase Transparency:** Provide clear visibility into project progress, allowing team members and managers to stay informed and make data-driven decisions.

- **Support Flexibility and Scalability:** Offer a platform that adapts to the needs of teams of all sizes, from small groups to large organizations, enabling growth and seamless project management.

- **Foster Accountability:** Promote ownership and accountability by assigning clear responsibilities and tracking individual contributions toward team goals.

➤ **System Overview**

TeamSync is a comprehensive platform designed to enhance team collaboration and project management. It integrates multiple features to help teams stay organized, communicate effectively, and track progress in real-time. The system serves as a central hub for managing tasks, team communication, and project updates.

1. **Purpose & Technology:** Streamlines team collaboration and task management using PHP for backend development and modern web technologies for user interaction and data processing.

2. **Components:**
   - Frontend: Web interface for easy user interaction and task management.
   - Backend: PHP for handling user authentication, task management, and real-time data updates.

- Database: MySQL or similar for storing tasks, user data, and project details.
- Connectivity: Cloud hosting and APIs for seamless remote access and integrations.

3. **Workflow:**
   • Users register and create profiles → Create teams and assign tasks → Users collaborate, track task progress → Real-time updates and notifications sent to team members.

4. **Task Management**: Automates task assignment, tracking, and progress updates to ensure efficient team workflow.

5. **Real-Time Updates:** Provides instant task and project status updates, ensuring all team members are aligned and informed at all times.

➤ **Benefits**

- **Improved Collaboration**: Real-time communication and updates keep teams aligned and foster efficient collaboration.
- **Streamlined Task Management**: Simplifies task creation, assignment, and tracking, ensuring deadlines are met.
- **Increased Productivity**: Automation reduces manual effort, allowing teams to focus on important tasks.
- **Centralized Information**: Keeps all project data in one place for easy access and management.
- **Real-Time Notifications**: Instant alerts ensure everyone is informed of updates and changes promptly.
- **Enhanced Accountability**: Clear task assignments and progress tracking boost accountability.

➤ **Application**

TeamSync is a powerful platform for project management and team collaboration. It simplifies task tracking, communication, and progress monitoring in real-time, enhancing team productivity and reducing the need for manual coordination.

Key use cases are:

• **Corporate Offices**: Manage team tasks, deadlines, and progress for efficient project execution.

• **Remote Teams**: Enable seamless collaboration and task management across distributed teams.

• **Agile Development**: Organize and track sprints, user stories, and milestones for software projects.

• **Marketing Teams**: Streamline task management and progress tracking for marketing campaigns.

• **Event Planning**: Coordinate tasks, timelines, and team communication for event execution.

➤ **Software & Tools Used**

Front-End:

- React: A JavaScript library for building dynamic and interactive user interfaces.
- HTML: Provides the structure and content of web pages.
- CSS: Styles the HTML elements to enhance the visual appearance of the platform.

Back-End:

- Node.js: A JavaScript runtime used for building scalable server-side applications.

- Express.js: A Node.js framework for creating RESTful APIs and handling routing.
- MongoDB: A NoSQL database used to store user data, tasks, and project information.

Real-Time Communication:

- Socket.io: Enables real-time, bidirectional communication between clients and the server for instant task updates.

➤ <u>Minimum Hardware Specifications</u>

- **Processor**: Intel Core i3 or equivalent (or better) processor.
- **RAM**: 4 GB (8 GB or more recommended for more demanding tasks like machine learning or computer vision).
- **Storage**: 50 GB of available hard drive space (SSD is recommended for faster performance).
- **Graphics Card** (Optional for certain libraries like OpenCV with deep learning).
- **Operating System**: Windows, macOS, or Linux (ensure compatibility with the libraries you're using)

➤ <u>Conclusion</u>

Wrapping up our Team Sync project feels great! We've built a solid platform using HTML, React, and MongoDB, and it's been awesome to see everything come together. The combination of HTML for structure, React for a smooth, dynamic interface, and MongoDB for handling data has made this project not just functional, but scalable and efficient.

Our goal was to create a tool that helps teams stay organized, collaborate in real-time, and stay on top of their tasks – and we've done just that. React made the user experience seamless, while MongoDB allowed us to sync data easily, which is crucial for team collaboration.

Looking back, the project has taught us a lot about working with modern web technologies and how important it is to work together as a team to solve problems and iterate on ideas. There's definitely room to grow and improve, but overall, we're proud of what we've built and excited to see where it can go next!