



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Class /Sem : III yr /06

Date: 24/01/2026

Batch : C14

Project Guide: Dr.Y.Baby Kalpana Prof/CSE

Project Title: DevSphere

Team Members:

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Abstract :

DevSphere is an innovative MERN stack platform designed to revolutionize collaborative coding by enabling multiple developers to work together in real-time, similar to Google Docs, while coding. It features a multi-user code editor with live cursor tracking, conflict-free editing, and support for popular programming languages like JavaScript, Python, HTML/CSS, and Java. Integrated AI-driven debugging provides instant error detection, suggested fixes, code explanations, and performance optimization tips, helping developers write cleaner, more efficient code. Additionally, DevSphere includes project management tools such as a file tree, cloud storage, Git integration, and the ability to export projects to GitHub, creating a seamless and intelligent collaborative development environment.

Modules:

Module 1: Collaborative Code Editor Module

Purpose: Enable multiple developers to code together in real-time.

Features:

- Multi-cursor tracking & live sync
- Monaco Editor with syntax highlighting
- Room creation/joining with user list

Module 2: AI Debugging Assistant Module

Purpose: Instant code analysis and fix suggestions.

Features:

- Real-time error detection
- AI-powered fix suggestions
- One-click auto-fix implementation

Module 3: Team Communication & Project Module

Purpose: Team discussion and project persistence.

Features:

- Real-time chat with @mentions
- File tree & multi-file support
- Project save/load & GitHub export

Project Progress on 24/01/2026:

Title has been finalized

Project Plan for 31/01/2026:

To decide the project overflow and start working on the project