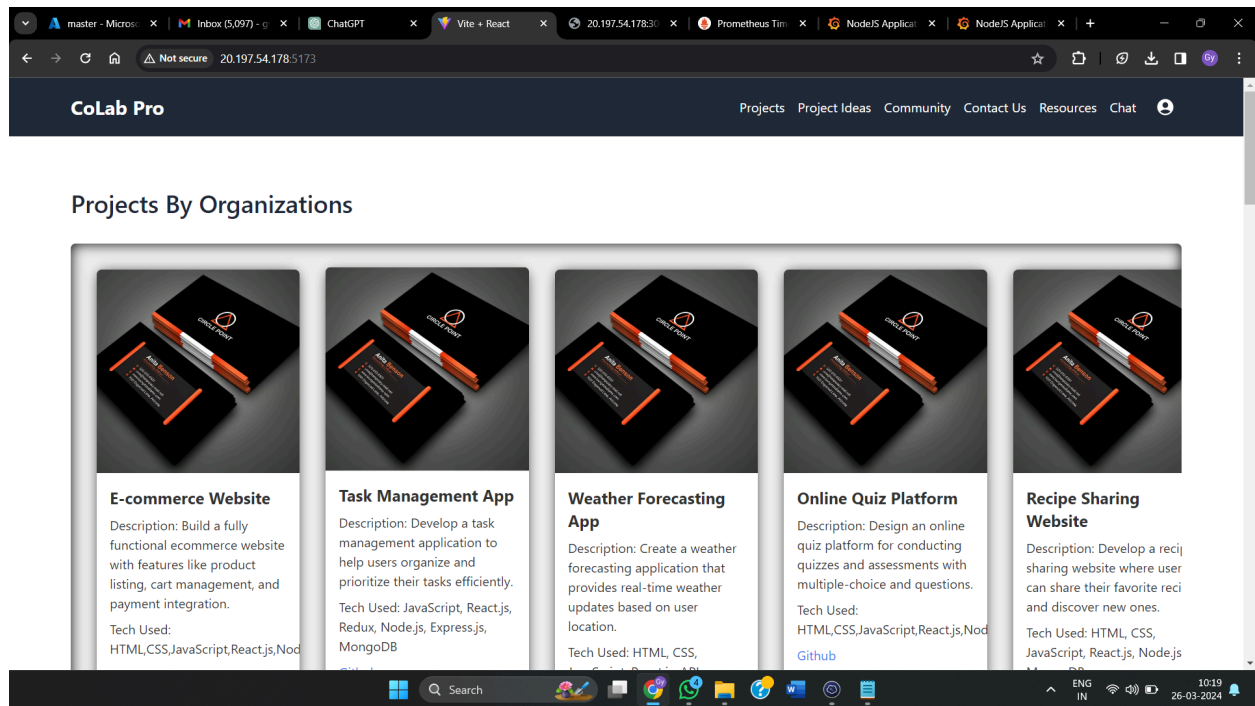


# Colabpro: A Comprehensive Guide

This document provides a detailed overview of Project Collaboration Pro, a collaborative platform designed to streamline project ideation, management, and communication within organizations. It also highlights the platform's utilization of DevOps practices for enhanced efficiency and maintainability.

## 1. Introduction



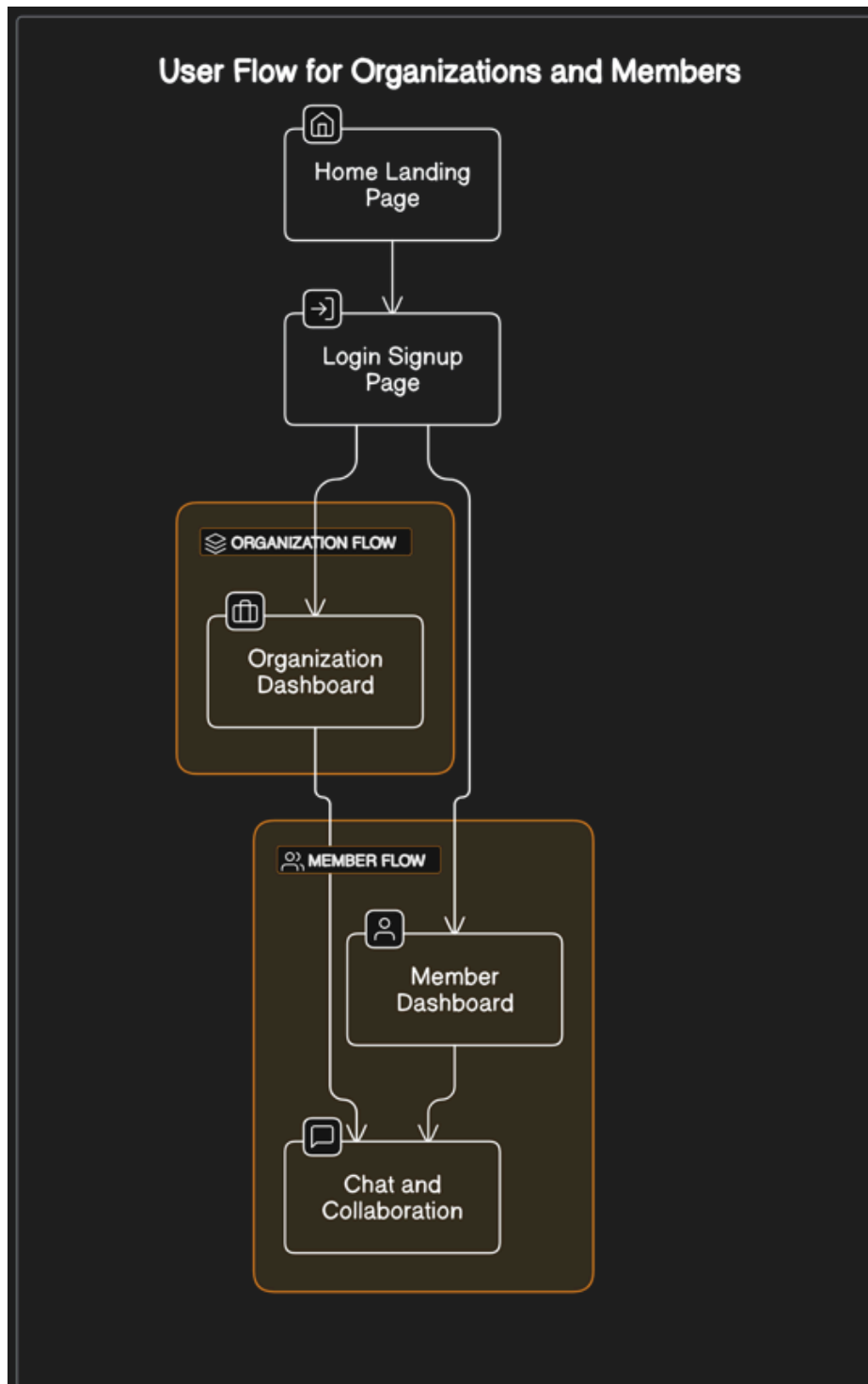
## Welcome to a New Era of Project Management

Traditional project management often faces challenges such as siloed communication, inefficient collaboration, and difficulty in tracking progress. Project Collaboration Pro tackles these issues head-on, providing a unified platform for organizations to streamline project ideation, management, and communication.

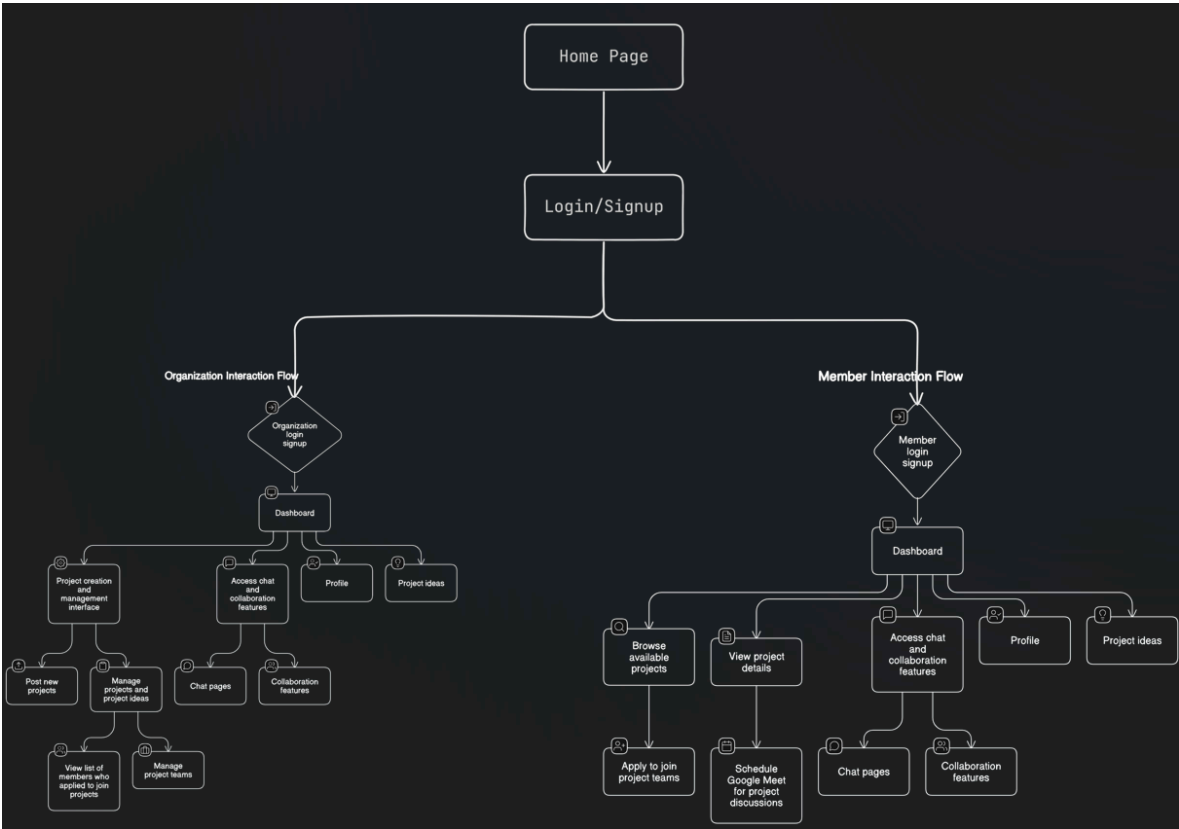
## Key Features & Benefits:

- **Centralized Project Hub:** Manage project ideas, ongoing projects, and collaboration tools in one place.
- **Enhanced Collaboration:** Foster communication and engagement through built-in chat.
- **Robust Security:** Implement role-based access control and data encryption for project confidentiality.
- **DevOps Integration:** Leverage Docker and Prometheus for improved scalability and monitoring.

## Project website workflow:



Project Feature workflow:



Project DataFlow:



## 2. Target Audience

### Empowering Teams of All Sizes

Project Collaboration Pro caters to a diverse user base, including:

- **Organizations:** Streamline project management across departments and enhance team collaboration.
- **Project Owners:** Propose project ideas, assign tasks, and track project progress effectively.
- **Team Members:** Collaborate on projects, participate in discussions, and stay updated on tasks.

### Benefits for Each User Type:

- **Organizations:** Improved project success rate, increased team productivity, and better resource allocation.
- **Project Owners:** Enhanced communication with team members, clear visibility into progress, and simplified project management.

## 3. Getting Started

### A Seamless Onboarding Experience

Project Collaboration Pro offers a user-friendly and intuitive interface. Here's how to get started:

- **Sign Up:** Organizations and members can create accounts through a simple sign-up process.
- **User Interface:** The clean and organized interface provides easy access to key functionalities.
- **Basic Functionalities:** New users have immediate access to explore project ideas, collaborate on discussions, and participate in ongoing projects.

## Viewing Projects:

The screenshot shows a web browser window with the CoLab Pro interface. The page title is "All Projects" and the subtitle is "Venky's Organization Projects". There are five project cards displayed, each with a placeholder image of a business card. The projects are:

- E-commerce Website**  
Description: Build a fully functional ecommerce website with features like product listing, cart management, and payment integration.  
Tech Used: HTML, CSS, JavaScript, React.js, Node.js, MongoDB  
[Github](#)
- Task Management App**  
Description: Develop a task management application to help users organize and prioritize their tasks efficiently.  
Tech Used: JavaScript, React.js, Redux, Node.js, Express.js, MongoDB  
[Github](#)
- Weather Forecasting App**  
Description: Create a weather forecasting application that provides real-time weather updates based on user location.  
Tech Used: HTML, CSS, JavaScript, React.js, API
- Online Quiz Platform**  
Description: Design an online quiz platform for conducting quizzes and assessments with multiple-choice and questions.  
Tech Used: HTML, CSS, JavaScript, React.js, Node.js  
[Github](#)
- Recipe Sharing Website**  
Description: Develop a recipe sharing website where users can share their favorite recipes and discover new ones.  
Tech Used: HTML, CSS, JavaScript, React.js, Node.js, MongoDB

The browser's address bar shows "20.197.54.178:5173/projects". The Windows taskbar at the bottom shows the time as 10:22 on 26-03-2024.

## Viewing ProjectIdeas:

The screenshot shows a web browser window with the CoLab Pro interface. The page title is "Project Ideas" and the subtitle is "Gyanavardhan Mamidiseti's Project Ideas". There are five project cards displayed, each with a placeholder image of a business card. The projects are:

- Online Learning Platform**  
Description: Develop a web-based platform for accessing educational materials and live classes.  
Skills required: JavaScript, React.js, Node.js, MongoDB
- Social Media Analytics Tool**  
Description: Build a tool for analyzing social media data and identifying trends.  
Skills required: Python, Django, Data Mining, Natural Language Processing, Data Visualization, Social Media API
- Online Marketplace App**  
Description: Create a mobile app for buying and selling products online.  
Skills required: React Native, Redux, Firebase, RESTful API Integration, UI/UX Design, Payment Gateway Integration
- Smart Home Automation System**  
Description: Design a system to automate home devices based on user preferences.  
Skills required: IoT, Raspberry Pi, Python, Home Automation Software, Voice Recognition
- Health Monitoring Wearable**  
Description: Develop a wearable device for vital signs and provide health recommendations.  
Skills required: Embedded Systems, Sensor Integration, Bluetooth Low Energy

The browser's address bar shows "20.197.54.178:5173/projectideas". The Windows taskbar at the bottom shows the time as 10:22 on 26-03-2024.

## 4. Project Ideas

### Fueling Innovation

Project Collaboration Pro fosters a culture of innovation by providing a dedicated space for brainstorming and proposing project ideas. Key features include:

- **Idea Submission:** Easily submit project ideas with clear descriptions and supporting documents.

## 5. Project Creation & Management

### Taking Ideas into Action

Transform promising ideas into actionable projects with Project Collaboration Pro's comprehensive management tools:

- **Project Creation:** Easily convert promising ideas into full-fledged projects with a dedicated workflow.
- **Task Management:** Create detailed task lists, assign responsibilities, and set deadlines for each task.
- **Milestones & Goals:** Define key project milestones and track progress towards achieving project goals.

## 6. Communication & Collaboration

### Staying Connected

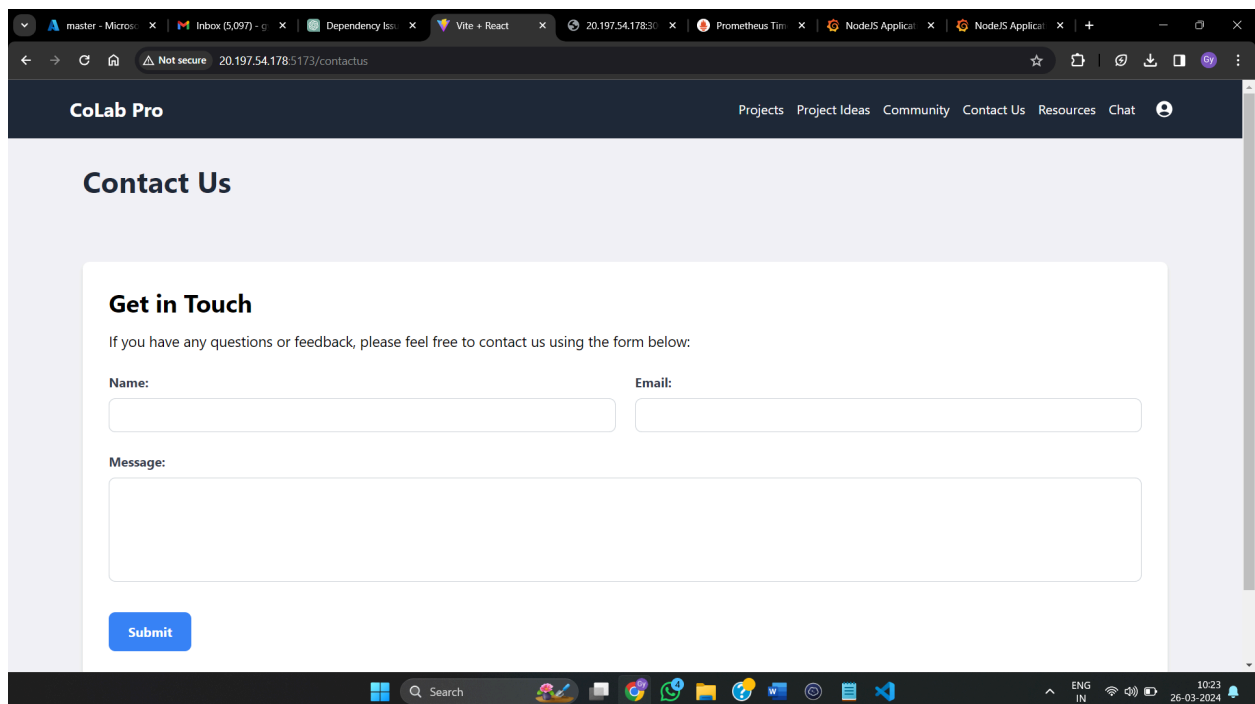
Project Collaboration Pro fosters seamless communication and collaboration throughout the project lifecycle:

- **Built-in Chat:** Real-time chat functionality allows for instant messaging and quick communication among team members.
- **Notifications System:** Stay updated on project activity with real-time notifications for tasks, discussions, and mentions.

## Chat Page:



## Contact Us:



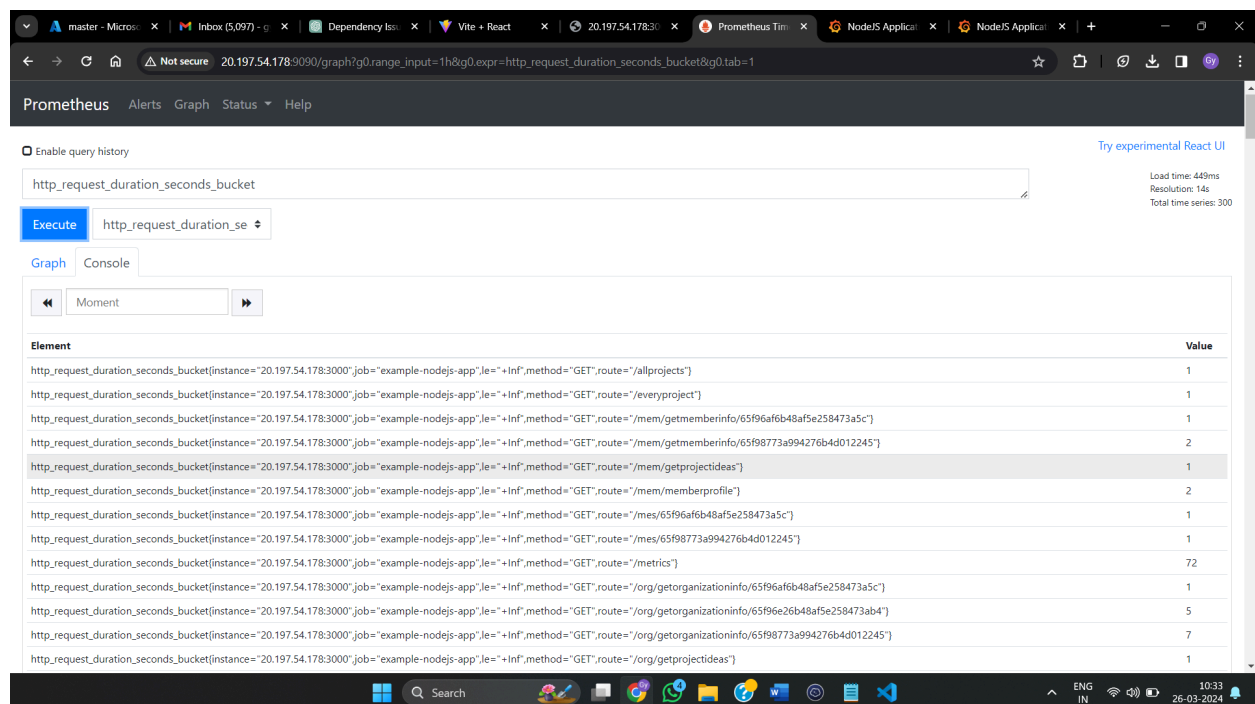
## 7. Technology Stack

### Powering Collaboration and Efficiency

Project Collaboration Pro leverages a robust technology stack to deliver a powerful and scalable platform. Here's a breakdown of some key components:


- **Front-end Technologies:**
  - Project Collaboration Pro utilizes a modern front-end framework **Reactjs** For a user-friendly and interactive interface.
  - JavaScript libraries and frameworks may be used for additional functionalities.
- **Back-end Technologies:**
  - The platform utilizes a secure and scalable back-end technology **Node.js, Express, Socket.io(for chatting)** to handle server-side logic and database interactions.
  - NoSQL databases **MongoDB** may be used for data storage, depending on project requirements.
- **DevOps Practices:**
  - Project Collaboration Pro embraces **DevOps** practices for continuous integration and delivery (CI/CD).
  - Docker containers enable containerized deployments for microservices architecture, promoting scalability and portability.
  - **Prometheus** serves as the platform's monitoring solution, collecting metrics and enabling performance insights (often visualized with tools like **Grafana**).

### Prometheus Usage:





## Single step Deployment(with changes in env's):

 gyanavardhana Update docker-compose.yml

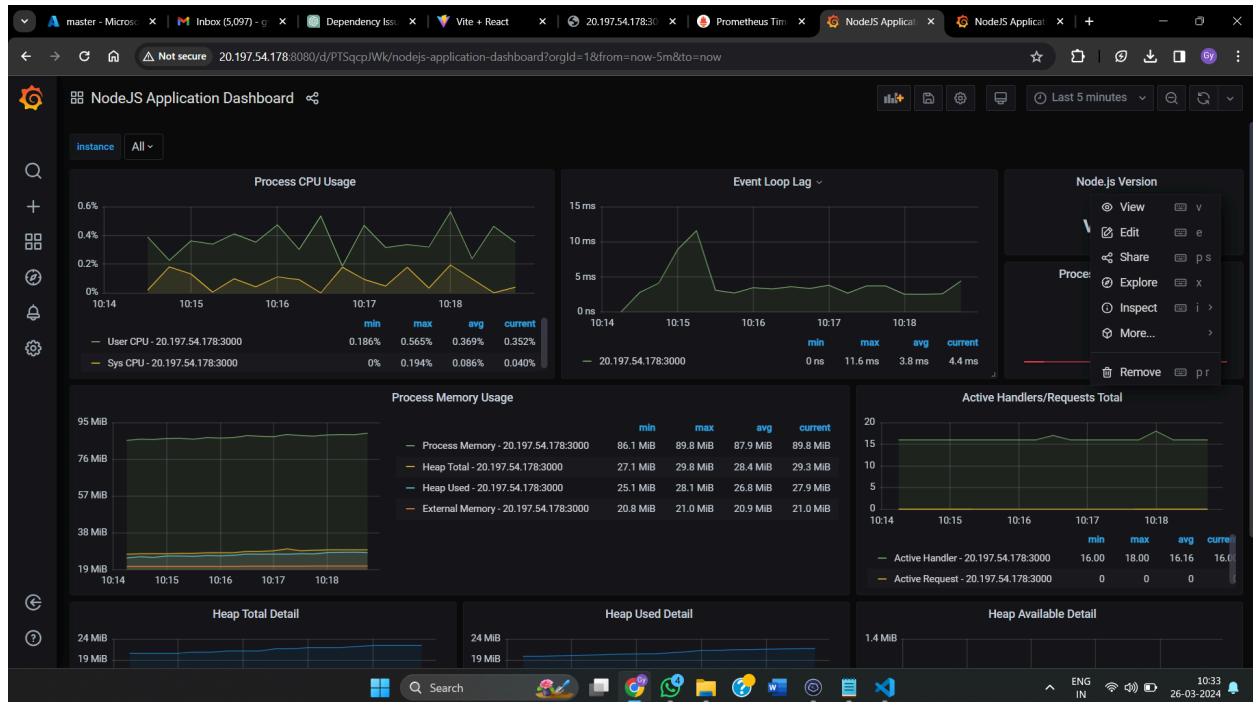
Code

Blame

39 lines (35 loc) · 884 Bytes

```
1  version: '3.8'
2
3  services:
4    client:
5      image: visweshdocker/pmcclientside
6      ports:
7        - "5173:5173"
8      environment:
9        - VITE_APP_URL=http://VM_IP:3000/
10
11   server:
12     image: visweshdocker/pmcserveride
13     restart: on-failure
14     ports:
15       - "3000:3000"
16     environment:
17       - TOKEN=jab
18       - MONGOURL=MONGOURL
19       - AITOKEN=CLARETOKEN
20       - SERVERURL=http://VM_IP:3000
21       - CLIENTURL=http://VM_IP:5173
22
23   prometheus:
24     image: prom/prometheus:v2.20.1
25     ports:
26       - "9090:9090"
27     volumes:
28       - ./prometheus.yml:/etc/prometheus/prometheus.yml
29
30   grafana:
31     image: grafana/grafana:7.1.5
32     ports:
33       - "8080:3000"
34     environment:
35       - GF_AUTH_DISABLE_LOGIN_FORM=true
36       - GF_AUTH_ANONYMOUS_ENABLED=true
37       - GF_AUTH_ANONYMOUS_ORG_ROLE=Admin
38     volumes:
39       - ./datasources.yml:/etc/grafana/provisioning/datasources/datasources.yml
```

## Grafana Usage and Continuous monitoring:



## Benefits of the Tech Stack:

- The chosen technologies contribute to:
  - **Enhanced User Experience:** Modern front-end frameworks ensure a responsive and user-friendly interface.
  - **Scalability and Performance:** Back-end technologies provide a robust foundation for handling large user bases and project data.
  - **Efficient Development & Maintenance:** DevOps practices streamline development workflows and ensure faster deployments.

## Conclusion:

Project Collaboration Pro represents a paradigm shift in project management, addressing longstanding challenges with innovative solutions tailored for modern organizations. By providing a centralized hub for project ideation, management, and communication, it empowers teams to collaborate effectively, driving productivity and success. The platform's integration of DevOps practices ensures scalability, reliability, and maintainability, while its robust technology stack guarantees a seamless user experience. With Project Collaboration Pro, organizations can embark on a new era of project management, where efficiency, collaboration, and innovation converge to propel projects towards success.