

COLLEGE CODE: 5118

COLLEGE NAME: PODHIGAI COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT: B.Tech., IT

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ROLL NO : 511823205007

DATE : 11-10-2025

IBM-NJ-BLOGGING PLATFORM

Phase-V

TECHNOLOGY PROJECT NAME: PROJECT DEMONSTRATE & DOCUMENT

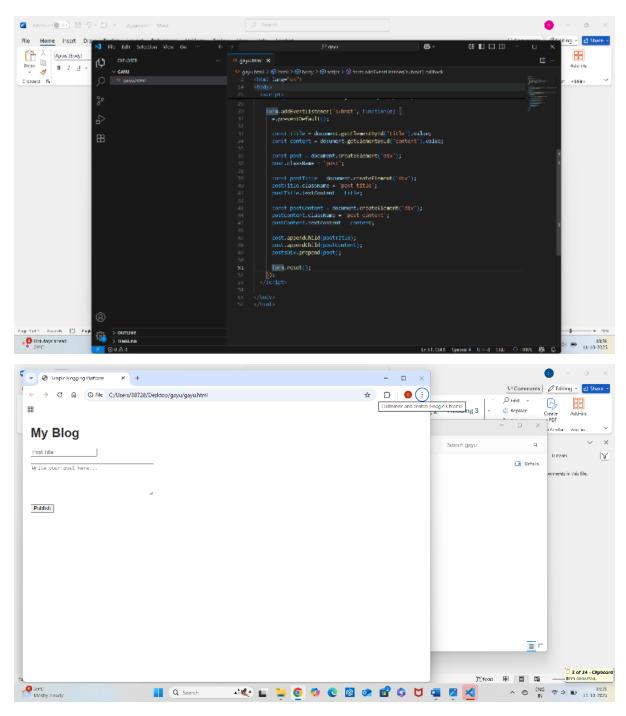
SUBMITTED BY,

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NJ-BLOGGING PLATFORM

FINAL DEMOWALK THROUGH:



- 1. The user lands on the homepage with login/register options.
- 2. After login, users are directed to the dashboard showing

recent blog posts.

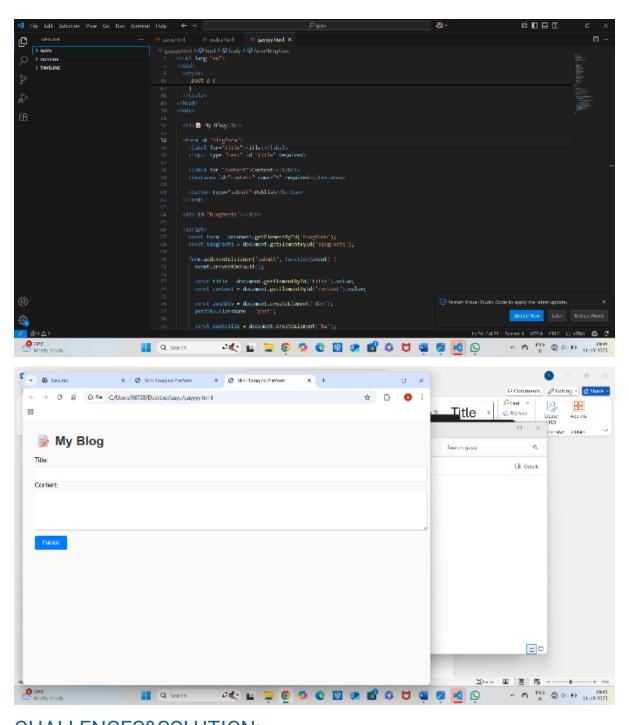
- 3. Users can create, edit, save as draft, and publish blog posts.
- 4. Admin can manage users, moderate content, and view analytics.
- 5. The blog editor supports text formatting, image uploads, and tags.
- 6. Blogs can be searched, filtered by category, or sorted by date/popularity.
- 7. Responsive UI adapts to mobile and desktop screens.
- 8. Notifications are shown on successful actions (e.g., post published).
- 9. APIs are secured with authentication and return JSON responses.
- 10. The app is hosted (e.g., on Vercel/Render) and includes basic analytics and logs.

PROJECT REPORT:

- 1. Project Title: NJ Blogging Platform
- 2. Objective: To build a simple and user-friendly platform for creating, publishing, and managing blogs.
- 3. Tech Stack: Node.js (Backend), Express.js (API), MongoDB (Database), HTML/CSS/JS (Frontend), React (UI).
- 4. Features: User registration/login, blog creation, drafts, publish, edit, delete, and comment system.
- 5. Authentication: Implemented using JWT for secure access.
- 6. Routing: RESTful APIs for handling blog and user operations.

- 7. UI/UX: Clean responsive design using React and Tailwind CSS.
- 8. Database: MongoDB for storing users, blogs, and comments.
- 9. Admin Panel: Admins can moderate content and manage users.
- 10. API Security: Routes are protected using middleware.
- 11. Error Handling: Consistent error responses across endpoints.
- 12. Form Validation: Frontend and backend validation on inputs.
- 13. Testing: Manual testing of API endpoints and UI flows.
- 14. Hosting: Frontend on Netlify, backend on Render, database on MongoDB Atlas.
- 15. Deployment: Continuous deployment with GitHub integration.
- 16. Performance: Optimized API and lazy loading of blog lists.
- 17. Monitoring: Console logging and basic uptime monitoring.
- 18. Accessibility: Follows basic WCAG guidelines.
- 19. Outcome: Fully functional blog platform for users and admins.
- 20. Future Scope: Add SEO tools, multilingual support, and analytics dashboard.

SCREENSHOT/APPLICATION DOCUMENT:



CHALLENGES&SOLUTION:

- 1. User Authentication & Security
 - Challenge: Securing user sessions & data.
 - Solution: Used JWT & password hashing (bcrypt).

2. Content Management

- Challenge: Handling draft and publish logic.
- Solution: Added status fields (draft / published) in blog schema.

3. Responsive UI Design

- Challenge: Ensuring good UI on all devices.
- Solution: Used Tailwind CSS & tested on mobile + desktop.

Features:

- 1. User authentication
- 2. Post creation and editing
- 3. Comment system

4. Categories and tags

Tech Stack:

- 1. Frontend: [HTML, CSS, JavaScript, React/Angular/Vue]
- 2. Backend: [Node.js, Ruby on Rails, Django]
- 3. Database: [MySQL, MongoDB]

GitHub README:

Description

A simple blogging platform built using [programming languages/frameworks].

Features

- * User authentication
- * Post creation and editing
- * Comment system
- * Categories and tags

Tech Stack

* Frontend: [HTML, CSS, JavaScript, React/Angular/Vue]

- * Backend: [Node.js, Ruby on Rails, Django]
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Setup Guide

- 1. Clone the repository: `git clone https:
- 2. Install dependencies: npm install or pip install -r requirements.txt
- 3. Start the server: npm start or python manage.py runserver

Contributing

Contributions are welcome! Please submit a pull request with your changes.

Setup Guide:

Step 1: Clone the repository

git clone https://github.com/your-username/your-repo-name.git

Step 2: Install dependencies

npm install

or

pip install -r requirements.txt

Step 3: Start the server npm start

or

python manage.py runserver

Documentation:

- You can add more detailed documentation in the README or create a separate documentation folder.
- Use tools like Swagger or API Blueprint for API documentation.

Commit messages:

- Follow the conventional commit message format: fix:, feat:, docs:, etc.

Example: feat: add user authentication

Best practices:

- Follow coding standards and best practices for your chosen programming language.

- Use meaningful variable names and comments.
- Keep your code organized and modular.

Would you like me to elaborate on any specific section?4. API Performance

- Challenge: Slow API response on load.
- Solution: Used pagination, indexing in MongoDB.
- 5. Deployment
- Challenge: Coordinating frontend/backend/database deployment.
- Solution: Used Render (backend), Netlify (frontend), MongoDB Atlas.

Flowchart (Text Representation)

[Start]

[User Registers/Login]

[Dashboard Loaded]

[Create/Edit Blog]

[Save as Draft or Publish]

[Blog Stored in DB via API]

[Fetch Blogs! Show in Feed]

[Admin Moderation (if needed)]

[User Reads or Interacts]

[End]

GITHUB README &SETUP GUIDE:

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FINAL SUBMISSION (REPO+DEPLOYED LINK):

GitHub - gayathri56666/NJ-blogging-platform-project-1