Niroj Thapa

Developer

Address	Kathmandu-32,Pepsicola , Pepsicola
Contact Number	9867816329
Email	thapaniroj5769@gmail.com
LinkedIn	https://www.linkedin.com/in/niroj-thapa-648761210/
GitHub	https://github.com/Niroj925

SUMMARY

As a backend developer with over 2 years of experience in designing, implementing, and maintaining scalable server-side applications using Node.js. Adept at building robust RESTful APIs, integrating with various databases (MongoDB,MySql,PostgreSQL, etc.), and ensuring application performance, scalability, and security. Known for collaborative teamwork, agile development practices, and problem-solving skills.

- Backend Development: Extensive experience in backend development using Node.js with Express and Nest.js frameworks.
- API Design and Integration: designing RESTful APIs and integrating with various frontend applications and third-party services.
- Database Management: Skilled in working with NoSQL databases like MongoDB and SQL databases like PostgreSQL, with knowledge of database design, optimization, and queries.
- Performance Optimization: Focused on optimizing application performance through caching, code refactoring, and other best practices.
- Agile and DevOps Practices: Experienced in agile development methodologies, familiar with CI/CD pipelines using GitHub Actions.
- Version Control: Proficient in using Git for version control and collaboration in team environments.
- Problem-Solving and Troubleshooting: Strong ability to troubleshoot and resolve complex technical issues.

With a passion for continuous learning and staying updated with industry trends, I'm dedicated to delivering high-quality backend solutions that meet business requirements and provide excellent user experiences. Looking for opportunities to leverage my skills in challenging projects and contribute to the development teams.

EXPERIENCE

Digital Pravidhi Pvt. Ltd (Anamnagar,kathmandu)

Node.js Developer
Dec, 2023 - May, 2024

In my role as a backend developer, I have designed and developed RESTful APIs with a strong focus on security, particularly in the areas of user authentication, token-based authorization, and Role-Based Access Control (RBAC). Here's a detailed overview of the common patterns and methodologies across my projects:
API Design and Development

- RESTful API Design: Designed RESTful APIs following best practices, with clear and consistent endpoints, HTTP methods, and status codes. This design approach ensured that APIs were intuitive and easy to consume.
- Data Validation and Error Handling: Implemented robust data validation using libraries like Joi or class-validator to ensure incoming data met required formats. Comprehensive error handling

provided meaningful responses to clients, improving the developer experience.
- Versioning and Documentation: Adopted API versioning to ensure backward compatibility and maintainability. Used tools like Swagger or OpenAPI to document APIs, enabling clear communication with frontend developers and external clients.

Authentication and Authorization

- Token-Based Authentication: Implemented JSON Web Tokens (JWT) for secure, stateless authentication. This approach provided scalability and was compatible with various frontend frameworks.
- Role-Based Access Control (RBAC): Developed a role-based access control system to manage user roles and permissions. This system supported dynamic authorization checks based on user roles and privileges.
- Secure Token Management: Created secure token management with token expiration, refresh mechanisms, and proper invalidation to prevent unauthorized access.

Database Design and Integration

- Database Technologies: Integrated with NoSQL (MongoDB) and SQL (PostgreSQL,MySql) databases, depending on project requirements. Used ORMs like TypeORM ,Sequelize or Mongoose to manage database operations.
- Database Optimization: Implemented indexing, query optimization, and data caching to improve database performance and scalability.
- Data Consistency and Transactions: Used transactions and other data consistency mechanisms to ensure data integrity across complex operations.

Security Best Practices

- Input Validation and Sanitization: Applied strict input validation to prevent injection attacks and sanitized user input to avoid common security vulnerabilities.
- Secure Data Storage: Stored sensitive information, such as passwords, using secure encryption and hashing techniques like bcrypt or argon2.
- Continuous Integration/Continuous Deployment (CI/CD): Integrated CI/CD pipelines using tools like GitHub Actions, enabling automated testing, deployment, and code quality checks.
- Agile Methodologies: Worked in Agile environments, participating in daily stand-ups, sprint planning, and retrospectives to ensure collaborative development processes.
- Code Reviews and Best Practices: Engaged in code reviews to maintain code quality and followed best practices for clean, maintainable code.

These detailed features and practices reflect my approach to designing and developing Node.js projects. My focus on robust API design, secure authentication and authorization, database integration, and security best practices has enabled me to deliver scalable and reliable backend solutions. Through a combination of technical skills, DevOps practices, and agile methodologies, I have contributed to successful projects that meet business requirements and offer a seamless user experience.

EDUCATION

Bhaktapur Multiple Campus (Bhaktapur)

B.Sc.CSIT
Nov, 2019 - Present

PROJECTS

WebRTC Projectt

https://github.com/Niroj925/kuraute

Ecommerce project

https://github.com/Niroj925/phonehub

Stroke prediction system

https://github.com/Niroj925/prediction_system

EMI

https://github.com/Niroj925/EMI

Skills

Node.js(Express and Nest), ReactJs,Nextjs, Docker, C/C++, Javascript/Typescript, Rust

Language

Nepali, English, Hindi