Ametheus Health
Backend Developers

Summary

NodeJS Backend Developer

- **JavaScript**: Mastery in JavaScript, Understand concepts such as closures, callbacks, promises, async/await and ES6+ features.
- **Node.js Fundamentals**: Deep understanding of Node.js and its core modules. How to work with the file system, streams, events and modules. Familiarized with npm (Node Package Manager) and commonly used npm packages.
- **Express.js**: Express.js is a popular web application framework for Node.js. Understandings of routing, middleware, request handling and how to structure applications using Express is important because we will build our backend systems using ExpressJS Framwork.
- **MongoDB Basics**: Fundamentals of MongoDB, including installation, CRUD operations (Create, Read, Update, Delete), querying documents, indexing and aggregation framework is important.
- **Mongoose ODM (Object Data Modeling)**: Mongoose is a popular ODM library for MongoDB and provides a schema-based solution to model application data. how to define schemas, models, perform CRUD operations and handle relationships using Mongoose is important.
- **RESTful API Design**: Understandings of RESTful principles and how to design APIs using Express.js and MongoDB. Knowledge about HTTP methods, status codes, resource naming and authentication/authorization mechanisms.
- **Error Handling and Debugging**: Skills in error handling and debugging Node.js applications. How to use built-in error handling mechanisms, logging, debugging tools and techniques to identify and resolve issues.
- **Authentication and Authorization**: How to implement user authentication and authorization in Node.js applications using strategies like JWT (JSON Web Tokens), OAuth, Passport.js and middleware.

- **Security Best Practices**: Understandings of common security vulnerabilities in web applications and how to handle them in Node.js and MongoDB-based projects. Knowledge about techniques such as input validation, parameterized queries, encryption and secure session management.
- **Testing**: Knowledge of testing methodologies and frameworks such as Mocha, Chai, Jest or Jasmine. How to write unit tests, integration tests and end-to-end tests for Node.js applications and MongoDB queries.
- **Scalability and Performance Optimization**: Principles of scalability and performance optimization in Node.js and MongoDB applications. Learn about caching, load balancing, database indexing, query optimization and other techniques to improve application performance.
- **Deployment and DevOps**: Know about how to deploy Node.js and MongoDB applications in production environments. Familiarize yourself with tools like Docker, Kubernetes, AWS or other cloud platforms for application deployment, monitoring, and scaling.
- **Version Control**: Proficiency in using version control systems like Git for managing code repositories, branching, merging and collaboration with other developers.
- **Continuous Integration and Continuous Deployment (CI/CD)**: Understandings of CI/CD pipelines and how to automate the build, test and deployment processes for Node.js and MongoDB applications using tools like Jenkins, Travis CI, CircleCI or GitHub Actions.

Job Description for Senior Developer

NodeJS Senior Developer (1 Position)

Position Overview:

We are looking for a highly skilled Senior Backend Developer to join our team. The ideal candidate must have extensive experience in Node.js and MongoDB development, with a strong understanding of backend architecture, RESTful API design and best practices in software development. The Senior Backend Developer will play a key role in designing, building and maintaining scalable and robust backend systems to support our applications.

Key Responsibilities and Requirements

JavaScript:
- Expert in JavaScript concepts such as closures, callbacks, promises, async/await and ES6+ features.
- Utilize JavaScript effectively in Node.js and MongoDB development.

Node.js Fundamentals:
- Deep understanding of Node.js and its core modules.
- Proficiency in working with the file system, streams, events and modules.
- Familiarity with npm (Node Package Manager) and commonly used npm packages.

Express.js Expertise:
- Expertise in Express.js, including routing, middleware, request handling and application structure.
- Design and implement backend systems using the Express.js framework.

MongoDB Proficiency:
- Strong understanding of MongoDB, including CRUD operations, querying documents, indexing and aggregation framework.
- Experience with Mongoose ODM for schema-based data modeling and interaction with MongoDB.

RESTful API Design:
- Design and implement RESTful APIs using Express.js and MongoDB.
- Knowledge of HTTP methods, status codes, resource naming and authentication/authorization mechanisms.

Error Handling and Debugging:
- Proficient in error handling and debugging Node.js applications.
- Utilize built-in error handling mechanisms, logging, debugging tools and techniques to identify and resolve issues.

Authentication and Authorization:
- Implement user authentication and authorization using strategies like JWT, OAuth, Passport.js and middleware.

Security Best Practices:
- Understand common security vulnerabilities in web applications and implement best practices to handle them.
- Knowledge of techniques such as input validation, parameterized queries, encryption and secure session management.

Testing:
- Knowledge of testing methodologies and frameworks such as Mocha, Chai, Jest or Jasmine.
- Write unit tests, integration tests and end-to-end tests for Node.js applications and MongoDB queries.

Scalability and Performance Optimization:
- Implement principles of scalability and performance optimization in Node.js and MongoDB applications.
- Utilize techniques such as caching, load balancing, database indexing and query optimization to improve application performance.

Deployment and DevOps:
- Deploy Node.js and MongoDB applications in production environments.
- Familiarity with tools like Docker, Kubernetes, AWS or other cloud platforms for application deployment, monitoring and scaling.

Version Control:
- Proficient in using Git for managing code repositories, branching, merging and collaboration with other developers.

Continuous Integration and Continuous Deployment (CI/CD):
- Understand CI/CD pipelines and automate the build, test and deployment processes for Node.js and MongoDB applications using tools like Jenkins, Travis CI, CircleCI or GitHub Actions.

Job Description for Junior Developer

Junior Developer (2 Positions)

Position Overview:

We are seeking two talented Junior Developers to join our team. The successful candidates will work closely with our senior developers to build and maintain software solutions. This role requires strong coding skills, the ability to manage codebases efficiently and a collaborative mindset to work effectively within a team.

Key Responsibilities and Requirements

Coding:
- Write clean, efficient and well-documented code in accordance with established coding standards of NodeJS, Javascript.
- Collaborate with senior developers to understand requirements and translate them into technical solutions.
- Continuously improve coding skills and stay updated on industry best practices and emerging technologies.

Codebase Management:
- Assist in managing the codebase, including version control, branching, merging and resolving conflicts in Github or other codebase management systems.
- Follow established coding conventions and contribute to code reviews to maintain code quality.
- Help identify areas for codebase optimization and refactoring under the guidance of senior developers.

Collaboration:
- Work collaboratively with the development team to meet project deadlines and deliver high-quality solutions.
- Communicate effectively with team members to understand project requirements and provide regular updates on progress.
- Participate in team meetings, brainstorming sessions and knowledge-sharing activities to contribute ideas and insights.

Learning and Development:
- Actively seek opportunities to learn and grow professionally, both independently and through mentorship from senior developers.
- Take initiative in exploring new technologies, tools and frameworks that can enhance development processes and productivity.