

Thamaraiselvan Madheshwaran

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SUMMARY

Experienced software developer with 2 years of experience at KnowledgeQ Interactive Consultancy Services Private. Proficient in backend development, including programming languages such as Javascript, Typescript and Python, as well as database management. Seeking a position as a Backend Developer to leverage skills in creating robust and efficient software solutions.

EXPERIENCE

software developer

KnowledgeQ Interactive Consultancy Services Private Limited

May 2023 - April 2024, coimbatore

- Orchestrated the seamless integration of third-party services to augment project capabilities and functionalities.
- Developed a robust API infrastructure encompassing the entire project, facilitating smooth communication and data exchange between different components.
- Applied advanced machine learning methodologies to refine system processes and enhance performance, contributing to the project's intelligent functionalities.
- Demonstrated proficiency in managing both SQL and NoSQL databases, ensuring efficient storage, retrieval, and management of project data according to specific requirements and scalability needs.
- Spearheaded the design and implementation of frontend features, focusing on enhancing user experience, interface aesthetics, and functionality to meet project objectives effectively.

Backend developer

squashapps pvt ltd

February 2022 - March 2023, coimbatore

- Developed a high-throughput API handling reducing latency by 30% and improving system scalability by integrating advanced caching mechanisms and optimizing database queries.
- Maintained databases

PROJECTS

Psychiatric-Mental Health Nurse Practitioner-Board Certified

KnowledgeQ Interactive Consultancy Services Private Limited · March 2024 - March 2024

• **Clinical Expertise Integration:**

- Leveraged in-depth knowledge and expertise in psychiatric-mental health nursing to inform the development of the API, ensuring it meets the unique needs and requirements of mental health practitioners and patients.

• **API Design and Development:**

- Collaborated with software engineers and developers to design and develop a robust API for the PHP project, enabling seamless integration of mental health assessment tools, treatment protocols, and patient management systems.

• **Data Security and Confidentiality:**

- Implemented stringent data security measures and HIPAA-compliant protocols to safeguard sensitive patient information transmitted and stored through the API.
- Ensured encryption of data in transit and at rest, access controls, and audit trails to maintain patient confidentiality and compliance with healthcare regulations.

• **Interoperability and Integration:**

- Designed the API to facilitate interoperability with electronic health record (EHR) systems, telemedicine platforms, and other healthcare IT systems, enabling seamless data exchange and workflow integration across healthcare settings.

• **Clinical Decision Support:**

- Integrated clinical decision support algorithms and evidence-based guidelines into the API to assist healthcare providers in making informed treatment decisions and managing psychiatric conditions effectively.
- Implemented features such as medication interaction checks, diagnostic decision support, and treatment planning tools to enhance clinical decision-making and patient outcomes.

• **User Experience and Accessibility:**

- Ensured the API's user interface and documentation are user-friendly and accessible to healthcare providers with varying levels of technical expertise.

- Provided comprehensive documentation, code samples, and developer resources to facilitate adoption and utilization of the API by mental health professionals and software developers.

• **Quality Assurance and Testing:**

- Conducted thorough testing and quality assurance processes to validate the functionality, performance, and reliability of the API across different use cases and environments.
- Collaborated with QA testers, clinicians, and stakeholders to identify and address any issues or bugs, ensuring the API meets high standards of quality and usability.

Netbulk

KnowledgeQ Interactive Consultancy Services Private Limited · <https://netbulkship.com/> · February 2024 – February 2024

• **Backend Setup:**

- Spearheaded the setup and configuration of the backend infrastructure, laying the foundation for the project's development.
- Selected appropriate technologies and frameworks based on project requirements, scalability needs, and team expertise.

• **API Development:**

- Initiated the development of core APIs essential for the project's functionality, focusing on essential endpoints and data structures.
- Implemented RESTful API architecture, adhering to best practices for resource naming, HTTP methods, and response formats.

• **Scaffold Setup:**

- Established scaffold structures and project templates to streamline development workflows and maintain consistency across codebases.
- Integrated scaffolding tools and code generators to automate repetitive tasks and expedite the creation of boilerplate code.

• **Framework Selection:**

- Evaluated and selected backend frameworks and libraries best suited for the project's requirements, considering factors such as performance, scalability, and community support.
- Set up project dependencies and configurations to ensure seamless integration with chosen frameworks and libraries.

• **Database Configuration:**

- Configured database connections and ORM frameworks to facilitate data persistence and manipulation within the backend system.
- Designed database schemas and models to reflect project data entities and relationships, ensuring efficient data storage and retrieval.

• **Authentication and Authorization:**

- Implemented authentication and authorization mechanisms to secure API endpoints and restrict access to authenticated users.
- Integrated authentication providers such as JWT, OAuth, or session-based authentication to validate user credentials and manage user sessions securely.

• **Testing and Validation:**

- Conducted unit testing and validation of backend components and APIs to ensure functionality, reliability, and adherence to specifications.
- Collaborated with frontend developers and QA testers to validate API endpoints and data interactions, addressing any issues or inconsistencies early in the development process.

Fingertip

KnowledgeQ Interactive Consultancy Services Private Limited · <https://thefingertip-b2b.in/> · May 2023 – December 2023

• **Transaction Processing:**

- Developed backend systems to handle transaction processing, ensuring accuracy, reliability, and security in financial operations.
- Implemented features such as real-time transaction validation, reconciliation, and settlement to maintain integrity and consistency in financial data.

• **Compliance and Regulatory Requirements:**

- Ensured adherence to regulatory standards such as PCI DSS, KYC, and AML by implementing robust compliance measures within the backend infrastructure.
- Integrated identity verification services, transaction monitoring systems, and risk management tools to mitigate fraud and comply with legal obligations.

• **Payment Gateway Integration:**

- Integrated with payment gateways and financial institutions to facilitate secure payment processing, including credit/debit card transactions, bank transfers, and digital wallets.
- Implemented webhook notifications and event-driven architecture to handle asynchronous payment processing and ensure real-time updates on transaction status.

• **Security and Authentication:**

- Implemented strong encryption protocols, secure authentication mechanisms, and access control policies to protect sensitive financial data and user information.
- Leveraged multi-factor authentication, OAuth, and JWT tokens to ensure secure user authentication and authorization for accessing financial services and functionalities.

• **Scalability and Performance:**

- Designed and optimized backend systems for scalability and high performance to accommodate growing user bases and increasing transaction volumes.
- Utilized distributed architectures, microservices, and cloud-based infrastructure to achieve elasticity and resilience in handling peak loads and fluctuations in demand.

• **Reporting and Analytics:**

- Integrated reporting and analytics tools to provide insights into financial transactions, user behaviors, and market trends.
- Developed backend APIs and data pipelines for extracting, transforming, and analyzing large datasets to generate actionable insights for business decision-making and risk management.
- **Continuous Integration and Deployment (CI/CD):**
- Implemented CI/CD pipelines and automated testing frameworks to ensure rapid and reliable deployment of backend code changes while maintaining code quality and system stability.
- Conducted code reviews, unit tests, and integration tests to validate backend functionalities and mitigate risks associated with software updates and releases.

Network courier

squashapps pvt ltd • <https://www.networkcourier.com.sg/3DWEBSITE/index.aspx> • August 2022 – March 2023

• **Backend Development:**

- Spearheaded the development of robust backend systems for ERP projects, ensuring high performance, scalability, and reliability.
- Implemented core backend functionalities such as user authentication, authorization, and session management to secure sensitive data and regulate access within the ERP system.

• **Data Management:**

- Designed and optimized databases to efficiently store and manage vast amounts of data critical to ERP operations.
- Implemented data migration strategies to seamlessly transition data from legacy systems to the new ERP platform, ensuring data integrity and minimal disruption to business processes.

• **Integration:**

- Integrated various modules and third-party systems with the ERP backend to enable seamless communication and data exchange across different departments and systems.
- Developed custom APIs and middleware to facilitate integration with external systems such as CRM, accounting, and inventory management systems, streamlining business processes and enhancing productivity.

• **Customization and Extensibility:**

- Collaborated with cross-functional teams to understand business requirements and customize the ERP backend to meet specific needs and workflows.
- Implemented extensible architecture and modular design principles to accommodate future enhancements and changes in business processes without compromising system stability or performance.

• **Performance Optimization:**

- Conducted performance profiling and optimization of backend systems to ensure optimal response times and resource utilization, enhancing overall system efficiency and user satisfaction.
- Implemented caching mechanisms, query optimizations, and database indexing strategies to improve system performance and scalability, particularly during peak usage periods.

EDUCATION

Karpagam Institute of Technology

Minor in BE ECE • coimbatore • Tamilnadu • 2021 • 7.3

CERTIFICATIONS

Fullstack web developer

Nschool Academy • 2024,20

SKILLS

Frontend development: Html, Css, Bootstarp, ReactJs

Backend development: Nodejs, Express, Sql, NoSql

Python

Machine Learning

Javascript