NIKHIL GANDE
Software Developer
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PROFESSIONAL SUMMARY

- **8+ years of experience as an accomplished Full-Stack Developer**, delivering high-performance, scalable software solutions across diverse industries.
- **Expert in Java, Spring Boot**, and ORM tools (Hibernate, JPA), with a proven track record in back-end development and API design.
- **Strong full-stack development skills**, specializing in **React, Angular, JavaScript, HTML, CSS**, and **Bootstrap** to create seamless, responsive user interfaces.
- **Proficient in database design**, including **relational databases** (e.g., **PostgreSQL**, **MySQL**) and **NoSQL databases** like **MongoDB**, ensuring efficient data management, complex queries, and system performance.
- Experienced in designing and implementing **RESTful APIs**, using **JSON** and **XML** for data communication between front-end and back-end systems, ensuring scalability and performance.
- Experienced with **version control using Git** and **Agile methodologies**, leveraging **JIRA** for project management, issue tracking, and sprint planning to drive development and ensure alignment with project goals.
- **Hands-on expertise in DevOps tools** (Docker, **Kubernetes**, AWS) and **Unix/Linux environments**, optimizing development workflows and enhancing scalability.
- Expertise in implementing **CI/CD pipelines** using **AWS CodePipeline**, **AWS CodeDeploy, Aws CodeBuild** and other tools to automate build, test, and deployment processes, ensuring faster and more reliable releases.
- Implemented **Apache Kafka** and **RabbitMQ** for real-time messaging and event-driven architectures, ensuring reliable and scalable data streaming across services.
- Utilized **Redis Cache** for optimizing application performance, reducing database load, and improving response times in high-traffic scenarios.
- **Proficient in GraphQL**, designing and optimizing flexible APIs for efficient data querying, reducing over-fetching and improving performance in modern web applications.
- **Exceptional problem-solving and debugging abilities**, consistently delivering optimized solutions while collaborating with cross-functional teams.
- Deep knowledge of **algorithms, data structures, and design patterns**, enabling the development of maintainable and efficient codebases.

TECHNICAL SKILLS

Category	Technologies
Programming Languages	Java (8/11/17), Kotlin, C, J2EE, TypeScript, Python, JavaScript
Frameworks	Spring Framework (MVC, Security, Data JPA, Cloud, WebFlux), Hibernate (ORM, Search, Validator), JSF, Struts 2, NodeJS, SpringBoot, ReactJS
Cloud Platforms	AWS (EC2, RDS, S3, DynamoDB, Lambda, CloudFormation, CloudWatch, CodePipeline, CodeBuild, Elastic Beanstalk), Docker, Kubernetes, Terraform

Mark-up/XML Technologies	XML, XSD, JSON
Web/App Servers	Apache Tomcat, JBoss/WildFly, Jetty
Databases	Oracle, MySQL, PostgreSQL, DB2, MongoDB, Cassandra
Web Services/API Services	REST (JAX-RS, Spring REST), SOAP (JAX-WS), GraphQL, OpenAPI/Swagger
Testing Tools	JUnit, Mockito, TestNG, AssertJ, WireMock, Cucumber, Selenium, JMeter, Postman, Karate
Logging/Others	Log4j/Logback, SLF4J, Micrometer, Prometheus, Grafana
Version Control	Git, GitHub, GitLab, Bitbucket
Development Tools/Environments	Maven, Ant, Eclipse, IntelliJ IDEA, Visual Studio Code, Jira, PyCharm, Jupyter, Gradle
Middleware/Messaging Systems	Apache Kafka, RabbitMQ, ActiveMQ, Apache Camel, Spring JMS
CI/CD Tools	Jenkins, GitLab CI/CD, Docker Hub, AWS CodePipeline, AWS CodeBuild, Bamboo
Other Tools and Technologies	UNIX, Apache Tomcat, Hibernate Search, Apache Cassandra-Spark Connector, Dropwizard, ELK Stack (Elasticsearch, Logstash, Kibana), Ansible, Kubernetes Helm, Perl, JMS (Java Messaging Service), Apache Maven, Shell
Soft Skills	Problem Solving, Communication, Teamwork, Leadership, Adaptability

EXPERIENCE

Bank of Montreal, Chicago IL **Dec 2023 - Present**

Senior Software Developer

Project Description: I am part of the team that developed a secure and scalable web application for BMO customers, making managing their checking accounts simple and efficient. The platform includes features like real-time transaction tracking, detailed account insights, secure fund transfers, and bill payments. I contributed to designing user-friendly interfaces using React to enhance customer engagement, created reliable back-end APIs with SpringBoot for real-time operations, and optimized the database with PostgreSQL for smooth and scalable performance. As part of the team, I helped deploy the application on AWS, ensuring high availability and performance. My focus was on delivering a secure and user-centered solution that improved the overall banking experience for customers.

Responsibilities:

- Developed a secure and scalable web application for BMO customers, leveraging **ReactJS**, **HTML**, **CSS**, and **JavaScript** which improved customer engagement and reduced user drop-off by 15%.
- Optimized React application performance by utilizing **useState** and **useEffect** hooks, reducing unnecessary re-renders by 30% and improving load times and user experience.
- **Boosted SEO and page load speeds** using Next.js for Server-Side Rendering (SSR) and **Static Site Generation (SSG),** achieving a 40% increase in search engine ranking and a 35% faster initial page load time.
- **Managed global state with Redux and React Context API**, ensuring real-time data synchronization across multiple views and components, reducing data load times by 20% and enhancing user interaction.
- Developed and optimized back-end services for checking account management using **Spring Boot**, ensuring high scalability, security, and reliability.
- Applied **Spring Data JPA** for object-relational mapping, simplifying data access and ensuring efficient interaction with the database.

- **Improved Spring Boot backend** by implementing **multithreading** and **synchronization techniques**, ensuring thread-safe operations and protecting critical sections of code while handling high-throughput transactions
- Used **Swagger** for API documentation, ensuring easy integration for front-end developers and external systems while improving team collaboration and API testing.
- **Implemented secure authentication and authorization using Spring Security, OAuth2, and multi-factor authentication**, integrating **open-source ID** and login mechanisms to enable token-based authentication, **Role-Based Access Control** (**RBAC)**, and enhanced protection of sensitive data.
- **Achieved 95% unit test coverage with JUnit**, significantly reducing production defects and ensuring code reliability and maintainability.
- **Used Amazon Kinesis** for real-time data streaming, enabling dynamic updates on account activities and enhancing the platform's responsiveness for BMO customers.
- **Implemented AWS Redis Cache** to enhance application performance by caching frequently accessed data, reducing database load, and improving response times for real-time transaction tracking and account updates for BMO customers
- **Containerized microservices using Docker**, ensuring consistent environments across development, testing, and production stages, simplifying the deployment process, and enhancing scalability and portability
- **Deployed and managed containerized applications using Amazon ECS**, streamlining service orchestration, auto-scaling, and load balancing, ensuring high availability and reliability of the BMO platforms during peak traffic periods.
- Used **Gradle** for efficient build automation and dependency management, ensuring smooth integration and fast deployment cycles.
- **Conducted efficient API testing with Postman**, validating RESTful endpoints, which reduced debugging time by 25% and ensured smooth integration between front-end and back-end systems.
- **Leveraged Bitbucket for version control** and **JIRA for agile project management**, enabling seamless collaboration, efficient code management through pull requests, and tracking of tasks, bugs, and user stories, which enhanced team coordination and project delivery timelines.

Environment: Java, SpringBoot, Spring JPA, Spring Security, React. Redux, JavaScript, Next.js, Reddis, Git, Bitbucket, AWS S3, Ec2,ECS, Docker, Amazon Kinesis, Postman, JIRA

Universal Orlando, Orlando, FL **Jan 2022 – Nov 2023**

Software Developer

Project Description: Worked with the Universal Orlando team to redesign and enhance the digital platform for ticket and hotel bookings. My contributions included developing a responsive, user-friendly interface using **ReactJS**, implementing performance optimizations for faster load times, and integrating real-time data for accurate availability and pricing. I also worked on building and optimizing APIs for booking transactions and ensuring seamless communication between the front-end and back-end systems. Additionally, I helped deploy the platform on **AWS**, ensuring scalability and high availability, while monitoring performance using **AWS CloudWatch**. The redesigned platform aimed to improve user engagement, enhance the booking experience, and ensure reliable performance during peak traffic periods.

Responsibilities:

- Played a key role in enhancing Universal Orlando's digital platform using **ReactJS** to provide a seamless, responsive interface for ticket and hotel bookings , which resulted in increase in user engagement and a 15% improvement in booking conversion rates.
- Optimized application performance by implementing React.memo and shouldComponentUpdate, reducing unnecessary re-renders and improving load time by 30%.

- Designed and built a mobile version of the consumer dashboard using **React Native**, ensuring feature consistency with the web application.
- Integrated **WebSocket** and **RESTful APIs** to provide real-time transaction tracking and account insights for up-to-date financial data.
- Built a real-time alert and notification system using **WebSocket** and **Push API**, keeping users informed of unusual activity and system changes.
- **Leveraged D3.js and Chart.js** to build interactive graphs and charts, enabling dynamic visual insights into transaction data, which improved user satisfaction and interaction by 30%.
- Led the back-end development with **Java (Spring Boot)**, creating robust, scalable services to support fund transfers, transaction tracking, and bill payments.
- **Implemented secure user authentication and Role-Based Access Control (RBAC)** using **Spring Security, OAuth2,** and **JWT**, enabling token-based authentication and ensuring scalable protection of sensitive customer data.
- **Optimized Spring Boot backend for Universal Orlando** by applying **multithreading** and **concurrency** concepts to handle high-throughput transactions, ensuring scalability and thread-safety in the application architecture.
- Leveraged **Maven** for project management and building processes, ensuring consistent dependencies, versioning, and smooth integration within the CI/CD pipeline.
- **Incorporated Apache Kafka for real-time data streaming**, enabling dynamic updates on ticket availability and reservations, enhancing platform responsiveness and reducing booking delays by 30%.
- **Implemented comprehensive unit testing with Mockito**, achieving 95% test coverage and reducing post-deployment defects by 35%, ensuring a high-quality, reliable application.
- Designed and optimized data storage solutions using **Amazon RDS** for structured data and **Amazon DynamoDB** for high-velocity transactional data.
- **Integrated GraphQL for efficient data fetching**, improving query performance by 25% and reducing server load by 15%, ensuring faster data retrieval for users.
- Ensured system security and optimized performance by implementing best practices like input validation, rate limiting, and API response time improvements.
- **Monitored system health and performance using Spring Boot Actuator and AWS CloudWatch**, providing actionable insights that helped reduce downtime by 20%.
- Deployed the application on **AWS** using **EC2**, **S3**, **Lambda**, and **Elastic Beanstalk** for scalable compute resources, secure data storage, and serverless functions.
- **Automated build, test, and deployment processes with AWS CodePipeline, CodeBuild, and CodeDeploy**, improving release cycles and reducing deployment errors.
- Set up **AWS CloudWatch** for real-time performance monitoring, including custom dashboards and alarms to proactively address system issues.
- **Used AWS CloudWatch Logs Insights for real-time log analysis**, troubleshooting application issues and ensuring smooth operations, reducing debugging time by 20%.
- Utilized **JIRA** for project management, issue tracking, and sprint planning, and used **Git** for version control, ensuring smooth collaboration and code management throughout the development cycle

Environment: Java, SpringBoot, Spring JPA, Spring Security, React. Redux, JavaScript, Apache Kafka, Reddis, Git, Github, AWS S3, Ec2, ECS, CodeBuild, AWS CodeDeploy, Elastic Beanstalk, Docker, Amazon Kinesis

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Kohl's, Milwaukee, WI **Nov 2019 – Dec 2021**

Software Developer

Project Description: As a Full Stack Developer, I played a key role in developing a seamless platform for Kohl's that integrated e-commerce and in-store shopping experiences. My contributions included designing and implementing intuitive features such as personalized recommendations, efficient checkout processes, and user-friendly navigation. On the backend, I focused on optimizing inventory management systems, ensuring real-time

data synchronization between online and in-store stock. I collaborated closely with cross-functional teams to deliver scalable solutions that enhanced both the customer experience and operational efficiency. The platform's enhancements resulted in improved digital efficiency, increased customer satisfaction, and contributed to overall business growth.

Responsibilities:

- **Designed intuitive and responsive interfaces** using **Angular**, ensuring seamless navigation and enhanced user engagement across desktop, tablet, and mobile devices.
- **Implemented Angular Routing** for smooth navigation between product pages, cart, and checkout, while **integrating Angular Forms** to streamline user input for account creation, order checkout, and payment, enhancing overall user experience.
- **Employed RxJS for asynchronous operations**, enabling real-time data fetching for product availability, price updates, and promotions
- **Utilized Angular's Dependency Injection (DI)** to manage services and enhance modularity, while **optimizing performance with lazy loading** to load components only when needed, improving app speed and page load times.
- **Designed RESTful APIs using Spring** to handle critical e-commerce functionalities, such as product search, user authentication, inventory updates, and order processing
- **Optimized database interactions with Hibernate**, providing seamless object-relational mapping (ORM) for efficient CRUD operations and enhanced database performance.
- **Integrated Spring Data** for handling complex queries, improving the system's efficiency in retrieving and managing data across the platform
- **Implemented caching strategies** with **Spring Cache** to improve performance, reducing the number of redundant API calls and speeding up response times for frequently accessed data.
- Integrated **RabbitMQ** with Spring to implement reliable messaging queues, ensuring asynchronous communication and efficient task processing.
- Integrated **MongoDB** with Spring using **Spring Data MongoDB**, optimizing **CRUD** operations and ensuring scalable data access with Dependency Injection.
- Integrating **AWS RDS** and **ElastiCache** with Spring allows you to combine the reliability of RDS for persistent data and the speed of ElastiCache for caching, resulting in a more efficient and scalable application architecture.
- Utilized **Docker** for containerization and deployed applications on **AWS EKS**, ensuring scalable, reliable, and efficient orchestration of microservices in a cloud-native environment.
- Implemented **AWS CloudFormation** for Infrastructure as Code (**IaC**), automating the provisioning and management of cloud resources, and utilized **Canary deployment** strategies for smooth, low-risk application rollouts and monitoring in production.
- Utilized **AWS CloudWatch** for real-time monitoring of system performance and resource utilization, and created **custom alarm**, **dashboards** to proactively detect and address potential issues, ensuring high system availability and performance

Environment: Angular, Spring MVC, Hibernate, TypeScript, RxJS, RabbitMQ, AWS, Docker, AWS EKS, AWS CloudFormation, AWS RDS, AWS CloudWatch, ElasticCache, MongoDB

Zomato, Hyderabad India **Dec 2016 – October 2019**

Software Developer

Project Description: As a Full Stack Developer at Zomato, I contributed to enhancing the platform by developing both frontend and backend systems. On the frontend, I utilized React to build responsive and user-friendly interfaces for restaurant search, order management, and customer interaction, ensuring a seamless user experience. On the backend, I leveraged AWS serverless services, including API Gateway and Lambda functions, to design and implement scalable and efficient APIs for managing restaurant data, customer orders, and payment processing. This serverless architecture improved performance, reduced infrastructure management overhead, and ensured

high availability. Collaborating closely with cross-functional teams, I focused on delivering innovative and reliable solutions that enhanced the platform's functionality and user satisfaction.

Responsibilities:

- Built responsive and interactive user interfaces using **React**, ensuring seamless user experiences for restaurant search, order management, and customer interactions.
- Enhanced performance and scalability by utilizing React's component-based architecture and state management libraries like **Redux**.
- Implemented dynamic UI updates with **React Hooks** (e.g., useState and useEffect) to improve responsiveness and interactivity.
- Designed and deployed RESTful APIs using AWS **API Gateway** and **Lambda,** enabling efficient communication between the frontend and backend service
- Utilized **AWS SQS** for asynchronous task processing, ensuring reliable and scalable handling of order updates and notifications
- Implemented real-time notifications and messaging systems with **AWS SNS**, improving communication between users and restaurants.
- Stored and managed media assets such as menu images and user uploads in **Amazon S3**, ensuring secure and scalable storage.
- Utilized **AWS DynamoDB** for efficient order management, implementing a serverless architecture with AWS Lambda to ensure scalable, real-time data processing and high availability.
- Integrated **AWS Cognito** for secure user authentication and authorization, enabling seamless login experiences with support for multi-factor authentication (MFA) and token-based security protocols
- Automated infrastructure provisioning and deployment using **AWS CloudFormation**, enabling consistent resource management and facilitating Canary Deployments for gradual rollout of updates, ensuring minimal disruption and quick rollback if issues arise.
- Integrated **GitHub** with a CI/CD pipeline, leveraging **AWS CodeBuild** for automated builds and **AWS CodeDeploy** for seamless deployments, ensuring efficient and reliable application delivery.
- Utilized **AWS CloudWatch** for real-time monitoring of application performance and infrastructure health, creating customized dashboards and setting up alarms to proactively address issues and maintain system stability.
- Utilized **SoapUI** to test and validate SOAP and RESTful APIs, ensuring functionality, reliability, and compliance with business requirements through automated and manual testing.

Environment: React, JavaScript, AWS API Gateway, Lambda, S3, AWS Cognito, AWS CloudFormation, AWS Codebuild, AWS Codedeploy, CloudWatch

EDUCATION

- **Master's in computer science** - University of Missouri-Kansas City, Kansas City, MO.
- **Bachelor of Technology in computer science and Engineering –**Sri Indu College of Engineering & Technology, Hyderabad, India.