**Java Full Stack Developer**

**DHARSHAK SEMBETI**

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**PROFESSIONAL SUMMARY**

* **Full Stack Developer** having 4+ years of experience in designing, developing, and delivering **Java/J2EE** solutions, driving digital transformation across various industries through all phases of the SDLC.
* Designed enterprise systems using **modern Java (8/11/17)** **lambdas**, **streams**, **virtual threads** for concurrency **records**, **sealed classes** for domain modeling and **pattern matching with Optional** for business logic.
* Ensured the stability and performance of **React** and **Angular** applications by writing integration and unit tests using tools like **Chai**, **Karma**, and **Jasmine**. Conducted end-to-end testing with **Cypress** to validate user journeys and functionality, while adopting a component-driven approach to create reusable, consistent UI elements.
* Built and tested **RESTful APIs** and **GraphQL** endpoints, leveraging **Swagger** for API design, **Postman** for validation, and **Wire Mock** for third-party simulations, ensuring seamless integration and reliable system communication.
* Designed and built secure, scalable applications using the Spring ecosystem using **IoC, Core, AOP, Boot, MVC,** **Security** **(OAuth 2, JWT, SSO)**, **Accurate**, **SLF4j**/**Log4j 2/Logback**, **SOAP** and **REST** web services, ensuring data integrity with **Spring Transaction**, **Spring Data Access**, and **Spring Cache**.
* Secured sensitive credentials using **Hashi Corp Vault**, **AWS Secrets Manager**, and **Spring Cloud Vault**, enabling Handled implementation of **OOPS**, **TDD** and **BDD** practices, using tools like **JUnit**, **Mockito**, and **Cucumber** to enhanced test coverage, boosted code reliability, and aligned development with business needs for faster, accurate feature delivery.
* Developed **RESTful APIs** using **JSP**, **Servlets**, and **JSON/XML** and **Node JS** to enable smooth system integrations, ensuring seamless data exchange and reliable communication between applications.
* Implemented comprehensive testing for **Java** and **Spring Boot** applications using **JUnit 5**, **Mockito**, **Spring Boot Test**, and **Cucumber**, ensuring robust, maintainable solutions.
* Created responsive user interfaces using **HTML5, CSS3, Tailwind CSS, Bootstrap, JavaScript, TypeScript, jQuery** and **Ajax**, focusing on delivering intuitive and engaging experiences for end users.
* Developed responsive **Angular, React** apps using **Flex** to Layout grids and **Template Driven**/**Reactive Forms** for validation and **Flux**, **RxJS**, **Context API** and **NgRx** for state management.
* Integrated **WebSocket** for real-time updates, Improved data handling (**Virtual Scroll, Angular CLI**), **ngx-translate** for multilingual support, **Tree Shaking** for bundle optimization.
* Implemented **messaging systems** like **Apache Kafka, IBM MQ, RabbitMQ,** and **ActiveMQ** to support **event-driven architectures**, enabling real-time data processing and reliability.
* Hands-on AWS expertise in designing, configuring, and managing scalable, secure, and automated cloud infrastructures. **EC2, S3, IAM, RDS, SNS, SQS, Lambda, CloudFront, Route 53, CloudWatch, Terraform, CloudFormation, DynamoDB, SES, and Elastic Cache**.
* Optimized **data storage** and retrieval using **relational databases** like **Oracle, MySQL, PostgreSQL,** alongside **NoSQL** solutions like **MongoDB, DynamoDB,** and **Cassandra**, balancing performance and flexibility.
* Streamlined development workflows by establishing robust **CI/CD** pipelines with **Jenkins**, managing configurations with **Puppet, Chef** and **Ansible**, and orchestrating cloud resources using **OpenStack**.
* Cultivated a security-centric **DevOps** culture by embedding automated security checks within **CI/CD pipelines**, ensuring early detection and remediation of vulnerabilities throughout the development lifecycle.
* Set up **real-time monitoring** with **AWS CloudWatch, Splunk,** and **Log4j** to track performance, resolve issues proactively, and ensure system stability.
* Deployed and optimized applications on **WebSphere**, **WebLogic**, **JBoss**, and **Tomcat**, ensuring high availability, performance, and load balancing for seamless front-end and back-end operations.
* Managed **version control** with **Git, GitHub, GitLab,** and **Bitbucket**, while employing **build tools** like **Maven** and **Gradle** to streamline project delivery and collaboration.

**TECHNICAL SKILLS**

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| **Programming Languages** | Java (8/11/17), JavaScript, TypeScript, HTML5, CSS3, SQL, PL/SQL, Bash |
| **Frameworks & Libraries** | Spring Boot, Spring MVC, Spring Security, Spring Data JPA, Hibernate, JSP, Servlets, Node.js, RxJS, NgRx, Redux, React Hook Form, React Testing Library |
| **Frontend Technologies** | Angular, React.js, Redux Toolkit, Material UI, Bootstrap, Tailwind CSS, jQuery, Ajax, SCSS |
| **Testing & QA** | JUnit 5, Mockito, Cucumber, Jasmine, Karma, Cypress, Chai, Jest, JMeter, OWASP ZAP, SonarQube |
| **API & Web Services** | REST, GraphQL, SOAP, Swagger, Postman, WebSocket, Axios |
| **Cloud Platforms** | AWS (EC2, S3, Lambda, RDS, SQS, SNS, IAM, CloudWatch, DynamoDB, SES, API Gateway, Route 53, CloudFront), OpenStack |
| **Infrastructure as Code** | Terraform, AWS CloudFormation, Helm Charts |
| **Containerization & Orchestration** | Docker, Docker Compose, Kubernetes, OpenShift |
| **CI/CD & DevOps** | Jenkins, CircleCI, GitHub Actions, Puppet, Chef, Ansible, GitFlow |
| **Databases** | PostgreSQL, MySQL, Oracle, MongoDB, Cassandra, DynamoDB |
| **Messaging Systems** | Apache Kafka, RabbitMQ, ActiveMQ, IBM MQ |
| **Security** | OAuth 2.0, JWT, TLS/SSL, Spring Security, HashiCorp Vault, AWS Secrets Manager, Spring Cloud Vault |

**PROFESSIONAL EXPERIENCE**

**Tech finite Systems June 2024 – Present**

**Role:** Full Stack Java Developer

**RESPOSIBILITIES:**

* Developed dental billing logic using **Java 17** advanced features including **Streams**, **Lambda expressions**, **Optional**, and enhanced **String** methods to calculate procedure costs and apply insurance adjustments accurately.
* Developed robust REST APIs using **Spring Boot**, **Hibernate ORM**, **Spring Data JPA**, and **Spring MVC** to manage patient records synchronize clinic data, and streamline integration between billing modules and third-party systems.
* Automated PDF invoice generation for dental services with **Spring MVC**, tracking payment status, and managed entities with **Spring Core** and **PostgreSQL** using a session-per-request pattern and **Map Struct** for DTO mapping.
* Optimized high-concurrency billing with **Spring AOP**, **Log4j**, and a cached thread pool, validated clinical workflows using **Cucumber** and **JUnit** monitored system health with **Prometheus**.
* Built a treatment progress dashboard using **Angular 15,** enabling real-time updates with **NgRx** and **RxJS** for accurate tracking. Optimized performance by implementing **Virtual Scrolling** to handle extensive patient histories efficiently.
* Developed reusable forms for updating patient records, ensuring robust validation through **Angular Material UI**, **Reactive Forms**, and custom **Pipes, Directives** enhancing usability during high-traffic periods.
* Secured real-time patient data workflows, restricting unauthorized access with **Route Guards** and promoting modularity via Standalone Components, allowing doctors to review and approve payment plans dynamically.
* Enhanced the platform's UI with **AOT** compilation, reducing load times and ensuring cross-browser compatibility with **WebSocket API** for live updates and **lazy loading** techniques for faster navigation.
* Ensured reliability through comprehensive testing, validating core functionalities with **Jasmine** and **Karma**, and verifying end-to-end workflows with **Cypress**, leading to seamless patient record management.
* Automated **AWS** infrastructure for the **Patient Billing and Insurance Claims System** using **Terraform**, managing **EC2**, **S3**, and **EKS** resources for secure, scalable, and reliable operations.
* Enforced HIPAA-compliant security measures with **AWS IAM** for granular access control and **KMS** for encryption of sensitive patient billing data stored in **S3** and transmitted via **API Gateway**.
* Developed infrastructure as code (IaC) using **AWS Terraform** to deploy and manage a scalable and resilient architecture for the billing platform, ensuring real-time monitoring and efficient resource allocation.
* Implemented infrastructure as code using **AWS CloudFormation** and **Terraform** to automate the deployment and management of cloud resources, improving efficiency and reducing the risk of manual errors.
* Designed efficient **PostgreSQL** database schemas and wrote optimized SQL queries following FHIR standards, enabling seamless data integration across healthcare applications.
* Optimized **MongoDB** performance by implementing sharding, compound indexing, and aggregation pipelines to handle large-scale patient records efficiently, ensuring low-latency queries and fault tolerance in a distributed healthcare system.
* Containerized microservices using **Docker** multi-stage builds, minimizing image sizes and improving deployment efficiency while maintaining consistency across development, staging, and production environments.
* Deployed containerized applications on **Kubernetes** clusters, leveraging Helm charts for configuration management and **StatefulSets** for reliable storage, ensuring high availability and automated scaling of services during high traffic loads.
* Integrated **Redis** for efficient distributed caching of patient billing data, while employing **Elasticsearch** to enhance log analysis and monitoring of claims workflows.
* Performed comprehensive unit testing using **JUnit** and **Mockito** frameworks, thoroughly validating billing logic to ensure application reliability and ongoing compliance with **HIPAA** standards.
* Secured healthcare billing systems by conducting vulnerability assessments with **SonarQube** and **OWASP ZAP**, proactively identifying and mitigating potential security threats.

**Tech Stack:** Java 17, Spring Boot, Hibernate ORM, Spring Data JPA, REST APIs, OAuth 2.0, JWT, RabbitMQ, PostgreSQL, AWS (EC2, S3, EKS, Lambda, API Gateway), Docker, Kubernetes, Angular, Rest API, RxJS, Jest, Cypress, Redis, Elasticsearch, Log4j, Splunk, Prometheus, Terraform, Jenkins, GitFlow, CI/CD Pipelines

**Agilysys Pvt Tech (Chennai, India) Mar 2020 – Dec 2022**

**Client: Eatec,**

**Role:** Full Stack Java Developer

**RESPOSIBILITIES:**

* Automated transaction reconciliation using **Spring WebFlux**, leveraging its backpressure capabilities for non-blocking processing during peak loads such as holiday seasons.
* Applied design patterns like **DAO**, **Factory**, and **Singleton** for clean architecture. performed comprehensive testing using JUnit and Mockito to validate application logic, while leveraging JMeter to assess performance under load.
* Simplified digital wallet logic using **Java 11 Records**, **Sealed Classes**, and **Pattern Matching**, reducing boilerplate code and enhancing maintainability for secure, scalable banking systems.
* Developed microservices using **Spring Boot, Spring JPA, and REST APIs** to process credit and debit card transactions, integrated **Spring Batch** for batch processing, and utilized Apache **Kafka** for real-time payment notifications.
* Ensured secure payment transactions using **TLS/SSL certificates**, implemented **OAuth 2.0** and **JWT** for authentication, and optimized data handling with Spring Boot and Hibernate to enhance performance and compliance.
* Enhanced wallet UI performance with **Code Splitting**, Suspense for **lazy loading**, and **WebSocket API** for live updates. Ensured accessibility compliance optimized caching strategies.
* Conducted comprehensive testing using **Jest** for unit tests, React Testing Library for component validation, and **Cypress** for end-to-end scenarios to ensure seamless payment workflows and system reliability.
* Built **RESTful APIs** for payment initiation and status tracking using **Hibernate** for ACID compliance. Integrated **Kafka** for real-time, fault-tolerant, scalable transaction processing in high-volume environments.
* Conducted vulnerability assessments using **SonarQube** for payment APIs and **OWASP** for penetration testing of wallet interfaces.
* Architected scalable payment microservices on **Amazon EKS** with **EC2** for high-performance computing, enforcing **IAM** for secure financial data.
* Ensured reliable payments with **SQS FIFO** queues for ordering, deduplication, **SNS** filtering for targeted notifications, and **DLQs** to prevent data loss during peak loads.
* Secured APIs with **AWS API Gateway** and real-time monitoring via **CloudWatch**, while **AWS Lambda** enabled cost-efficient auto-scaling for peak payment loads.
* Automated **CI/CD** pipelines for wallet microservices using **Jenkins, CircleCI**, **GitFlow**, and **Puppet** ensuring zero-downtime deployments during financial calendar peaks.
* Deployed microservices-based applications on **OpenShift** using **Docker** containers, leveraging **Kubernetes** Operators for automated scaling and simplified management of containerized workloads.
* Designed **PostgreSQL** schemas for transaction auditing with **JPA/Hibernate**, implemented row-level security to protect sensitive data, with composite indexing and partitioning for high performance and scalability.
* Orchestrated seamless integration of **GraphQL APIs** using **Apollo Client's** declarative data fetching for secure, fault-tolerant communication with backend services.
* Automated **API** testing with **Postman**, validating banking sandbox integrations and implemented Defined **API** specifications with **Swagger** for clarity and seamless integration.
* Implemented centralized logging for payment workflows using **Log4j**, with **Grafana** dashboards tracking failed transaction patterns, integrated real-time alerting for anomaly detection and log aggregation for streamlined troubleshooting.
* Used **Maven** as a **build automation tool** and managed **Continuous Integration (CI) and Continuous Delivery (CD)** processes ensuring seamless collaboration and efficient release cycles.

**Tech Stack:** Java 11, Spring Boot, Hibernate, REST APIs, OAuth 2.0, JWT, Spring Security, Apache Kafka, PostgreSQL, MongoDB, AWS (EC2, S3, Lambda), Docker, Kubernetes, React, TypeScript, RxJS, NgRx, JUnit, Mockito, Cypress, Maven, Git, CI/CD Pipelines, Puppet

**Agilysys Pvt Tech (Chennai, India) Jun 2019 - Mar 2020**

**Client: Data Magine,**

**Role:** Full Stack Java Developer

**RESPOSIBILITIES:**

* **Developed RESTful APIs using Spring MVC and Hibernate ORM, managing real-time inventory updates and payment processes while utilizing Java 11 features like Lambdas and Streams for optimized performance.**
* Utilized Spring Core with Dependency Injection to streamline database operations, integrating **Spring Data JPA** and **Hibernate caching** to efficiently handle high-concurrency transactions.
* Secured payment processing workflows through **Spring Security**, implementing **JWT** authentication and enforcing role-based access control to protect sensitive user and transaction data.
* Built a real-time interactive balance tracker application using **Angular**, **TypeScript**, **Material UI**, and **HTML/CSS**, providing live wallet updates and intuitive transaction history visualization.
* Developed responsive inventory management UIs using **Angular Drag and Drop**, providing intuitive item categorization with adaptive styling via SCSS.
* Automated UI testing using **Jasmine**, **Karma**, and **Cypress** to ensure smooth user interactions and compliance with accessibility standards.
* Designed adaptive user interfaces featuring **lazy loading** of modules and multilingual support via **ngx-translate**, enhancing application accessibility for global audiences.
* Created unit and integration tests using **JUnit** and **Mockito**, and validated API contracts with **Postman** for seamless backend integrations.
* Integrated **Kafka** to enable event-driven architecture, improve load balancing, and ensure scalable real-time system communication.
* Configured Hibernate sessions and implemented session-per-request patterns to efficiently manage database connections and transactions.
* Developed **BDD** test scenarios using **Cucumber** and integrated them into **Jenkins** pipelines for continuous testing and quality assurance.
* Used **Splunk** for monitoring logs, performance data, and errors to effectively troubleshoot and maintain application stability.

**Tech Stack:** Java 11/8, Spring MVC, Hibernate ORM, REST APIs, OAuth 2.0, JWT, Spring Security, MySQL, Apache Kafka, AWS (EC2, S3, Lambda), Docker, Kubernetes, Angular, TypeScript, NgRx, GraphQL, JUnit, Mockito, Cypress, Maven, Git, CI/CD Pipelines

**EDUCATION: -**

**Master of Science in Computer Science**

Southeast Missouri State University — Cape Girardeau, MOMay 2024

**Sathyabama university**

B.E