Kenith Dykes

Technical Skills

- Distributed systems
- AWS
- SDLC
- Docker
- GitHub
- Agile product development
- Microservices
- RESTful API
- SQL Server Management Studio
- CI/CD
- C#
- Design patterns
- C/C++
- Linux

Object Oriented Concepts I'm strong in:

- Inheritance
- Encapsulation
- Polymorphism
- Abstraction

Version Control Tools:

- Subversion
- TFS
- Git

Testing Tools:

- Postman
- Swagger API
- Unit

Testing Configuration Tools:

- Jira
- Confluence

Documentation Tools:

- Notion
- Google Docs
- DOORS

Software:

- Microsoft Visual Studios
- Microsoft SQL Server Management Studio
- Docker
- GitHub

Framework:

- Dapper
- Entity Framework
- .NET Core
- ASP.NET (MVC and Webforms)

Authentication & Authorization:

- OAuth 2.0
- JWT (JSON Web Tokens)

Package Management:

- NuGet Package Manager

Summary

Experienced backend engineer with over 8 years in Fintech and Aerospace industry, specializing in C# development, SQL database management, and API integration. Skilled in designing and optimizing scalable systems to meet demanding performance requirements. Proven ability to reduce operational inefficiencies, improving data processing time, and delivering high-quality solutions. Expertise in Agile methodologies, cloud technologies (AWS), Docker, and CI/CD processes. Driven to innovate and optimize backend systems for performance and scalability.

Education

Bachelor's in Computer Engineering, Florida Atlantic University, Boca Raton, FL, Jan 2013 – May 2015
Associates Degree in Computer Engineering, Broward College, Fort Lauderdale, FL, Dec 2010 – Dec 2012

Professional Experience

Performance Software Corporation, Phoenix, AZ **Aug 2024 – Feb 2025**
Engineer (Contract)

- Developed and maintained C# backend tool for Collins Aerospace client, enabling pilots to easily access and interpret mission-critical information from a lightweight database, improving flight planning efficiency.
- Designed and improved SQL queries, ensuring fast data retrieval and seamless access to relevant information for pilots, even in resource-constrained environments.
- Modified and created system requirements using IBM Rational DOORS, ensuring clear documentation and alignment with project goals, while enhancing traceability and compliance throughout the development lifecycle.
- Actively participated in Agile sprints, contributing to sprint planning, development, and retrospectives. Conducted thorough code reviews to ensure adherence to best practices, maintainability, and high-quality code standards.

SmartX Advisory Solutions, West Palm Beach, FL **Jul 2018 – Jul 2024**
Backend C# Engineer

- Built and improved robust backend systems in C# for financial data processing, reducing processing time through system refactoring and optimized algorithms.
- Designed and optimized SQL queries and stored procedures in Microsoft SQL Server Management Studios, achieving an increase in data retrieval efficiency.
- Implemented RESTful APIs to facilitate seamless communication between internal services and third-party services, improving external data exchange reliability.
- Developed and containerized .NET Core applications using Docker, enabling consistent deployment environments across development and production.
- Ensured fault tolerance by using Polly in .NET Core, reducing service downtime and enhancing system reliability under heavy load.
- Managed and optimized NuGet packages to streamline dependency management, ensuring integration of third-party libraries and reducing conflicts during updates.
- Conducted comprehensive unit tests using Visual Studio, ensuring code functionality and stability, and validated API endpoints with Postman and Swagger to guarantee seamless integration and performance.
- Implemented CI/CD pipelines using GitHub Actions to automate the build and deployment of Docker images to AWS, reducing deployment times, increasing release frequency, and ensuring consistent code quality.
- Led full SDLC phases using Agile methodologies for client-server applications, consistently delivering projects on schedule and within defined scope.
- Collaborated with UI/UX designers to ensure seamless applications and with database administrators to optimize data management, contributing to the development of efficient systems.
- Implemented AWS logging using CloudWatch for efficient monitoring of application performance and error tracking. Set up AWS alerting and created custom metrics dashboards to proactively identify and resolve system issues, ensuring smooth and reliable service operation.

Belcan, Palm Beach Gardens, FL **Dec 2015 – Feb 2018**
Controls System and Software Engineer

- Utilized IBM Rational DOORS for system requirements documentation and fault detection.
- Executed software verification for Next Generation Product Family, adhering to Agile and Scrum methodologies.
- Conducted system integration testing in UNIX environments and performed debugging and feature enhancement in C and C++ to optimize system performance and reliability.
- Worked on critical software for airplane safety systems, utilizing C programming in compliance with DO-178C standards.

Projects/Labs:

ATM Application (C#/ASP.NET Project)
A simple web-based ATM simulation built with C#, ASP.NET Core, SQL Lite, and Entity Framework. This application supports basic banking operations for a single user with two accounts: Checking and Savings. Includes unit tests for services and integration tests for repositories.
Link: https://github.com/KennyBDykes/ATM-Application

JobTracker (C#/ASP.NET Project)

A simple ASP.NET Core application to track job applications. Built with Entity Framework Core and SQLite, this backend-focused project provides basic functionality for managing users and job submissions. Includes user authentication using JWT tokens and role based access control.

Link: https://github.com/KennyBDykes/JobTracker

Software/Hardware Co-Design (Course)
HELP
An Android application my team and I created, to encourage middle school kids to volunteer within their communities. The app uses Google Maps to search for volunteer activities near the user's current location. The app saves user data such as username and password, by using Parse.com. Programmed in Java
Link: https://github.com/RShankar/Empower-App-Help-Fall-2014

Object-Oriented Design (Course)
Shopping Cart Project
An Android application I created that allows customers to view and purchase items and allows sellers to update inventory and view revenue and profit. The project also consisted of various UML diagrams (Class, State, and Activity diagrams), use cases, unit/integration tests, and pattern concepts such as Observer patterns, Strategy patterns, and Composite patterns. The project was programmed in Java and data was handled by creating SqlLite tables.
Link: https://github.com/KennyDykes/ShoppingCart

Engineering Design 2 (Course)
Fire Suit
A project my team and I created, the fire suit is a vest composed of temperature sensors, a Bluetooth module, and two vibration disks. The temperature sensors and vibration disks are intended to alert firefighters wearing the vest of dangerously high temperatures and the Bluetooth module is for keeping a good communication with our android app. Along with the vest, I created an Android application that pairs with the vest via Bluetooth module; the android app allows firefighters to be tracked and allows fire chiefs to track those same firefighters (Using REST APIs).
Link: https://github.com/KennyDykes/Fire-Suit