Kebin Wang

Software Engineer Lead — Cloud

Profile

Versatile software engineer lead with over 14 years of experience building back-end services and front-end applications for multiple domains, on-premises and cloud-based. Capabilities and experience range from deep technical knowledge in designing and developing software applications to managing local and offshore teams in the creation and maintenance of software products.

Skills

Golang, C#, .NET Framework, C++, Java, Python, MySQL, MSSQL, AWS, S3, ECS, EKS, Redshift, Kubernetes, K9S, Micro Service, REST API, Swagger Web API, GORM, GraphQL, gqlgen, Visual Studio, Docker, Git, CI/CD, DUNS, Experian, PACER

Professional Experience

2021.10 - 2023.11 Senior Software Engineer - Cloud

LSQ Remote

Legal Entity Project

- Designed and implemented the project to manage and serve client information on the cloud.
- It is used to remove redundancy, share, and resolve conflicting client info among separated business modules each with a localized version. There were 200 thousand company data across several platforms, where 13% were duplicates. More than 90% of them were automatically de-duplicated.
- Using Golang and MySQL, implemented
 - real-time services to detect client info updates on services and pass to REST API via Kafka on EKS,
 - a service to monitor SQL bin log data to detect client info updates and pass to REST API via Kafka on EKS,
 - a REST API service to receive batch data, de-duplicate them, and sync to DB,
 - the REST API service (using swagger) and a GraphQL(via gqlgen) service to serve other services and various clients, and
 - a data migration tool using Flyway.

LSQ Credit Engine Upgrade

- Credit Engine uses third-party data to evaluate corporate credibilities.
- Designed and implemented the migration of corporation credit information sources from Experian to Dun & Bradstreet.
- Worked with Python 3 in AWS ECS serviceless function and AWS ECS.

Corporate Agency Project

- Designed and implemented the project of centralizing management of detailed corporation info as large as 5Mb from Dun & Bradstreet, Experian, and other third parties.
- Gathered data from different locations including AWS S3, local database, and locally shared files from different locations.
- Unified data into DB tables.
- Added REST API and GraphQL services for data retrievals and updates.
- Used Golang, MongoDB, MySQL, GORM, AWS S3

LSQ PACER Service

- PACER is a public API for US court records.
- It was a quick tool requested by the compliance team to handle a projected one thousand client ingestion in two weeks.
- Designed and implemented the project to replace manual queries by compliance officers with service to request in batch via API,
 removed repeating queries and saved data into DB.
- It was designed, implemented, and tested using Golang and MySQL within two weeks.

Payment Matching

- Matching multiple invoices with single money transfer via Quadratic Greedy algorithm and Branch and Bound.
- Implemented in Golang and was able to handle 100+ invoices.

The DOTNet Framework, Visual Studio and DevExpress upgrade project

- The project covers all EZE OMS code bases, including tens of C# solutions, thousands of projects, and most C# files.
- Upgraded for DOT NET framework (2.0 to 4.0) and Visual Studio (2005 to 2010).
- Upgraded customized DevExpress from version 6 to version 10 and added support for DOT NET version 4.

List Trader project

- Led the project with one subteam in the US and another in Beijing with four members.
- Redesigned and implemented a batch trade management and execution module.
- Project finished as scheduled despite distractions:
 - Team member left for other opportunities in the beginning,
 - Heavy unexpected client support, sometimes takes more than 50% of a sprint,
 - Unexpected scope change one major feature being added halfway.
- Implemented in C# and MSSQL.

Multi-Day Order Project

- Led the project of supporting multi-day order processing and management in the Eze trading and management system.
 - EzeOMS were designed as a single-day order system, while brokers believe orders last across days and months,
 - This project enables EzeOMS to support multiday orders with creation/updates/deletion in their single-day system,
 - Heavy distraction from client support first-priority tasks, took more than 50% of total hours in some sprints.
 - Unexpected scope change one major feature being added halfway.
- Used Agile approach, meet daily with PM and remote team members for design and implementation.
- Implemented in C# and MSSQL.

FIX cache export tool

- Came up with the idea from an internal innovation challenge, designed and implemented a proof of concept. It was shared within Dev teams for troubleshooting.
- FIX services caches contain data not available in DB. This project added a button to OMS client to be able to snapshot and export all intermediate caches of all FIX services.

Mifid II Enhancement project

- Mifid II was a new EU legislative framework to regulate financial markets,
- Enhanced FIX services to manage customizable configurations and handle customized communication via FIX messages.

The Pause/Resume project

- Added Pause/Resume functionalities in all core services
 - to stop sequential and parallel data processing gracefully finish data already in the assembly line
 - without interruption still able to receive external requests and cache them
 - to resume after the daily process completes, and refresh caches if necessary
- Designed and implemented Pause/Resume handling mechanisms in various services.
- Had intensive meetings with product owners on inter services communications, worker threads, and caches
- Achieved good quality Only one bug was discovered by QA for this multi-month project.

The New Order Creation project

- Added a new business workflow for handling trading messages.
- Added new business logic, DB synchronizations, and new SQL stored procedures.
- Added new FIX protocol messages handling.
- Implemented in C# and MSSQL.

The Symbol Length Extending project

- Eze used to use 16 characters in DB and code for a trading symbol. This project is to expand it to 256 characters in the system.
- Changes included 100+ DB tables updates. Many Delphi file updates, and some C# code updates.

Legacy Code Migration projects

- Worked in a team to migrate several legacy logic to utilize services for more manageable business logic and better maintainability.
- Migrated legacy Delphi code into C#. Moved most client-side business logic and DB access to centralized services.

General Work

- Work closely with Product Support Group, PM and QA in troubleshooting and solving product issues quickly.
- Help team members and other developers in product setup, configuration, and troubleshooting.

Education

Ph.D. in Computer Science Boston University

Boston, MA 2003-2009

Thesis: Cache-Oblivious Scientific Computing

Claritas® Investment Certificate CFA Institute

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