Ross Tollefson

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https://github.com/past9
https://bitbucket.org/past9systems

About Me

Software engineer with 4.5 years experience in object-oriented design, web development (front and back end), single-page applications, and event-sourcing architectures. Seeking contract or consulting roles.

Technical Skills

Architectures

Object-Oriented Design
Event Sourcing
CQRS
Domain-Driven Design
REST APIs

Languages

C# (.NET)
JavaScript
TypeScript
SQL
Rust
Go
PHP5
HTML5
CSS3

Frameworks

AngularJS (1 and 2)
jQuery
Bootstrap 3
WPF

Tools

Visual Studio
Vim
Git
Team Foundation Server
Visual Studio Online

Operating Systems

Linux (Ubuntu)
Microsoft Windows

Employment

Kiosk Information Systems (Dec 2015 - May 2016)

Implemented an event store in C# with an asynchronous Linq-like API for querying event data. Supported storage backends included SQL Server, PostGreSQL, MySQL, SQLite3, MongoDB and in-memory storage.

Worked with a team of 3 other developers to build a WPF GUI for a Cox Communications bill-pay kiosk. GUI application included integration with hardware devices (credit card reader, check/document scanner, cash acceptor, and barcode reader) as well as Cox APIs. Aforementioned event store was used to log transaction data for generating receipts and reconciliation reports for the kiosk.

Freight Systems International (Apr 2014 - Oct 2015)

Rewrote a DotNetNuke application from scratch using a C#/Web API backend and an AngularJS SPA frontend. Engineered Web API to efficiently utilize legacy database using in-memory caching and efficient SQL queries and stored procedures. Site was formerly IE8-only but new version works on all modern browsers, including IE8+. Implemented a new feature into the application using Event Sourcing, CQRS, and Domain Driven Design principles. Utilized clean separation of Web API, domain model, data transer objects, and user interface throughout.

Took a large set of IE8-only JavaScript/HTML tools on a customer-facing website and made them compatible with all modern browsers, including IE8+, without changing appearance or functionality.

FreemanWhite (Feb 2013 - Dec 2013)

Implemented a Content Management System from scratch. Due to its extensible/plugin architecture, it now serves as a platform for an internal application used for employee training, as well as a small conference signup application. Backend is built with MySQL and PHP5 with MVC architecture, frontend is built with HTML5, CSS3, and jQuery.

Freelance web developer (Jan 2012 - Dec 2013)

Self-employed for two years as a freelance software developer working mainly with PHP5, HTML5, CSS3, jQuery, and MySQL.

Notable projects include:

- VehicleExam.com (Jun 2012 - Dec 2013)

  Website for a mobile vehicle inspection company. Includes tools for customers to purchase (via PayPal) and schedule inspections, and for company owner to assign them to inspectors based on location. Inspectors can complete inspections using an online form and then send the results to the customers.

- DonorNation (Sep 2012 - Mar 2013)

  Analytics tool intended to help the Duke University Development Office find alumni from which to solicit donations. Tool displayed a node graph representation of personal relationships between approximately 200,000 Duke alumni using SigmaJS. Graph could be interactively explored by Development Office employees in order to determine who were the most valuable potential donors.

Side Projects

EarlDB

EarlDB is an experimental event store database written in the Rust programming language. It is intended for use in event-sourced applications. It is in very early stages of development, but planned features include transaction support, sharding, and replication. I am undertaking this project partly to satisfy my own desire for a cross-platform, natively compiled event store database and partly to learn about how the previously mentioned database concepts are implemented. It is also an exercise in becoming more proficient with the Rust programming language.

References

References are available upon request.