Anthony Sharp

Software Developer

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Highly experienced software developer for backend and frontend systems.

Portfolio: https://www.anthonysharpy.dev/

Work Experience

Full-Stack Developer - STR Group Limited (January 2022 - September 2023)

As the only software developer in the company my role was to plan, develop and optimise various internal systems for a recruitment agency with a turnover of £50 million. My role primarily revolved around introducing new features and enhancements to their centralised system, including designing software to handle the processing of complex financial data for feeding real-time KPI reports and calculating employee commission payouts. In order of frequency, the tech stack included: Go, PostgreSQL, Git, PHP, Laravel, Nginx, Docker, HTML, CSS, Azure, Vue, Linux (CentOS/Ubuntu), TeamCity, PowerShell JavaScript and Jenkins.

Achievements

- Recommended and actioned a new high-performance REST API in Go, speeding up the workflow of all ~150 staff that use the company's internal systems. Responsible for the re-write and of core business logic, including applying database optimisations, after which pages on our internal system that used to load in ~2 minutes loaded in under 1 second.
- Created custom integrations with accounting software InTime and sales software Bullhorn, using SOAP and JSON formats, which allowed the business to meet its legal obligations around correct accounting practices and personal data minimisation.
- Proactively introduced coding best practices into the company, such as transactions, event and error
 logging, caching, unit testing and functional testing and created automated build and test pipelines,
 stopping many issues from reaching production and upping the value of the company's intellectual
 property.
- Set up our entire tech stack, from the Nginx server to the API, to run on Docker infrastructure, which we then used to easily upgrade and migrate our custom brand websites as we saw fit.
- Documented the entire tech stack, including creating about 20 pages worth of documentation and video guides within Atlassian Confluence.
- Created a custom thread-safe database caching layer for our API to efficiently handle hundreds of thousands of data points.
- Provided technical support to staff at all levels within the company; heavy emphasis on solving accounting-related queries.

<u>Software Developer - i-Wonder Aggregator Services (February 2021 - December 2021)</u>

Worked in a team to develop custom integrations for insurance companies that would allow them to sell their products online through websites such as GoCompare and Compare the Market. At the same time I helped build our company's own insurance comparison websites on both the frontend and backend. We practised continuous development, daily standups and kanban. In order of frequency, the tech stack included: C#, .NET, Angular, Git, TypeScript, Azure, HTML, CSS, Microsoft SQL Server and MongoDB.

Achievements

- Created an SQL database frontend as a Windows application in my spare time that let us easily view and edit customer data, saving us hundreds of hours per year.
- Was the main point of development contact for many clients; provided support throughout the development process, carefully ascertaining (often changing) client needs. Praised by management for my speed of response, thoroughness and professionalism.
- Created high-quality code at a fast pace. Was asked to take on extra work to lessen the load on those
 more senior than me and at one point was responsible for more ongoing integrations that anyone
 else on the team.

Personal Projects

Sandbank - a document-model database for s&box (https://github.com/anthonysharpy/sandbank)

A MongoDB-like database created in C# for the game engine s&box to make up for the lack of out-of-the-box data storage solutions. Supports concurrent access, has a straightforward and well-documented API and is free to use.

YayOrNay - dating app (https://www.yayornay.se)

Novel multi-platform friendship/dating app created using Go, Quasar (Vue.js) and MongoDB. Uses custom build pipelines with Docker to automatically perform unit and integration tests against a test database before every release. Currently in development.

<u>S&box City - a multiplayer gamemode for the game engine s&box</u>

Involves many complex systems created from the ground-up, such as AI-controlled vehicles, a housing system, crafting, inventory, achievements, logging, a persistent world, weapons and tools, localisation and others. Mix of backend (C#) and frontend development (Razor/CSS). Encompassing hundreds of code files with many moving parts, development has required a careful eye for detail in order to keep game performant and the code clean. Currently in development.

GNU Compiler Collection contributions

Contributed bug fixes for issues in the GCC C++ compiler that went unfixed for years. Involved complex topics such as dependent template-ids, private inheritance and using statements in a codebase spanning millions of lines of code. Submitted code that complied with strict GNU style requirements as well as the C++ standard. Fixes approved by world-leading experts with decades of experience in compilers and C++.

Developer for GarrysMod game server Civil Gamers (https://www.civilgamers.com/community/)

Developed and maintained addons in the Lua programming language on a voluntary basis for a GarrysMod server with a community of around 300 people; fixed bugs, gave technical support to members of the community and worked alongside server leaders.

Learn Law - a UK law app

Made when I was at university, the app, which taught people about English law, remained on the Play Store for a year and received 2,923 downloads whilst retaining an average 4.43 out of 5 stars app rating. Built in Java, PHP and MySQL.

Education

- Medina College (2013 2014): GCSEs (6 A*s, 4 As, 1 C)
- Platform One College of Music (2016): BTEC Level 3 Extended Diploma in Music (D*D*D*), Grade 8 Rockschool Guitar (Distinction), Grade 8 Rockschool Drums (Merit)
- Island Innovation VI Form (2017): AS Levels (AAA)
- London School of Economics and Political Science (2020): Law (LLB) (2:1)