# Stephen Adams - Web Developer

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# **Summary**

As an experienced Web Developer with a two-decade track record, I specialise in creating highly responsive desktop and mobile applications for both private and public-sector organisations. My expertise lies in digitising business workflows and significantly enhancing user experiences. Over the past 20 years, I have honed my skills in JavaScript, HTML, and CSS to develop robust web applications across a diverse range of platforms, including mobile, tablet, and desktop.

I have been actively involved in every phase of the application development lifecycle, from requirements gathering to design and development. My key strengths include delivering bespoke applications of the highest standard, minimising the need for future fixes, and mentoring development teams to enhance their skills and productivity.

I excel in engaging with stakeholders, product owners, and project managers to understand project requirements, ensuring that functionality is delivered as expected and meets the desired outcomes.

#### Skills Summary

Frontend Developer | React Developer | Angular Developer |

TypeScript Developer | JavaScript Developer |

# **Skills / Technical Details**

Languages: JavaScript, TypeScript, NodeJS, HTML, CSS, Sass, Tailwind, experience with C#

Frameworks: React, Angular, Redux, RxJs, NgRx

**Testing:** Jasmine, Jest, Karma, Storybook, Cypress, TDD

Cloud Platforms: Azure, AWS, GCP

Methodologies: Agile, Kanban

Skills: Web application development, API integration, Application version updates, Frontend Architecture,

# **Career History / Work Experience**

CGCSoftware July 2012 to present

Consultant / Director / Web Developer

Since 2012, I have operated as an Independent Consultant and Web Developer completing assignments for leading companies such as Chelsea FC, BT, Calor Gas, Google, and The Houses of Parliament.

RehabAgency Jun 2024 to Present

## Senior Frontend Developer

For the RehabAgency I joined a team to take over the frontend development of three applications, all for a major client of theirs. Working with exposing Ai based data to the end user, these applications allow a user to enter a query or an overview of the document they wanted to write and the Ai response would provide alternatives and or things they needed to consider in the final report that the web application generated.

Each application was built using React, Typescript, HTML and Scss, with a strong focus on the UI design which had to match the global branding of the client, all deployed onto the Google Cloud Platform. There was a tight deadline to deliver these applications to the client which we managed to do.

RealWear May 2023 to Feb 2024

# Senior Frontend Developer

Joined the fully remote international engineering team of RealWear as a member of the frontend team, to help develop new applications and work on the existing set of applications. As part of the Cloud team who create and manage a set of apps that RealWear clients use to register and manage the headset devices they buy from RealWear, these devices are the core product of RealWear

- Built a new application allowing resellers of RealWear devices to manage their own clients workspaces. A workspace
  is how the headsets are grouped, the reseller could then log into the management system of the headset for their
  client. Allowing resellers to take over the management of all their clients headsets if allowed.
- Developed web app using Twilio as part of 3 way video call system between headset and mobile devices as new feature to sell more headsets. This system was part of the new approach for RealWear to integrate their mobile apps with the headsets for an overall better experience. Making use of both mobile and web to add more uses of the headset, which should lead to selling more headsets
- Worked on multiple applications all using the NX mono-repo architecture
- Helped improve existing architecture to make code more maintainable and components reusable, helping team deliver new features to end user faster than before
- Created new core components library in reusable UI components that can be used across all apps giving a consistent UI to RealWear suite of apps
- Set up Storybook to build out, test and document new reusable components

SmartImpact Jan 2023 to May 2023

#### Lead Frontend Developer

I worked on an existing application for the main client of SmartImpact, taking over from a previous developer who had left the project. I took over the complex codebase and upgraded the code from the Angular version through to 15 within the timescales set by the client. The application had a tight deadline as the end client needed the system working for their busiest time of year, where they make the most of their income. So being on time was extremely important to both the main and SmartImpact.

- Delivered the upgraded application and documented the entire process for the end client both within time and budget.
- Fixed issues found during upgrade including a few TypeScript issues where changes in the language meant the existing code needed to be refactored to work with the new version of TypeScript.
- Changes were also needed to how the Angular application used forms, with the introduction of Typed Forms I had to set up a series of models for the forms in the application so they could make use of this new feature in Angular 14.
- Added new features to the application while integrating with a third party system called FormIO, which the app used allowing end users to create new pages.
- I delivered the new features all within the tight timescales set out by the budget restraints the end client was imposing on the project.
- Fully documented the changes made, the bug fixes implemented for end clients internal documentation.

At the end of my time on the project I completed the upgrade and added the new features required, then handed
over the codebase to an internal developer while a completely new version of the entire application was being
developed by another company to replace this system in the coming months.

BT Oct 2021 to Jan 2023

## Lead Frontend Developer

For BT I joined a small internal team to work on a React application that used a Map, focused on the UK but able to be global, that showed the cables and lines used by BT's Sports TV network. The idea of the application was that when work for laying new lines was being planned, this map could show a user what is already there and how the connections are made before work was started.

- Saved the company vast amounts of money by stopping unnecessary work being started when cables were already in place. Through this system allowing them to check before work was even planned.
- Developed a system that could be used throughout the organisation.
- The application replaced a more manual process which freed up time and resources within the company.
- Built a system that could be used on different screen sizes but still show vast amounts of data to the end user.
- This application used LeafletJS to build and display a map, then through both a REST API and a GraphQL API I built up layers on the map, again using the LeafletJS API, each layer on the map would show the lines on the map where the cables were. Each layer would then have points on each line where the user could hover on each line and see more information about each point in a popup on the map.
- Used the browser's local storage to record all the information displayed on the map, so the user could reload the
  browser if required. I also stored the entire list of the internal codes used for the search, in order to make the search
  more optimised and extremely quick as loading the entire list while someone was searching caused the app to slow
  and become unusable.

Inawisdom May 2021 to Oct 2021

#### Lead Frontend Developer

Joined an existing Inawisdom team as the single developer on the project, working on a finance-based system for a pharmaceutical client of theirs. The system was designed to work in the same way a large excel spreadsheet would work, but with a large set of custom business rules attached. These rules were all managed via the main database the system was running on. So all the data recorded in the system was submitted to the backend, via a set of .net APIs and then processed.

- Took over the development of the frontend application, without official handover from previous developers.
- Delivered new features and bug fixes within timescale.
- Created a new feature allowing end users of the system to log in and see work tasks assigned to them. As part of a larger workflow process the system was supported.
- Went through a large set of bug fixes chosen by the client that needed fixing, in order for them to be happy to pay InaWisdom.
- Worked with a new team of developers taking over the project from Inawisdom, writing up handover notes, and explaining how the frontend application worked.
- The application was built using both Angular and NgRx and integrated with a .net API, an architecture I have previous experience in which allowed me to understand quickly how the app works.

At the end of the project I had to hand over the UI application to the new company who was employed to maintain the application and explain how the Angular application worked to a non-Angular development team so they could work on the project going forward.

Solirius Consulting Dec 2020 to May 2021

## Senior Frontend Developer

Engaged by Solirius to work on an application for a major client of theirs, this application was a training platform that provided both live and recorded lessons via video using Twilio. The aim of this application was to allow the training company

to run interactive sessions where they can teach end users how to negotiate business mergers, which was core to the end clients business. They were a consultancy who helped facilitate mergers between companies, and the training platform was how they trained their consultants how to work with other companies. This application needed to have good accessibility as it was used by trainers who had issues with accessibility. We spent time adding metadata to the application so it would support screen readers and set up the CSS so the user could control the font and theme of the application to make it more accessible to them.

- Built a new training system which was core to the end clients business.
- Delivered project for Solirius on time allowing them to deliver to their major client, keeping the good working relationship they have intact.
- Contributed to the development of the new 'classroom' feature that allowed users to join different types of classes from large group classes to small 4-6 person groups. So they could take part in training and practising scenarios of facilitating a merger between two companies. The training room system allowed others to watch and listen to how their fellow consultants performed, and then all rejoin as a group to discuss after completing the session.
- The system also had the ability to set up a training plan that a user needed to complete, this was based on their user type. So if your designated user type needed to complete four set modules the system was designed to only allow you to only access these modules.
- Worked with the tech lead on developing both the training room system and the training plan system, based on the requirements set out by the end client and the tech lead of Solirius.
- Supported a junior developer who had just started their career, answering their questions and reviewing their code.
- At the end of the project we delivered both the training room system and the training plan system, within the timescale set out by the client.

# **Cambridge Assessment**

July 2019 to Dec 2020

# Frontend Developer

I joined Cambridge Assessment to build a new system for authoring exam questions for international students, replacing a third-party system. There was an existing authoring system in place that needed replacing before a third party licence needed renewing that the existing system used. Cambridge Assessment did not want to be in another year using this third party system so wanted something that was custom developed. The existing system was built using Angular and this third party authoring tool, the Angular application managed the workflow process around creating an exam paper, while the third party tool allowed the question writers to write the questions.

- Develop a new system to replace existing applications.
- New system needed to be in place before the third-party licence used in the existing system needed renewing, but
  having the new system in place helped save Cambridge Assessment having to pay for the expensive third party
  authoring tool.
- This new application allowed exam authors to select from a pool of questions to create exam papers for students.

  Once an exam was created via this system the paper was sent to another part of the business to be printed.
- Originally the new application was going to be developed internally, but due to a new team being set up the original developer moved to a new team and I was brought on to take on this project.
- Took over the maintenance of this existing system as well as start designing and architecting the new replacement system
- Created a system that could be selected from a set of exam questions that needed to match the requirements of the exam. Having a certain number of questions per category.
- System generated JSON output that could be imported in other systems in Cambridge Assessment as part of the exam authoring workflow.
- I was able to complete a working prototype of the new system and show both the product owners and the department heads how the system worked and how it generated an output file that could be imported into the other systems Cambridge Assessment uses when printing exam papers.

## Web Developer

Joined Beyond to work on a project for Google, their Learn With Google site, adding a new training plan recommendation system. This system allowed users of the site to enter what skill they are looking to learn and the system would then suggest a set of training they could take to work towards this skill. This system was a new feature to an existing learning system already developed with Google and Beyond. As this site was designed for external users, the website needed to match the standards Google set out. This meant the website was built to allow the user to change font size, colour theme to make the text more readable. All the imagery and text was tagged so a screen reader could be used on the site, we aimed to follow the W3C Accessibility Initiative, while keeping to the branding guidelines of Google.

- Created a new site that generated a training plan of the available courses on the Learning With Google site, based on a set of questions the user completed, a custom training plan was generated for the user.
- Released the first version of this new site to end users within the timescale set out by the Google team.
- Worked with both the internal developers of Beyond and the tech lead of Google to provide code that matched the high standards Google required.
- Created UI layouts to match the high quality designs created by the design team at Beyond.
- Integrated the new site with new APIs built by the internal Beyond backend team of developers.
- Wrote the code to match the coding conventions that Google insisted on in order to pass their code quality checking systems and be deployed through their pipelines
- Implemented a Test Drive Development approach to how the TypeScript code was written to improve code quality and reduce bugs.

Netwealth Nov 2018 to Apr 2019

## Web/Mobile Developer

Was contracted directly by Netwealth to develop the initial build of their new mobile app. This app is for Netwealth clients to see how their investments through Netwealth were progressing. It allowed users to log into their account, see the overall status of their investments, drill down into the finer details of how their investments were doing via a set of charts to see the breakdown by category of their portfolio and read the latest news from Netwealth all within the app.

- Developed the first version of a new mobile app for Netwealth clients.
- Built a mobile app that worked on iOS and Android, both mobile and tablet from a single codebase reducing the need for multiple developers working on each platform.
- Added charts to the mobile app, using the Highcharts library, that visually shows how the clients' investments are performing with Netwealth.
- Integrated the mobile app with the existing set of APIs used on the main web app, so there was no need to create a new set of mobile specific APIs that the backend team did not have time to develop.
- Used RxJs to create a reactive UI that updated the values shown on screen when they changed so the end user always had the latest information on screen.
- Integrated with the push notifications sent out via the Azure backend.
- Developed the news section of the app allowing Netwealth to send full news stories on the world of investments to the mobile app.
- Release the app to both iOS and Android stores at the same time so all Netwealth clients could access the app and see their portfolio.

MakePositive Feb 2018 to Nov 2018

#### Web/Mobile Developer

I joined MakePositive to work on a mobile application for their client Calor Gas, designed for the sales team of Calor Gas to use onsite when talking to their customers. This mobile application integrated with a SalesForce backend and allowed the sales team to place and complete orders via a tablet reducing the time to completing a sale.

- Created a new tablet application for the sales team to place orders while onsite, allowing for a far quicker workflow for placing orders for the end client.
- Developed a mobile solution that integrated with the SalesForce backend.
- Delivered the first version of the sales app on time to the sales team to start using and place sales through the app
- Created a complete sales application that showed all the available stock, contained the order in a cart, placed the
  order with the backend system and allowed the sales team to print off the final sales order all within the single
  application.
- Provided MakePositive with Ionic development skills they needed as they specialised in SalesForce development not mobile applications.
- Worked as the main contact point between the internal team and developers from a third-party company who provided a SalesForce/mobile API.

# Houses of Parliament Oct 2017 to Feb 2018

## Lead Frontend Developer

As part of a team within the main IT department of the Houses of Parliament, I was responsible for developing all the frontend development for the various projects this internal team was responsible for. Including building a tablet application to record the votes MPs made when voting for a motion. A web application that allows members of the public to see how their MPs had voted within the House. I worked on apps for both the House of Lords and the House of Commons, working within the guidelines of Gov.UK and the branding of both Houses. As part of the government's digital initiative we developed applications that not only supported multiple devices but also different browsers. So the applications we developed were as accessible as possible. We also took care to design and set up the UI to be accessible for users who had accessibility issues, we used the GOV.UK design guidelines.

- Built tablet-based app using vanilla JavaScript, HTML and CSS, the application was released internally for Android and iOS
- Created vanilla JavaScript libraries for all the frontend applications adding a library of core UI functionality used in all the applications the team developed.
- Integrated with .Net applications

## Chelsea FC Nov 2016 to Sep 2017

#### Lead Frontend Developer

I joined a new team within Chelsea FC to work on the build of the new website (https://www.chelseafc.com/en) working with the new design agency who had been awarded the contract of designing the new version of the website. I was responsible for developing the frontend of the site, taking the elements from the UI designer and building the components and screens needed.

- Built out the new frontend of the new website replacing the original which was hard to update, had no mobile support and articles on the site required a redeploy of the site. Replaced this with a new, fully responsive site that used Adobe AMP as the main CMS.
- Worked with the product owner from Chelsea FC, explaining the approach and decisions made in developing the frontend.
- Worked with an external design team building the UI to match their designs implementing the CSS and components needed for the III
- Built the existing Match Centre that shows the team and live scores of a game as it is running.
- Integrated with Adobe AMP APIs to load content from the AMP authoring tool allowing content writers to publish articles, and a news feed to the site.
- Built the news section that had to support different news article types. Each article type was selected in the AMP authoring tool and the UI used meta-data to dynamically select which layout was needed for an article.
- Created the players section that shows information on any selected player from the team.
- Built the entire site to be fully responsive so the site could be viewed on desktop, tablet and mobile which the previous site did not support. Allowing fans of Chelsea to read the site on any device.
- Added multi-language support so fans from other countries could access and read the site. This feature used the browser information to determine which language to use and there was a language selector so the user could

choose which language they wanted. This was then stored so on their next visit the site was in that newly selected language.

- Built the fan profile section that used a third-party system for creating profiles. I worked with this company adding
  their system to the Chelsea FC site so when a fan signs up their profile is managed by this third-party company.
- Released the first version of the new site to fans.

#### **GSK**

#### Frontend Developer

At GSK I worked as part of a team who developed internal projects used throughout GSK. These web applications needed to work on top of the company's internal Microsoft SharePoint instance, which for security reasons was locked down meaning we did not have the ability to use any JavaScript based frameworks to structure our applications.

In order to build the applications needed we developed a pure vanilla JavaScript approach, where we implemented JavaScript libraries that could be loaded into CMS elements of an application. Then when the HTML for the site was loaded, these JavaScript libraries were loaded into the browser and we could then add interactivity to these applications.

- Built JavaScript libraries that are loaded as web elements to the SharePoint sites
- Created many internal sites for different departments within GSK using these JavaScript libraries
- Built a fully responsive news site called GSK News, that used JavaScript to load news articles from various SharePoint sites into this central news site
- The GSK News site supported desktop, mobile and tablet layouts using Responsive Web Design principles

## **Relevant Career History**

- Lifecake.com: AngularJS Developer May 2016 to Nov 2016
- Various: Freelance Ionic Developer Jan 2016 to May 2016
- Houses of Parliament: Ionic/Angular Developer June 2014 to Dec 2016
- Qinec Ltd: Angular JS Developer May 2014 to June 2014
- Reed Elseiver: Web developer May 2013 to June 2014

#### **Education / Training**

• BA (Hons) English Literature: University of Hertfordshire

#### **Interests**

- · Guitar Player
- Gym/Yoga