

<b>Role Title</b>	<b>Senior Front-End Developer</b>
<b>Business Unit</b>	Group IT - Development, Data & Integration, Application Support
<b>Reports to</b>	Development Manager – Apprenticeship Delivery Platforms
<b>Full / Part Time</b>	Full time
<b>Grade</b>	D2
<b>Location</b>	London
<b>Created/Updated by</b>	Jon Joyce
<b>Created/Updated on</b>	October 19

*Everything we do contributes to achieving our purpose:  
Helping people, organisations and economies develop their skills for growth. This purpose drives everything we do.*

#### Our values

Our values **Imagination**, **Integrity** and **Leadership** are core to everything we do, and makes us who we are. They underpin the way we work, from how we treat our people right through to how we design our products. Living these values in everything you do at the City & Guilds Group will not only make this a great place to work, but ensure you thrive and are successful in your role.

#### Your mission

To design, develop, test and maintain web/client-server applications and web services that support and/or enhance City & Guilds products and services. To also provide technical input into the product development and technology strategy. To engage within the product development team to improve design, development and testing principles on an on-going basis. To develop tools to improve ease of use and efficiency of systems used by internal and external consumers of the systems. To document and pro-actively manage the existing/emerging front-end technologies within the product and help produce developer schemas for on-going work. To make rapidly developed prototypes for client-side technologies

#### What you'll be doing

The role will be to take ownership of front-end technologies and processes for multiple City & Guilds products. It will involve technical documentation of new and existing processes as well as R&D for implementing new feature sets and upgrading existing components.

- **Design Web/client-server applications** - To demonstrate and provide technical input to the Design Team, to ensure practical considerations are taken into account during the design process and to assist with creating mock-ups and prototypes.
- **Develop Prototype client-side applications** - Develop rapid interactive prototypes for client-side applications using industry standard libraries such as React, Angular or Vue.

- **Develop web based/client-server applications and web services** - Develop applications for one or more platforms using native code, SDKs and tools applicable to each platform and/or cross-platform development frameworks.
- **Developing application standardisation** - Ensure that application is developed to the correct standard and building the tools to enforce this. Standardise the use of build tools to aid in application development. Develop code widgets to ensure application is built to a high standard specification
- **Application Maintenance** - Ensure that issues and defects raised are resolved within the agreed SLA. Ensure status and changes are clearly communicated to 2nd line and/or 1st line customer support teams.
- **Research and innovation** - Keep abreast of the changing web technology landscape, new devices, emerging development methodologies and frameworks. Make recommendations for future innovations and develop proof-of-concepts as and when required alongside supporting the current live applications.  
Ensure application roadmap and release plans reflect the functional, innovative and emerging developments on supported platforms, operating systems (OS), development framework SDKs and devices.
- **Documentation and support** - All applications, code image assets and supporting systems, such as content management systems, are documented, stored in an orderly and logical manner and backed up regularly. Support on applications is provided to internal stakeholders where necessary.
- **Mentoring** - In addition to working in parallel with other developers as required to provide support, guidance and testing, there is an obligation to share knowledge and advice to improve the team's knowledge.

## How success will be measured

### Design Web/client-server applications

- Applications developed build on and take into account lessons learned and customer feedback from previous projects.
- Knowledge of and proficiency with prototyping tools and applications.
- Create useful and engaging prototypes using prototyping tools and/or more in-depth prototypes using code.
- Plan application and information architecture that will facilitate designs so that they perform well across various browsers and operating systems, require the minimum of maintenance and are compatible with officially supported versions.
- Inform and engage with the Design Team so they are aware of technical considerations and platform constraints and opportunities when designing applications.
- Document design plans/patterns and to make sure that these are following during back-end development

### Develop Prototype client-side applications

- Functional/interactive prototype matches specifications
- Prototype is evaluated and revisited
- Clear upgrade path from prototype to functional releasable functionality

### Develop web based/client-server applications and web services

- Application User Interface matches design specifications.
- Application Technical Design and code meets User Requirements.  
Application has test case and unit tests to provide enough coverage to ensure high quality deliverable.
- Application architecture implemented correctly to ensure fastest possible performance for target browsers and platforms.
- Applications run error free on platforms and form factors that are supported.

- Application performance and reviews monitored on a regular basis.
- Follow industry best practices to improve product development methodologies
- Inherent support for Localisation/Internationalisation when designing and implementing code and tests
- Contributing to and following agreed coding standards
- Tracking and maintaining any framework releases/updates/bug-fixes that pertain to the product.

## **Developing application standardisation**

- Application has a clear and easy to use build system for any compiled code (such as Less/SASS to CSS compiling, or JavaScript minification).
- Application has clearly defined widgets
- Application has a good level of coding standards

## **Application Maintenance**

- Influence and follow agreed processes to manage maintenance queue and regular communication with customer support to report progress or delays.
- Implement fixes to code and design in a timely manner, ensuring the continuing integrity and performance of the application.
- Ensure regression testing is performed and there is visible continuous improvement in the quality of the applications released.
- Effectively communicate progress and status updates to all stakeholders
- Play a key role in agreeing backward compatibility and the strategy on support for legacy platforms.

## **Research and innovation**

- Monitor releases of new platform operating systems and devices and the requirements to adapt or update existing applications to meet those requirements and/or utilise new features.
- Demonstrate what is potentially possible with new OS and device features through creating working prototypes.
- Scope potential developments to update existing applications and work with the design to implement new features.
- Stakeholders are kept up-to-date on emerging developments in the web technology landscape.
- Utilise emerging technologies and methodologies to deliver efficiencies/improvements in application user experience and/or performance and/or time to market.
- Product Development is equipped with information about emerging technologies to feed into their ideas and planning activity.

## **Documentation and support**

- Documentation for all applications and supporting systems created and maintained where necessary either manually or through the use of markdown/wiki/other documentation formats.
- Training provided where necessary to internal stakeholders on using supporting systems, such as content management systems.
- Support provided to internal stakeholders on use of any aspect of applications and tools.

## **Mentoring**

- The quality of work across the team improves.
- Throughput of tickets.
- Codebase standardisation using improved techniques.
- Setting a Highly Professional Example to others.

## What we're looking for

### We can't live without...

- 5 years of commercial experience of developing online applications or websites
- Experience of working in a high-pressured commercial environment.
- Experience of working with local and/or remote agile teams.
- Experience of tracking and maintaining updates from framework repos.
- Use of version/source control software (SVN/GIT)
- Experience of integrating with Content/Brand/Customer management systems
- Proficient in at least one modern JavaScript library such as Angular, React or Vue.
- Proficient with modern build tools, such as NodeJS with Gulp, Yarn or Webpack
- Proficient with ECMA5 and ECMA6 JavaScript, jQuery and object orientated JavaScript.
- Proficient with compiled CSS languages (LESS or SCSS) as well as HTML4/5
- Proficient with AJAX, JSON, XML, WSDL.
- Good understanding of rapid prototyping and creating mock-ups
- Good understanding of building re-usable components or widgets
- Good understanding of web standards and accessibility
- Good understanding of Bootstrap
- Good understanding of design patterns.
- Good Written, Oral Communication and Inter-Personal Skills.
- Good Time Management Skills.
- Interest in Emerging Technologies.
- High level knowledge and understanding of Responsive Design

### We would love you to have...

- Passion for technology within the user interface and user experience space.
- Experience of working on projects involving internationalisation/localisation projects
- Contributions to open source projects
- Degree in a digital design related area or equivalent commercial experience
- Use of ajax style technologies to communicate with API services.
- Understanding or experience of working with middle layer/server side technologies
- Understanding or experience of SEO principles, Object Orientated Design Skills, etc.
- Understanding of User Interface Design (UI) and User Experience Design (UX) principles
- Experience in front-end languages, toolkits and libraries.
- Experience with JavaScript libraries like KnockoutJS or Backbone
- Good understanding of developing applications using CFML
- Good understanding of developing applications using C# .NET
- Good understanding of SOA principles.
- Good understanding of MS SQL and similar relational databases.
- Good understanding of MVC and other similar frameworks.
- Experience with desktop application development using Proton

## Your career with the City & Guilds Group

This role is a great stepping stone to two possible paths within Application Development:

- Senior Developer – concentrating on server-side technologies
- Application testing consultant – concentrating on testing new/existing applications