###### Technical Architect

###### We want to expand our team of outstanding Technical Architects to help the UK government build and run great digital services for the people of the UK. Candidates must have a strong track record of building and running high volume, reliable and flexible services that are relentlessly user-focused and continually improved through iterative development.

The role requires an equal balance of technical expertise, gained through current, hands-on involvement in developing real-world systems, and excellent interpersonal skills allied with the ability to quickly develop strong working relationships in high pressure environments. Candidates should ideally have experience in development of transformational digital services on “brownfield estates” and/or rapid development and scaling of very high-volume “greenfield” services.

Technical Architects carry out a wide range of activities, from actively writing code as a senior member of the development team and breaking down complex problems and identifying steps towards solutions, through to coaching individuals and engaging with non-technical people at all levels of seniority.

The main responsibilities of the post are:

* Provide hands-on technical leadership, in the development, operation and ongoing improvement of complex, transformational digital services serving millions of users.
* Work with product managers to understand user needs for new and existing services.
* Act as the technical authority in prospective, information gathering and scene setting meetings with other government departments, evaluate technical proposals from external suppliers, and make implementation recommendations to senior stakeholders.
* Work with delivery teams and partners to break technical requirements down into appropriate pieces, and to identify key API requirements for integration with internal and external systems.
* Lead the rapid development of user-driven prototypes to identify technical options and inform architectural approaches, working with colleagues and supplier team members to write tests, code and documentation for new and existing systems.
* Ensure that new and updated platforms, products and transactions are thoroughly tested for performance, are able to handle specified load, and can be maintained over the long-term.
* Work with external suppliers to ensure that their system architectures are robust, scalable, open and secure, with appropriate overall system design and integration points/APIs, to deliver a high quality user experience.
* Advise on, manage and implement agile delivery projects within government departments, providing guidance, mentoring and training in agile technical delivery and evolutionary software architecture to government departments and agencies.
* Provide mentorship and/or line management for software developers and junior software developers
* Assist with building a culture of continuous delivery and improvement, ensuring that key systems are regularly analysed, maintained and improved.

###### **PERSON SPECIFICATION - COMPETENCES/SKILLS REQUIRED**

***SETTING DIRECTION***

**Changing and Improving**

**Essential**

* Understand and identify the role of technology in public service delivery and policy implementation
* Effectively capture, utilise and share customer insight and views from a diverse range of stakeholders to ensure better policy and delivery
* Spot warning signs of things going wrong and provide a decisive response to significant delivery challenges

**Desirable**

* Encourage a culture of innovation focused on adding value – give people space to think creatively

**Making Effective Decisions**

**Essential**

* Push decision making to the right level within their teams, not allow unnecessary bureaucracy and structure to suppress innovation and delivery
* Identify the main issues in complex problems, clarify understanding or stakeholder expectations, to seek best option
* Make difficult decisions by pragmatically weighing the complexities involved against the need to act

**Desirable**

* Weigh up data from various sources, recognising when to bring in experts/researchers to add to available information

***DELIVERING RESULTS***

**Delivering Value for Money**

**Essential**

* Achieve the best return on investment and deliver more for less on specific budgets by managing resources and maximising the use of assets
* Balance policy aspiration and delivery, outline risk and benefits of different options to achieve value for money ensuring all submissions contain appropriate financial information
* Weigh up priority and benefits of different actions and activities to consider how to achieve cost effective outcomes

**Desirable**

* Understand impacts of financial position in own area and that of the organisation and use insight to curtail or support business and investment activities

**Managing a Quality Service**

**Essential**

* Make clear, pragmatic and manageable plans for service delivery using programme and project management disciplines
* Create regular opportunities for staff and customers to help improve service quality and demonstrate a visible involvement
* Ensure the service offer thoroughly considers customers’ needs and a broad range of available methods to meet this, including new technology where relevant

**Desirable**

* Establish how the business area compares to customer service expectations and industry best practice and identify necessary improvements in plans

**Delivering at Pace**

**Essential**

* Get the best out of people by giving enthusiastic and encouraging messages about priorities, objectives and expectations
* Act as a role model in supporting and energising teams to build confidence in their ability to deliver outcomes
* Maintain effective performance in difficult and challenging circumstances, encouraging others to do the same

**Desirable**

* Clarify business priorities, roles and responsibilities and secure individual and team ownership

***ENGAGING PEOPLE***

**Collaborating and Partnering**

**Essential**

* Actively build and maintain a network of colleagues and contacts to achieve progress on objectives and shared interests
* Actively involve partners to deliver a business outcome through collaboration that achieves better results for citizens
* Seek constructive outcomes in discussions, challenge assumptions but remain willing to compromise when it is beneficial to progress

**Desirable**

* Demonstrate genuine care for staff and others – build strong interpersonal relationships

**Specialist skills and requirements**

**Essential**

* Comprehensive and recent experience designing and implementing complex software systems, i.e. is an active software developer currently engaged in architecting and building high-volume digital services
* Proven capability in managing technology implementation projects and in presenting to / working with stakeholders at every level of seniority
* Demonstrable track record of successfully taking an evolutionary architecture approach to software architecture
* Focused on strategic alignment of technical design and architecture to meet business growth and direction
* Knowledge of Agile product management, in particular determination of vision, objectives, goals and success criteria
* Experience of developing product roadmaps, backlogs and measurable success criteria, and of writing user stories, i.e. can establish a path to delivery for breaking down stories
* Experience organising and performing prototyping and proof of concepts
* Experience with Agile methodologies (TDD, SCRUM, Kanban, etc)
* Building and scaling high-traffic websites and/or high volume transaction processing and analysis platforms
* Experience designing and implementing scalable and robust approaches to caching, security and databases (including relational, e.g. MySQL, PostgreSQL, and “NoSQL”, e.g. Cassandra, MongoDB)
* Experience with automated configuration management, deployment and testing solutions
* Use and implementation of modern front end web programming techniques, such as HTML5, CSS3, AJAX, REST, JSON
* Experience with a web programming framework such as Django, Ruby on Rails, Scala / Play etc
* Experience developing and using web-based APIs (especially REST-based APIs)
* Enthusiastic about and experienced with open source solutions and community
* Experience using and deploying on Cloud based platforms
* Enthusiasm for sharing knowledge and working in a multi-disciplinary team