Role Profile

Principal Software Engineer

February 2017

THE ROLE

Job title: Principal Software Engineer

Grade: 6

Reporting to: Software Engineering Manager

Key peer group: DevOps Teams, Technical Integrations Team

Location: Wallingford, UK

Purpose of the role

CABI is an international not-for-profit organization that improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. This role plays a critical part in developing and enhancing web applications, sites and databases that support this mission. Working with other software engineers and database engineers this role helps to set excellent development practices and to deliver innovative changes in new and existing products. It is a hands-on technical role that leads by example using web, mobile and database technologies.

Key Accountabilities

- Designing, developing and maintaining CABI websites and applications mainly using ASP.NET, C# & MVC
- Strong middle-tier development experience with good front end web site development skills
- Developing and enhancing SQL Server databases
- Knowledge or willingness to learn MarkLogic and XQuery
- Designing and implementing appropriate solutions architectures
- Designing, developing and maintaining mobile apps
- Working with the release team to design & implement improved release processes
- Reviewing the work of other team members and providing assistance as required
- Researching and keeping up-to-date with technology applicable to CABI's business needs
- Writing clear, concise and comprehensive technical documentation
- Ensuring development and launch procedures and policies are adhered to
- Helping to ensure the global DevOps team works as one efficient team

PERSON SPECIFICATION

You will have a passion for software and technical innovation, and enjoy being involved in the complete software delivery lifecycle from project scoping through to implementation, testing and ongoing maintenance. You are able to design and implement solutions using a variety of technologies, frameworks and platforms to deliver excellent results. An interest in learning and implementing new technologies is a must, along with the ability to help other engineers to adopt the technology and improve.

You will have a very strong background in delivering ASP.NET and SQL solutions in a team environment with some exposure to document databases, ideally MarkLogic, or working with XQuery. You will have experience of creating and improving the solution architecture of multiple products.

Qualifications and skills

	REQUIRED (commercial or project based)	DESIRABLE
Technical knowledge & skills	• 5+ years ASP.NET using C#, including Web Forms & MVC • 5+ years relational database development, preferably SQL Server • 5+ years using source control within a team setting • 3+ years experience of working with JavaScript libraries • 3+ years experience of HTML5, CSS2/3 & responsive design • 3+ years enterprise level, multi-tiered solution architecture	• API design and implementation • Document database development, preferably MarkLogic, or XQuery • Mobile application development • Document database modelling • SPARQL • XML/XSLT • Experience of working in a DevOps or Agile culture
Education & qualifications	• Degree or MCP's or equivalent in Computer related subjects or relevant work experience	
Personality characteristics	• A pragmatist with excellent judgement to balance business and technical needs • Holds a modern view on how software should be deployed • Ability to quickly learn, implement and evangelise new technologies • Able to mentor and motivate other technical staff • Passionate about the IT industry & CABI's mission • Good communicator with excellent English • Can-do attitude	• Interest in scientific disciplines and/or international development
Special Circumstances	On rare occasions, this role will be required to work outside of normal working hours. Some travel to other CABI offices may be required.	