

## **SOFTWARE ENGINEER/DEVELOPER**

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**POSITION TITLE:** Software Engineer/Developer

**DEPARTMENT:** Technical

**REPORTS TO:** Technical Director

**INCUMBENT:** ANO

**DIRECT REPORTS:** No supervisory responsibilities

**POSITION SUMMARY:** The Software Engineer/Developer develops information systems by analysing, designing, programming, testing and installing Nimblex software solutions

### **ESSENTIAL CRITERIA:**

#### **Qualifications:**

- Tertiary education in computer sciences or similar discipline

#### **Experience:**

- Proven experience in software development: C#, React JS, ASP.net Core, TypeScript and MS Visual Studio
- Proven experience in web development: HTML, CSS and JavaScript
- Proven experience in database development: PostgreSQL, SQL Server and general SQL knowledge
- Demonstrated experience using standard computing tools including testing and data manipulation skills
- Understanding and knowledge on how to create documentation for processes and systems

Note that in the next few months EBMS plans to move into ASP.Net Core MVC so experience in this environment is a plus, but secondary.

#### **Competencies (knowledge, skills and behaviours):**

- Strong and effective interpersonal skills to interact professionally with a diverse group of clients and various departments, and perform as an effective member of a project team
- Effective communication skills so that information and ideas are clearly presented and understood and has a strong appreciation of the end user experience
- Highly analytical with the ability to solve problems quickly and thoroughly
- Ability to think laterally with the use of logic and reasoning
- Ability to multitask and stay organised in a dynamic work environment

#### **Technical skills:**

- Ability to write, edit and debug computer programs to achieve desired output
- Strong understanding of C#, ASP.Net Core, React JS, HTML, TypeScript
- Strong understanding of SQL in general, and for SQL Server and PostgreSQL in specific
- Some understanding of ASP.net Web Forms, JavaScript (vanilla + jQuery) and CSS (EBMS has an existing application on these technologies that needs ongoing support)
- Knowledge of Version Control tools like Git and Subversion
- Understanding of CI/CD principles using Azure DevOps is desirable

- Understanding of Cloud Platforms like Azure and AWS is a plus
- Knowledge of computer languages, data structures, computer logic, flow-charting, computer program design methods and techniques
- Ability to learn new programming languages quickly
- Good knowledge of mathematical and statistical principles
- Knowledge of writing program documentation
- A working knowledge of networking, in particular around HTTP
- Expert knowledge of Windows desktop and server, as well as MS Visual Studio
- Working knowledge of Excel for calculations and data manipulation
- Good knowledge of security and encryption

**MAIN ACTIVITIES:**

Activities	Description of activities and responsibilities
Planning	<ul style="list-style-type: none"> <li>• Liaise with systems analysts, engineers, programmers and others to design systems</li> <li>• Obtain information on project limitations and capabilities, performance requirements and interfaces</li> <li>• Analyse user needs and software requirements to determine feasibility of design within time and cost constraints</li> <li>• Consult with customers about software system design and maintenance</li> <li>• Obtain and evaluate information to determine software and hardware configuration</li> <li>• Determine system performance standards</li> <li>• Plan software programming and development of documentation</li> </ul>
Designing	<ul style="list-style-type: none"> <li>• Design, develop and modify software systems, using scientific analysis and mathematical models to predict and measure outcome and consequences of design</li> <li>• Develop direct software system testing and validation procedures, programming and documentation</li> <li>• Analyse information to determine, recommend and plan specifications and layouts, and peripheral equipment for the installation of a new system or modification of an existing system modifications</li> <li>• Modify existing software to correct errors, allow it to adapt to new hardware, or to improve its performance</li> <li>• Store, retrieve and manipulate data for analysis of system capabilities and requirements</li> <li>• Create technical specifications and test plans</li> </ul>
Testing, evaluating and installing	<ul style="list-style-type: none"> <li>• Coordinate software system installation and monitor equipment functioning to ensure specifications are met</li> <li>• Tests new programs to ensure that logic and syntax are correct,</li> </ul>

	<p>and that program results are accurate</p> <ul style="list-style-type: none"> <li>• Evaluate the software and systems that make the hardware work</li> <li>• Research and recommend software tools to management</li> </ul>
Customer interaction	<ul style="list-style-type: none"> <li>• Consult with customers, other departments on project status, proposals and technical issues</li> <li>• Advise customers about the performance and maintenance of software system</li> <li>• Make presentations to customer or client audiences or professional peers</li> </ul>
Documentation	<ul style="list-style-type: none"> <li>• Write operational documentation with technical authors</li> <li>• Document code consistently throughout the development process by listing a description of the program, special instructions, and any changes made in database tables on procedural, modular and database level</li> <li>• Maintain client databases</li> </ul>
Professional Development	<ul style="list-style-type: none"> <li>• Perform any lawful and reasonable instructions</li> </ul>

**KEY RELATIONSHIPS:**

<b>Personnel</b>	<b>Purpose and frequency</b>
Customers	Regularly – to gather user requirements, communicate project status, updates on technical issues and support and carry out presentations
Marketing staff	Regularly – for updates on support issues and time allocations
Technical staff	Regularly – to communicate the project status and performance issues