



## **TERMS OF REFERENCE**

### **1. Introduction**

Post: Senior Software Engineer  
Post type: Contract (Initial contract shall be for a period of 2 (two) years. The contract can be extended based on performance.)

**Location/Department:** Maldives Customs Service Head office

### **2. Reporting Relationships:**

The Senior Software Engineer shall report to the Head of Information System and Communication Section, and/or other designated supervisors.

### **3. Overall scope of work:**

To lead, design, develop, maintain, and enhance software applications and information systems to meet organizational requirements. The Senior Software Engineer is responsible for ensuring the reliability, security, performance, and scalability of software solutions while providing technical leadership and supporting the continuous improvement of IT systems and services.

### **4. Main Responsibilities/Tasks:**

- Lead the design, development, testing, implementation, and maintenance of software applications in accordance with organizational requirements, technical standards, and business objectives.
- Review code to ensure quality and best practices.
- Analyze business and user requirements and translate them into technical specifications, system architectures, and scalable software solutions.
- Lead the development, modification, enhancement, and optimization of existing applications, systems, and software modules.
- Ensure systems security, reliability, high availability and performance.
- Establish and enforce coding standards, software development best practices, and guidelines to ensure code quality, security, maintainability, and performance.
- Design, develop, review, and optimize SQL queries.
- Design and oversee the integration of software applications with existing systems, databases, APIs, and third-party services.



- Conduct and oversee code reviews, unit testing, integration testing, system testing, debugging, and troubleshooting to ensure software quality and reliability.
- Identify, analyze, and resolve software defects, technical issues, security vulnerabilities, and performance bottlenecks.
- Prepare, review, and maintain comprehensive technical documentation, including system architecture, technical specifications, API documentation, user guides, and maintenance procedures.
- Ensure the implementation of appropriate software security controls, data protection measures, and compliance with organizational IT policies, standards, and procedures.
- Collaborate with business users and other technical staff to identify requirements, assess system improvements, and deliver effective software solutions.
- Provide technical leadership, guidance, and mentorship to software engineers and development team members, including support in problem-solving, code quality, and technical decision-making.
- Monitor application performance, system availability, and resource utilization, and recommend and implement improvements to enhance system efficiency, scalability, and reliability.
- Lead and participate in software deployment, system upgrades, data migration, application implementation activities.
- Oversee the use of version control systems and CI/CD pipelines, including tools such as GitHub, to support automated testing, continuous integration, deployment, and effective software change management.
- Evaluate emerging technologies, software development tools, frameworks, and methodologies and recommend their adoption where they can improve organizational efficiency and system capabilities.
- Contribute to software project planning, technical estimation, risk assessment, and implementation scheduling to ensure the timely delivery of high-quality software solutions.
- Investigate recurring technical issues and implement sustainable solutions to minimize system downtime, improve maintainability, and prevent future failures.
- Coordinate with relevant stakeholders to ensure that software solutions meet functional requirements, technical specifications, operational needs, and agreed quality standards.
- Perform other duties related to software engineering, system development, and information technology as assigned by the supervisor.



## 5. Desired Skills & Competencies:

- Strong programming and software development skills.
- Excellent analytical, problem-solving, and troubleshooting abilities.
- Knowledge of software architecture, design patterns, and development methodologies.
- Proficiency in database design, SQL, and database management systems.
- Knowledge of API development, system integration, and web application technologies.
- Demonstrate strong knowledge of operating systems.
- Understanding of cybersecurity principles, secure coding practices, and data protection.
- Experience with version control systems, automated testing, and CI/CD tools.
- Ability to lead technical projects, manage priorities, and meet deadlines.
- Strong leadership, mentoring, teamwork, and collaboration skills.
- Excellent written and verbal communication skills.
- Ability to analyze complex requirements and develop practical, reliable, and scalable solutions.
- Commitment to continuous learning and keeping up to date with emerging technologies.

