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PALLI KARMA-SAHAYAK FOUNDATION (PKSF)

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Terms of Reference (ToR) for Quality Assurance Engineer

1.0 Background

Palli Karma-Sahayak Foundation (PKSF), an apex development organization founded by the Government of Bangladesh, is mandated for poverty alleviation through sustainable employment generation by providing appropriate financing, skill training, and other necessary services. As a second-tier organization, PKSf implements all programs and projects through more than 200 of its Partner Organizations (POs) across the country. Extending diversified financial and non-financial services covering over 2 crores members using its and POs' digital network.

To strengthen data-driven planning and monitoring, PKSf is in the process of implementing a comprehensive Decision Support System (DSS) an integrated systems platform. Through real-time dashboards, analytics, and reporting tools, the DSS will enhance evidence-based decision-making, transparency, accountability, and operational efficiency at all levels.

To ensure the quality, reliability, and performance of the DSS, PKSf intends to engage a qualified professional in the position of Quality Assurance Engineer. The incumbent will be responsible for designing and executing comprehensive test strategies to ensure the system meets all functional and non-functional requirements before deployment.

2.0 Name of the Position

Quality Assurance Engineer

3.0 Duty Station

The incumbent will be stationed in Dhaka. Occasional field visits may be required as per organizational needs.

4.0 Employment Duration

The appointment will be made initially for 04 (four) years, subject to annual renewal based on performance and demonstrated dynamism.

5.0 Responsibilities and Tasks

The Quality Assurance Engineer will work under the Information Technology (IT) Department of PKSf and will be responsible for the following tasks (but not limited to):

- Develop, implement, and maintain comprehensive test strategies, test plans, and quality gates for the DSS.
- Design, document, and execute detailed test cases covering functional, integration, system, regression, performance, and UAT.
- Include DSS data-quality verification—validating dashboard calculations, analytics accuracy, and integration consistency with source systems
- Conduct manual and automated testing to identify defects, inconsistencies, and performance issues.



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- v. Develop and maintain automated test scripts for regression and performance testing using industry-standard tools.
- vi. Automate validation of DSS KPIs and business rules using Java-based frameworks integrated with Jenkins/GitLab CI pipelines.
- vii. Perform API testing using Postman or equivalent tools to validate system interoperability.
- viii. Perform data validation and integrity testing across integrated databases.
- ix. Work closely with System Analyst, Software Solution Specialist, and software vendors to ensure test coverage and requirement traceability.
- x. Identify, document, track, and verify software defects using a defect management system.
- xi. Establish and monitor QA standards, metrics, and processes across all SDLC phases.
- xii. Review and approve vendor testing methodologies, test cases, and QA frameworks.
- xiii. Monitor vendor adherence to quality standards, coding practices, and testing protocols.
- xiv. Oversee vendor-led test execution including unit, integration, system, and UAT.
- xv. Conduct quality audits and assessments of vendor development and testing processes.
- xvi. Establish and manage defect resolution life cycles with vendors.
- xvii. Review and validate vendor test automation strategies and implementation.
- xviii. Coordinate performance, security, and compliance testing activities.
- xix. Monitor test coverage, defect density, and quality KPIs across vendor deliverables.
- xx. Ensure compliance with industry quality standards, regulatory requirements, and internal policies.
- xxi. Facilitate quality reviews, evaluate test results, and provide go/no-go recommendations for releases.
- xxii. Establish and maintain quality documentation, test artifacts, and traceability matrices.
- xxiii. Serve as primary QA liaison between internal stakeholders and vendor testing teams.
- xxiv. Provide QA guidance and training to vendor teams on organizational standards and best practices.
- xxv. Oversee test environment setup, maintenance, and test data management strategies.
- xxvi. Monitor post-deployment system quality and coordinate defect triage.
- xxvii. Drive continuous improvement initiatives in vendor QA processes and test management practices.

6.0 Academic and other qualifications

- i. Candidates must have a Bachelor's degree in Computer Science/Computer Science & Engineering/Information Technology/Software Engineering from a recognized university.
- ii. Applicants must have at least two First Divisions/Classes or equivalent CGPA in their academic record.
 - a. Any Third Division/Class in any examination is not acceptable.
 - b. First Class will be determined based on the candidate's regular degree (considering the first three degrees only).
- iii. Preference will be given to candidates with Agile, Cloud, Security, or Performance testing certifications

7.0 Experience & Required Skills

- i. Mandatory Experience and Required Competencies of the Candidate:
 - a. The candidate must have at least ten (10) years of demonstrated professional experience in software quality assurance and testing, including both manual and automated testing of enterprise-grade web applications developed in Java or equivalent platforms.



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- b. Proven experience in designing, developing, and maintaining test automation frameworks using standard tools such as Selenium WebDriver, Cypress, or other equivalent tools.
- ii. Preference will be given to the candidates with experience in:
- Strong knowledge of software QA methodologies, tools, and processes, including writing comprehensive test plans, test cases, and defect reports.
 - Proficiency in API testing using Postman, SoapUI, or similar tools, including testing of microservices and system integrations.
 - Practical experience in performance and load testing using recognized tools such as Apache JMeter or LoadRunner, including performance tuning, system profiling, and benchmarking of large-scale applications.
 - Solid understanding of relational databases (PostgreSQL, SQL Server, Oracle) and ability to write SQL queries for data validation and ETL testing.
 - Familiarity with CI/CD pipelines, version control systems (e.g., Git), and integration of testing into continuous delivery practices.
 - Understanding of security testing, vulnerability assessment techniques, and risk-based testing approaches.
 - Experience with mobile application testing, cross-platform testing strategies, and emerging technology quality assurance, including AI/ML systems.
 - Knowledge of test management tools, defect tracking systems, quality metrics, and reporting processes.
 - Previous experience as a test architect or senior quality engineer leading complex testing initiatives.
 - ISTQB or equivalent QA certification will be considered an added advantage.
 - Excellent analytical skills and attention to detail for identifying complex defects and quality gaps.
 - Strong problem-solving abilities to address complex quality challenges.
 - Excellent communication skills with the ability to articulate quality risks, recommendations, and findings to both technical and non-technical stakeholders.
 - Leadership skills with experience managing cross-functional quality teams.
 - Systematic approach to quality assessment and process documentation.
 - Ability to work under pressure and manage multiple quality initiatives simultaneously.
 - Adaptability to changing requirements, evolving quality standards, and emerging technologies.
 - Strong vendor relationship management, ensuring quality delivery, continuous improvement, and compliance with contractual obligations.
 - Expert knowledge of quality assurance best practices, frameworks, and standards.
 - Risk management and mitigation strategies for quality-related project risks.
 - Development, monitoring, and evaluation of quality metrics, including vendor performance assessment methodologies.
 - Experience in testing data-driven decision-support or analytics platforms will be an added advantage.



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8.0 Age limit

Minimum 37 years on the last date of application.

9.0 Salary & other admissible benefits:

- i. Consolidated monthly salary will be BDT 200,000/-(Two Lac only)
- ii. Other admissible benefits (Annual Salary Increment, Festival Allowance, Bangla Noboborsho Allowance, Mobile Allowance, Group insurance, etc.) as per PKSF policies.
- iii. Salary and other admissible benefits (if any) are inclusive of all taxes as imposed by the Government of Bangladesh. All relevant Taxes will be deducted at sources as per the Government rules.

PKSF is an equal opportunity employer and seeks to employ and assign the best-qualified personnel for all of its positions in a manner that does not unlawfully discriminate against any person because of his/her specific identities, such as race, religion, gender, disability or any other status or characteristics protected by the laws of the country.