Terms of Reference
For
Selection of Individual Consultant

Job #	N/A
Position Title	**Consultant (Software Engineer)**
Source of Fund	**GoB**
Location	Dhaka, Bangladesh
Appointment	Local Hire
Job Posted	TBA
Closing Date	TBA
Language	Bangla [Essential]; English [Essential]
Appointment Type	Time-Based. Duration: 12 months (Subject to the date of joining and duration of the project till 31 December 2026. Further extension is subject to the performance of the incumbent and availability of fund)

Background of the Project:

The Aspire to Innovate (a2i) Programme builds on the Government of Bangladesh's efforts to introduce a citizen-centric culture of innovation in civil service to improve service delivery and make services more inclusive, affordable, reliable, and easier to access. This project provides support to establish institutional mechanisms that incentivize, sustain, and scale innovations to attain sustainable impact, involving both the public and private sectors. a2i has implemented multiple national-scale digital platforms and enterprise applications to facilitate government service delivery.

This project will have four components:

1. Institutionalizing Public Service Innovation and Improving Accountability
2. Catalysing Digital Financial Services and Fintech Innovations
3. Incubating Private Sector-enabled Public Service Innovation
4. Forming an 'Agency to Innovate' under ICT Division

Background of the assignment:

The Consultant (Software Engineer) will develop working prototypes, modules, recommend modern software engineering practices, and ensure quality, security, and performance compliance in medium to large scale e-Government software development. S/he will perform requirement analysis, technical design, and architecture planning for digital transformation initiatives. This role also involves close coordination with infrastructure and development teams to ensure interoperability across government digital services.

Aspire to Innovate (a2i) Programme is looking for a **Consultant (Software Engineer)** who will analyze the technical aspects of software development lifecycles, system architecture, and integration of enterprise-scale applications for government services, to ensure the ongoing development, integration, and optimization of such platforms,

Objectives of the assignment:

- Analyse technical aspects of software development lifecycles.,

- Plan and optimize efficient software solution across government digital platforms.

- Perform requirement analysis, system architecture and technical design preparation for the digital transformation of public services.

- Develop working prototypes, technical presentations, and recommend modern software engineering practices including CI/CD, version control (Git), containerization (Docker), etc.

- Ensure quality, security, and performance compliance throughout the software development lifecycle.

- Coordinate with relevant stakeholders, and development and infrastructure team to manage development activities and validate deliverables.

- Plan and implement integration between Government digital services to ensure interoperability.

Supervision and Performance Evaluation:

The **Consultant (Software Engineer)** will work with the Technology team of the Aspire to Innovate Programme. Performance evaluation will be conducted by the project authority, a2i. Contract continuation will depend on satisfactory performance, fund availability, and project duration.

Scope of work, Duties and Responsibilities:

- Develop, test, and maintain applications using appropriate programming languages, frameworks, and tools.
- Participate in requirement gathering, system analysis, and architectural design for new and existing applications.
- Ensure adherence to coding standards, maintain documentation, and implement software engineering best practices.
- Collaborate with DevOps and QA teams to ensure smooth integration, deployment, and operational support.
- Review code, provide guidance to junior developers, and contribute to team knowledge sharing.
- Troubleshoot, debug, and optimize applications for performance, security, and reliability.

Relevant Competencies:

Technical Competencies:

- Proficiency in programming languages such as **Java, Python, .NET, or similar**, and relevant frameworks.
- Experience in **software development lifecycle**, including design, coding, testing, and deployment.
- Knowledge of **system architecture, application integration, and API development**.
- Familiarity with **databases, data modelling, and query optimization**.
- Understanding of **software security best practices** and coding standards.
- Experience with **version control systems** (e.g., Git) and collaboration tools.
- Experience with CI/CD tools, containerization, and cloud-native environments.

Functional Competencies:

- Strong **analytical and problem-solving** skills to troubleshoot complex software issues.
- Ability to **collaborate with cross-functional teams** including QA, DevOps, and product teams.
- Competence in **project planning, task prioritization, and delivery tracking**.

- Ability to **guide junior developers**, promoting knowledge sharing and best practices.
- Effective **communication skills** for reporting, documentation, and stakeholder interaction.
- Ability to **adapt to evolving technologies** and implement scalable, maintainable solutions.

Deliverables and Timeframe:

The assignment will be for 12 months. Completed tasks under each area and activity will be as follows:

Deliverables	Timeline
- Complete development, testing, and deployment of assigned software modules. - Requirement analysis, system design, architecture diagrams, and solution specifications. - Regular code review reports, adherence to coding standards, and implementation of best practices. - Reports on system integration, performance testing, and optimization recommendations. - User manuals, operational guides, and knowledge transfer materials. - Comprehensive summary of deliverables, project outcomes, and recommendations for future enhancements.	12 Months

The incumbent will perform other related duties and responsibilities as and when required and assigned. The incumbent should function as an effective team member.

Payment: The Consultant will be paid equal instalments on a monthly basis upon completion of the above deliverables.

Requirements for Experience and Qualifications:

Academic Qualifications:

- Minimum Bachelor's degree in Software Engineering, Information and Communication Systems, CSE, Management Information Systems, or relevant subject from a reputed university.

Experience:

- Minimum of 8 years of work experience in national or international organizations.
- At least 4 years of experience in system design and software development
- At least 2 years of experience in developing and maintaining enterprise scale applications.