

STRENGTHENING PUBLIC EXPENDITURE MANAGEMENT IN BELIZE
TERMS OF REFERENCE

Software Developer I

Central Information Technology Office - Ministry of Finance

Updated May 28, 2024

TYPE OF ENGAGEMENT: Individual Consultant

DUTY STATION: Belmopan City, Belize

PROJECT NUMBER: BL-L1038

LOAN NO.: 5353/OC-BL

PROCESS ID: BL-L1038-P00083

1 BACKGROUND

The Strengthening Public Expenditure Management Program – SPEM (5353/OC-BL-L1038) is a response to the consolidation efforts to bring public finances back to a sustainable path and create meaningful fiscal space require the adaptation of reforms to reduce inefficiencies in public expenditure, which amounts to 6.3% of GDP at the level of the wage bill, procurement, and transfers, the third highest in the region. To face this challenge the government is committed to implementing a comprehensive fiscal consolidation plan, with a strategy centered on three areas: (i) expenditure reduction (ii) increased revenues; and (iii) debt restructuring.

The general objective is to promote the fiscal sustainability of Belize. The specific objective is to increase the efficiency of public resources by strengthening public financial management. The project is being funded by the Government of Belize and the Inter-American Development Bank (IDB) through a loan of US\$8 million.

The program is comprised of a single component with four subcomponents that will achieve the objective:

- (i) Financial Management, to improve the efficiency of key expenditure functions; (ii) Procurement, to improve efficiency by promoting economies of scale and competitiveness among suppliers in the acquisition of all goods and services; (iii) Technological Infrastructure, to promote a more sustainable technological infrastructure enabling processes to be more reliable and faster; and (iv) Strengthening Capacity Building, to improve institutional capacity for personnel to carry out processes and operate systems efficiently.

2 OBJECTIVE AND SCOPE OF WORK

The Software Developer I will be responsible to Analyze, design, code, test, assess, and troubleshoot software programs and applications throughout their software development life cycle for CITO, MOF, Government of Belize. This includes researching, designing,

configuring, coding, developing, documenting, and modifying software specifications throughout the project/development life cycle.

3 RESPONSIBILITIES/ACTIVITIES

The main responsibilities include, among others:

Analysis and Requirements:

- 1) Analyses user requirements.
- 2) Conducts research, develops software designs, and writes software code that aligns with the business requirements and functions developed by the System Analyst.

Development and Coding:

- 3) Works with a variety of computer coding languages and platforms/environments (web, desktop, mobile, etc.).
- 4) Develops existing programs by analyzing and identifying areas for modification.
- 5) Integrates existing software products.

Testing and Quality Assurance:

- 6) Tests new programs and discovers faults and takes corrective action to ensure that the software is fit for use.
- 7) Creates technical specifications and test plans.

Documentation:

- 8) Writes operational and development documentation.
- 9) Documents programming problems and resolutions for future reference.

Maintenance and Monitoring:

- 10) Maintains systems by monitoring and correcting software defects.

4 QUALIFICATION AND EXPERIENCE

Academic Qualifications

Bachelor's degree with a major in Computer information Systems, Computer information Science, Software Development or Software Engineering or related field. Degrees and certificates must be attached.

Experience

Note that experience must be clearly demonstrated/listed/explained in application submission.

- 1) **Minimum Experience of three (3) years** in one or more programming languages relevant to the job: JavaScript, React.js, Angular, Vue.js (or similar frontend framework for

building user interfaces), C#, PHP, .Net Framework. Experience in Java, Python, C++.
Ensure to list the programming languages.

- 2) **Minimum Experience of three (3) years** in the development of software solutions. Provide descriptive list of development software solutions.
- 3) Demonstrable working knowledge of Azure cloud technologies such as Azure Services, Azure DevOps, Azure SQL Database would be an asset.
- 4) Experience in Ruby programming language would be an asset.
- 5) Demonstrable experience in database design, querying, and integration (e.g., Microsoft SQL, NoSQL databases) would be an asset.

5 DESIRED TRAITS, SKILLS, KNOWLEDGE AND ABILITIES

Skills, Knowledge and Abilities

Technical:

- 1) Working knowledge of microservices architecture including familiarity with containerization and orchestration using Docker or Kubernetes for scalable and efficient application deployment.
- 2) Working knowledge of security and compliance in managing identity and access control using Azure Active Directory and on-premises solutions.
- 3) Strong knowledge of software testing methodologies (unit testing, integration testing).
- 4) Experience in using version control systems (e.g., Git) to manage and track changes to code. Clearly list the control systems.
- 5) Demonstrable proficiency in debugging and troubleshooting code.
- 6) Keeping knowledge up to date with technical sector developments in the industry.
- 7) Strong understanding of software development life cycle.
- 8) Awareness of security principles and best practices in software development and implementation of secure coding practices.
- 9) Demonstrable Software Development experience - must be familiar with systems analysis and design methods, including the selection of appropriate architectural patterns for software applications (MVC, Microservices, etc.). Skills in gathering and analyzing system requirements from stakeholders and experience in translating business requirements into technical specifications.
- 10) Working knowledge in optimizing software system performance through code enhancements and software architectural improvements.
- 11) Analytical and problem-solving skills.
- 12) Knowledge of database architecture and design.
- 13) Ability to interpret written requirements and technical specification documents.
- 14) Ability to code software according to published standards and design guidelines.
- 15) Flexible attitude, ability to perform under pressure.
- 16) A commitment to quality and a thorough approach to the work.
- 17) Ability to work well within a team.

18) Project management experience with software development as an area of concentration.

Behavioral:

- 1) Exhibit strong customer service orientation.
- 2) Ability to be patient.
- 3) Strong communication and Interpersonal skills.
- 4) Research skills.
- 5) Strong leadership skills.
- 6) Ability to present ideas in business-friendly and user-friendly language.
- 7) Highly organized, self-motivated, self-directed, and attentive to detail.
- 8) Ability to effectively prioritize and execute tasks in a high-pressure environment.
- 9) Extensive experience working in a team-oriented, collaborative environment.
- 10) Good work ethics.

6 REPORTING RESPONSIBILITY

The Software Developer I will report to the Systems Analyst, CITO within the Ministry of Finance

7 SALARY RANGE

\$38-47K BZD per annum

8 Duration of Consultancy

3 Years

9 APPLICATIONS

CRITERIA for SELECTION

Consultants will be selected in accordance with the procedures set out in the Inter-American Development Bank: [Policies for the Selection and Contracting of Consultants financed by the Inter-American Development Bank](#) (GN-2350-15) – individual consultants and is open to all eligible candidates as defined in the IDB policies. The individual consultant will be selected based on their experience and competence relevant to the assignment and most appropriate qualifications and references in accordance with the Comparison of Qualifications method set out in the Consultant Policies. **Only short-listed applicants will be invited for an interview.**

APPLICATION REQUIREMENTS:

Application should be submitted in one document in English using required template. Template should be requested from tjoseph.ceu@med.gov.bz.