



**CIVIL SERVICE OF JAMAICA
JOB DESCRIPTION AND SPECIFICATION
MINISTRY OF ENERGY, TRANSPORT AND TELECOMMUNICATIONS (METT)**

JOB TITLE:	Programmer Analyst
JOB GRADE:	MIS/IT 5
POST NUMBER:	58533
DIVISION:	Corporate Services
BRANCH/UNIT:	Information Systems
REPORTS TO:	Software Development Manager
MANAGES:	N/A

This document will be used as a management tool and specifically will enable the classification of positions and the evaluation of the performance of the post incumbent.

This document is validated as an accurate and true description of the job as signified below:

Employee

Date

Manager/Supervisor

Date

Head of Department/Division

Date

Date received in Human Resource Division

Date Created/revised

JOB PURPOSE

Under the general supervision of the Software Development Manager, the Programmer Analyst is responsible for analysing user requirements, designing, developing, testing, implementing and maintaining software applications and database solutions to support the effective and efficient delivery of the Ministry's business functions. The Programmer Analyst provides technical advice and user support in relation to software solutions and contributes to the continuous improvement, security and reliability of the Ministry's information systems.

KEY OUTPUTS

- Software applications and database solutions developed, tested and implemented;
- User requirements analysed and translated into appropriate technical solutions;
- Existing applications enhanced, upgraded and maintained;
- Software applications and changes adequately tested and documented;
- Software documentation, source code and program specifications maintained;
- User training and technical support provided;
- Software solutions evaluated and recommendations made for improvement;
- Ministry website and intranet content and functionality maintained and updated;
- User satisfaction with implemented software solutions assessed and reported on.

KEY RESPONSIBILITY AREAS

Administrative Responsibilities

- Consults with users and stakeholders to clarify requirements, establish priorities and provide updates on software development activities;
- Prepares and maintains accurate documentation for software applications, including source code, program specifications, system documentation, database structures, process flows and user documentation;
- Documents system changes, enhancements, upgrades, modifications and implementation activities;
- Provides user training and guidance on the effective use of custom-developed and commercial software applications;
- Develops training materials, user guides and other support documentation as required;
- Conducts user satisfaction surveys and other assessments to determine the effectiveness of newly developed or implemented systems;
- Maintains records of reported application problems, corrective actions, system changes and other relevant technical activities;
- Coordinates with ICT personnel, vendors, consultants and other stakeholders in the implementation, maintenance and support of software solutions;
- Provides input to the planning and prioritisation of software development and enhancement activities;

- Prepares technical reports, status updates and recommendations for consideration by the Software Development Manager;
- Provides input to the evaluation and selection of software products, technologies and related services;
- Ensures that software development and implementation activities comply with established Ministry policies, ICT standards, procedures and security requirements; and

Technical/Professional Responsibilities

- Analyses user requirements and business processes to determine appropriate software solutions;
- Participates in the design, development and implementation of software applications to support the Ministry's business operations;
- Develops program specifications, flowcharts, data models and other technical specifications to guide software development;
- Codes, tests, debugs and modifies software applications using approved development platforms, programming languages and tools;
- Develops, maintains and optimises database applications and performs database programming as required;
- Performs enhancements, upgrades and modifications to existing applications to address changing business requirements and technological developments;
- Conducts system, integration and user acceptance testing and resolves identified defects and performance issues;
- Implements and deploys software applications, enhancements and updates in accordance with approved procedures;
- Provides technical support in diagnosing and resolving application-related problems;
- Ensures that appropriate application security controls are incorporated into software solutions;
- Monitors the functionality and performance of developed applications and recommends technical improvements;
- Researches and evaluates emerging software technologies, development tools and commercial software solutions and makes recommendations regarding their suitability for Ministry operations;
- Participates in the integration of software applications and databases with existing ICT systems, where required;
- Maintains and updates the technical functionality of the Ministry's intranet and website; and
- Keeps abreast of developments, standards and emerging technologies in software development, database management and related ICT disciplines.

Other

- Performs any other duties assigned from time to time.

PERFORMANCE STANDARDS

- Software solutions are developed and implemented in accordance with approved requirements, standards and timelines;
- Applications are reliable, functional, secure and fit for purpose;
- User requirements are accurately analysed and appropriately translated into system specifications;
- Software is adequately tested prior to implementation, with identified defects addressed promptly;
- Software upgrades and modifications are implemented within approved timelines and with minimal disruption to users;
- Software documentation, source code and system specifications are accurate, complete and kept current;
- Application security controls are implemented in accordance with established ICT security standards and policies;
- User support and reported application problems are addressed promptly and effectively;
- User training is conducted effectively, and appropriate support materials are provided;
- User satisfaction with implemented software solutions is monitored and maintained at an acceptable level;
- The Ministry's website and intranet are maintained and updated accurately and within established timelines; and
- Relevant developments in software technologies and practices are monitored and appropriately incorporated into recommendations and solutions.

INTERNAL AND EXTERNAL CONTACTS

<i>Internal</i>	<i>Nature of Relationship</i>
Director, Management Information Systems, Software Development Manager	Receive guidance, direction and technical advice; report on software development and implementation activities; identify and escalate technical issues.
ICT Division	Collaborate on the development, implementation, maintenance and support of software applications; exchange technical information and coordinate ICT-related activities.
All Staff Members/Users	Obtain information on user requirements and system problems; provide technical assistance, user guidance and training on software applications; receive feedback on system performance and functionality.

<i>External</i>	<i>Nature of Relationship</i>
e-Gov Jamaica Limited	Request and receive technical advice and support, where required, in relation to software applications and ICT services.
Software Vendors/Service Providers	Obtain technical information, software support and assistance with the implementation and maintenance of software solutions, as required.
Other Ministries, Departments and Agencies	Exchange information on software applications and ICT-related matters, where required.

REQUIRED COMPETENCIES

Core Competencies	Level	Functional Competencies	Level
Written Communication	2	Systems Analysis	2
Oral Communication	2	Software Development	2
Analytical Thinking	2	Programming	2
Problem Solving	2	Database Management	2
Teamwork	2	Software Testing	2
Customer Focus	2	Systems Implementation	2
Initiative	2	Application Security	2
Results Orientation	2	Technical Documentation	2
Technical Expertise	2	User Support	2

MINIMUM REQUIRED QUALIFICATION AND EXPERIENCE

- Bachelor's Degree in Computer Science, Software Development, Information Technology, Information Systems or a related field from an accredited tertiary institution;
- Two (2) years experience in the related field

or

- Diploma in Computer Science, Software Development, Information Technology, Information Systems or a related field from an accredited tertiary institution;
- Three (3) years experience in the related field

Professional certification in software development, database management or a related area would be an asset.

SPECIAL CONDITIONS ASSOCIATED WITH THE JOB

- Work is primarily performed in an office environment;
- May be required to work beyond normal working hours, including weekends and public holidays, where operational requirements necessitate.

AUTHORITY

- Analyses and interprets user and business requirements;
- Makes technical decisions within established policies, standards and procedures;
- Recommends software technologies, applications, development tools and related solutions;
- Recommends modifications and enhancements to existing applications;
- Identifies and reports software defects, vulnerabilities and performance issues;