



## IDENTIFICATION

Department	Position Title	
Finance	Senior Software Developer	
Position Number	Community	Division/Region
15-13702	Yellowknife	ISSS

## PURPOSE OF THE POSITION

The Senior Software Developer designs and develops large or complex business applications and integrations. Solutions developed facilitate the achievement of departmental program outcomes and enhance service effectiveness through the use of process and technology.

## SCOPE

Located in Yellowknife and reporting to the Manager - Development Services, the Senior Software Developer plans and undertakes software development projects and assignments including interfaces and applications within the ISSS, ensuring implemented solutions meet the anticipated business requirements. Services are delivered on behalf of all GNWT departments and NWT Housing Corporation. Projects and initiatives range from simple to extremely complex, costing upwards of \$1M and have significant organisational financial and reputational risk.

The incumbent is an expert on software development, ensuring the planning, designing, creation, amending, verification, testing and documentation of new and amended software components in order to deliver agreed value to stakeholders. The position assists in the identification, creation and application of agreed software development and security standards and processes. The position Adopts and adapts software development lifecycle models based on the context of the work and selecting appropriately from predictive (plan-driven) approaches or adaptive (iterative/agile) approaches.

The incumbent influences clients, suppliers and partners at the management and staff level. It may make decisions which impact the work assigned to individuals or phases of projects including the work of staff in other departments. The position understands and collaborates on the analysis of user/client needs and represents this in their work.



The incumbent performs a range of work, often complex and non-routine, in a variety of environments requiring the application of a methodical approach to issue definition and resolution.

The position operates under limited direction, using individual discretion in identifying and responding to complex issues and assignments. It accepts guidance and has work reviewed at agreed milestones. The position holder uses its discretion to determine when issues should be escalated to a higher level.

There is a requirement for security and privacy to their own work and the operation of the organization. The position seeks specialist security and privacy knowledge or advice when required to support their own work or work of immediate colleagues.

The position plans, schedules and monitors its own work within limited project deadlines and according to relevant legislation, standards and procedures.

## **RESPONSIBILITIES**

- 1. Takes technical responsibility across all stages and iterations of software development.**
  - Plans and drives software construction activities.
  - Adopts and adapts appropriate software development methods, tools and techniques selecting appropriately from predictive (plan-driven) approaches or adaptive (iterative/agile) approaches.
  - Measures and monitors applications of project/team standards for software construction including software security.
  - Contributes to the development of organisational policies, standards, and guidelines for software development.
  - Leads review of peers work and participates in reviews of own work
- 2. Creation of test cases using own in-depth technical analysis of both functional and non-functional specifications (such as reliability, efficiency, usability, maintainability and portability).**
  - Produces test scripts, materials and regression test packs to test new and amended software or services.
  - Specifies requirements for environment, data, resources and tools.
  - Interprets, executes and documents complex test scripts using agreed methods and standards.
  - Records and analyses actions and results and maintains a defect register.
  - Reviews test results and modify tests if necessary.



- Provides reports on progress, anomalies, risks and issues associated with the overall project.
- Reports on system quality and collects metrics on test cases.
- Provides specialist advice to support others.
- Coordinates and manages planning of the system and/or acceptance tests, including software security testing, within a development or integration project or initiative.

**3. Collaborates with technical and project teams to develop and implement system integration plans and report on progress.**

- Provides technical expertise to enable the configuration of software, other system components and equipment for systems testing.
- Defines complex/new integration builds.
- Ensures that integration test environments are correctly configured.
- Designs, performs and reports results of tests of the integration build.
- Identifies and documents system integration components for recording in the configuration management system.
- Recommends and implements improvements to processes and tools.

**WORKING CONDITIONS**

**Physical Demands**

No unusual demands.

**Environmental Conditions**

No unusual conditions.

**Sensory Demands**

No unusual demands.

**Mental Demands**

This position undertakes work on which there are client expectations for quality and timely completion of initiatives. The Senior Software Developer will be under pressure to deliver projects. Overtime and travel to regional and vendor offices may be required from time to time.

**KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of software development methods, practices and processes.
- Knowledge of Project Management practices such as those described in the Project Management Body of Knowledge (PMBOK).
- Knowledge of the software development lifecycle, as well as the various



methodologies including predictive (plan-driven) approaches or adaptive (iterative/agile).

- Experience with modern software development and scripting languages, software and tools.
- Communicates fluently, orally and in writing, and can present complex information to both technical and non-technical audiences.
- Ability to effectively facilitate collaboration between stakeholders who share common objectives.
- Ability to maintain an awareness of developments in the industry and select appropriately from applicable standards, methods, tools and applications, taking responsibility for driving own development.
- Ability to implement software design and programming concepts, processes and methodologies.
- Has a sound generic, domain and specialist knowledge necessary to perform effectively in the organisation typically gained from recognised bodies of knowledge and organisational information.
- Demonstrates effective application of knowledge and takes action to develop own knowledge and contributes to the development of others.
- Has an appreciation of the wider business context.
- Contributes fully to the work of teams. Appreciates how their own role relates to other roles and to the business of the ISSS or client.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

**Typically, the above qualifications would be attained by:**

Completion of an undergraduate degree in computer science, with 3 years of relevant experience as a programmer developing software components and integrations.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

**Position Security (check one)**

- ☒ No criminal records check required
- ☐ Position of Trust – criminal records check required
- ☐ Highly sensitive position – requires verification of identity and a criminal records check

**French language (check one if applicable)**

- ☐ French required (must identify required level below)  
Level required for this Designated Position is:

ORAL EXPRESSION AND COMPREHENSION

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

READING COMPREHENSION:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

WRITING SKILLS:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

☐ French preferred

**Indigenous language:** Select language

☐ Required

☐ Preferred