

Public (when completed)

Common Government

New

Ministry

Technology and Innovation

Describe: Basic Job Details

Position

Position ID

50023540

Position Name (200 character maximum)

Inter Full Stack Developer

Requested Class

Systems Analyst Level 2

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Vacant

Organizational Structure

Division, Branch/Unit

Digital Design and Delivery, Software Delivery

☐ Current organizational chart attached?

Supervisor's Position ID

50025399

Supervisor's Position Name (30 characters)

Manager, Software Delivery

Supervisor's Current Class

Manager (Zone 1)

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

The Digital Design and Delivery division is the Government of Alberta's new centre of digital delivery. It partners with ministries to design simpler, faster, and better services; build capability and confidence in modern digital practice; and assure service quality and value through standards and controls. Multidisciplinary product teams are assigned priority GoA projects and employ an agile, product-oriented approach in providing solutions for ministry partners. Each product team is typically comprised of six to eight team members including an Architect, Designers, Developers, and other assigned specialists.

The Intermediate Full Stack Developer is a collaborative member of a multidisciplinary product team. The Full Stack Developer designs and implements software with a focus on iterative, continuous development, where requirements and solutions evolve through collaboration between cross-functional teams and users. The Full Stack Developer has knowledge of both front end and back end development.

This position is required to develop and support applications across various GoA Ministries.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

1. Provide both front end and back end software development as part of a multidisciplinary product team, employing a human-centered design and agile approach to improve services and deliver products.

- Collaborate with agile teams and stakeholders to understand user needs and lead the development of the solution.
- Participate in project activities, including field work and user research.
- Participate in creating and prioritizing a backlog of work, estimates effort, and commits to scope of work for predictable delivery of features.
- Identify technical tasks for a backlog of work such as software development, and technical investigation, and recommendations.
- Design and implement digital services, shared components, and integrations to existing systems.
- Work with designers throughout development to tailor the solution for users with refinement through frequent user feedback using methods such as usability testing.
- Ensure quality while providing consistent pace of feature delivery.
- Apply best practices such as unit testing, test coverage, linting, code reviews, co-design, and pair programming.
- Utilize source control and documentation best practices to ensure long term maintainability of code bases.
- Facilitate high quality and rapid delivery through adoption of tools and automation in CI/CD pipelines.

2. Provide technical advice, and recommendations as it relates to software development.

- Research industry trends and new technologies, identifying technology opportunities.
- Identify efficiencies and service enhancements as part of making the shift to modern digital products.
- Provide technical assistance to other product team developers when resolving problems.
- Looks for opportunities to communicate to the Digital Architect, Team Leaders, and Management to improve processes including alternatives and solutions, product evaluation, and risk assessment.

3. Engage with a wide variety of both internal and external stakeholders.

- Work closely with GoA ministry partners and external stakeholders to identify and advocate technologies that will lead to digital transformation.
- Work with other product team Full Stack Developers and other members to identify efficiencies.
- Represent and participate in teams and committees as assigned.
- Communicate effectively with all stakeholders to convey concepts to various audiences.

Problem Solving

Typical problems solved:

The product team relies on the Intermediate Full Stack Developer to resolve issues utilizing their knowledge and skills across the full spectrum of software development (front end and back end).

The position works with various ministries and may work on more than one product team, requiring knowledge of several different technical stacks and government processes. The position makes decisions that will affect the overall success for each product.

The position is challenged with recommending modern digital solutions to help ministry partners to decommission legacy systems and reduce technical debt. The position must be able to understand the user needs of a varied stakeholder group which may be internal or external to government. The position conceptualizes new and innovative approaches for ministry partners and stakeholders.

Types of guidance available for problem solving:

This position works independently but has access to the Associate Director of Software Delivery, Director of Architecture, Director of Cloud Operations, and Director DevOps & QA for assistance for non-routine issues as well as other Digital Architects.

Direct or indirect impacts of decisions:

Decisions made by this position could result in the following:

- Decommissioning of legacy applications and systems.
- Reducing technical debt.
- Moving from on premise legacy technologies into cloud platforms.
- Building loosely coupled components (e.g., microservices, APIs) to reduce future upgrade/enhancement costs.

Key Relationships

Major stakeholders and purpose of interactions:

Internal Stakeholders:

- Product team members: Work in close collaboration with other product team members.
- Other product teams: Work in collaboration with other product teams to identify efficiencies and share lessons learned and common services built in their own product team.
- Branch/Division Management: Seek guidance and direction.
- GoA Ministry partners: Engage with users to determine needs and offer product solutions.

External:

- Other jurisdictions, Agencies, Boards, and Commissions (ABCs), Albertan citizens: Engage with external stakeholders to determine needs and offer product solutions.
- Consultants, contractors, vendors: Engage depending on nature of project or when transitioning during various stages.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)			

If other, specify:

2 yr computer tech. diploma plus 4 yrs experience OR 1 yr computer tech. diploma and 5 plus experience.

Job-specific experience, technical competencies, certification and/or training:

This position requires the following:

- Experience working as a Full Stack Developer on complex software solutions in an agile team environment.
- Experience developing web applications using current technologies such as single-page application frameworks.
- Experience working with open-source ecosystems such as but not limited to: .net, C#, Oracle PL/SQL with the ability to create both desktop and web based interfaces.
- Experience with unit testing and integration testing.
- Experience using source control, particularly git, in collaborative software development.
- Experience working with CI/CD pipelines.
- Experience using and working with Integrated Development Environment (IDE).
- Experience conveying technical information to non-technical people and advising decision-makers on technical options.
- Experience with design patterns and their application and software architecture considerations.
- Experience with database technologies, including relational databases and alternatives.
- Experience developing on cloud platforms and utilizing cloud services in development and in solutions.
- Experience working with teams that also apply UX design, service design, design thinking, or human-centered design approaches.
- Experience providing daily operational support (tier 1, 2, & 3) to several developed applications.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Develop Networks	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Works on maintaining close relations with all stakeholders: <ul style="list-style-type: none">• Identifies key stakeholder relationships• Has contact with range of interested parties• Actively incorporates needs of a broader group• Influences others through communication techniques	Work closely with GoA ministry partners and external stakeholders to identify and advocate technologies that will lead to digital transformation.
Build Collaborative Environments	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Facilitates open communication and	Analyze impacts, exposure, and risk as it pertains to software design.

		leverages team skill: <ul style="list-style-type: none"> • Leverages skills and knowledge of others • Genuinely values and learns from others • Facilitates open and respectful conflict resolution • Recognizes and appreciates others 	
Systems Thinking	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Considers inter-relationships and emerging trends to attain goals: <ul style="list-style-type: none"> • Seeks insight on implications of different options • Analyzes long-term outcomes, focus on goals and values • Identifies unintended consequences 	Collaborate with agile teams and stakeholders to understand problems and lead the technical piece of the solution.
Agility	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Works in a changing environment and takes initiative to change: <ul style="list-style-type: none"> • Takes opportunities to improve work processes • Anticipates and adjusts behaviour to change • Remains optimistic, calm and composed in stressful situations • Seeks advice and support to change appropriately • Works creatively within guidelines 	Employ an agile, product-oriented approach in providing solutions for stakeholders.

Benchmarks

List 1-2 potential comparable Government of Alberta: [Benchmark](#)

The position is comparable to a Systems Analyst 2, notably Benchmark 512SA08, Project Technical Analyst.

Both positions require in-depth technical understanding of IT knowledge used in wide variety of situations for different project teams in multiple ministries. Both require formal knowledge acquired through education in computer science or a related discipline. Both work on designing new and technical solutions with the Full Stack Developer also researching and addressing issue that are 'new'. Both initiate and maintain communications between various audiences (operations, project teams, end users).