

New

Ministry

Describe: Basic Job Details

Position

Position ID

Position Name (200 character maximum)

Full Stack Developer

Requested Class

Job Focus

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

 Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

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 centre of digital delivery. It partners with ministries to design simpler, faster, and better services; build capability and confidence in modern digital practices; 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 Full Stack Developer is a collaborative member of a multidisciplinary product team. The Full Stack Developer designs and implements software using an iterative, continuous development approach, where requirements and solutions evolve through collaboration between cross-functional teams and users. **The role explicitly requires AI capability, creating systems with AI as co-developers. So, we are seeking developers who can build, integrate, and optimize AI-driven solutions** in addition to traditional front-end and back-end development. The Full Stack Developer is expected to apply AI responsibly and effectively to enhance digital services and delivery outcomes.

The role supports the Government of Alberta's North Star vision by delivering citizen-centric digital services, driving

purposeful innovation, including the adoption of AI-enabled solutions, and ensuring secure, high-quality digital products.

Responsibilities

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

1. Deliver full-stack software development with a strong emphasis on AI-enabled solutions: Provide front-end and back-end software development as part of a multidisciplinary product team, using a human-centered design and agile approach to deliver modern digital services, including AI-driven capabilities.

- Collaborate with agile teams and stakeholders to understand user needs and design and implement solutions that incorporate AI, automation, or machine-assisted decisioning where appropriate.
- Contribute to project activities, including field work, user research, and identification of opportunities where AI can enhance service delivery or efficiency.
- Contribute to creating and prioritizing backlogs, estimating effort, and committing to scope for predictable delivery of features, including AI-related technical work.
- Identify and define technical tasks for backlogs, including AI experimentation, model integration, data pipelines, prompt engineering, and technical investigations.
- Design and implement digital services, shared components, and AI-enabled tools for rapid prototyping and integration with existing systems.
- Work closely with designers throughout development to tailor AI-assisted solutions based on frequent user feedback, including usability testing and responsible-AI considerations.
- Ensure quality and reliability while maintaining a consistent pace of delivery, including validation of AI outputs and behavior.
- Apply best practices such as unit testing, test coverage, linting, code reviews, co-design, pair programming, and testing strategies for AI-enabled functionality.
- Use source control and documentation best practices to ensure the long-term maintainability of codebases, including clear documentation of AI usage, assumptions, and limitations.
- Enable high-quality, rapid delivery through automation and CI/CD pipelines, including deployment and lifecycle management of AI components.

2. Provide technical leadership and advice with a focus on AI adoption: Provide technical advice and recommendations related to software development, with an explicit focus on AI technologies and modern digital practices.

- Research industry trends and emerging technologies, including applied AI, machine learning, and developer-assist tools, and identify opportunities for adoption.
- Identify efficiencies and service enhancements through appropriate use of AI to modernize digital products and delivery processes.
- Provide technical assistance to other developers, particularly in integrating, operating, and troubleshooting AI-enabled components.
- Proactively communicate with Digital Architects, Team Leaders, and Management to recommend improvements, alternatives, and solutions, including AI-based approaches and associated risks, ethics, and controls.

3. Engage stakeholders to advance AI-enabled digital transformation: Engage with a wide range of internal and external stakeholders to advocate for responsible, secure, and effective use of AI in digital services.

- Work closely with GoA ministry partners and external stakeholders to identify technologies, including AI capabilities, that support digital transformation objectives.
- Collaborate with other Full Stack Developers and product team members to identify efficiencies and share AI-related practices and patterns.
- Represent and participate in teams and committees as assigned, including those related to digital innovation and AI adoption.
- Communicate effectively with technical and non-technical stakeholders to clearly explain solutions, including AI concepts, benefits, and limitations, to diverse audiences.

Problem Solving

Typical problems solved:

The product team relies on the Full Stack Developer to design, build, and maintain digital services across front-end and back-end systems, with a core expectation that the developer can build, integrate, and optimize AI-driven solutions to improve efficiency and service outcomes.

This role works across multiple ministries and product teams, requiring adaptability to different technical stacks and government processes. The position is expected to recommend and implement modern, cloud-native, and AI-enabled solutions to replace legacy systems, reduce technical debt, and support long-term resilience.

The role requires the ability to understand diverse user needs and apply AI responsibly and effectively to deliver

innovative, secure, and user-centered digital products.

Types of guidance available for problem solving:

This has access to the Director of Software Development, Director of Architecture, and various guilds for assistance for non-routine issues as well as the Digital Architect.

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.
- Product team developers: Provide guidance, mentorship, and support.
- 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

Bachelor's Degree (4 year)

Focus/Major

2nd Major/Minor if applicable

Designation

If other, specify:

Computer Science field OR a related discipline

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, including delivering and supporting AI-enabled features within digital products.
- Experience using AI coding assistants (e.g., GitHub Copilot, Claude Code, Cursor, etc.) to support application development, with strong validation habits (testing, code review, secure coding) and responsible use (privacy/security).
- Experience developing web applications using current technologies such as single-page application frameworks, including applications that integrate AI services or automation capabilities.
- Experience working with open-source ecosystems such as but not limited to: Node.js/NPM, PHP, Java, JavaScript, Angular, MySQL, MongoDB, Drupal, Twig, and Elasticsearch, and integrating AI services or libraries within these ecosystems.
- Experience with automated unit testing and integration testing, including validating behavior, reliability, and failure handling of AI-driven components where applicable.
- Experience using source control, particularly Git, in collaborative software development, including managing AI-related code, configurations, and prompts.
- Experience working with CI/CD pipelines, including supporting deployment and lifecycle management of cloud-based and AI-enabled solutions.
- Experience using and working with command-line interfaces, command-line based tool stacks, and Integrated Development Environments (IDEs), including tools used for AI integration, configuration, and troubleshooting.
- Experience conveying technical information to non-technical audiences and advising decision-makers on technical options, including explaining AI capabilities, trade-offs, risks, and limitations.
- Experience with design patterns and their application, and software architecture considerations, including patterns for AI-ready and cloud-native solutions.
- Experience with database technologies, including relational databases and alternatives, supporting data needs for AI-enabled features and workflows.
- Experience developing on cloud platforms and utilizing cloud services in development and solutions, including cloud-

hosted AI services or model integrations.

- Experience working with teams that apply UX design, service design, design thinking, or human-centered design approaches, including refining AI-enabled solutions based on user feedback and usability considerations.

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"/>	<p>Works on maintaining close relations with all stakeholders:</p> <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"/>	<p>Facilitates open communication and leverages team skill:</p> <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 	Analyze impacts, exposure, and risk as it pertains to software design.
Systems Thinking	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Considers inter-relationships and emerging trends to attain goals:</p> <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"/>	<p>Works in a changing environment and takes initiative to change:</p> <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 	Employ an agile, product-oriented approach in providing solutions for stakeholders.

		support to change appropriately • Works creatively within guidelines	
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Benchmarks

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

Assign

The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

_____ Date yyyy-mm-dd _____

Supervisor / Manager Name _____ Date yyyy-mm-dd _____ Supervisor / Manager Signature

Director / Executive Director Name _____ Date yyyy-mm-dd _____ Director / Executive Director Signature

ADM Name _____ Date yyyy-mm-dd _____ ADM Signature