New

Ministry

Technology and Innovation

Describe: Basic Job Details

Position

Position ID

Position Name (200 character maximum)

Junior Full Stack Developer

Requested Class

Systems Analyst Level 1

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 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 compromised of six to eight team members including an Architect, Designers, Developers, and other assigned specialists.

The Junior 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 assist with the development 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 assist with the development of the solution.
• Participate in project activities, including field work and user research.
• Identify technical tasks for a backlog of work such as software development, and technical investigation, and recommendations.
• Assist the team to 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. Assist Team with technical advice, and recommendations as it relates to software development.
• Research industry trends and new technologies to assist with identifying technology opportunities.
• Assist with identifying 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.
• Assist the team who 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 Junior 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 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 Intermediate Full Stack Developers, 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:
• Building loosely coupled components (e.g., microservices, APIs) to reduce future upgrade/enhancement costs.
• Assist with the modernization of existing applications from legacy code to modern platforms.

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 2 yrs experience OR 1 yr computer tech. diploma and 3 plus experience.

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

This position requires the following:
- Experience working as a Junior 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 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 A B C D E	Level Definition	Examples of how this level best represents the job
Develop Networks	A ○ B ◉ C ○ D ○ E ○	Works on maintaining close relations with all stakeholders: • 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	A ○ B ◉ C ○ D ○ E ○	Facilitates open communication and leverages team skill: • Leverages skills and knowledge of others • Genuinely values and learns from others • Facilitates open and respectful conflict	Analyze impacts, exposure, and risk as it pertains to software design.

		resolution • Recognizes and appreciates others	
Systems Thinking	◉ ○ ○ ○ ○	Observes and understands larger impact of role: • Sees impact of work on organization; anticipates change in own area based on activities in other areas • Considers how own work impacts others and vice versa • Ask questions to understand broader goals • Aware of how organization adds value for clients and stakeholders	Collaborate with agile teams and stakeholders to understand problems and lead the technical piece of the solution.
Agility	◉ ○ ○ ○ ○	Understands need for change and manages own emotions: • Uses common sense and past experience to approach ambiguous problems • Prevents emotions from affecting others negatively • Looks for information on changes • Open to new ideas and helping co-workers	Employ an agile, product-oriented approach in providing solutions for stakeholders.

Benchmarks

List 1-2 potential comparable Government of Alberta: Benchmark