Ministry of Digital Economy
Project Management Unit (PMU)

Job Descriptions

1. **Title: Software Architect -** 4 vacancies
2. **Introduction:** Technical Oversight and Design: Responsible for providing technical leadership and guidance, ensuring the technical feasibility and soundness of solutions, and defining the overall technical architecture. Software Architects will be primarily involved in: * Maintaining Essential Common Services, ensuring their stability and eventual transition. * Providing technical oversight to the Interim Project Unit. * Potentially contributing to the early design of systems for DEA/GovTech (as needed).
3. **Duration**: 2-month service contract
4. **Job Descriptions :**

1. Software Architect – Digital Initiatives

Position	Software Architect – Digital Initiatives
Location	Ministry of Digital Economy (MoDE)
Reporting to	Head of PMU
Objective	The objective of this role is to provide technical and architectural expertise to the PMU for the successful design, implementation, and transition of digital initiatives. The Software Architect will: ● Develop architectural frameworks for core DPIs. ● Ensure alignment with technical and business requirements. ● Provide strategic guidance for technology adoption. ● Support the transition to DEA/GovTech through structured handover.
Key Responsibilities	The applicant shall report to the Head of PMU or the relevant Technical Lead and will be responsible for the following: **(i) Solution Design** ● Provide architectural guidance and design support for new digital initiatives. ● Develop architectural frameworks for core DPIs. ● Ensure scalability, security, and performance of proposed solutions. **(ii) Technology Evaluation** ● Evaluate and recommend appropriate technologies for implementing digital initiatives. ● Conduct technical feasibility studies and recommend best-fit solutions. **(iii) Technical Oversight** ● Provide technical oversight and guidance to development teams. ● Ensure alignment with architectural guidelines and technical standards.

	● Identify and mitigate technical risks. **(iv) Documentation** ● Prepare and maintain comprehensive architectural documentation. ● Develop design blueprints and technical specifications. ● Document system dependencies and integration points. **(v) Stakeholder Support** ● Provide technical support and guidance to stakeholders. ● Work with government agencies, vendors, and internal teams to address architectural requirements. ● Participate in technical discussions and reviews.
Qualifications and Experience	**Experience:** ● Minimum 7 years experience in software architecture and design. ● Proven track record of successful delivery of complex software solutions. ● Experience working with government organisations and large-scale public sector projects is desirable. **Knowledge:** ● Strong understanding of digital technologies and software development methodologies. ● Experience with microservices, cloud computing, and enterprise architecture. ● Knowledge of digital platforms and Digital Public Infrastructure (DPI).
Technical Skills	● Expertise in relevant technologies such as cloud infrastructure, APIs, microservices, and containerisation. ● Proficient in architectural frameworks such as TOGAF. ● Strong analytical and problem-solving skills. ● Ability to design scalable, secure, and high-performance solutions.
Non-Technical Skills	● Excellent communication and interpersonal skills. ● Ability to work independently and collaboratively with stakeholders. ● Strong organisational and time-management skills.
Educational Requirements	● Bachelor's degree in Computer Science, Software Engineering, or a related field.
Certifications (Optional)	● Relevant architecture certifications such as TOGAF, AWS Certified Solutions Architect, or equivalent are desirable.

2. Software Architect – Project Management Unit

Position	Software Architect – Project Management Unit
Location	Ministry of Digital Economy (MoDE)
Reporting to	Head of PMU

Objective	The objective of this role is to provide technical and architectural expertise to the PMU for the successful design, implementation, and transition of digital initiatives. The Software Architect will: ● Design the overall architecture for new software systems. ● Ensure alignment with technical and business requirements. ● Validate the technical aspects of ongoing and future tenders. ● Provide strategic guidance for technology adoption. ● Support the maintenance of essential common services

Key Responsibilities	The applicant shall report to the Head of PMU or the relevant sectoral head and will be responsible for the following:
	(i) Solution Architecture
	● Design the overall architecture for new software systems and applications.
	● Develop architectural frameworks for critical initiatives such as:
	   ○ **SLUDI** (Sri Lanka Unique Digital Identity)
	   ○ **PM Tool** (Project Management Tool)
	   ○ **ERP** (Enterprise Resource Planning)
	● Ensure the designed architecture is scalable, secure, and high-performing.
	(ii) Technical Guidance
	● Provide technical oversight and guidance to development teams.
	● Ensure alignment with architectural guidelines and technical standards.
	● Identify and mitigate technical risks.
	(iii) Tender Validation
	● Review and validate the technical aspects of ongoing and upcoming tenders related to software development.
	● Ensure proposed solutions meet technical, security, and performance standards.
	● Provide technical input for tender evaluation and selection processes.
	(iv) Technology Evaluation
	● Evaluate and recommend appropriate technologies and platforms for new projects.
	● Conduct technical feasibility studies and recommend best-fit solutions.
	● Identify emerging technologies that align with PMU's strategic objectives.
	(v) Maintenance of Essential Common Services
	● Provide architectural support for the maintenance and enhancement of 10 Common Services.
	● Ensure common services meet performance and security benchmarks.
	● Establish guidelines for long-term maintenance and scalability.

Qualifications and Experience	**Experience:** ● Minimum of **7 years** of experience in software development, with at least **3–5 years** in a software architecture role. ● Experience with government projects is a plus. ● Proven track record of successful delivery of complex software solutions. **Knowledge:** ● Deep understanding of software architecture principles, design patterns, and best practices. ● Familiarity with various technologies and platforms, including open-source and proprietary solutions. ● Experience in designing scalable, secure, and high-performance systems.
Technical Skills	● Expertise in relevant programming languages and frameworks. ● Experience with cloud technologies (e.g., AWS, Azure, GCP). ● Strong understanding of database design and management. ● Experience with API design and integration. ● Knowledge of microservices architecture and containerization. ● Familiarity with DevOps practices and CI/CD pipelines.
Non-Technical Skills	● Excellent communication and interpersonal skills. ● Strong leadership and problem-solving skills. ● Ability to work independently and collaboratively with stakeholders. ● Strong organizational and time-management skills.
Educational Requirements	● Bachelor's degree in Computer Science, Software Engineering, or a related field.

Certifications (Optional)	● Relevant architecture certifications such as:
	   ○ AWS Certified Solutions Architect
	   ○ TOGAF
	   ○ Microsoft Certified: Azure Solutions Architect Expert
	   ○ Google Professional Cloud Architect

3. Software Architect – Project Handover

Position	Software Architect – Project Handover
Location	Ministry of Digital Economy (MoDE)
Reporting to	Head of PMU

Objective	To ensure the successful handover of digital projects, including: ● Technical due diligence of projects being handed over. ● Assessment and completion of technical documentation. ● Ensuring smooth knowledge transfer to receiving organizations. ● Providing technical support during the handover process. ● Facilitating post-handover technical support.
Key Responsibilities	The applicant shall report to the Head of PMU or the relevant sectoral head and will be responsible for the following: **(i) Technical Due Diligence** ● Review the technical architecture of projects being handed over. ● Identify gaps, inconsistencies, and areas of improvement in the existing architecture. ● Ensure alignment with technical and business requirements. **(ii) Documentation Review** ● Assess the completeness and accuracy of technical documentation. ● Identify missing or outdated information and recommend corrective actions. ● Ensure that documentation covers system design, implementation, and maintenance guidelines. **(iii) Knowledge Transfer** ● Facilitate structured knowledge transfer sessions with technical staff. ● Ensure that receiving organizations and the PMU have a clear understanding of the system architecture, dependencies, and maintenance requirements. ● Develop knowledge transfer frameworks and guidelines. **(iv) Technical Support** ● Provide technical oversight during the handover process. ● Address technical challenges and roadblocks encountered during the transition. ● Ensure the stability and continuity of services during the handover period. **(v) Handover Support** ● Support receiving organizations in adopting and maintaining the handed-over systems. ● Monitor post-handover performance and provide technical assistance as needed. ● Develop a transition plan to ensure long-term stability and scalability.
Qualifications and Experience	**Experience:** ● Minimum of **7 years** of experience in software development, with at least **3–5 years** in a software architecture role. ● Experience with government projects is a plus. ● Proven track record of successful delivery of complex software solutions. **Knowledge:** ● Broad understanding of software architecture principles, design patterns, and best practices. ● Familiarity with various software technologies and platforms, including open-source and proprietary solutions. ● Experience in designing scalable, secure, and high-performance systems.

Technical Skills	- Expertise in relevant programming languages and frameworks. - Experience with cloud technologies (e.g., AWS, Azure, GCP). - Strong understanding of database design and management. - Experience with API design and integration. - Knowledge of microservices architecture and containerisation. - Familiarity with DevOps practices and CI/CD pipelines.
Non-Technical Skills	- Excellent communication and interpersonal skills. - Strong knowledge transfer and training skills. - Strong leadership and problem-solving skills. - Ability to work independently and collaboratively with stakeholders. - Strong organizational and time-management skills.
Educational Requirements	Bachelor's degree in Computer Science, Software Engineering, or a related field.
Certifications (Optional)	- Relevant architecture certifications such as: - AWS Certified Solutions Architect - TOGAF - Microsoft Certified: Azure Solutions Architect Expert - Google Professional Cloud Architect

4. Software Architect – Maintenance of Essential Common Services

Position	Software Architect – Maintenance of Essential Common Services
Location	Ministry of Digital Economy (MoDE)
Reporting to	Head of PMU
Objective	To ensure the ongoing stability and eventual transition of essential common services, including: - Providing technical oversight for 10 essential common services. - Addressing complex technical issues and ensuring service continuity. - Contributing to the technical aspects of the transition plan for these services. - Ensuring that technical documentation is up-to-date and comprehensive. - Supporting the phased transition to new organisations or teams.
Key Responsibilities	The candidate shall report to the Head of PMU or the relevant sectoral head and will be responsible for the following: **(i) Technical Oversight** - Provide technical oversight and guidance for the maintenance of 10 essential common services. - Ensure alignment with established technical standards and best practices.

	● Monitor service performance and recommend improvements. **(ii) Issue Resolution** ● Provide software architecture support to resolve complex technical issues. ● Act as the technical escalation point for critical issues. ● Ensure rapid identification and resolution of service disruptions. **(iii) Transition Planning** ● Contribute to the technical aspects of the transition plan for essential common services. ● Develop guidelines for the smooth transition of services to new organisations or teams. ● Identify risks and mitigation strategies related to service transition. **(iv) Documentation** ● Ensure that technical documentation for the services is up-to-date and accurate. ● Develop and maintain architectural guidelines, implementation details, and maintenance procedures. ● Ensure that documentation is accessible to relevant stakeholders. **(v) Maintenance** ● Oversee the routine maintenance of essential common services. ● Ensure proper versioning, updates, and patch management. ● Monitor security and performance to prevent service disruptions.
Qualifications and Experience	**Experience:** ● Minimum of **7 years** of experience in software development, with at least **3–5 years** in a software architecture role. ● Experience with maintaining and scaling complex software systems. ● Experience with government or large-scale enterprise projects is preferred. **Knowledge:** ● Broad and in-depth knowledge of software architecture principles, design patterns, and best practices. ● Familiarity with technologies and platforms used in essential common services. ● Understanding of performance monitoring, security standards, and system integration.
Technical Skills	● Expertise in relevant programming languages and frameworks. ● Experience with cloud technologies (e.g., AWS, Azure, GCP). ● Strong understanding of database design and management. ● Experience with API design and integration. ● Knowledge of microservices architecture and containerisation. ● Familiarity with DevOps practices and CI/CD pipelines.
Non-Technical Skills	● Excellent communication and interpersonal skills. ● Strong problem-solving and analytical skills. ● Ability to work independently and collaboratively with stakeholders. ● Strong leadership and decision-making skills.
Educational Requirements	● Bachelor's degree in Project Management, Business Administration, Information Technology, Public Administration, or a related field.

Certifications (Optional)	● Relevant architecture certifications such as:
	  ○ AWS Certified Solutions Architect
	  ○ TOGAF
	  ○ Microsoft Certified: Azure Solutions Architect Expert
	  ○ Google Professional Cloud Architect