Job Title: Senior Software Engineer

Responsibilities

As a Senior Software Engineer, you will be instrumental in architecting, developing, and evolving the secure, scalable digital platforms and services critical to UNU's global mission. You will drive technical excellence, foster innovation, and collaborate across teams to deliver robust solutions that enhance the way our community researches, learns, and shares knowledge worldwide.

Responsibilities:

- **Strategic Platform Development**
  - Drive the architectural design and full-lifecycle development of secure, scalable, and user-centric solutions leveraging Microsoft 365 services, with a primary focus on SharePoint Online and the Power Platform.
  - Lead the implementation of modern information architectures, custom applications (SPFx, Power Apps), and automated workflows (Power Automate) that directly support UNU's operational and research objectives.
  - Pioneer the adoption of reusable components, templates, and frameworks (e.g., PnP) to ensure consistency, efficiency, and adherence to best practices across all solutions.
  - Strategically plan and execute complex migrations from legacy systems to cloud-native platforms, ensuring data integrity and minimal disruption.
- **Architectural Leadership & Technical Strategy**
  - Define and evolve the technical architecture and strategic roadmap for key digital platforms, ensuring alignment with organizational goals and long-term scalability.

- ◦ Evaluate emerging technologies and industry trends within the Microsoft ecosystem, recommending innovative solutions to enhance platform capabilities and user experience.
- ◦ Lead technical design discussions, review solution architectures, and ensure adherence to security, performance, and maintainability standards.
- ◦ Proactively identify and address technical debt, advocating for sustainable engineering practices and refactoring efforts.
- **Security, Governance, and Compliance**
  - ◦ Proactively enforce robust tenant- and environment-level governance policies, including data loss prevention (DLP), access controls, and role-based permissions, to safeguard sensitive information.
  - ◦ Conduct comprehensive security reviews, threat modeling, and vulnerability assessments for all developed solutions, implementing "security by design" principles.
  - ◦ Ensure strict alignment with organizational information security policies and international regulatory requirements (e.g., GDPR, SOC 2, UN data privacy standards).
  - ◦ Establish and maintain comprehensive monitoring, auditing, and alerting frameworks to track usage, detect anomalies, and ensure continuous compliance and operational health.
- **Agile Delivery & Stakeholder Collaboration**
  - ◦ Collaborate closely with diverse stakeholders across UNU's global network to elicit, refine, and translate complex business requirements into clear, actionable user stories and acceptance criteria.
  - ◦ Drive agile development ceremonies, including sprint planning, estimation, daily stand-ups, and retrospectives, fostering a culture of iterative delivery and continuous improvement.
  - ◦ Communicate project status, risks, and dependencies transparently, managing expectations and incorporating feedback to refine solutions effectively.
  - ◦ Manage and prioritize a dynamic product backlog and roadmap, ensuring alignment with strategic business outcomes and organizational priorities.

- **Engineering Excellence & Mentorship**
  - Lead and conduct rigorous technical design reviews and code reviews (SPFx, Power Fx, flow definitions) to ensure high standards of quality, performance, and maintainability.
  - Define, champion, and enforce engineering best practices, coding standards, automated testing strategies, and comprehensive documentation norms.
  - Actively mentor, coach, and empower junior engineers through pair programming, design sessions, and constructive feedback, fostering their technical growth and professional development.
  - Instill a culture of continuous learning, knowledge sharing, and technical excellence across the team.
- **Complex System Integration**
  - Architect and orchestrate seamless, secure, and performant integrations between SharePoint, Power Platform, Microsoft 365 services, and Dynamics 365 CE, leveraging Dataverse, APIs, and virtual tables.
  - Design and implement scalable event-driven and scheduled integrations utilizing Power Automate, webhooks, Azure Functions, and other integration patterns.
  - Develop and manage secure, high-performance custom connectors for both internal and external legacy systems, ensuring robust data exchange and consistency.
  - Define and implement resilient data models and synchronization strategies to ensure data integrity and consistency across interconnected systems.
- **Operational Excellence & Performance Optimization**
  - Proactively monitor and analyze telemetry, logs, and performance metrics to identify, diagnose, and resolve incidents efficiently within established service level agreements (SLAs).
  - Continuously optimize solution performance, efficiency, and resource utilization for Power Apps, Power Automate flows, and SharePoint components through query tuning, trigger optimization, and platform best practices.
  - Oversee capacity planning, licensing, and cost optimization strategies across development, test, and production environments to ensure sustainable operations.

- Develop and maintain comprehensive runbooks, support playbooks, and disaster recovery procedures to streamline operations, facilitate knowledge transfer, and ensure business continuity.

- **DevOps & Release Management**
    - Drive the implementation and adoption of robust Application Lifecycle Management (ALM) and CI/CD pipelines for SharePoint Framework (SPFx) and Power Platform solutions using Azure DevOps or GitHub Actions.
    - Establish and manage secure branching, versioning, and release strategies across multiple development, testing, and production environments.
    - Automate and optimize build, test, packaging, and deployment workflows to ensure reliability, repeatability, and speed of delivery.
    - Implement secure test data management practices, ensuring data privacy and compliance throughout the development lifecycle.

- **Documentation & Knowledge Transfer**
    - Create and maintain authoritative architecture diagrams, technical design documents, and Architecture Decision Records (ADRs) for critical system components and decisions.
    - Develop comprehensive user guides, administrative manuals, and onboarding materials for new solutions, enabling self-service and efficient adoption.
    - Facilitate and lead technical workshops, training sessions, and knowledge-sharing initiatives across engineering teams and business stakeholders.
    - Systematically document support procedures, change logs, and troubleshooting guides to ensure operational continuity, auditability, and team scalability.

- **User Experience & Accessibility Advocacy**
    - Champion user-centric design principles, ensuring all solutions are intuitive, accessible, and meet diverse user needs across UNU's global community.

- Integrate accessibility standards (e.g., WCAG) into the design and development lifecycle, conducting regular audits and remediation efforts.
- Gather user feedback proactively through various channels (e.g., surveys, usability testing) to inform continuous improvement and enhance solution usability.

Qualifications

Required Qualifications & Experience

- **Education:**
  - Bachelor's degree in Computer Science, Information Systems, Software Engineering, or a closely related technical discipline.
  - Equivalent practical experience, demonstrating expert-level proficiency in software development and architecture, may be considered in lieu of a degree.
- **Experience:**
  - Minimum of 7 years of progressive professional experience in software engineering.
  - At least 4 years specifically focused on designing, developing, deploying, and operating robust solutions within the Microsoft 365 ecosystem, with a strong emphasis on SharePoint Online and the Power Platform.
  - Proven track record of delivering and maintaining complex enterprise applications.
- **Technical Expertise:**
  - **Microsoft 365 Core Development:**
    - Expertise in modern SharePoint Online development, including SPFx (SharePoint Framework) solutions, PnP (Patterns and Practices) components, and seamless integration with REST APIs and Microsoft Graph API.
    - Proficiency in leveraging Microsoft Graph API for advanced Microsoft 365 service integration, encompassing app registrations, delegated/application permissions, and secure authentication flows (OAuth 2.0/OIDC).

- **Power Platform Development:**
  - Advanced capabilities in Power Automate (cloud flows), including complex business process automation, approvals, robust error handling, and effective Application Lifecycle Management (ALM) for Power Platform solutions, including custom connectors.
  - Strong command of Power Apps (both canvas and model-driven applications) and Dataverse, demonstrating the ability to design and build scalable, user-centric applications.
- **Cloud & Development Practices:**
  - Proficiency in Git-based source control management and implementing CI/CD pipelines using Azure DevOps or GitHub Actions, specifically for SPFx and Power Platform ALM.
  - Solid programming skills in TypeScript/JavaScript and/or C#/.NET, with the ability to write clean, efficient, and maintainable code.
  - Familiarity with core Azure services such as Azure Functions, Logic Apps, and Key Vault, and their integration into Microsoft 365/Power Platform solutions.

- **Leadership & Mentorship:**
  - Demonstrated experience in leading technical design sessions and conducting comprehensive code reviews, ensuring adherence to best practices, architectural standards, and high-quality deliverables.
  - Proven ability to mentor junior engineers, foster their technical growth, and contribute to a collaborative and high-performing development environment.
- **Software Development Methodologies:**
  - Extensive experience working within Agile development methodologies (Scrum, Kanban), actively contributing to sprints, and adapting to evolving requirements.
  - Strong understanding and practical application of CI/CD principles for efficient and reliable software delivery.
- **Problem-Solving & Optimization:**
  - Adept at troubleshooting complex technical issues and implementing effective performance optimization strategies across SharePoint Online and Power Platform environments.

- **Communication & Collaboration:**
  - Excellent communication skills, with the ability to engage diverse stakeholders, elicit detailed requirements, and effectively translate business needs into clear technical specifications and solutions.
  - Proficient in creating comprehensive and clear technical documentation for solutions, architectures, and processes.
- **Security & Compliance Acumen:**
  - Practical understanding of security, privacy, and compliance considerations within the Microsoft 365 ecosystem (e.g., GDPR, data loss prevention (DLP), role-based access control (RBAC), auditability, permissions management).

Preferred Qualifications

- **Advanced Education & Certifications:**
  - Master's degree in Computer Science, Software Engineering, Information Systems, or a related field.
  - Relevant Microsoft certifications (e.g., Microsoft 365 Certified: Developer Associate; Power Platform Developer Associate; Azure Developer Associate AZ-204; Security/Compliance certifications).
- **Specialized Platform Integration:**
  - Hands-on experience integrating solutions with Dynamics 365 (including Customer Engagement) and advanced Dataverse capabilities (e.g., virtual tables, complex data modeling, data synchronization).
- **Advanced Power Platform Capabilities:**
  - Practical experience with Power Automate Desktop (RPA) for automating desktop processes and developing advanced custom connectors for diverse system integrations.
- **Platform Governance & Migration:**
  - Experience planning and executing SharePoint migrations (e.g., from on-premises or legacy versions, utilizing tools like ShareGate) and establishing tenant-level governance strategies (e.g., DLP policies, environment management strategies).

- **Advanced ALM & DevOps:**
  - Demonstrated expertise in advanced ALM practices for Power Platform and SPFx, including sophisticated branching/versioning strategies, automated build/test/deploy processes, environment provisioning, and test data seeding.
- **Monitoring & Observability:**
  - Experience implementing and utilizing monitoring and observability tools such as Application Insights and Log Analytics, including developing proactive incident response plans and runbooks.
- **Enterprise Security & Regulatory Compliance:**
  - Knowledge of enterprise-level security practices (e.g., conditional access, robust identity and permissions design, threat modeling) and experience operating within highly regulated environments (e.g., SOC 2, ISO 27001).

Language Requirements

- Fluency in English is required.
- Knowledge of another UN official working language is an asset.

Key performance indicators

Key Performance Indicators:

- **Software Quality & Engineering Excellence:**

  - Consistently delivers high-quality, well-tested, and maintainable code that adheres to established standards.
  - Actively participates in and improves code review processes, fostering a culture of technical excellence and best practices.
  - Contributes to the continuous refinement of development standards, tooling, and engineering practices across the team.

- **Feature Delivery & Product Impact:**

  - Regularly delivers complex features and projects on time, meeting functional and non-functional requirements effectively.

- Demonstrates a strong understanding of product goals, ensuring technical solutions align directly with business value and user needs.
- Effectively breaks down large, ambiguous problems into manageable components, guiding successful implementation from conception to deployment.

- **System Reliability & Performance:**

  - Contributes significantly to the stability, scalability, and performance of critical systems and services.
  - Proactively identifies and addresses potential technical debt, performance bottlenecks, and operational challenges.
  - Ensures implemented solutions are robust, resilient, and observable, contributing to a consistently positive user experience.

- **Technical Leadership & Mentorship:**

  - Mentors and guides junior and mid-level engineers, fostering their technical growth, problem-solving abilities, and career development.
  - Provides constructive technical guidance and thoughtful feedback during design discussions, code reviews, and problem-solving sessions.
  - Champions engineering best practices and promotes a culture of continuous learning, knowledge sharing, and technical excellence within the team.

- **Architectural Contribution & Innovation:**

  - Contributes significantly to the design, evolution, and documentation of scalable, robust, and future-proof architectures.
  - Identifies opportunities for technical innovation, evaluating and integrating new technologies or approaches where appropriate to enhance capabilities or efficiency.
  - Shapes long-term technical strategies and contributes to the roadmap for core systems and services.

- **Collaboration & Communication:**

  - Fosters effective collaboration and strong working relationships within cross-functional teams, including product, design, and quality assurance.
  - Clearly communicates complex technical concepts, decisions, and trade-offs to both technical and non-technical stakeholders.
  - Actively participates in team discussions, offering valuable insights, constructive feedback, and contributing to a positive team dynamic.