Position Title Engineer - DevOps Last Updated June 2017

Department IT Team Engineering

Location Philippines Author CIO

#### 1. Position Summary

#### You:

You're a coder and love coding. You have a passion for learning to better yourself through your coding. Automation and the value it brings amazes you and you get your kicks from delivering systems to the customer. You take pride in delivering world-class reliable and scalable systems

#### **Expectations of you:**

As a member of the engineering team, you will deliver robust and efficient engineering practice as directed by business constraints while respecting controls. As the engineer, you are expected to:

- Delivery of coding practices and automation while meeting quality criteria and project constraints
- Explore and try different methods to improve productivity and efficiency of the team
- Ensure alignment to Chief Architect roadmaps and strategies
- Meet service levels for systems (availability, security, and performance)
- Influence the direction of the overall architecture
- Understand the public and private cloud concepts especially compute, network, storage and data
- Understand cloud native application architectures and micro-services
- Critical attention to detail about code, troubleshooting, efficiency and design
- Develop and maintain standards of software development, components, and release management
- Identify and reduce technical debt
- Be able to communicate effectively verbal and written
- Be able to work alone or with others as needs dictate
- Take ownership of all assigned tasks
- Take ownership of systems and services assigned in production
- Be proactive in promoting 'Best Practices'
- Be available for out of hours support as required

## 2. Major Responsibility Areas

Priority	Major Responsibilities	Activities completed	Measure/s of success
1	Coding & Platform Delivery	<ul> <li>Write lots of code</li> <li>Review lots of code</li> <li>Accelerate timelines while balancing quality and simplicity</li> <li>Execute and improve on controls and coding practice</li> </ul>	<ul> <li>Code quality reviews</li> <li>Speed to market</li> <li>Cost efficiency of technologies adopted</li> <li>Met targets for delivery timelines and budgets</li> </ul>
2	Support	<ul> <li>Implement reliable systems</li> <li>Timely resolution of incidents and problems</li> <li>Root cause analysis and remediation</li> <li>Manage technical debt</li> <li>Communication of changes</li> </ul>	<ul> <li>Availability metrics</li> <li>Performance metrics</li> <li>Fault lead times</li> <li>Incident management &amp; post mortem learning</li> <li>Stakeholder feedback</li> </ul>
3	Leadership	<ul> <li>Help other developers</li> <li>Share knowledge on codebase</li> <li>Ensure compliance with ING standards</li> </ul>	<ul> <li>Effectiveness of development team</li> <li>Stakeholder feedback</li> </ul>

### 3. Major Challenges

- Nurturing a strong developer culture
- Estimating and delivering to estimates
- Adhering to standards and guidelines

#### 4. Decision Making/ Delegating Authority

- Design and implementation of components and coding style
- · Assessment of work involved
- Code quality and completeness
- Platform implementation quality and completeness
- Service reliability, restoration method and problem resolution

### 5. Working Relationships

Most frequent contacts (Who)	Nature or purpose (Why)
Head of Engineering	Line Manger, Progress, Reviews
PM / Delivery Lead / Product Owner	Project delivery
Chief Architect	Design and Strategic alignment
Developers	Code review, knowledge transfer, mentoring, technical direction, quality control

### 6. Knowledge and Skill Requirements

#### **Essential Tangible Skills**

Demonstrable deep and applied knowledge of the following (2+ years)

- Programming/Scripting Language & Automation
  - Proficient in one of Python, Go, Perl, Shell
  - o Chef/Puppet/Ansible
  - Terraform
- Web/Application Servers
  - NGINX
  - JBOSS/Spring knowledge is plus
- RDBMS/Data
  - o PostgreSQL, SQL Server, Oracle
  - Indexing and partitioning
  - o Backups
  - Replication
  - o Rapid Provisioning of nodes
- Continuous Integration/Tooling
  - o Git/Gitflow
  - o Trunk-based Development
  - o Software Branching/Merging Strategy
  - Artifactory/Registry
  - o Test automation
  - Code quality tools
  - o Builds per branch
- Cloud
  - o AWS/Azure/Google
  - VPC's
  - Object Storage
  - Cloud Security best practice
- Testing
  - Web Test Automation
  - Load & Performance Testing
  - Chaos Testing/Engineering
- DevOps
  - Hashicorp toolset
  - Atlassian toolset

- Configuration Management
- Release Management
- Canary Channels
- Web Services
  - REST
  - o XML
- Logging, Monitoring and Instrumentation
  - o ELK Stack
  - Grafana
  - Prometheus
  - Zipkin Tracing
  - Pagerduty/Opsgenie
- PAAS
  - o Containers & Docker
  - Kubernetes/DCOS Mesos/OpenShift
  - Service Discovery
  - Virtual Machines (VMWare)
  - Load Balancing
  - Secrets, keys management
  - o Proxies (forward and reverse)
  - o CDN, caching, compression
  - Firewalls
  - Gateways
  - HTTP protocols & Browser networking
  - Deep knowledge of TCP/IP
  - o Knowledge of Linkerd/Istio is a plus
- Security
  - TLS/SSL and certificates
  - Cryptography
  - o JWT/SAML
  - API Security
  - Cloud / Infrastructure Security
- Operating Systems
  - Linux distributions particularly RHEL
  - Deep knowledge of Linux Networking
  - Windows Server
- Architecture
  - Distributed Systems Principles
  - o Infrastructure as code
  - Micro-services
  - 12 Factor Apps
  - Continuous Deployment & Delivery

#### **Important Experience**

- Demonstrated experience in delivering mission critical systems
- Demonstrated experience to design and implement public/private cloud
- Demonstrated experience in mentoring other developers
- Demonstrated experience leading efficient and operational 24/7 large scale system support
- Communication (written/verbal) to be well developed and of a professional standard
- Ability to operate at own initiative with a pro-active attitude, within the directions and confines of management and Bank policy
- Ability to liaise with a broad range of people, including line management, senior management, external suppliers and related people.
- Strong problem solving ability and strong analytical skills
- Experience working in an agile development lifecycle

#### 7. Dimensions

Leave Blank if not applicable to the position.		
Number of reporting employees (manage/		
supervise)	0	
Number of employees in Department	30	
Financial Year Budget for position	No	\$
Other information indicating scope and/ or size of	of position	