

COMPETENCY PROFILE: Software Developer

FUNCTIONAL COMPETENCIES			
	JUNIOR DEVELOPER	INTERMEDIATE DEVELOPER	SENIOR DEVELOPER
Software Design	<p>Familiar with UI and database design standards and concepts .</p> <p>Professionally participates in design workshops Appreciates the value of senior design before code approval process.</p> <p>Follows complex code design pattern and conform to standards.</p>	<p>Conceptualizes and communicate a system design effectively from business requirements.</p> <p>Accountable for a technical design deliverables through to review and architecture approval.</p> <p>Strong advocate for sufficient design approval before coding.</p> <p>Assesses potential risks in business requirements prior to finalizing design deliverables.</p> <p>Able to fulfill a role in the adoption of varying development methodologies.</p>	<p>Identifies critical architecturally significant concerns and aspects of systems and the impact on quality design.</p> <p>Responsible for all design deliverables that contribute to core system architecture.</p> <p>Designs software that is flexible, configurable and manageable to scale and adapts to future business growth.</p> <p>Ensures the functional, operational and system quality attributes are met Manages technical risk aspects of a solution redesign through advocating best possible solution or approaches.</p> <p>Implements industry design patterns and architecture principles that suit the solution, without over engineering a solution.</p>
Software Coding	<p>Learns quickly and with passion extend their coding skill set as the project requires.</p> <p>Reads code quickly and efficiently without the aid of technology.</p> <p>Improves on their previous delivered code feature and be open to code reviews.</p> <p>Delivers code within stipulated timeframes and according to design and specification .</p> <p>Communicates effectively current status of code deliverables and raise risks early that timeframes could be missed.</p> <p>Held accountable for the quality of the code they deliver, and ensure that there is no issues on the critical system path.</p> <p>Aligns themselves to with Group IT standards and policies.</p> <p>Flexible in their approach to coding.</p>	<p>Successfully implements design patterns.</p> <p>Defines coding standards and patterns on medium complex code modules.</p> <p>Reviews peers code from a standard and design adherence perspective.</p> <p>Has coding experience across a number of varying frameworks, technologies within different environments.</p> <p>Owens the delivery of complete code modules.</p> <p>Fine tunes performance, decipher complex logic and efficiently implement solutions that work.</p> <p>Shares coding approach and principles in a collaborative manner with greater development team.</p> <p>Has following qualities: <ul style="list-style-type: none"> • Excellent code reading skills • Good debugging skills • Solid understanding of concurrency • Good understanding of secure coding techniques </p>	<p>Advocates new techniques, technologies or frameworks and demonstrate their value through proof of concepts.</p> <p>Owens the technical decision making at a code level.</p> <p>Responsible for the code quality of an entire team.</p> <p>Up to date with newer technologies and frameworks that could possibly favour a particular business solution.</p> <p>Is seen as the go-to-guy when it comes to problem solving within the solution.</p> <p>Have the most complex coding tasks assigned to them.</p> <p>Has the following qualities: <ul style="list-style-type: none"> • Has a firm grasp of code quality • Excellent debugging skills • Excellent understanding of concurrency principles and techniques • Excellent understanding of secure coding </p>

COMPETENCY PROFILE: Software Developer

FUNCTIONAL COMPETENCIES			
	JUNIOR DEVELOPER	INTERMEDIATE DEVELOPER	SENIOR DEVELOPER
Software Testing	<p>Conform and adhere to unit testing strategy of an application.</p> <p>Comfortably owns a subset of system's unit tests.</p> <p>Appreciates the value of unit tests.</p>	<p>Owens an entire unit test strategy and implement it appropriately.</p> <p>Able to deduce an issue within the system efficiently and also communicate effectively to those responsible.</p> <p>Able to work within an automated build test development environment.</p>	<p>Can establish a distributed system integrated unit testing strategy.</p> <p>Can determine the level of unit testing required per system and architecture accordingly.</p>
Data Modeling and Querying	<p>Responsible for querying directly from any relational database structure.</p> <p>Compiles well structured stored procedures.</p> <p>Advocates specific changes to a data structure in order to cater for an enhancement.</p> <p>Understands the basic principles surrounding good database design.</p> <p>Quickly becomes proficient in chosen SQL editing tool and management/ administration workbench.</p> <p>Understands the key principles around Object Relational Mapping (ORM), Web services and generic persistence of data</p>	<p>Takes ownership of most database or object model design decisions.</p> <p>Is aware of alternative data modeling and persistence frameworks so as to advocate or share with development team the most appropriate.</p> <p>Reviews and assesses quality of SQL queries, database structures and object data models.</p>	<p>Understands the benefits, risks and best practices around the persistence of data to a database or the preferential storage of certain data structures.</p> <p>Implements suitable security and permissions to data sources.</p> <p>Able to persist data from most formats or storage devices</p>
Application Builds and Deployments	<p>Adheres to and contributes towards ensuring complete Continuous Integration (CI) and Software Configuration Management (SCM).</p> <p>Conforms to necessary standards and procedures within the development environment and has an appreciation and knowledge around the staging to production intricacies and control mechanisms.</p> <p>Contributes to the release management and work item status within the build.</p>	<p>Responsible for development team adherence and assistance to conforming to the build and deployment tools and procedures.</p> <p>Researches tools selected for constantly seeking to improve the build and deployment process.</p> <p>Can be relied upon to negotiate and ensure infrastructure and server configurations are completed by possible third parties.</p>	<p>Responsible for the definition and implementation of a stable and scalable build and deployment strategy.</p> <p>Evaluates and configures suitable CRM, CI tools that aid effectiveness of a well coordinated build and deployment environment across varying code projects using varying technologies.</p> <p>Responsible for the compilation and communication of proposed development release plan and associated deployment roadmap.</p>

COMPETENCY PROFILE: Business Analyst

FUNCTIONAL COMPETENCIES			
	EXPERIENCED (at least 3 years)	HIGHLY EXPERIENCED (at least 5 years)	EXPERT (more than 5 years)
Business Analysis Planning and Monitoring	<ul style="list-style-type: none"> Scoping/Context Diagrams Requirements Planning 	<ul style="list-style-type: none"> Requirements Review Stakeholder Analysis 	<ul style="list-style-type: none"> All of these
Requirements Elicitation	<ul style="list-style-type: none"> Conducting user interviews Interface Analysis Documentation Analysis 	<ul style="list-style-type: none"> Prototype Development Running JAD Sessions Running Workshops 	<ul style="list-style-type: none"> All of these
Requirements Analysis and Documentation	<ul style="list-style-type: none"> User Interface Modeling Business Rules Identification Process Flow Modeling Determining Assumptions and Constraints Determining Non-Functional Requirements Determining Informational/Reporting Requirements 	<ul style="list-style-type: none"> Event/State Modeling Data Modeling Scenarios and Use cases 	<ul style="list-style-type: none"> All of these
Solution Assessment and Validation	<ul style="list-style-type: none"> Conduction Factory Acceptance Testing Conduction User Acceptance Testing 	<ul style="list-style-type: none"> Designing Test Cases Develop Test Strategies and Test Planning 	<ul style="list-style-type: none"> Product/Package Assessment and Implementation Bespoke Solution Assessment and Implementation Release Delivery Strategy Development
Enterprise Analysis		<ul style="list-style-type: none"> Identify Business Needs/Problems/Opportunities Develop Business Cases 	<ul style="list-style-type: none"> Document Business Architecture Conduct Feasibility Study Develop RFP's Financial Analysis (ROI/Cost Benefit)

QUALIFICATIONS			
	An EXPERIENCED BA will have completed or be busy with...	A HIGHLY COMPETENT BA could be studying for...	An EXPERT BA could be studying for...
Target Qualifications	FTI Diploma in Business Analysis	FTI Certificate in Object Orientated Analysis	DCBAP Certificate

COMPETENCY PROFILE: Software Testing

FUNCTIONAL COMPETENCIES			
	EXPERIENCED (at least 3 years)	HIGHLY EXPERIENCED (at least 5 years)	EXPERT (more than 5 years)
Test Organisation	<ul style="list-style-type: none"> Analyse and Interpret Requirements and Specifications 	<ul style="list-style-type: none"> Review Requirements and Specifications Produce Test phase Plans Produce Test Estimates Produce Test Activity Schedule 	<ul style="list-style-type: none"> Produce test Strategy Methodology Define Defect Management Lifecycle Configure Test Tools Define Environment Requirements
Test Preparation	<ul style="list-style-type: none"> Test Cases Reviews Test Case Design Test Data Analysis Produce Test Requirements Produce Test Matrices 	<ul style="list-style-type: none"> Produces Test Requirements Traceability Matrix 	<ul style="list-style-type: none"> Produces Test Execution Plan Produce test Coverage Reports
Test Execution	<ul style="list-style-type: none"> Execute Test Cases Produce defect Reports 	<ul style="list-style-type: none"> Manage Test Execution 	<ul style="list-style-type: none"> Manage Releases Manage Defects Produce Defect Status and Trend Reports
Test Completion			<ul style="list-style-type: none"> Produce Test Completion Report Produce Test Phase Exit Reports
Test Case Management and Automated Testing	<ul style="list-style-type: none"> Basic Understanding of Test Case Management Tools Basic Scripting Test Run Execution Result Analysis and Reporting 	<ul style="list-style-type: none"> Manage Test Execution Runs Develop Advanced Scripts Perform Tool Compatibility Testing 	<ul style="list-style-type: none"> Install and Configure Tools Administer Tools Design and Develop Frameworks Conduct Proof of Concepts

QUALIFICATIONS			
	An EXPERIENCED TA will have completed or be busy with...	A HIGHLY COMPETENT TA could be studying for...	An EXPERT TA or TM could be studying for...
Study Course	ISED/ISTQB Foundation Certification AND A Tertiary IT Qualification	ISED/ISTQB Analyst OR Analysis Certification	ISEB Practitioner OR ISTQB Advanced Certification

COMPETENCY PROFILE: Project Manager

FUNCTIONAL COMPETENCIES			
	EXPERIENCED (at least 3 years)	HIGHLY EXPERIENCED (at least 5 years)	EXPERT (more than 5 years)
Scope Management	<ul style="list-style-type: none"> Develop Work Structure Draft project charter / Breakdown scope statement 	<ul style="list-style-type: none"> Identify assumptions, constraints, dependencies Identify changes to scope 	<ul style="list-style-type: none"> Integrate progress impacts of scope, cost, risk, time, quality to plan Control scope change
Time Management	<ul style="list-style-type: none"> Define activities Estimate time requirements Track milestone attainment Create & control basic schedule / plan – 3 level 	<ul style="list-style-type: none"> Identify activity duration Analyse activity sequencing Create & control schedule / plan – 6 level 	<ul style="list-style-type: none"> Manage estimation by phase Identify critical path activities and manage over lifecycle
Cost Management	<ul style="list-style-type: none"> Allocate given resource cost to plan activities Assess high-level budgetary requirements 	<ul style="list-style-type: none"> Plan resource requirements Estimate costs and adjust per progress made Track actual costs 	<ul style="list-style-type: none"> Perform Cost-Benefit Analysis Determine cost baseline Devise cost management plan Manage cost baseline per company standards
Quality Management	<ul style="list-style-type: none"> Confirm company quality assurance processes Integrate given processes to plan 	<ul style="list-style-type: none"> Develop quality plan Identify quality standards pertinent to project Build quality assurance & control activities into plan 	<ul style="list-style-type: none"> Identify quality-cost value threshold Conduct quality audits to identify lessons learned & future process improvements
Stakeholder Management	<ul style="list-style-type: none"> Identify key stakeholders Manage project team delivery Identify escalation procedures 	<ul style="list-style-type: none"> Manage stakeholder relationships Secure required resources Identify and deliver stakeholder communication requirements 	
Risk Management	<ul style="list-style-type: none"> Identify risks Evaluate risk by probability and impact Identify escalation procedures 	<ul style="list-style-type: none"> Identify contingency plans Plan risk response strategies (avoidance, acceptance, mitigation) Coordinate workarounds 	<ul style="list-style-type: none"> Adopt risk management techniques suited to project structure and size Identify transition indicators and monitor over lifecycle

QUALIFICATIONS			
	An EXPERIENCED PM will have completed or be busy with...	A HIGHLY COMPETENT PM could be studying for...	An EXPERT PM could be studying for...
Study Course	FTI Diploma in IS Project Management OR PMI CAPM Accreditation	FTI PMI Exam Preparation OR PMI PMP Accreditation	PMI PMP Accreditation OR PMI Continuing Certification Requirements