

SKILLS FRAMEWORK FOR MEDIA SKILLS MAP - GAME TECHNICAL DIRECTOR		
Sector	Media	
Sub-sector	Games	
Track	Game Technical Development	
Sub-track	Game Programming	
Occupation	Game Technical Development Professional	
Job Role	Game Technical Director	
Job Role Description	<p>The Game Technical Director, being one of the most senior technical roles within the organisation, is responsible for the technical aspects of game development. In the initial stage, he/she is involved in strategic meetings and judges the technical feasibility of envisioned strategies. In addition, he translates the game concepts into technical needs and tools. During the production stage, he supervises programming, monitors the budget and manages the overall code quality. He provides guidance on any technical problems and makes available all technical tools for successful game development. He also ensures that the team has the right technical capabilities and trains them in new technology and concepts. The work involves technical leadership and guidance to the technical teams as well as high amount of coordination with creative and business teams.</p> <p>He is expected to attend a variety of meetings in order to connect the creative and technical requirements of a project. He is the lead advisor on all technical matters and will have to engage with multiple teams to address all technical issues.</p> <p>He is an authority on all technical aspects of game development, as well as an evangelist for new technologies. He is an expert problem solver with the ability to resolve complex game design and implementation challenges. He should be proficient in team management, and has excellent communication and influencing skills to deliver to the expectations of the role effectively.</p>	
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks
	Plan game development	Define the game's vision and scope by collaborating with the production team
		Establish the technical objectives of game development for the project
		Identify the technical expertise needed based on the game vision and concept
		Identify technical requirements and tools to deliver on the game vision and concept
		Supervise technological design and design review
		Establish technical architecture and process decisions for the technical game development
		Develop an overall budget for the technical development of the game
		Recommend investments into new cutting edge technology
	Execute game development	Establish quality standards and efficiency for the technical deliverables of projects
		Drive the technical development of the game by guiding the team in the achievement of the technical deliverables
		Report technical progress of projects to internal and external stakeholders as required
		Drive the development of technical tools to aid game development
		Recommend solutions for technical challenges encountered in the development phase
	Promote best practices within game development	Track industry developments and best practices in game technologies and development approaches on a regular basis
		Evaluate proofs-of-concept for emerging technologies and approaches to understand suitability for the organisation's requirements
		Drive adoption of suitable technologies and approaches to improve organisation's technical game development standards
		Drive programmes for the adoption, promotion and sharing of best practices amongst technical development teams
	Manage projects	Drive projects to meet schedules, budget, manpower and technical quality targets
		Drive the design, art and technical teams to define requirements and iteratively build solutions
Lead users, technical staff and management to determine and resolve issues associated with project implementation		
Lead regular project reviews to recommend schedule changes, cost or resource adjustments		
Manage teams and/or departments	Define common goals, direction and accountability among staff	
	Define staff development strategies by coaching, mentoring and career discussions	
	Define effective performance management practices within department in accordance with organisational policies and procedures	
	Oversee budgets, forecasting, work allocations and staffing of the various departments	

	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Skills and Competencies	Audio Programming	Level 5	Communication
Database Administration		Level 5	Decision Making	Advanced
Game Analytics		Level 4	Leadership	Intermediate
Game Artificial Intelligence Development		Level 5	Problem Solving	Advanced
Game Engine Development		Level 5	Developing People	Advanced
Game Level Development		Level 4		
Game Networking		Level 5		
Game Physics Development		Level 5		
Game Porting		Level 5		
Game Production Optimisation		Level 5		
Game Server Programming		Level 5		
Game Technical Design		Level 5		
Game Testing Automation		Level 4		
Gameplay Development		Level 5		
Production Budget Management		Level 4		
Project Management		Level 5		
Research		Level 5		
Tools Development		Level 5		
Programme Listing	For a list of Training Programmes available for the Media sector, please visit: www.skillsfuture.sg/skills-framework/Media			

The information contained in this document serves as a guide.