

SGADM Game Analysis | *Part I – Activities map*

Game: Senior PM Game

	Gaming activity	Learning activity	Internal teaching activity	External teaching activity (optional)
Activity	Play the game	Learn how to organize projects and how to initiate employees with different skills for different tasks. Learn how a good assignment of tasks can effect the success of a project. Learn how staffs can develop their skills.	Use the game to explain how projectmanagement works and how important a good assignment of tasks is for the success of a project.	-
Subject	Player	Player/learner	Game designer	-
Motives	Competition Learning about Projectmanagement	Learning about projectmanagement enables the player to get better results during the game, and lets him rise up in the score ranking.	Give people a chance to improve their management skills.	-
Tool	Game	Game	Game	-

SGADM Game Analysis | Part II – Game diagram and actions/ tools/ goals table

<div><div><Game diagram></div><div><pre>graph LR; Start(()) --> Intr([Intr]); Intr --> Employ([Employ Staffs]); Employ --> Bid([Bid on Project]); Bid --> D1{ }; D1 -- No --> Win([Win the Bet?]); D1 -- Yes --> Assign([Assign Tasks]); Win --> ScoreUp1([Score goes up]); Assign --> StartProj([Start project]); StartProj --> Success([Success?]); Success --> D2{ }; D2 -- Yes --> ScoreUp1; D2 -- No --> ScoreWorse([Score gets worse]); ScoreUp1 --> ScoreBox[Score]; ScoreWorse --> ScoreBox; ScoreBox --> Recruit([Recruit new staff]); Recruit --> Employ; ScoreBox -- "Better Score, better Projects" --> Bid;</pre></div></div>	
Game actions	The player chooses 4 employees, which have different skills. He uses bid points to bid for projects. A project contains tasks, for which the employees have to be assigned. Depending on the assignment of tasks, the player has success or not, what is displayed in the score.
Game tools	Bid points, Employees, Score, Projects, Bonus, Penalties
Game goals	Manage the team to solve all the tasks in time, to get a good score.

Learning Actions	Assignment of tasks for the different employees
Learning Tools	The different employees, projects with different tasks
Learning Goals	To make the best decisions when assigning the tasks, considering the difficulty and the skills of the employees.
Internal Teaching actions	Inform the player of the results of his decisions and reward good choices with a good score and punish him for bad decisions with penalties.
Internal Teaching tools	Score, Bonus, Penalties
Internal Teaching goals	Give feedback on the players decisions.

External Teaching actions	
External Teaching tools	
External Teaching goals	

SGADM Game Analysis | *Part III – Abstractions table*

Game actions	Manage Resources, Planning
Game tools	Tokens, Penalties, Performance meters, Rewards
Game goals	Maximize score
Learning Actions	Experimentating, Planning, Selecting
Learning Tools	Simulator
Learning Goals	Organization, Reflective observation
Internal Teaching actions	Rewarding good performance, Sanctioning bad performance
Internal Teaching tools	Penalties, Rewards, Simulators
Internal Teaching goals	Providing feedback, Assessing performance

External Teaching actions	
External Teaching tools	
External Teaching goals	

Gaming actions						
Entity manipulations			Movement		Time-related	Information
Capturing	Eliminating	Owning	Avoiding	Shooting	Manipulating time	Asking questions
Collecting	Exchanging	Planning / Strategy	Colliding	Targeting	Starting/ Stopping time	Answering questions / trivia
Creating	Generating	Removing	Moving	Teleporting	Advance game period	Obtain help
Customizing	Managing resources	Selecting	Evading	Traversing		See performance evaluation
Designing	Manipulating gravity	Tactical maneuvering	Rotating	Visiting		Watch / Listen to / Read information
Destroying	Matching	Trading virtual items				Watch / Listen to / Read story
Editing						

Gaming goals			
Collect resources	Get acquainted with story		
Be the first to reach the end	Learn to use interface		
Be the last player standing	Maximize performance		
Collect information	Maximize score		
Complete quest	Perform task within allotted time		
Complete side quests	Reach narrative end		
Form/discover goal	Reach resources end		

[illegible]

Learning actions	
Completing goal	Memorizing
Discovering	Model building
Discriminating	Objectifying
Discussion	Observing
Experimentating	Participating
Exploring	Participating in conversation
Forming hypothesis	Performing action/ task
Forming goal	Planning
Generalizing	Puzzlement
Identifying	Reading
Imitating	Repetition
Listening	Selecting/ Choosing
Locating	Verifying/ Reviewing

Learning tools	
Animation	
Challenge	
Graphics	
Information	
Report	
Simulator	
Story	
Student diary	
Task list/ Checklist	
Tasks	
Tests	
Text	
Video	

Learning goals				
Bloom's Taxonomy – Cognitive domain	Bloom's Taxonomy – Affective domain	Bloom's Taxonomy – Psychomotor domain	Kolb's experiential learning cycle	Fink's Taxonomy
Remembering	Receiving phenomena	Perception (awareness)	Concrete experience	Foundational Knowledge
Understanding	Responding to phenomena	Set	Active experimentation	Application
Analyzing	Valuing	Guided response	Reflective observation	Integration
Applying	Organization	Mechanism (basic proficiency)	Abstract conceptualization	Human dimension
Evaluating	Internalizing values	Complex Overt Response		Caring
Creating		Adaptation		Learning how to learn
		Origination		

Teaching actions
Demonstrating
Presenting material
Presenting problem
Presenting quiz
Qualitatively assessing performance
Quantitatively assessing performance
Reviewing lesson
Rewarding good performance
Sanctioning bad performance
Scaffolding
Showing similar problems
Stressing importance
Suggesting improvements
Telling story

Teaching tools
Checklists
Deadlines
Discussion
Help text
Limited set of choices
Penalties
Performance measures
Practice tests
Questions & Answers
Rewards
Simulators
Story
Tips / Assistance
Warning messages

Teaching goals	
Gagné's Nine Events of Instruction	ARCS Model of Motivational Design
Gaining attention	Attention
Informing learner of objective	Relevance
Stimulating recall of prior learning	Confidence
Presenting the stimulus	Satisfaction
Providing learning guidance	
Eliciting performance	
Providing feedback	
Assessing performance	
Enhancing retention and transfer	

