Year 9 IST Assignment Three Semester Two (40%) – Game Development

Name:

Marking Criteria:

Item	Mark	Total
Menu & Story Scenes (10 marks)		
• Menu - A title has been displayed appropriately	**1**	
• Menu - At least one image or animation has been displayed appropriately	**1**	
• Menu - Includes buttons, dropdowns and/or text inputs as appropriate to enable the player to select an option (e.g. Start New Game, Select Level, Controls, etc.)	**1**	
• Menu - The buttons, dropdowns and/or text inputs function as designed to load the correct game scene (story and minigame scenes)	**1**	
• Story - Text, images and/or audio have been included to narrate the story	**1**	
• Story - The player can progress to the next game scene	**1**	
• Up to 4 marks awarded for going above and beyond (one for each) o All menu and story scenes function perfectly without any flaws, bugs or typos o Multiple story scenes have been included to tell the complete story of the original game design o SpriteKit Features and/or Game Logic have been implemented to enhance the story (e.g. includes animations, player choices affect the story, the player's name is stored and included in story sequences) o Exceptional creativity and/or innovation shown when using multiple scenes, SpriteKit Features and/or Game Logic to enhance the story	**4**	
Minigame SpriteKit Features (10 marks)		
• Able to display some kind of numerical score	**1**	
• Tracks and correctly updates the score	**1**	
• Appropriate use of SpriteKit provided methods such as didBegin(contact:) to detect collisions between physics bodies, if needed in the game	**1**	
• Correctly using and handling touch events	**1**	
• The game can be played as designed, and doesn't crash or have bugs which significantly impact upon the intention of the game	**1**	
• The game is professionally presented	**1**	
• Up to 4 marks awarded for going above and beyond (one for each) o The minigame functions perfectly without any flaws, bugs or typos o At least one game mechanic has been implemented so that the player needs to interact with skills and/or strategy to achieve a level of success o SpriteKit Features and/or Game Logic have been implemented to enhance the game mechanic(s) (e.g. power ups, increasing difficulty) o Exceptional creativity and/or innovation shown when using SpriteKit Features and/or Game Logic to enhance the game mechanic(s)	**4**	

Item	Mark	Total
Overall Programming Quality (20 marks)		
• A non-working solution, showing some attempt and minimal or limited understanding of how to code using SpriteKit o The code is not close to getting the game functioning as designed o Understanding of how to use SpriteKit is lacking (e.g. code that doesn't compile, variables not defined correctly or in the wrong spot)	**0-4**	
• A partially working solution, showing substantive attempt and basic understanding of how to code using SpriteKit: o General game logic has been demonstrated. Overall, the code is somewhat close to getting the game functioning as designed o Some essential features work, such as the game scene loading and the player being able to move o Creation of variables for various nodes such as the player, enemies and score display is on the right track o Update of variables to implement game mechanics is on the right track o A basic level of code comments, with appropriate naming of variables, functions, objects, etc.	**5-9**	
• A fully working solution showing a thorough understanding of how to code using SpriteKit: o General game logic has been fully demonstrated. Overall, the code achieves the goal of getting the game functioning as designed o All essential features work, such as the game scene loading and the player being able to move o Creation of variables for various nodes such as the player, enemies and score display is completely functional o Update of variables to implement game mechanics and game logic is completely functional o Provides thorough and descriptive code comments, with appropriate naming of variables, functions, objects, etc. o Appropriate use of control structures to achieve the desired game logic, particularly if statements and loops o Appropriate use of functions to minimize repetition of code and to properly organize code	**10-15**	
• Extension and bonus band (in addition to all of the requirements of a fully working solution) showing an exceptional understanding of how to code using SpriteKit: o Be the implementation of a complex game which may include advanced physics simulation, integration with node.js to support multiplayer and store persistent game data, the implementation of a computer-based AI player, and/or other advanced features o Coding techniques have been masterfully implemented to achieve the complex features (e.g. use of 2D arrays to generate grids, use of objects and functions for a computer based IA player, etc)	**16-20**	
• Marks awarded	**20**	
TOTAL	**40**	

Comments