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 (clickable sprite nodes) as appropriate to enable the player to select an option (e.g. Start New Game, Select Scene, etc.)	**1**	
□ Menu - The buttons function as designed, enabling the player to navigate to different game scenes	**1**	
□ Story - Text, images and/or audio have been included to narrate the story	**1**	
□ Story - The player is able to progress through each game scene in the correct sequence	**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, reference nodes are used for easier navigation) 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 The game mechanics and game logic are significantly customized above and beyond tutorials covered in class 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