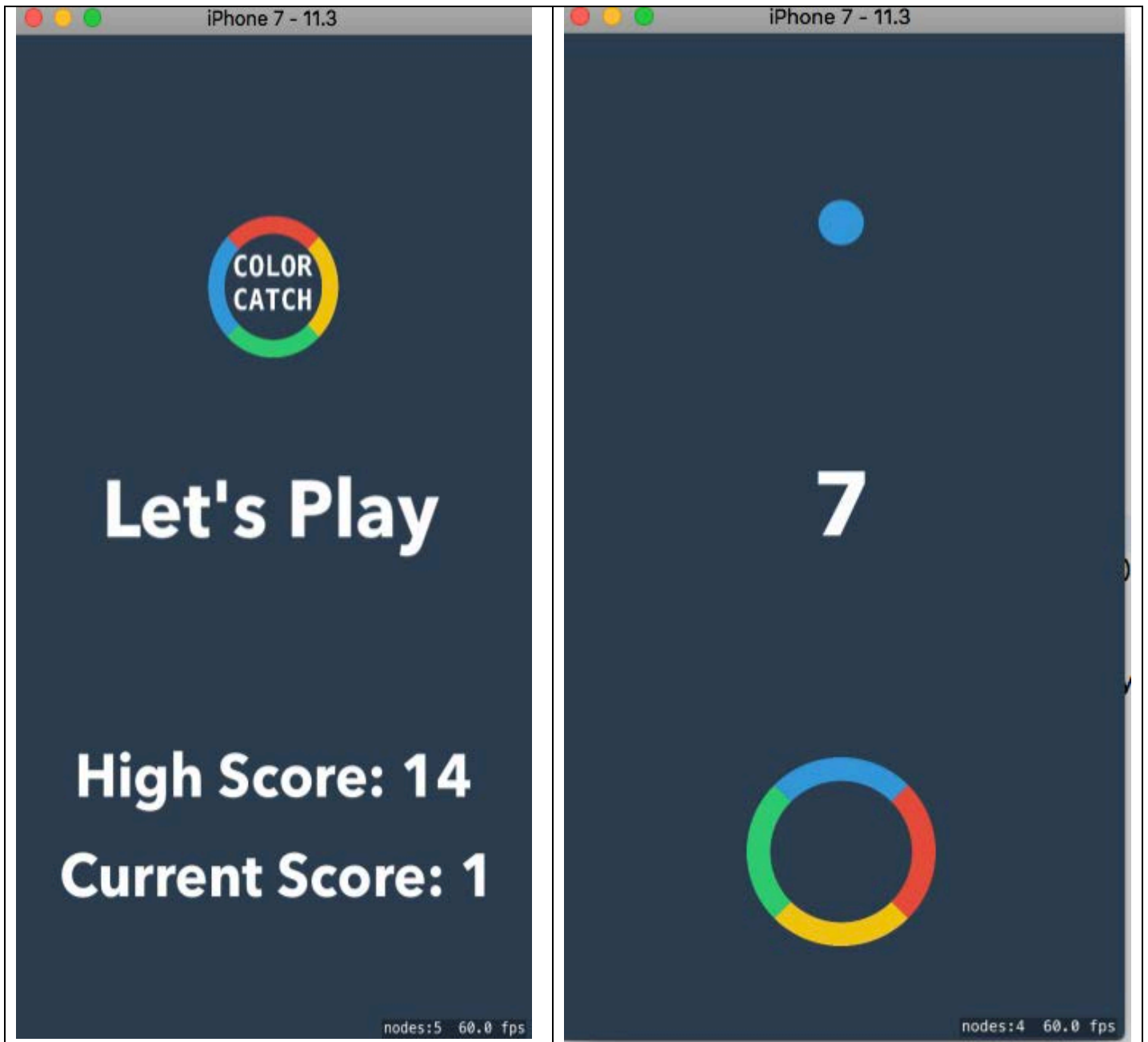


<b>GD2S03</b> <b>Advanced Software</b> <b>Engineering &amp;</b> <b>Programming for</b> <b>Games</b>	<b>Summative Assignment</b> <b>(Weightage: 20%)</b> <b>SpriteKit Based Project</b>  <b>ColorCatch</b>	<b>Issue: 9<sup>th</sup> April 2018</b>  <b>Submission:</b> <b>14<sup>th</sup> May 2018, 9.00 am</b>
<p style="text-align: center;">Submission filename:  <b>GD2S03-<u>Student Name</u>.zip</b></p>		
<p><b>Game-play and Rules:</b></p> <p>The main objective of the game is to catch a falling ball in a ring with the same colour segment of the ring. The ball's colour changes at random. The ring can be rotated by tapping on the screen in a counter clockwise direction. If the ball is caught by the same coloured segment, the player is awarded one point and ball fades out at the centre of the colour wheel. If the ball is caught by a segment of a different colour, the game ends and scene goes back to the Main Menu Scene.</p> <p>The game should start with a Main Menu Scene showing the logo, high score, current score and Play labels.</p> <p>Every time a new game starts,</p> <ul style="list-style-type: none"> <li>• Current Score must be zero.</li> <li>• Highest Score must be the last highest score</li> </ul> <p>To move to game play screen, player needs to tap on the main menu screen.  Ball must start falling from outside the top of the Screen</p> <p>When the game ends</p> <ul style="list-style-type: none"> <li>• Go to Main Menu Scene and update the current score.</li> <li>• Store Current Score as highest score if current score is greater than the Highest Score.</li> <li>• Store Highest Score in permanent Storage.</li> <li>• Game must be playable again</li> </ul>		



## **ASSESSMENT CRITERIA:**

### **Grade D:**

- No work submitted **OR**
- Work submitted but the source code does not build **OR**
- The executable works but it does not implement any of the features of the game.

### **Grade C:**

The development of an application that has the following features:

- Ability to draw the Main Menu and Game Scene on the Screen.
- Main Menu must display logo, high Score, current Score and Play Labels
- Ability to move from Main Menu Scene to Game Scene.
- Ability to draw both ball and colour wheel as the textured SKSpriteKit on the screen.

### **Grade B, as per grade C and:**

- Ability to transition from Main Menu to Game Scene with animation
- Ability to generate the ball with random colour.
- Ability to move the ball from top to bottom.
- Ability to rotate the wheel on every tap
- Ability to increase the score by 1 if the ball is caught by same colour segment.
- Ball must fade out at the centre of the colour wheel.
- Coding standards have been adhered to in most of the places in the code.

### **Grade A, as per grade B and:**

- Ability to rotate the colour wheel in both directions (clockwise and counter clockwise)
- Logic must be added to increase the ball's falling speed after a certain score.
- Must be able to store and update the highest score in permanent storage
- When the game is over the application should transition back to main menu and display the latest score and playable again.
- The Player must be able to quit the game at wish.
- The interface makes excellent use of screen space and has good visual appeal.
- The controls are intuitive and clearly documented in a ReadMe file.
- Coding standards are adhered to in all parts of the code.

### **Grade A+, as per grade A and:**

The game exhibits evidence of additional work beyond the limits set in the assignment brief, in an attempt to make the game more interesting for the user. This could be in terms of the visual appeal of the game and/or enhanced gameplay features that add more fun to the game.