

CT3536 Unity Lab 7

Finishing the Asteroids game



This week, we are adding:

- Two high-level game states: **Menu**, and **Playing**.
- A simple GUI for displaying in Menu state, which includes a Play button. Clicking the button starts the game in Playing state.
- A simple GUI for displaying in Playing state, which displays a score, high score, and player lives
- A check for all asteroids having been destroyed.. at which point, the next wave is started
- A check for game end, when the player has lost all 3 of their allocated lives. This switches back to Menu state.

Steps this week:

- Create two simple GUIs – one for displaying the Menu, and the other for displaying during Playing.
- Create a member variable of the GameManager class, for indicating whether the game is in Menu or Playing state. Have the game initially in Menu state, and initially displaying the Menu GUI.
- Also in GameManager, create a new function called `StartNewGame()`, and move the gameplay initialisation code from `Start()` into this new function.
- When the Start button (in the Menu GUI) is clicked, switch the game's state to Playing, switch the GUI which is being displayed, and call `StartNewGame()`
- Implement a scoring system (and update the in-game GUI when score changes)
- Implement a high-score system
- Implement player lives – and end the game (switching back to the menu) when all 3 lives are lost.
- When the game ends (or perhaps just before the next one starts), destroy all asteroids left over from the last game