

Paratrooper Extreme : Description

I made this flash game as a final assessment for a “Development in Flash” module. The game itself is a straightforward attempt to port the old game Paratrooper, made by Greg Kuperberg in 1982 and it uses sprite art borrowed from the Advance Wars franchise.

As there’s quite a lot of sprites appearing, disappearing and getting destroyed on screen, one of the main things to consider about the game was obviously the management of the memory. Left unchecked, all these movieclips that were getting created to represent the sprites would’ve eventually cluttered the memory, a method of “garbage collection” had to be conceived. An obvious solution would’ve been the use of classes to represent the sprites and using their constructors and destructors for their generation and removal. But whether it was my lack of confidence about using classes in first year or simply deciding that classes would be overkill when it comes to such a simplistic functionality I devised my own methods for memory management.

For the cannon shots – there’s was only a certain amount of cannon shots you can have on screen, and that was the size of the array that stored their data, any new shot would actually be stored in the array location of the latest one, creating a rotation cycle within the array.

For the enemy sprites – if it goes out of the boundaries of the screen, it destroys itself. If it is shot, it destroys itself. Very straightforward, lean and mean.

In hindsight, these little methods took as much time as what writing a whole class would’ve and as I saw no need to recycle the code in the future, I didn’t see much in complicating things and encapsulating them in a class.

This coursework also served as the basis of another smaller one, which was a short report on the significance of good memory practices.