Mini Game Design Document

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**Original challenge**

For the majority of the original challenge, the project was able to be kept similar to its original design. Some modifications were made in order to suit newer changes such as edits in the controller that allowed for references in new scripts. An example of which was a “GetComponent” script which was used to alter information in scripts changing the background scroller and star field.

**Visual change**

When it came to visual changes, I stuck with some of the recommended options that were suggested in the assignment. As mentioned above in the “Original challenge” section I used the code “GetComponent” to reference new scripts in order to make the changes I desired. With the code in place, I was able to alter the speed of the scrolling background and star fields when the player reaches victory.

**Audio change**

The audio changes made involved including two new audio files when the player reached either a victory or a game over. Similarly, to the way I completed the visual changes I used references to call upon variables in the game controller to play specific audio upon a victory or game over. Each only plays once and still allows for the normal soundtrack to loop normally until at least one prerequisite is met.

**Gameplay changes**

For new additions to gameplay I created two new entities which will spawn with the hazards. Both will not obstruct any already existing hazards and work as intended. The first major change is a power up in which when retrieved by the player, will spawn a shield around them which stays attached and will save the player from any one collision for four seconds. After four seconds the shield will despawn and the player will need to pick up another.

The second major change is a new enemy type which is much larger than the normal enemy. It has two special differences to set it apart from the basic enemy introduced in the original space shooter tutorial. The first of which is a different firing mode that acts as a burst fire. The ship will instead of firing singular shots fire in bursts of three. The second difference for the enemy is the addition of a shield similar to the power up I’ve introduced for the player. The ship will spawn with the shield and like the power up it will protect it from any one collision from either the player or a fired shot. Because of the ships size and more defensive and destructive capabilities, I have abstained from giving it evasive maneuvers like the other enemy ship to prevent it from being too difficult to defeat. Defeating it will acquire for the player 40 points. The last change of note is that the win condition has been changed from 100 to 250 as to prevent the game from ending too fast.