

Part 1 - Analysis (Valorant)

Valorant is a FPS game that is developed by Riot games that is a team based game with five players on each team and they play strategically using abilities and skill in order to secure the round.

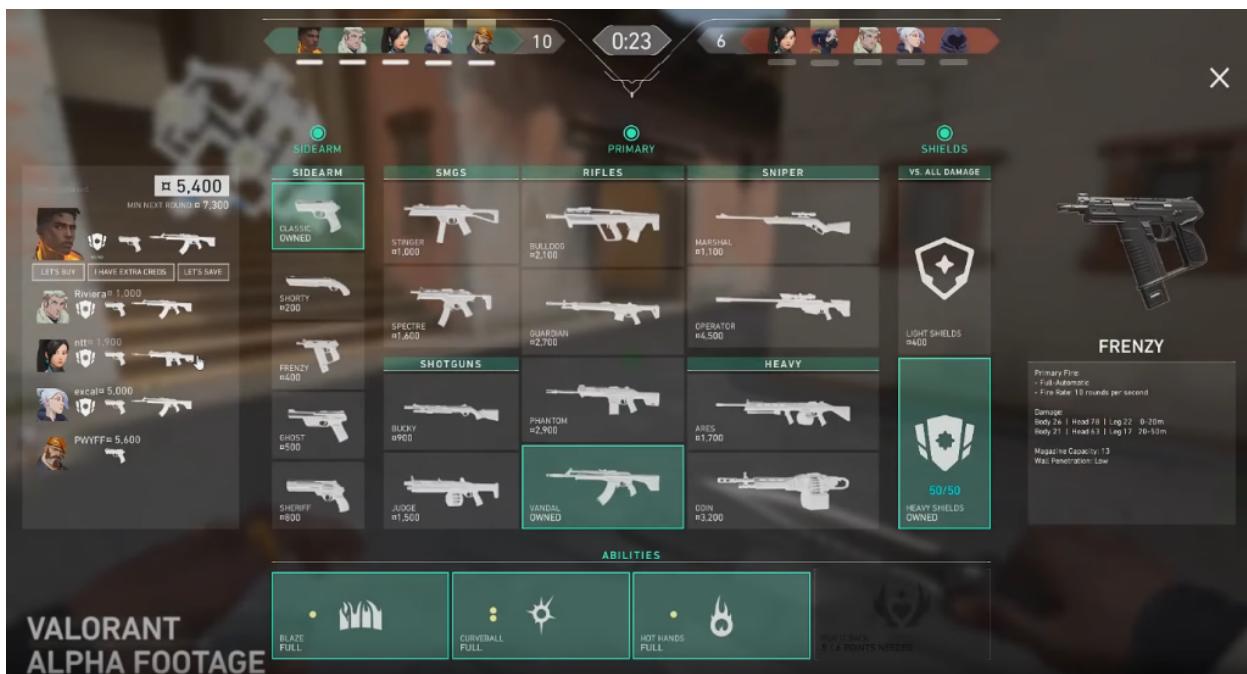
I personally enjoy playing the game most of the time as it supports playing with friends. I started playing this game when the beta came out and have been hooked on ever since, as it was available on PC it was the easiest to play. I loved the team playing aspect of the game as I could play with my friends and hated the whole toxic environment when playing with random people.



Object pooling

The above scene is from the FPS game Valorant game from Riot. I will be specifically talking about the bullets and the guns that I think would be classified into an object pool. In this game the gun has a specific amount of bullets per round, that once used can only be replenished either by picking up the same type of gun from another player, after the round is done the bullets are refreshed if the gun is kept after the round is done, or buying a new one from the store.

The other reason I feel that the guns are object pools themselves is the way that they work in the game. There are different guns and they all have different properties for their bullets such as fire rate, wall penetration, number of bullets and damage per body part as well as the difference of damage due to distance. Due to these properties these guns are all unique by themselves and no other gun has these properties. Guns with class types do have similar properties but their feel is different giving them leverage in different situations.



Factory Design

The use of abilities in this game is what I think would be classified as factory design. Every agent has a different set of abilities and they all have different

ways in which they can be used and replenished. The abilities use factory design to spawn in the player's hands and disable the use of guns since the hands are used by the abilities. The abilities have different ways they are used when they are used on players instead of when they are placed on the map to provide tactical advantage.



On the image on the left we can see a blue orb that is in the characters hands, this ability heals and there is nothing more to it as it does not put anything on the map other than heal the player that it is applied on.

While on the image on the right the turret placed on the floor that is shown by a holographic blueprint as the image shown below making us the spawner placing it wherever we think is fit.

