We engage in activities that give us joy and those that we find fun. The same applies to games. We play games to have fun. But what exactly is fun? In his book '*A Theory of Fun for Game Design*,' Raph Koster touches upon what he perceives as fun in games. At the 2012 GDC, he revisits his book after ten years to see whether the definition of fun in games changed over the years. According to Raph, fun from games comes from learning, comprehension, and mastery. Through games, we learn patterns and apply them to reality unconsciously. Once the player learns the pattern, and there is nothing new to learn, the game becomes dull. A game can also be boring to the player when it is either too easy to understand the pattern or too challenging to master it. Koster mentions that fun can be perceived as a neurochemical reward to encourage the players to keep trying.

While fun and flow go hand in hand in games, they are hardly the same thing. Koster defines flow as a neurological event that differs in degree rather than type from other similar events. To summarise, flow does not trigger joy, whereas fun does. Koster further explains that game feedback has a massive impact on fun. This feedback includes art, animation, sound, music, movement, and story. A game cannot be fun because of its core features alone, i.e., problem, preparation, and core mechanics. It is the feedback that triggers dopamine and causes fun.

We see how fun is an essential component of games. But how exactly do game designers determine whether a game is enjoyable or not? At the 2019 GDC, Dylan Rogerson tells us how he and his team at Activision decide what features of Call of Duty correlate to fun. To do this, Dylan and the team introduced a fun survey that was given to all players of Call of Duty: WWII. The survey asked the players whether they had fun, and the players could reply with a yes or no answer or could skip it. The team saw that 60-80% of the players did not skip the survey because it was easy and quick.

To determine what contributes to the fun, the team considered three modes of the game and rigged some of the game's existing features (increasing the number of kills for team deathmatch, increasing the score per kill for domination, etc.). They then got the player feedback from which they deduced that some changes made the game too easy to play, which reduced the player interest. Further, they collected player data for three months for each mode and then created predictive models assessing the strength of factors that correlate with fun. On comparing the results across the modes, they observed that team score is a more predictive variable for fun and game performance matters less than team score.

From both the talks, we see that fun is essential in games, not just from a player perspective but also as a tool for the designers to understand what features to include and to what extent. There is a fine line between making a game fun and boring, and it is up to the designers to find the right balance of features. Take the example of the run and gun video game Cuphead. While this game is incredibly innovative and takes you back to the 1930s era, some levels are extremely difficult, and it takes the player multiple turns to clear. This makes the player lose their patience and eventually makes the game less fun. Ultimately, a fun game is one that blends play, story, and art well. At its best, it gives the player a sense of gratitude, generosity, mindfulness, optimism, enables them to use their strengths, allows social connections, and allows them to strive for goals. It is one that gives you a feeling of happiness in life.

1. Koster argues that visceral fun is not actually fun because the chemical being released is adrenaline and not dopamine. Ultimately can we classify fun based on the neurochemical effect happening in bodies alone?

2. Team score is more important, moving from TDM - DOM - War. What design aspect contributes to this change?