# TDT71 Game Development

Zaim Imran

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## Contents

## 1   A Brief History of Computer Games:

After the boom of the popular MMORPG, World of Warcraft, in 2004, the player base made multiple mods for the game. One of these mods was Defense of the Ancients, also known as DotA, which started the MOBA era. The game mode became so popular that some developers in 2009 created League of Legends: Clash of Fates (referred to as LoL). As a game made in 2009, there were still issues with bad computers, but as mentioned in [4], hardcore gamers prefer the PC over a console. With the suitable investment, good quality hardware for PC outperformed the console, and as a game requiring a keyboard and mouse, this was the perfect fit. There was also the issue with PC games that they easily cracked. However, the game became quite appealing to many gamers because LoL was free to play and downloadable on the internet. In 2009 LoL made headlines with its well-designed and animated graphics. They implemented a third point of view (Isometric projection), created life-like animations and gave each character unique details. Finally, the developers filled the map with different terrain and objectives making the game immersive. [4] also explains how with time, powerful computers became more accessible and popular in homes, which resulted in all types of gamers gravitating towards the game because of its free-to-play business model. The way LoL made money was by selling skins and

the ability to buy characters with cash instead of saving up in-game currency. Lol also implemented ranks where the game matched players with others on the same level, the gamers incentive to become the best.

## 2  Player Types: A Meta-synthesis:

The players in LoL consist of a couple of the player types mentioned in [1]. Lol is a game created for all nationalities and tries to give everyone a fair advantage by having region servers. However, because of how gaming is viewed in different parts of the world, each server has a different gaming culture. For example, Korea is regarded as the best and most competitive server, and players from all over the world move to Korea to be able to play on these servers. On the other hand, Europe has three different servers, where some of the servers are more relaxed, with players playing for fun. There are also some European servers dedicated to pro play. However, the primary demographic of all servers are males between 18-30 [2]. As mentioned in [1], the in-game demography mainly consists of achievement, sociability and domination. The achievement types aim to progress through the game's many stages and ranks to become the best player in the world. The sociability type mainly plays the game with friends and plays for fun. They have no desire to win but focus on having fun with others. Finally, the domination type usually creates a smurf account, a second account with a much lower rank matching them with less skilled players. They do this to dominate over less experienced players and play for ego.

## 3  What makes things fun to learn?

In [3], three categories are mentioned to make a game more fun to learn: challenges, fantasy and curiosity. How does LoL implement these three? The challenge comes from defining a goal: defeating the enemy by taking their base. However, we need some uncertainty to get a unique experience each time. LoL achieves this by giving players random teammates and enemies with different skill levels and game sense. There are also implemented subgoals with turrets, dragons and other elements giving a team an advantage. LoL is based on fantasy, with characters that can do magic, dragons and other exciting abilities. Appeal to the general fantasy genre makes the game emotionally appealing to most players. Combined with a wide variety of characters, abilities and backstories, gives an extensive palette for most players to find a character that matches one's ideal fantasy character. Finally, as described in [3], the curiosity aspect is to be motivated to learn, independent of any goal-seeking or fantasy-fulfilment. The motivation to learn teamwork and communicate efficiently with random team members.

# 4 How does LoL keep its loyal gamers?

First, to ensure that all new players are cared for, everyone has to start with a tutorial where the player is introduced to the basic movements. Then after playing against other players at the same level, the player can level up by playing. When hitting level 30, the player is allowed to play the game mode ranked. In this game mode, the player is matched with other players with a similar rank, which can be increased or decreased by winning/losing.

Then it's all about evaluating player enjoyment. [6] explains that games should always keep the player engaged. LoL does this by making the player farm gold while fighting other players and competing for objectives. The team must determine the best course of action to win the game. Some matches are won by just farming gold, while other games require brute force. A typical LoL match can last between 20-40 minutes. However, players have reported that it feels way shorter. When the player is immersed in the game, time passes by faster, mainly because they are having fun [8]. In addition, the player gets emotionally involved to the point where players are emotionally invested in their wins and losses. This emotional investment strengthens their bond to the game.

# 5 Riot Games

Riot games started as a small company created by five game developers and designers with the help of their family and angel investors. As [7] mentioned, the game developers only had little development experience other than previously creating small games. Their main focus was creating an engaging game for players to play long-term. They drew inspiration from the Asian game designers with the free-to-play game policy, but with buy perks with money. [7] mentioned that as a team grow, they require different professions to complement various aspects of the game. The same happened at Riot. As the game grew, Riot started to employ more game developers, designers and player behaviour specialists (psychologists) to combat toxicity. The team also started to include story writers and integration engineers. In [7], it's mentioned that more and more game developers have started to use third parties to create games. The prototype for LoL was created using the Warcraft III game engine. The team adapted an iterative process with heavy influence by DOTA, where they started with assets, map design, character design etc., to finally have a working demo. After a couple of years, the team had hundreds of designers and developers creating lore, champions and other aspects of the game.

# 6 Scripting vs Emergence

Finally, where does LoL stand on the scripting vs emergence scale[5]? LoL is a game with many characters, items and other entities which change the game. Because of the sheer amount of different options a player has, its only possible to

script part of this experience. The only thing Riot can do to create a balanced and fair game is to form general rules and interactions and test them well. [5] also mentions that an emergence strategy is the best approach when creating a scaling game with frequent changes in the character, item or entity roaster.

The emergence strategy also helps with the immersive experience. When the game is consistent with how the world and other characters work, the player can enjoy a game with expectations of what can happen [5]. There are no uncertainties when playing a specific character because of previous experience.

Finally, LoL also has entities which are computer-controlled characters which are used for farming gold. These are controlled using algorithms that dictate where they will move and who they will attack. Because of its impact on the game, the algorithm itself is a secret. However, they mimic flocking behaviour in movement and actions, giving the player a smoother and more pleasant experience with predictable behaviour [5].

# References

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