The Important and Relevance of Strategy in Role-playing Games

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***Abstract*—There is a lack of proper more sophisticated strategy in several role-playing games today. Based on data from the 'steamspy' website that gathers and analyses data of users from the 'Steam' platform, the largest gaming platform today, out of the 1591 role-playing games on the platform, only 37 are categorized as 'strategy role-playing games' and only 46 are categorized as 'tactical role-playing games', which is only about 5% of the total number of role-playing games. This research paper aims to determine the importance and relevance of strategy in role-playing games and promote the strategy element to be incorporated in role-playing games. Based on reviews of different existing games, a game level design document was produced. Analysis of the completed document showed that the 'strategy' element is indeed important in role-playing games. Further research is needed to identify if strategy should be incorporated into every genre of games other than role-playing games.**

Keywords—Adventure, Role-playing, Strategy.

I. Introduction

The replay value or replay ability of a game is a game's potential to be replayed after the first completion [1]. The higher the replay value of a game, the more times the game can be replayed before the player loses interest [2]. Based on a replay value ranking board on the website, it can be inferred that strategy and role playing games are one of the genres of games with a higher replay ability compared to others as most of the top games ranked by replay value consists of either strategy or role-playing games [3-5]. Besides, strategy and role-playing games also have one of the longest game lifespans before the game becomes no longer relevant [6]. The lifespan of role-playing games can range between 2 years to 20 years depending on the quality and popularity of the game [7]. The aim of this research is to comprehend the importance and relevance of the strategy genre in role-playing games [8]. The methodology of this research is the game level design that starts with the choosing of 3 keywords for the levels followed by reviewing all elements of other existing games and the development of the design of the storyline [9]. After that, development of the game concept, character and non-player character concept, environment concept, resources concept, map design and head up display design starts [10-12]. Finally, it ends with the development of the beginning and ending concept, goals concept, challenges concept, missions concept and the collision points concept [13]. The scope of this research covers game level design concepts consisting of storyline design, game concept, environment design, beginning and ending concept, goals concept, challenges concept, missions concept, resources concept, collision points concept, map design, characters and non-player characters concept and head up display design [14-16].

II. Literature Review

The objective of the research 'Character Design Fundamentals for Role-Playing Games' done by [13] was to look into the important aspects in a character that make character immersion possible. The results show that the goal of the characters is one especially important aspect of character design as well as characters being important in developing a good role-playing game. A limitation of the research is that not all aspects of role-playing games and character design were researched.

The objective of the research 'Player-Character Dynamics in Multi-Player Role Playing Games' done by [14] was to study the impact of integrating complex characters in multiplayer role-playing games. The results show that players readily accept and engage with complex characters if they are easy to engage with and designed in a way that is understandable by players. A limitation of this study is that it only studies

The objective of the research 'Game design and learning: a conjectural analysis of how massively multiple online role-playing games (MMORPGS) foster intrinsic motivation' done by [9] was to analyze the structure of massively multiplayer online role-playing games, mainly character development and quest design in the context of supporting intrinsic motivation. The results show that there are elements that require players to think, plan, and act critically and negatively. By providing choice, control, collaboration, challenge and achievement, games can foster intrinsic motivation. A limitation of this research is that only a specific genre which was multiplayer role-playing games was analyzed for this research.

III. Background Studies

One of the flow model type that was used for the game level design was the branching flow model type. This can be seen when the player must make the decision to be an ally, enemy or neutral to the non-player character which results in different scenarios in all the normal levels except the final level as shown in fig 1.

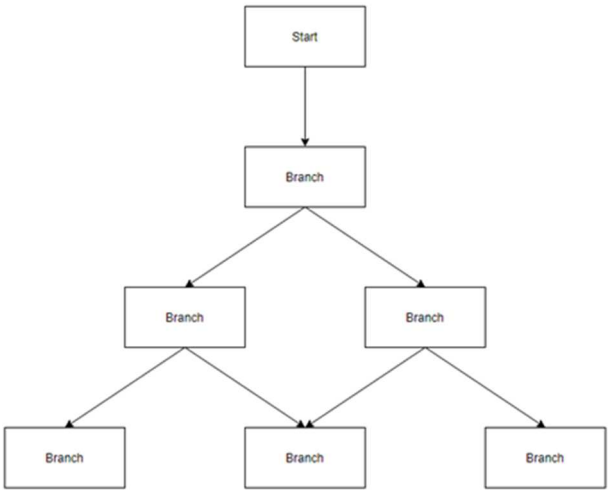

Fig. 1. Branching flow model

The linear flow model type was also used for the game level design. This can be seen when the player has no other choice but to proceed to an area or a mini boss after landing in the starting location in all levels as shown in fig 2.

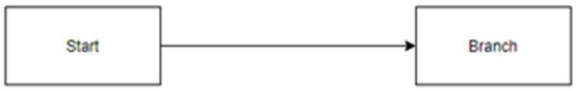

Fig. 2. Linear flow model

The bottlenecking flow model type was also used for the game level design. This can be seen where even though the player can progress in the game in different ways in the levels other than the final level, in the end the player will still encounter the final boss and will still need to defeat it no matter what the player did before as shown in fig 3.

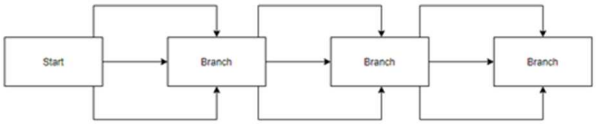

Fig. 3. Bottlenecking flow model

IV. GAME LEVEL CONCEPT & DESIGN

The game concept for the game level design consists of three genre keywords which are role-playing, strategy and adventure. The gameplay consists of two states which are the non-combat state and the combat state. In the non-combat state, the player can interact with the non-player characters and buy items from them. Other than that, the player can also freely explore the world and may find secret areas, items, and loot, hidden non-player characters and more. Besides, the player can also trigger non-combat event scenes with non-player characters. The player can also observe and scout out enemy locations and routines as well as familiarize themselves with strategic locations and points to give the player an edge in later battles. In combat, players have two options. The first option is to defeat all the objectives by bringing their Health Points down to 0. Defeating all the objectives may range from just destroying objects in the environment to defeating the enemy servant and master character or just the master character while ensuring that the player's master character does not die, similar to 'capture the flag', which in this case, the master character as the 'flag'. The other option is to flee combat by dealing a certain amount of damage to pursuing enemies and defending the player's master character for a certain amount of time until the player's master character escapes.

A. Resources

Fig. 4. Currency [4]

Fig. 5. Master character equipment [4]

Fig. 6. Materials [4]

Fig. 7. Special items [22]

For the game level design, the resources consist of 4 types which are game currency, master character equipment, materials, and special items as shown in fig 4, fig 5, fig 6 and fig7. Game currency are used to make purchases from shops while materials are used for crafting and upgrading. Master character equipment can make the player's master character more powerful and special items can help to trigger certain event or unlock certain secret or hidden areas.

B. Maps

Fig. 8. Node type map for one level of the game [4]

Fig. 9. Node type map for final level of the game [4]

The maps in this game level design is of the node type. Each node has different levels of resource rating, defense rating and hostility rating as shown in fig 8 and fig 9. In all the normal levels except for the final level, some nodes have a more strategic position allowing flexibility and easy access to players to travel about. In the final level the only strategic decisions that player can make is the order of which mini bosses to fight first due to the final level consisting of only bosses in a boss marathon-like gameplay where the player has to fight boss after boss.

C. Games Environment

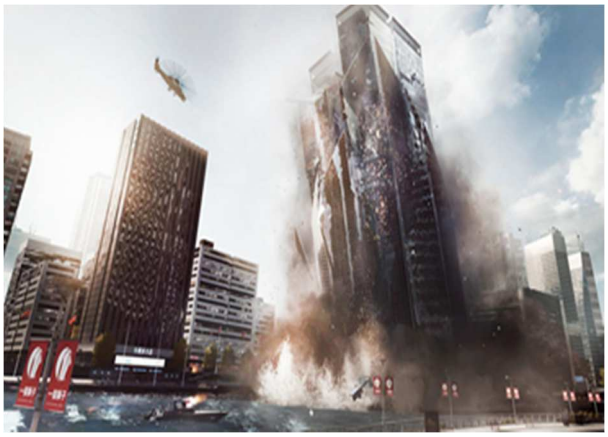

Fig. 10. Destructible environment [15]

Fig. 11. Weather [17]

Fig. 12. Time [18]

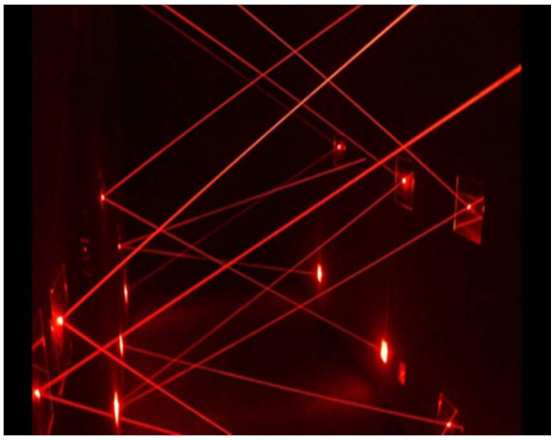

Fig. 13. Traps [16]

The environment in the game level design consists of mainly 4 elements, which are the destructible environment, weather, time, and traps. Each of these elements can be both an advantage and disadvantage for both the player and non-player characters depending on how the player and non-player characters makes use of these elements and the situation as shown in fig 10, fig 11, fig 12 and fig 13.

D. Characters

Fig. 14. Master character and servant character [4]

Fig. 15. Neutral characters [19]

Fig. 16. Civilians [21]

Fig. 17. Executors [20]

The characters in the game level design mainly consists of 5 types which are the master characters, servant characters, neutral characters, civilians, and executors. Master characters and servant characters come in a pair. The player controls one such pair while other master character and servant character pairs are controlled by the game's AI. All master character and servant character pairs whether player or AI controlled have the same kind of character mechanics but may be varied in patterns and types. Neutral characters are AI controlled and provide functions in the way of missions, quests, and shops. They can turn hostile if provoked. Executors will spawn and endlessly pursue and kill the player if the player exposes the supernatural to civilians by killing or getting seen by civilians when conducting supernatural activities as shown in fig 14, fig 15, fig 16 and fig 17. Comparison of important characters is shown in Table 1.

TABLE I. COMPARISON OF CHARACTERS

Characters	Power (in HP)	Vision (in Degrees)
Neutrals	400	30
Executers	750	80
Masters	1200	110

E. Challenges

For the game level design, the challenges that the player will face consists of but not limited to defeating enemies, protecting the master character, keeping track of the environment and making use of it, gathering materials, decision making, strategic planning, avoiding exposing the supernatural to normal civilians, maintaining relationships,

noticing traps, keeping anonymity, finding the holy grail and finding certain neutral characters.

F. Beginning & Ending

The beginning of all the levels start with the player spawning at the initial spawn locations for each level. The play will then be given choices on where to go or who to fight, and from there, missions, goals and objectives will have to be completed by the player. All levels except for the final level ends when the player retrieves the holy grail. The final level ends when the final boss is defeated.

G. Goals & Missions

For the game level design, the player's goals & missions consist of but not limited to restoring humanity's past, present and future by repairing the singularities, identifying the source of the irregularities, solving the mystery surround the singularity, reaching and defeating the final game boss, becoming stronger, improving character relationships, solving conflicts and preventing allies from dying as well as resolving the holy grail war.

V. CONCLUSION & FUTURE ENHANCEMENTS

In conclusion, the implementation of strategy in role-playing games allows more challenges and options for player gameplay.

A limitation of this research was that due to time constraints, certain aspects could not be explored or explained in further detail in the game level design. Future research should explore with further detail as well as examine other genres.

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