

Revenge of Omega (FPS game)

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ABSTRACT - Game is one of the great source of entertainment, it has been observed that people playing action games have better mental flexibility and one of the popular game of this category is Fps game. It is a type of shooter game that relies on a first person point of view with which the player experiences the action through the eyes of the character. The successful Fps game design with better graphics & challenges when playing namely enemy characters, can make a player more enjoyable. In present days academic institution provides necessary skills and encourage their students to build their career in game development. In many of the countries game development is an important Industry.

We are developing an FPS game named Revenge of Omega using unity software. FPS (First person shooting) is a sub-class of the shooting video game centered on gun & other weapon based battle in first person's perspective in which experiencing action through the eyes of the hero (central player) & control the character in 3-Dimensional space lively touch and attractive background, each level has its own different challenges which makes player more curious about the game. The character development and the update of the levels as the game process is an interesting element of this game.

I. INTRODUCTION

The purpose of Gaming is to create a video game that requires players to learn the skills as per game's requirement like they should know how to operate several types of guns that are typically used in eliminating enemy and rescue and law enforcement.

Study shows that FPS game provide youth with immersive and compelling social, cognitive, and emotional experiences. Further, these experiences may have the potential to enhance mental health and well-being in players. It also helps to increase learning ability of a player which

helps him to take better decisions in real life. Gaming also stimulate creativity, focus and visual memory. [1]

In this work we are developing a FPS i.e. First-person shooter game, it is a video game, centered on gun and other weapon-based combat in a first-person perspective, with the player experiencing the action through the eyes of the protagonist and controlling the player character in a three-dimensional space.

"First person shooter" game is easily identifiable by its specific perceptual presentation of game events, and the presence of a gun or other weapon. [2]

The genre shares common traits with other shooter games and hence falls under the action game genre. Since it involves advanced 3D and pseudo-3D graphics, these features have challenged hardware development. First-person shooters are a type of three-dimensional action shooter game featuring a first-person point of view with which the player sees the action through the eyes of the player character. The main design element is combat which mainly involving firearms. FPS game genre is one of the biggest, fastest growing and the most commercially feasible video game genre.

II. LITERATURE SURVEY

The FPS game genre is one of the biggest and fastest growing video game genres, being the most attractive to publishers in terms of revenues. FPS games allow players to move about and interact with each other and do battles in real time in a virtual environment. Our aim is to give background on the shared networking architecture currently in use and draw a general process taken for measuring and modelling game traffic from field research. With this we present the relative characteristics of datasets analysed in research and validate various, sometimes contradicting, and game session traffic models derived from said

datasets. We do so in a fashion that presents game traffic with respect to the evolution in game engine design, in the hope that this leads insight into future traffic.

Let us begin by providing an overview of game engine characteristics, parameters of interest, and networking protocols. First- person shooter (FPS) games position players from the point of view of a game character and require them to navigate 3D space and shoot enemies in order to complete game objectives.

While the FPS has developed and adopted numerous gameplay and narrative conventions in the 20 years since the form coalesced, competitive online multiplayer gameplay is a pillar of the genre. FPS games are controversial with the general public because of their representations of violence but very popular within gaming cultures and a mainstay of the game industry. [4] While a good deal of historical, formalist, and interpretive scholarship informs this entry, social scientific research is only beginning to move beyond the question of violence and to examine prosocial effects and applications of FPS games. Evidence has shown that violent video games increase adolescent aggression (Anderson & Bushman, 2001). The increased popularity of first-person shooter violent video games creates a need to explore the effects.[5]

III.METHODOLOGY



Figure 1.Flow of FPS Application System

The working of our project can be explained in the following manner: The user interface will be typically divided into two sections: the “main menu” and the “in-game” areas. The user interface will be simple, quick and easy to process. The main menu will present a title screen to the user and allow the user to choose between starting the game and viewing the setting panel, which allows changing of the video and audio settings. Once the user clicks the “start game” button on the main menu, the game will switch to the “in-game” user interface. Upon transition to the in-game user interface, the player object and the environment will be displayed. The user will control the player throughout the game by using the keyboard and mouse. For the in-game interface, a “health bar” will be displayed on the screen and will represent the current health of the player. [6]

IV.PROPOSED SYSTEM

A first person shooter (FPS) is a genre of action video game that is played from the point of view of the main character of the game . FPS games provide the exact view of what an actual person would see and do actions in the game.It contains a pseudo 3D graphic which involves 3d view of rooms and various objects ,protagonist have to explore this rooms for finding bots and gaining points by defeating them and progressing in levels.But if bot attack on protagonist , our main character would die and player would have to restart the game .A FPS usually shows the character's hands at the bottom of the screen, carrying whatever weapon the player has selected

The gamer is expected to drive his avatar through the game by moving it forward, backward, sideways and so on using the game controller or mouse. Forward movements of the controller result in the avatar moving forward , similarly backward and sideways .The protagonist can generally get healing and equipment supplies by means of collectible items such as health kits and jet packs, simply by walking over, or interacting with them. While moving protagonist have to collect health packs and jet packs. Health is the element of the game which shows the life of protagonist .Initially it would be 100% but as enemies will attack it would get reduced so to maintain the health protagonist would have to collect health packs. And jet packs would help our character to fly for certain period of time

Enemies would be low powerful and high powerful. Low power enemies would reduce our main character’s health by 5% in one attack and high power enemies would reduce health by 10%

in one attack. And to defeat them there would guns of different power

It is difficult to precisely define the FPS genre due to diverse titles on the market, however the basic concepts found in most FPS games are: an avatar, one or more ranged weapons, and a varying number of enemies.

Having resources like health give a player a better experience. Health is a resource which, when depleted, causes the hero to die. Resources are usually automatically accumulated as the time passes, but can also be gained by defeating the bots.

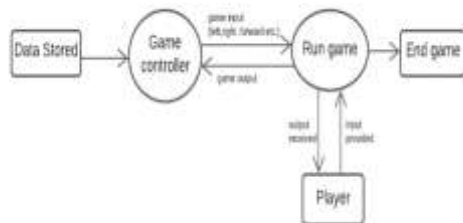


Figure 2. Architecture of FPS

V. CHALLENGES FACED

The FPS game genre is the biggest and fastest growing genre in worlds of games, being the most attractive to publishers in terms of revenues. the FPS game allows the player to experience the action with his own eyes in real time virtual environment .The FPS game allows the player to be in the position of the character which he is playing and experience the game with the eyes of the character and require them to navigate 3D space to complete the game objective.

Unity is a well-known software to develop FPS game. The unity provides all the software tools to develop an fps game. As it is known that unity provide software tool for development of the game it take too much time to get use to software whether it is to know how to use the tools or to understand the functionality of the software ., For a beginner it is slightly difficult to grasp the concept of the software . But as the time goes it is easy to understand and use.

Sometimes the code snippets are not exact and we do not get the desire outcome but after some changes and some error and correction the work need to be done.

VI. EXPERIMENTAL RESULTS



Figure 3. Map Overview



Figure 4. First Person POV I



Figure 5. First Person POV II



Figure 6. First Person POV III



Figure 7. First Person POV IV



Figure 8. Enemy Bot



Figure 9. Equipments

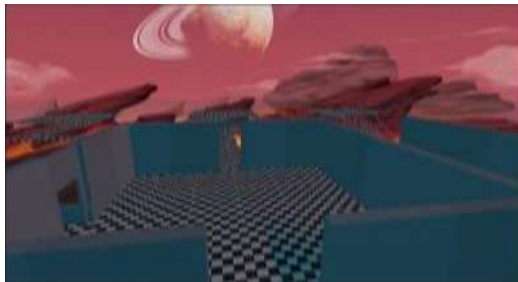


Figure 10. Top View



Figure 11. After Defeat Interface

VII.CONCLUSION

First person shooters are new phase in gaming world. With their advanced technology and sophisticated environment, FP Shooters gives a player thrilling experience. In every aspect it offers a great excitement with fast pace while playing. They give you the complete freedom to configure everything just the way you want it.

We demonstrate how a personalized/adaptive FPS experience can significantly speed-up the learning curve of action

videogame players, opening to possible future applications for video-gamers.

Although the conceptual framework and the model are focused on FPS games as their paradigm but we have tried to boost their analytical thinking by the challenging levels and out of box scenario.

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