Universiti Teknologi MARA

MASSIVELY MULTIPLAYER ONLINE GAME IN COMPUTER SUPPORTED COOPERATIVE WORK

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ABSTRACT

Massive Multiplayer Online Game (MMOG) is an online game which capable of supporting large numbers of players. MMOG enables players to cooperate and compete with each other and interact with people around the world. This game can be found of most networks including personnel computer, video games console or smartphones and other mobile device. Most of the game connects the connection using User Datagram Protocols (UDP). Most of the players having difficult to interact with each other due to data loss when playing the game. The reason is that UDP often lose data when a message is being sent and received by the server. So player having difficult to communicate with each other. This thesis includes communication awareness between players when they interact in the game, with the implementation of Unity 3D plug-in as the engine for connect Transmission Control Protocol (TCP). In this project, Computer Supported Cooperative Work will be use as communication between the players are important to the project. It combines the understanding of the way people work with enabling technologies of computer networking, and associated hardware, software, services and techniques. The result of the project will show the gameplay which is Checkers using Unity 3D and interaction between players through chatting while playing.

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CHAPTER 1

INTRODUCTION

This chapter shows the brisk of explanation and overview of the research. It is started with the background of study and pursued by the problem statement, objectives, and project scope and project significance. Besides that, it also includes the expected outcome of the research. In this project, to developed a multiplayer online game, "Multiplayer Checkers". This game mainly focuses on the method of using Transmission Control Protocol in Computer Supported Cooperative Work (CSCW).

1.1 Background of study

The rise in the use of the internet has followed to many changes in our daily life. To be specific, this rise has also been followed to the rise of online gaming. Numerous computer games are played online against other players over the web, whether on a computer, console, and mobile device or via social networking sites ("Online Gaming", 2016). Moreover, in multiplayer element, players often communicate via integrated chat sessions or with microphones as well as headset in different location across the world. As far as video games, online gaming is growing in popularity for an assortment of reasons. Gamers can undoubtedly find opponents of a similar skill level when playing a head-to-head game in virtual world ("What is Online Gaming? ", 2016).

The Internet has provided a wide range of possibilities for traditional video games like chess, checkers and so on and the attraction is clearly common worldwide, especially with Massively Multiplayer Online Game (MMOG) (Achab, Nicolier, Mauny, Monnin, Trojak, Vandel, Sechter, Gorwood & Haffen, 2011). An example of this popularity is World of Warcraft (WoW).