BEHAVIOUR-ORIENTED MULTIPLAYER ONLINE ROLE PLAYING GAME:
CLIENT-SERVER DEVELOPMENT USING RAKNET GAME NETWORKING ENGINE

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ABSTRACT

Computer games industries are growing fast and even complex. Even during this global recession the growth does not affect much to the industry. This proves that computer games have been a part of people lifestyle. During these days, MMORPG industry boasts the market of gaming experience. This kind of online gaming experience emphasize on the social interaction besides of the graphics and game play. This social interaction has maintained the online games to stay in the market even longer than ordinary single player game. This MMORPG kind of game usually refers to complex architecture required to manage the interaction between computers, and one of general architecture is client-server architecture. This client-server architecture has become complex and unique for each MMORPG that it is required to be managed specifically to the game itself.

The purpose of this thesis project is to analyze and implement an adequate client-server architecture to the thesis project that is a Multiplayer Online Role-Playing Game (MORPG). In order to achieve this, it is required to prepare and manage a network system required to interconnect clients and a server so that the online game interaction can run efficiently and stable to play.

The development of the client-server architecture will be using C++ programming language with MySQL as its database, and RakNet as the main network engine to handle the physical layer of the network. The client-server will be implemented in both side that client with Windows operating system and server with Linux Fedora operating system, and will be implemented along with other developers that mainly deals with the graphics programming and AI as a team in finishing the MORPG.

Key words
Client-Server Architecture, RakNet, MMORPG.