



Presented to the **Software Technology Department**

De La Salle University - Manila

**2nd Term, A.Y. 2018-2019**

In partial fulfillment

of the course

In **NETWORK (S17)**

**NETWORK MP DOCUMENTATION:**

**LOCAL AREA NETWORK GAME SPECIFICATIONS AND RFC**

Submitted by:

**Caguiat, Juan Miguel E.**

**Lim, Johanna Koon Gan U.**

**Ngo, Carlos Miguel F.**

**Wong, Jerick John D.**

Submitted to:

**Ms. Geanne Ross Franco**

**March 29, 2019**

## GAME SPECIFICATIONS

This group's local area network game is a quiz bee. This quiz bee offers several topics. There is not specified number of quizzes as this may vary. A "quiz master" can log in to the game and add or delete quizzes. Moreover, each quiz will be a multiple-choice type, with each question having four choices. Each quiz can host from two upto four people at a time. The goal of each quiz is to score as much by answering as many items correctly in the shortest time. Not to mention, each question has a time limit of one minute. This game is a mix of a time-attack and racing. The winner will only be announced once all the participants have finished answering the questions. On the other hand, this game utilizes TCP.

# RFC

## 1 Logging In

### 1a Log in as quiz master

A client can log in as a quiz master to add and delete quizzes. The client must send their username and password to the server.

### 1b Log in as participant

A client can log in as a player and participate in the games. He must input his alias after logging in as a participant.

## 2 Managing Quizzes

### 2a Adding a quiz

Quiz masters are allowed to add as many quizzes as they want. After issuing a add-quiz request, the quiz master will have to input the details of a quiz. All prompts, choices, and answers should be filled out before the quiz master can save the quiz.

### 2b Deleting a quiz

Quiz masters are also allowed to delete quizzes. The name of the quiz is required from the quiz master; the delete request requires the client to send the quiz's name to the server.

## 3 Playing a Game

### 3a Joining a quiz bee

Clients can join any quiz. However, a quiz is only playable with a minimum of two clients. A quiz can also only host a maximum of four clients. In order to enter a game, the

client's name and the quiz's name will be sent to the server that is hosting the clients.

### 3b Leaving a quiz bee

A client may opt to leave a game. The client's name and the quiz's name will be sent to the server for the termination to be completed. The server will also notify the other players in the game once the player leaves.

### 3c Finishing a quiz bee

A player finishes the quiz once they have answered all questions. The quiz bee will only be finished after all the other participants have finished answering their quizzes. The rankings are also broadcasted by the server after the quiz been has ended.

## SEMANTICS OF MESSAGES SENT BETWEEN THE SERVER AND CLIENTS

Message Format	Function
ADDQUIZ <i>quiz_details</i>	Sent by client to request the server to add the quiz specified by the parameter <i>quiz_details</i>
END	Sent by server to signal that it has finished sending its message.
GETQUIZZES	Sent by client to request all of the quizzes from the server.
JOINQUIZ <i>quiz_name</i> , <i>participant_name</i>	Sent by the client (specified by the parameter <i>participant_name</i> ) to join a quiz bee game (the client's thread and the quiz's name are the parameters needed to join the quiz bee specified by the <i>quiz_name</i> ). The server also sends this message to the quiz participants to notify them of the new participant.
LEAVEQUIZ <i>quiz_name</i> , <i>participant_name</i>	Sent by the client (specified by the parameter <i>participant_name</i> ) to leave a quiz bee game (the client's thread and the quiz's name are the parameters needed to leave the quiz bee specified by the <i>quiz_name</i> ). It is also sent by the server to broadcast to the other quiz participants of the update.
STARTQUIZ <i>quiz_name</i>	Sent by the client to start his or her quiz (specified by the parameter <i>quiz_name</i> ). It is also sent by the server to signal the quiz participants that the quiz is starting.

FINISHQUIZ <i>quiz_name</i> , <i>participant_name</i>	Sent by the client (specified by the parameter <i>participant_name</i> ) to signal that they have finished the quiz (specified by the parameter <i>quiz_name</i> ).
SCORE <i>quiz_name</i> , <i>participant_name</i> , <i>new_score</i>	Sent by the client (specified by the parameter <i>participant_name</i> ) to update their current score (specified by the parameter <i>new_score</i> ) for the quiz (specified by the parameter <i>quiz_name</i> ). It is also sent by the server to broadcast to the other quiz participants of the player's new score.