

IIIT Bangalore

A PROJECT REPORT

ON

SOCKET PROGRAMMING

SUBMITTED TO

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BY

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PROJECT REPORT

Overview:

This is an online quiz which can be played with 3 participants. It is a 3 player (it can be changed inside the code as per requirement) game. Player presses the buzzer if he knows the answer. The player who presses the buzzer first will be given a chance to answer the question. If the given answer is correct, he will get +1 point; otherwise +0 (No reduction will be there from points if the answer is wrong). Winner of the game is the player who reaches 5 points fastest.

Technology used:

Python 2.4
Socket Programming
Threading

Implementation:

Using Socket Programming I have made a socket. Players (clients) can connect with the socket using the Host_address and IP_Port. Now using threading I

have thread all player. So the first player who press the buzzer will be given chance to answer. There are 2 codes server.py and client.py. The client code is run by the players and the server code is run by host. The host has a set of 20 questions which are chosen randomly to the players. If a player know the answer to the question then he press 'y' and Enter key. Otherwise, if he doesn't he presses 'n' and Enter key. The player who presses 'y' first has to answer the question. I have created an empty array when someone(clients) presses 'y' his client number will be added into array.

When the array size increases I won't add client number in the array. So using this idea I am getting first person who presses the buzzer. There is a point table displayed after each question is answered. The player who reaches a score of 5 first, wins the game.

How to Run:

There are 2 code files:

server.py

client.py

To execute as a 'host' run on terminal:

python server.py

To execute as a 'client' run on terminal:
`python client.py`

Assumption:

In program of client (client.py) we always assume that we always get an input from the player whether or not he knows the answer. (If he knows the answer he will press 'y' or 'n' if he doesn't).

Knowledge Gain:

I learn how to do socket programming and threading in socket. I get the real life experience of working in socket(host and clients). I learn functioning of IP address and Port number.