Study to Prevent Youth from Online Gaming Addiction

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Abstract: Around 211 million users play video games by using different types of physical devices. Online video gaming is one of them. This game is played either partially or primarily through the Internet or any other computer network available. People are more excited to play an online video game. PUBG (Player Unknown’s Battlegrounds) is one of the popular online game among the children as well as adult also. Such games are so attractive that player(s) are playing game like a real war and become addicted to this game. They play the game until they get Chicken Dinner. (Who won the match they declare as “winner winner chicken dinner”). Playing PUBG continuously, it seems to be like player(s) are more attached to this game. They only want to play the game at any possible time, don’t even bother what they do actually and what is happening in the surrounding area? And now a day’s it is one addictive game which will harm children and adults health. Addiction of PUBG is结果ing in extreme violence, less sleep, negative approach, bad physical and mental health among the children and adults as well.

This paper is exploring how PUBG game addiction can be reduced so that children as well as adult will secure from such online multiplayer game addiction by using Network Security.

Keywords: Chicken Dinner, Addiction of game, IP Address, Timestamp (Network Security).

1. INTRODUCTION

Player Unknown’s Battlegrounds (PUBG) is an online multiplayer battle royal game. This game is one of the best-selling and most-played online video game of all the time and it has seen a massive reach among youngsters as well as gaming enthusiasts. PUB is inspired by 2000 Japanese film which is “Battle Royale”

1) Release Date: Battlegrounds were first released for Microsoft Windows in March 2017, or full release on December 20, 2017. Even this game is available for Xbox One and PlayStation-4 free to play Mobile version for android and IOS in the form of PUBG mobile.

2) PUBG Mobile: PUBG mobile game can access through the social account or play game/guest. People are enjoying PUBG-mobile game because it is easily accessed or free to play. So anyone can play this game at any time with no restriction. While playing a player can do voice call (conference), chatting with many friends. A player can play this game as a duo, solo or even group (a small team of up four people). Game’s design and graphics which will attract a player to play this game again and again and youngster play this game like a real war is going. Players who win a match are got “winner winner chicken dinner”,

3) PUBG Lite: PUBG Lite is free of cost so the player can download and play easily. Which is developed specifically for lower to mid-range Smartphone? A player can access this game as a Guest user or Play game it will be enabling multiplayer matches with friends but PUBG Lite will not save players gaming task after login as a Guest user or play a game.

PUBG is popular because of its simplicity and it has smooth experience for player(s) it has some rule to play the PUBG game: first player the start game (Run game) If player is new to this game then they will ask for login process where player have to login with their Facebook, Gmail account or play as a guest mode . Where, for guest mode you need to create a new login id and password. After the successful of login and registration process player have to select the some other option like their skin type, face type, hair type, gender type and then after player have to select their costumes.

If players are already the member of this game means player has already registered to the game then system can give player to directly access to lobby to select the further options. After enter to the lobby player have to select the a mode type whether it is a FPP mode or TPP that’s totally depend on the player. After mode selection player can select their maps, in which map they want to play. Here map is something like an area where having different condition in whether cloudy or rainy or night time etc. Here one more facility you get that is select a player type where you want to play solo or with your partner (duo) or with group of friends (squad). You give other options like zone selection and controls selection. After that player is ready for play the game.

FPP is known as First Person Perspective where paler can playing the game in the eyes of the character. And here it is not possible to switch to third person mode from this game mode.
TPP is known as Third Person Perspective where player can playing the game from behind the character where allowing them to see whole character. As seen a younger generation attracted towards this game result of that more number of people getting bad impact on their heath, mind as well as physical body so here need to find some solution to restrict the player and save the younger generation from this dead full habit

II. RESEARCH QUESTION

TABLE I (PUBG QUESTIONNAIRE)

|   |   |
|---|---|
| 1. | How children's are addicted to this online battle game? |
| 2. | Do you love PUBG game? |
| 3. | Which Console do you use? |
| 4. | Do you think PUBG is one of the most interesting game? |
| 5. | Do you find yourself gaming in the early morning? |
| 6. | Do you get very angry when someone or something interrupts a game? |
| 7. | Do you lose hours of sleep to gaming? |
| 8. | Are you playing this game while eating? |
| 9. | How many times do you play the game? |
| 10. | Do you update in social media if you become a winner in PUBG? |
| 11. | Are you using Pirated game of copy? |
| 12. | Do you become defensive when people suggest you might be gaming too much? |
| 13. | Do you spend a lot of time thinking about your next gaming experience? |
| 14. | You often spend time playing games rather than with your friend's |
| 15. | Do you think gaming has positive effects on your health? |
| 16. | Do you delay or even skip daily tasks like brushing my teeth or doing laundry to play games? |
| 17. | Do you feel PUBG is an addictive game? |
| 18. | Which Profile/ account do you use for PUBG? |
| 19. | Restriction on game time, do you think it is fair? |
| 20. | How you like to play this game? |
| 21. | Do you really think battlegrounds game is irritating? |
| 22. | Which place do you use more to play this game |
| 23. | At what time do you find yourself in gaming? |
| 24. | While playing, how do you like to communicate with others/ friends? |
| 25. | Are the people in your life worried by your gaming? |
| 26. | Do you have any Health issues? |
III. FLOWCHART: VARIABLES STUDY AND THEIR IMPACT

According to survey on the above questionnaire table (Table. No1(PUBG Questionnaire)) and from those questionnaires answers, Got the exact idea about, how much player(s) is addicted to this game.

![Points scored](image)

Fig. 1 Result of Addicted People

Above diagram Fig.1 (Result of Addicted People) shows, out of 100 %, 40% students are normal as they are secure from such online multiplayer game and the remaining 60% students are addicted to this game.

IV. GRAPHS OR MODEL

Analysis: Below are the Graphs representing the data collected by the answerers of above questioners in terms of percentage of players who are addicted to the multiplayer game

A. Console Used By Player

![Console Used By Player](image)

Fig. 2

B. Spending Time On Game

![Spending Time On Game](image)

Fig. 3
C. How Much They Like To Play This Game

![How to play](image)

Fig. 4

D. When Players are Playing PUBG

![Time](image)

Fig. 5

E. Where Players Are Playing PUBG

![Place](image)

Fig. 6

V. METHODS/SOLUTION

On the basis of survey, 60% of players are more addicted to multiplayer game. It is a major concern to restrict the players from such type of games so that they spend less time with such type of games. Below are the methods to restrict the players from such type of games. To restrict the user, save players login detail and time in the database,

Create a table for insert record into table and database connection for gathering all information details safely store into DB for admin. For that:

1) Level-1 Create a table with the name “Active Window”:

   Step
   
   a) Syntax: CREATE TABLE [dbo].[TABLE_NAME](
ip_address[varchar];
logintime[varchar];
logoutime[varchar];
duration[varchar];
// Add the record of IP_Address and Timestamp
//So that, IP address or current time will store after player login from any account );

2) Level-2 Initialize library:

   Step
   
   a) Need to add library here
   
   b) the library will work for a particular section or predefined function, So Use this library for
   
   c) multiplayer game
3) A level-2 Create Connection with DB’s: Step+
   a) Need to create variable for that need to define below line:
      i) string connection String;
      ii) SqlConnection conn;
   b) Put DB’s credentials below steps
      i) Use variable for connection with the database
      ii) Insert localhost, username, password, values into that variable
      iii) All value store into one variable which is called as conn
      iv) Call open connection() function

A. Need to Restrict User by Using IP Address

Use the IP address for restriction: IP address restriction could be one of the solutions to restrict the players from PUBG. As it was identified that though PUBG allows playing the game maximum up to six hours from one account. It will not allow the users to play the game more than 6 hours. The user can create multiple accounts and would be allowed to play more than 6 hours in a day which could be restricted by assigning IP address. The player would be assigned one IP and maximum number of hours can be allotted to one IP. This will restrict the user to play more than maximum number of hours assigned from one IP as user is blocked by the assigned IP.

B. Need to Restrict user by Timestamp

Timestamp for restriction: Assigning the timestamp per user per game can restrict the Users to play more than the assigned timestamp. The uses could be restricted by using timestamp by the implementation of timestamp on login and logout per account per user per IP address

1) IP address and Timestamp for restricting the player: Once the user login the timestamp is allotted to their login for the same IP. It should be automatically logged out as the time stamp is over. Below are the functions to restrict the user by using Timestamp and/or IP Address.

a) IP address

Use checkIP() // This function is use to identify the user is present in database or not
Steps:
   - Define function: checkIP()
   - Define var IP = get IP // Get IP when using is trying to login
   - Define var query = SELECT * from database_name where IP_address = var ip;
     // query variable are used to retrieve ip address value, which is declare inside server
     - Start if loop (query) // to check result are store into query are found or not
       Inside if loop:
       - Define variable duration and logout_time
       - Start if loop() again
         - To check that duration is equal to 6
         - if YES // this IP won’t play this game
           - if NO // then goto else condition
         - Define else condition here // Check play duration are not equal to 6
           - define result into logout_time variable:
             $logout_time = current_time+(6-duration)
           - insert result value in logout_time variable
             -loop close here
             - Define else condition here // for login and logout time checking
               - Define logout time
             $logout_time = current_time+6
           - Insert result into this variable
             -Insert into database( login_time, logout )
             -Close loop
b) Page Load

Here Page_load function is used for refreshing the page for checking time duration of player login and logout.

Use Page_load() // by using this function page will refresh

Steps:
- Define function: Page_load()
- Check duration() // find Page load time
- Use Select query for login_time and logout_time fetch from database
  - Start if loop( login_time - logout_time = 0 )

Inside if loop:
  - if < 0 statement is true
  - Then user automatically logout from the game
  - Else if (login_time - logout_time < 1min)
    - then refresh page after 10 second
  - Else if (login_time - logout_time < 1hrs)
  - then refresh page after 1/2 hour
  - else
  - Page will refresh after 1 hour
  - loop close here

c) Logout

Here Logout function are used.

Use Logout() // To logout from game and store the total duration of game timestamp

Steps:
Define function: Logout()
write select query for getting logout_time from database
Start if loop( logout_time - current_time != 0 )

Inside if loop:
- check loop statement whether it true or not
- insert actual result into Logout
- write this query inside this loop
- insert into logout database (Scurrent_time, $duration);
else
- Logout //Player will logout
  loop close here

IP Address helps to set the limit/restriction on gaming, after playing six hours (time can be anything) the game will close automatically If the player wants to play this game again IP address will restrict this device that they can't play more.

VI. CONCLUSIONS

Players are more addicted to online multiplayer games therefore to overcome of this problem, the solutions would be, to restrict the player(s) by assigning fixed quantum of timestamp so that player(s) would not be able to play the game much. Even though the players wants to play the game by using another account, above restriction would not allow the players to play the game more than their assigned timestamp.

This way player(s) can concentrate more on outdoor games/ indoor games and studies. Reducing the addiction from such type of online multiplayer games can reduce the violence in young generation. This is the necessity of 21st century generation.

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