TheGameRoom

MINI PROJECT – I
SYNOPSIS

Department of Computer Science & Application

Institute of Engineering & Technology

SUBMITTED TO: -   SUBMITTED BY: -

Md. Farmanul Haque   Shivanand kumar Jha (201500656)

(Technical Trainer)   Lokesh Goswami   (201500372)

                                 Aditya Gupta   (201500035)

<u>Acknowledgement</u>

It gives us a great sense of pleasure to present the synopsis of the B.Tech mini project undertaken during B.Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals. We owe special debt of gratitude to Md. Farmanual Haque , Technical Trainer , for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work.

His sincerity, thoroughness and perseverance has been a constant source of inspiration for us. We believe that he will shower us with all his extensively experienced ideas and insightful comments at different stages of the project & also taught us about the latest industry-oriented technologies. We also do not like miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and co-operation.

Shivanand kumar Jha (201500656)

 Lokesh Goswami   (201500372)

Aditya Gupta   (201500035)

ABSTRACT

This report describes all the requirement of the project The purpose of this project is to provide a virtual for the combination of both structured and unstructured information of out project . "TheGameRoom" is a mini project specially designed for two or more friends who can join a room using room id and can start playing without any interruption. This project built by using (frontend) html CSS javascript React Technology. TheGameRoom consist of a little clicks and user are ready to play the game which is available on web due to which anyone can access it from anywhere around the globe on any system. This can enhance the creativity , analytical ability of player while playing the game.

The game play feature allows users to play tick tac toe, bingo, and other games with people online playing tic tac toe online with multiple players is a stimulating game where each player takes turns placing their own mark on a 3×3 grid the first player who reaches three in a row or diagonal wins the game.

CONTENTS

INTRODUCTION

The Game Room is a web-based application that allows users to create game rooms and play multiplayer games, written in HTML, CSS, and JavaScript. The game room has two main features: room creation and game play. The room creation feature allows users to create a room by code that others can join. The game play feature allows users to play tick tac toe, bingo, and other games with people online.

Playing tic tac toe online with multiple players is a stimulating game where each player takes turns placing their own mark on a $3{\times}3$ grid. The first player who reaches three in a row or diagonal wins the game.

Bingo is a very popular lottery game which can be played by multiple players. In this game, each player has a bingo card with 25 numbers. The caller will draw balls randomly and announce the number. The players need to mark off the number on their card if it is called out. The first player who achieve one line, two lines or full house wins respectively.

SOFTWARE AND HARDWARE REQUIREMENTS

1. **VS Code Editor**

   Visual Studio Code is a streamlined code editor with support for development operations like debugging, task running, and version control.

2. **Chrome Browser**

   Google Chrome browser is an open source program for accessing the World Wide Web and running Web-based applications.

3. **Backend Server**

   The backend (or "server-side") is the portion of the website you don't see. It's responsible for storing and organizing data, and ensuring everything on the client-side actually works.

4. **Ethernet Adapter**

   Ethernet Adapters allow you to connect your laptop directly to

   a Wi-Fi router or cable modem was one of the first to go.

PROJECT DESCRIPTION

The purpose of this project is to develop a online multiplayer game to connect friends and provide them a platform in which they can play games in their free time. It allows users to create game rooms with a room code which help friends to connect together in a virtual game room.

The project is divided into 2 modules –Landing Page and game creation section.

The roles of the modules are as follows:

Landing Page

Landing page contains the option to create a room or join a pre created room and choose which game user want to play tic tac toe or bingo.

Both games have the same functionality. Users must be able to select a room, enter username and start playing.

-After selecting the game you want to play you will be redirected from landing page to room creation section.

ROOM CREATION SECTION:-

User is presented with an option to create a room by entering the name of the room and owner's username (to save room) after clicking Join Room button then owner gets into that specific room. After owner enters into the created room he can start game by inviting friends by giving them draw link using facebook or twitter. When someone joins his invitation link which consist of owner's id information then team mate appears in Owner console except him there are only two places in waiting console where public person can come and join the game if because their question matches according to tic tac toe game own's profile then user just can place one 'X' mark on board those people who while they joined they don't answer any questions regarding Tic Tac Toe game instead they are set as 'random matchers.' In each step/turn another player takes inside of that right.

WORKING

A player has to choose which game to play first, then player has to enter room id for create room or enter in a room, if Room id matched then player entered in room else shows error invalid.

Tic-Tac :-

In this game players take turns placing their Mark, X or O, on an open square in the grid. **The first player to make 3 of their own mark in a row vertically, horizontally, or diagonally wins the game**. If all 9 squares are filled and neither player has 3 in a row, the game is considered a Tie.

Bingo :-

Online bingo and land-based bingo is played by crossing off the numbers you have on your tickets when they are called out. If you want to know how to win bingo, then all you need to do is cross off

all your numbers before anyone else. The type of bingo game you are playing decides how many numbers are on your ticket.

IMPLEMENTATION

For Implementation we need react, CSS (frontend) , javascript, node.js (backend) & socket.io (realTime communication) because application needs to provide a real-time experience so every move you make is seen instantly by the other player and vice versa.

Socket.io.

Socket.io is an awesome library that provides a real-time event-driven connection between a client and server relying on Websockets and other protocols and approaches to guarantee the real-time capability and performance boost when it comes to handling thousands of socket connections and load balancing it on multiple servers.

<u>REFERENCES;</u>

Websites:

1.   W3SCHOOL
2.   GOOGLE CHROME
3.   STACKOVERFLOW
4.   MDN

<u>Faculty Guidelines:</u>

Md. Farmanual Haque (Technical Trainer in GLA University)

<u>GitHub Repository link:</u>

https://github.com/adityagupta0123/TheGameRoom