CODE THIẾT LẬP SEVER:

**Tạo server cơ bản:**

|  |  |
| --- | --- |
| var express = require("express"); | |
|  | var app = express(); |
|  | var server = require("http").Server(app); |
|  | var io = require("socket.io")(server); |
|  | var mysql = require("mysql"); |
|  | var bodyParser = require('body-parser'); |
|  | var urlencodedParser = bodyParser.urlencoded({ extended: false }) |
|  |  |
|  | app.use(express.static("public")); |
|  | app.set("view engine","ejs"); |
|  | app.set("views","./views"); |
|  | app.use(bodyParser.urlencoded({ extended: false })) |
|  |  |
|  | server.listen(8888); |

**Kết nối mySQL, tạo dabtabase, tạo table :**

|  |  |
| --- | --- |
| var conn = mysql.createConnection({ | |
|  | host: "localhost", |
|  | user: "root", |
|  | password: "Asd123456@", |
|  | database: "server\_1" |
|  | }); |
|  | //Tao database |
|  | conn.connect(err => { |
|  | if (err) throw err; |
|  | console.log('Connected!'); |
|  | }); |
|  | conn.query("CREATE DATABASE IF NOT EXISTS server\_1", function (err, result) { |
|  | if (err) throw err; |
|  | console.log("Database created"); |
|  | }); |
|  |  |
|  | conn.query("CREATE TABLE dang\_ky (ID VARCHAR(255),PASS VARCHAR(255),JOY VARCHAR(255))", function () { |
|  | console.log("table created"); |
|  | }); |

**Kiểm tra connect và disconnect:**

|  |  |
| --- | --- |
| io.on("connection" ,function(socket){ | |
|  | var idConect = null; |
|  | var mangtoados = []; |
|  | var mangcheck = []; |
|  | var mangdelete = []; |
|  | mangusnames[socket.id] = []; |
|  | var mangusname = mangusnames[socket.id] || []; |
|  | console.log("co nguoi ket noi "+socket.id); |
|  | //console.log("player ",players,"manguser ",mangUser,"mangtoado ",mangtoados); |
|  | socket.once("disconnect", function() { |
|  | console.log(socket.id+" disconnect"); |
|  | for (var id in players) |
|  | for (var id in mangtoados) |
|  | for (var id in mangusnames) |
|  | for (var i =0; i < mangUser.length; i++){ |
|  | if(mangUser[i] == socket.id){ |
|  | mangUser.splice(i,1); |
|  | } |
|  | } |
|  | for (var i =0; i < mangDevice.length; i++){ |
|  | if(mangDevice[i] == mangDevice.id){ |
|  | mangDevice.splice(i,1); |
|  | } |
|  | } |
|  | delete players[id]; |
|  | delete mangtoados[id]; |
|  | delete mangusnames[id]; |
|  | //players.splice(players.indexOf(socket.id),1); |
|  | io.sockets.emit("send-disconnect"); |
|  | }); |

**Đăng ký:**

|  |  |  |
| --- | --- | --- |
| socket.on("send-id1",function(data){ | | |
|  | console.log(data); |
|  | socket.Us = data.id; |
|  | var sql\_query = "SELECT \* FROM dang\_ky WHERE ID = ('"+data.id+"')"; |
|  | console.log(sql\_query); |
|  | conn.query(sql\_query,function(err, result) { |
|  | if(err) throw err; |
|  | console.log(result); |
|  |  |
|  | if (result.length == 0) { |
|  | console.log("ko co"); |
|  | conn.query("INSERT INTO dang\_ky (ID,PASS,JOY) VALUES ('"+data.id+"','"+data.pass+"','"+data.joy+"')",function(){ |
|  | console.log("1 record inserted"); |
|  | }); |
|  | socket.emit("dangkithanhcong"); |
|  | } |
|  | if (result.length > 0) { |
|  | console.log("ton tai"); |
|  | socket.emit("ton-tai"); |
|  | } |
|  | }); |
|  | }); |

**Đăng nhập:**

|  |  |
| --- | --- |
| socket.on("send-id",function(data){ | |
|  | console.log(data); | |
|  | var sql\_query = "SELECT \* FROM dang\_ky WHERE ID = '"+data.id+"'"; | |
|  | console.log(sql\_query); | |
|  | conn.query(sql\_query,function(err, result) { | |
|  | if(err) throw err; | |
|  |  | |
|  | if (result.length == 0) { | |
|  | console.log("ko co"); | |
|  | socket.emit("erro",function(){}); | |
|  | } | |
|  | if (result.length > 0) { | |
|  | console.log("ton tai"); | |
|  | console.log(result); | |
|  | console.log(result[0].PASS); | |
|  | console.log(result[0].JOY); | |
|  | if(result[0].PASS==data.pass){ | |
|  | // mangUser.push(socket.id); | |
|  |  | |
|  | socket.emit("star-game"); | |
|  | socket.Us = data.id; | |
|  | mangusname.push(data.id); | |
|  | mangUser.push({user:socket.Us,id:socket.id,jt:result[0].JOY}) | |
|  | console.log(mangUser); | |
|  | console.log(mangusnames); | |
|  | console.log("US: "+socket.Us); | |
|  | } | |
|  | else { | |
|  | socket.emit("error-pass"); | |
|  | } | |
|  | } | |
|  | }); | |
|  | }); | |

**Set up game:**

|  |  |
| --- | --- |
|  | |
| socket.on("movement-left",function(data) { | |
|  | //console.log(data); | | |
|  | //console.log(socket.id+ ' start'); | | |
|  | console.log(mangtoados); | | |
|  | var player = { x: data.x, y: data.y } | | |
|  | if (data.control.left) { | | |
|  | if(player.x==5){ | | |
|  | player.x += 320; | | |
|  | } | | |
|  | else | | |
|  | player.x -= 80; | | |
|  | } | | |
|  | if (data.control.up) { | | |
|  | if(player.y==5){ | | |
|  | player.y += 560; | | |
|  | } | | |
|  | else | | |
|  | player.y -= 80; | | |
|  | } | | |
|  | if (data.control.right) { | | |
|  | if(player.x==325){ | | |
|  | player.x -=320; | | |
|  | } | | |
|  | else | | |
|  | player.x += 80; | | |
|  | } | | |
|  | if (data.control.down) { | | |
|  | if(player.y==565){ | | |
|  | player.y -= 560; | | |
|  | } | | |
|  | else | | |
|  | player.y += 80; | | |
|  | } | | |
|  | if(data.control.space){ | | |
|  | var tonTai = 0; | | |
|  | for(var i=0; i < mangtoados.length; i+=2){ | | |
|  | if(mangtoados[i]==player.x && mangtoados[i+1]==player.y){ | | |
|  | console.log("ton tai: " + player.x + "," + player.y); | | |
|  | mangtoados.splice(i,2); | | |
|  | socket.emit("delete",player); | | |
|  | tonTai = 1; | | |
|  | break; | | |
|  | } | | |
|  | } | | |
|  | if (tonTai == 0 && mangtoados.length != 16) { | | |
|  | mangtoados.push(player.x,player.y); | | |
|  | //console.log(mangtoado); | | |
|  | } | | |
|  | } | | |
|  | if(data.control.chose){ | | |
|  | console.log(socket.id+" "+socket.Phong); | | |
|  | io.to(socket.Phong).emit("block"); | | |
|  | console.log(socket.id+" enter"); | | |
|  | return ; | | |
|  | } | | |
|  | socket.emit('state', player); | | |
|  | socket.emit('pick',mangtoados); | | |
|  | }); | | |
|  | |  |

**Lệnh bắn:**

|  |  |
| --- | --- |
| socket.on("movement-right",function(data) { | |
|  | //console.log(data); |
|  | //console.log(socket.id+ ' start'); |
|  | console.log(mangtoados); |
|  | var player = { x: data.x, y: data.y } |
|  | if (data.control.left) { |
|  | if(player.x==485){ |
|  | player.x += 320; |
|  | } |
|  | else |
|  | player.x -= 80; |
|  | } |
|  | if (data.control.up) { |
|  | if(player.y==5){ |
|  | player.y += 560; |
|  | } |
|  | else |
|  | player.y -= 80; |
|  | } |
|  | if (data.control.right) { |
|  | if(player.x==805){ |
|  | player.x -=320; |
|  | } |
|  | else |
|  | player.x += 80; |
|  | } |
|  | if (data.control.down) { |
|  | if(player.y==565){ |
|  | player.y -= 560; |
|  | } |
|  | else |
|  | player.y += 80; |
|  | } |
|  | if(data.control.space){ |
|  | socket.to(socket.Phong).emit("check",player); |
|  | } |
|  | socket.emit('state', player); |
|  | //socket.emit('pick',mangtoados); |
|  | }); |
|  |  |
|  | socket.on("check",function(data){ |
|  | //socket.emit("fire-delete"); |
|  | //console.log(data.x-480,data.y); |
|  | //socket.emit("pick",mangtoados); |
|  | var tonTai = 0; |
|  | for(var i=0; i < mangtoados.length; i+=2){ |
|  | if(mangtoados[i]==(data.x-480) && mangtoados[i+1]==data.y){ |
|  | mangtoados.splice(i,2); |
|  | // socket.to(idConect).emit("buzzer",{result: 'hit'}); |
|  | // console.log(idConect); |
|  | mangdelete.push(data.x,data.y); |
|  | socket.to(socket.Phong).emit("pick-delete",mangdelete); |
|  | socket.emit("pick",mangtoados); |
|  | tonTai = 1; |
|  | break; |
|  | } |
|  | } |
|  | if( tonTai == 0 ){ |
|  | mangcheck.push(data.x,data.y); |
|  | console.log("check "+mangcheck); |
|  | socket.to(socket.Phong).emit("pick-check",mangcheck); |
|  | } |
|  | var soldier = mangtoados.length/2; |
|  | socket.to(socket.Phong).emit("soldier",soldier); |
|  | socket.emit("turn"); |
|  | socket.to(socket.Phong).emit("turn1"); |
|  | if(mangtoados.length == 0){ |
|  | socket.emit("lose"); |
|  | socket.to(socket.Phong).emit("win"); |
|  | } |
|  | }); |
|  | }); |