PROGRAM FOR GAME :

const mongoose = require('mongoose');

mongoose.connect('mongodb://127.0.0.1:27017/mongo-exercises')

.then(() => console.log('connected to mongo db...'))

.catch(err => console.error("could not connect to mongodb...", err))

const prompt=require('prompt-sync')();

var  rand; attempts=0; //username;

 var username= prompt("enter user name:");

 do{

 rand = (Math.random()\*10000).toFixed(0);

//console.log(rand);

 var s = new Set();

 s.add(rand[0]);

 s.add(rand[1]);

 s.add(rand[2]);

 s.add(rand[3]);

  if (s.size == 4)

     break;

}while(true);

console.log(rand);

console.time("timeout ");

setTimeout(() => {

    console.timeEnd("timeout ");

},5000);

do{

    attempts++;

    var val= prompt("enter a 4 digit number:");

    if (rand==val){

        console.log("Bingo you have won the game !!");

        break;

    }

//logic to count digits

var output="";

   for(var i=0;i<rand.length;i++)

   {

      for(var j=0;j<val.length;j++)

      {

        if(rand[i]==val[j])

        {

            if(i==j)

            output+=`${'+'}`; //"+";

            else

           output+=`${'-'}`;// "-";

        }

      }

   }

   console.log(output);

}while(true);

console.log(` congrats ${username} you completed the game in ${attempts} attempts `);

//newFunction();

/\*function newFunction() {

  console.time("finished game in");

  let total = 0;

  for (n = 1; n < 60000; n++) {

      total += n;

  }

  console.timeEnd("finished game in");

}\*/

const gameSchema = new mongoose.Schema({

    user: String,

    attempts:Number,

    time:{

        min:Number,

        sec:Number,

    }

});

const Data= mongoose.model('Data',gameSchema);

async function createdata(){

    const gamedata=new Data(

        {

            "username":username,

            "attempts":attempts,

            setTimeout:{ }

        }

    );

    const result=await gamedata.save();

    console.log(result);

}

 createdata();

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Case Description | Steps | Test Data | Expected Result | Actual Results | Status  (Pass/Fail) |
| \*1 | Check whether the number given as input by the user is same as of auto generated number by program. | 1. Run the program 2. Input player name 3. Input number(s) 4. Verify given numbers match the random number | Name: imran  Enter4 digit number: 4875  Enter 4 digit number: 6248  Enter 4 digit number: 3541  Enter 4 digit number: 6493 | -  +-  --  Win!!  Name: imran  timeout :5.000s  your total attempts is 4 | -  +-  --  Win!!  Name: imran  Time out : 5.004s  your total attempts is 4 | Pass |
| \*2 | Check whether the number given as input by the user is same as of auto generated number by program. | 1. Run the program 2. Input player name 3. Input number(s) 4. Verify given numbers match the random number | Name: teja  Enter 4 digit number: 1846  Enter 4 digit number: 3824  Enter 4 digit number: 2814 | +-  +--  Win!!  Name: teja  timeout 12.004 s  your total attempts is3 | +-  +--  Win!!  Name: teja  Timeout: 12.004s  your total attempts is3 | Pass |
| \*3 | Check whether the number given as input by the user is same as of auto generated number by program. | 1. Run the program 2. Input player name 3. Input number(s) 4. Verify given numbers match the random number | Name: hamsar  Enter 4 digit number: 8694  Enter 4 digit number: 2547  Enter 4 digit number: 4215  Enter 4 digit number: 9514 | -+  +-  -+  --  Win!!  Name: hamsar  Timeout:5.000s  your total attempts is4 | -+  +-  -+  --  Win!!  Name: hamsar  Timeout:5.000s  your total attempts is4 | Pass |