MULTI4CONNECT

The one stop for gaming, friends and music.

Abstraction

Over the last 2 decades, humans have made a lot of advancements in the field of technology. We had a shift from the industrial age to the age of data & electronics in just a matter of 25 years.

Everything today is an advancement or an improvement of its previous version. This is known as updates. However, one of the most popular fields & the most used field of the era has seen very little improvement & updates.

The field that is most loved, the field that allows the human neural circuit a real workout – games.

Yes, PC & mobile games have come a long way, and we are not arguing or even pointing fingers at these. Our focus is on browser-based games.

Since the start of the millennial, people have been more interested in mobile & PC applications. However, with the 2021 news of Flash being supported by Google has ended, we have seen the value of browser-based games.

People still enjoy playing games online without having to commit storage or download anything.

Introduction

A browser game or a "flash game" is a video game that is played via the internet using a web browser. They are mostly free-to-play and can be single-player or multiplayer.

Some browser games are also available as mobile apps, PC games, or on consoles. For users, the advantage of the browser version is not having to install the game; the browser automatically downloads the necessary content from the game's website. However, the browser version may have fewer features or inferior graphics compared to the others, which are usually native apps.

The front end of a browser game is what runs in the user's browser. It is implemented with the standard web technologies of HTML, CSS, JavaScript, and Web Assembly. In addition, WebGL enables more sophisticated graphics. On the back end, numerous server technologies can be used.

In the past, many games were created with Adobe Flash, but they can no longer be played in the major browsers, such as Google Chrome, Safari, and Firefox due to Adobe Flash being shut down on December 31, 2020. Thousands of these games have been preserved by the Flashpoint project.

Problem?

Back in 1995 when the first browser-based game was made, everyone was hyped. They had a game to play without having to actually download it. People had something to enjoy.

Over the next couple of years, a bunch of other browser-based games started to come into play as well. Here is where our problem begins. With more competition, every game creator now has to also ensure that their game is best for people to play.

However, this was also, not the problem. Since the millennials, as phone & PC applications for games gave better graphics, better experience, and better gameplay, everyone switched to making these types of games.

This did not mean that browser-based games were dead but look at the graphics.

This was the first browser game ever made.

And this is now, is there really a 20 years' worth of improvement?

Drawbacks?

Tech innovations like AI in gaming are focused on creating smart – more interactive games for efficient user experiences.

Talking in numbers, the annual revenue for tech gaming apps in 2021 was a 4.4% increase, making more than 180.3 billion USD.

The image below shows a clear segmentation of gaming revenues based on platforms and gaming categories for 2021.
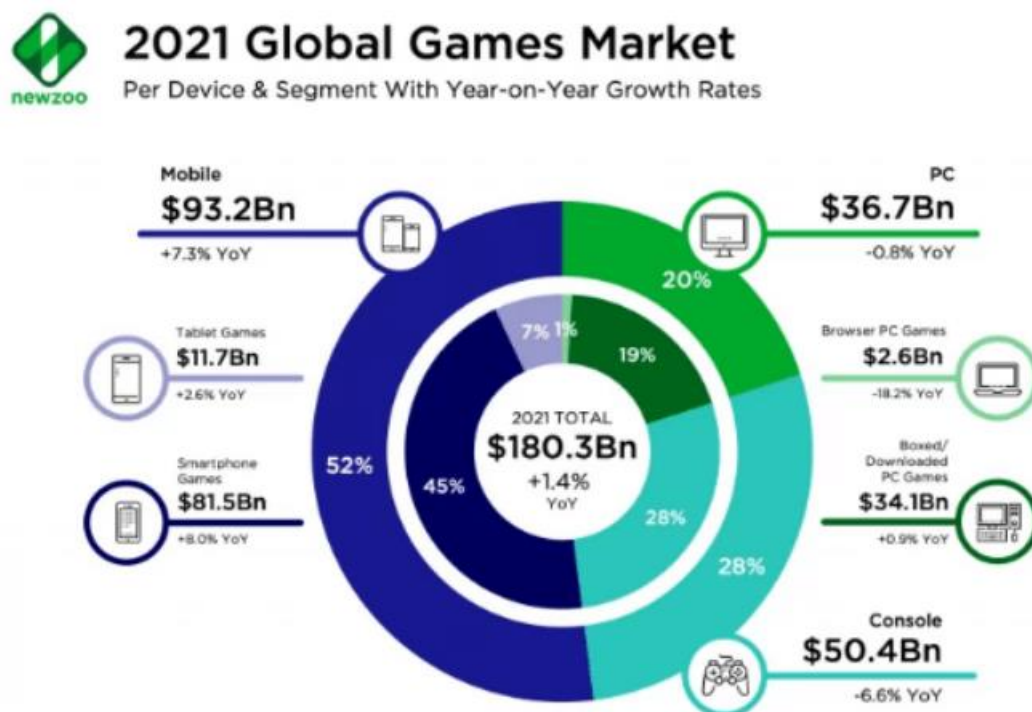
What is being missed out on, are the following -

- Gesture Control.
- Facial Recognition.
- Voice recognition.
- Cutting-edge Graphics.
- High-definition Displays.
- NFT Game Development.
- Augmented Reality + Virtual Reality: Extended Reality.
- Offline Gaming Apps.

Approach & Flowchart
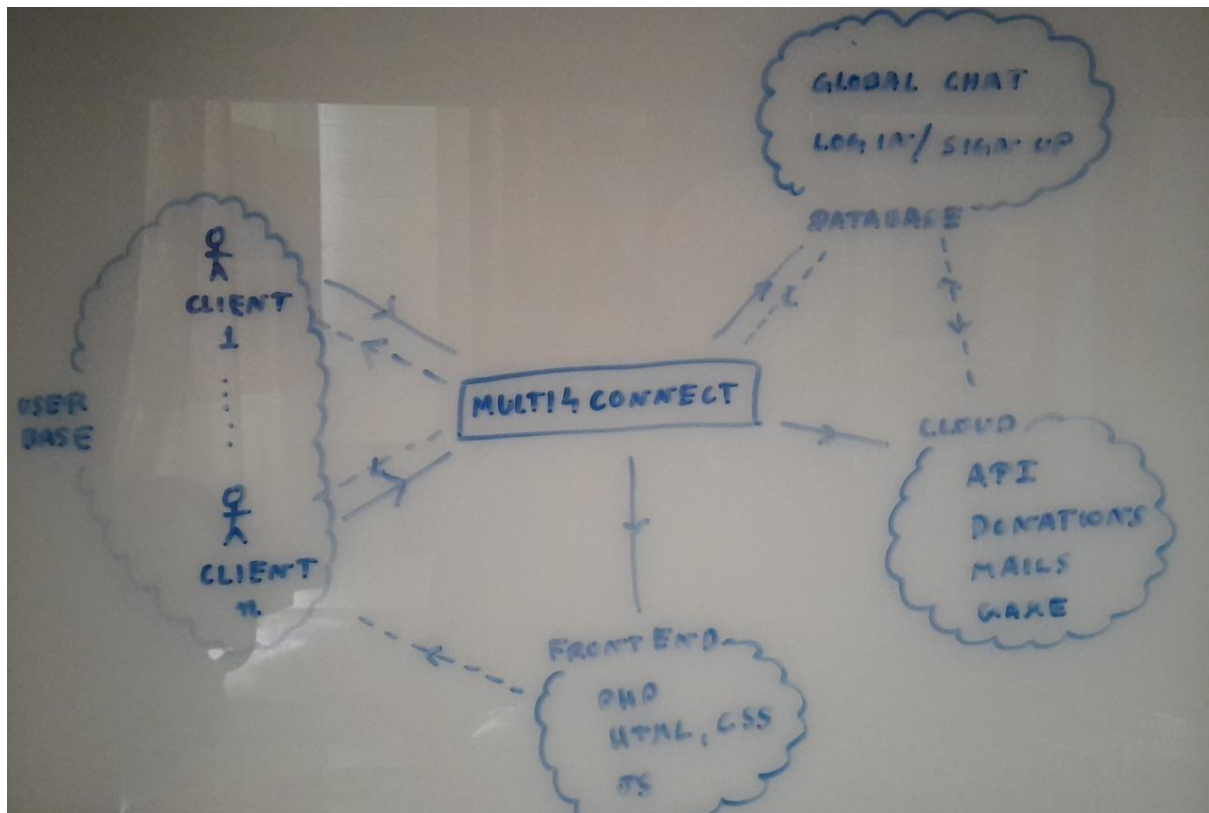

```
var firebaseConfig = {
    apiKey: "AIzaSyA_Cc4mrSvKui2XFg4puECgc9ejk2uVOcw",
    authDomain: "login-with-firebase-data-ddc55.firebaseapp.com",
    projectId: "login-with-firebase-data-ddc55",
    storageBucket: "login-with-firebase-data-ddc55.appspot.com",
    messagingSenderId: "1048671250983",
    appId: "1:1048671250983:web:25358d028c357a25b0fc02",
    measurementId: "G-79J0Y6LXSF"
};
//Initialise variables
const auth = firebase.auth()
const database = firebase.database()

//set up register function
function signup (){
  //get all input fields
 username = document.getElementById('uname').value
  password = document.getElementById('pass').value
  confirmpassword = document.getElementById('pass').value
}
```

```javascript
  //validate input fields
  if (validate_username(username) == false || validate_password(passwor
d) == false){
    alert('username or Password is Otta Line!!')
    return
  }

  //move on with auth
  auth.createUserWithusernameAndPassword(username,password)
  .then(function(){
   var user = auth.currentUser

   var database_ref = database.ref()

   var user_data = {
       username : username,
       password: password,
       last_login : Date.now()
   }
   database_ref.child('users/' + user.uid).set(user_data)




   alert('User Created')

  })
  .catch(function(error){
   var error_code = error.code
   var error_message = error.message

   alert(error_message)
  })


  function login() {
   username = document.getElementById('uname').value
   password = document.getElementById('pass').value

   if (validate_username(username) == false || validate_password(passw
ord) == false){
       alert('username or Password is Otta Line!!')
       return
     }
  }

  auth.signInWIthusernameAndPassword(username,password)
```

```
 .then(function(){
  var user = auth.currentUser

  var database_ref = database.ref()

  var user_data = {

      last_login : Date.now()
  }
  database_ref.child('users/' + user.uid).update(user_data)

  alert('User Logged In')


 })
 .catch(function(error){
  var error_code = error.code
  var error_message = error.message

  alert(error_message)
 })




function validate_password(password){
  if (password < 6){
      return false
  }
  else {
      return true
  }
}

function validate_field(field) {
  if(field == null){
      return false
  }
  if (field.length <=0){
      return false
  }
  else{
      return true
  }
}
```

Results & Conclusion

While our website offers a number of features for the scope of this report, we will show the API and the cloud we used for our database.

For the entire website video, please check out the video - https://www.youtube.com/watch?v=xq_B9hzQxMo

The demo video is attached in the GCR as Mp4.

The team members are updated in the Excel sheet.
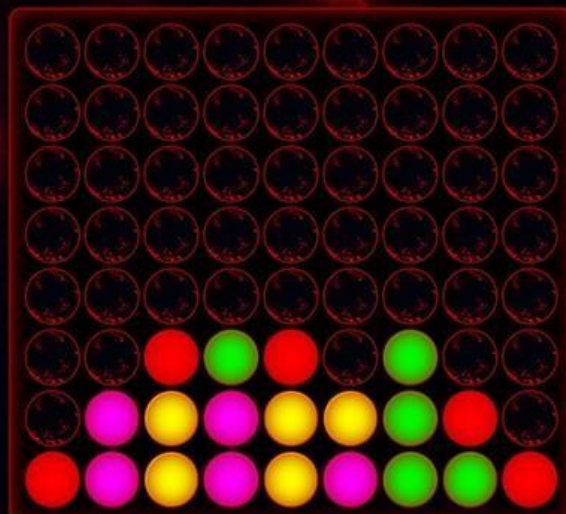
Here are some images of our work -
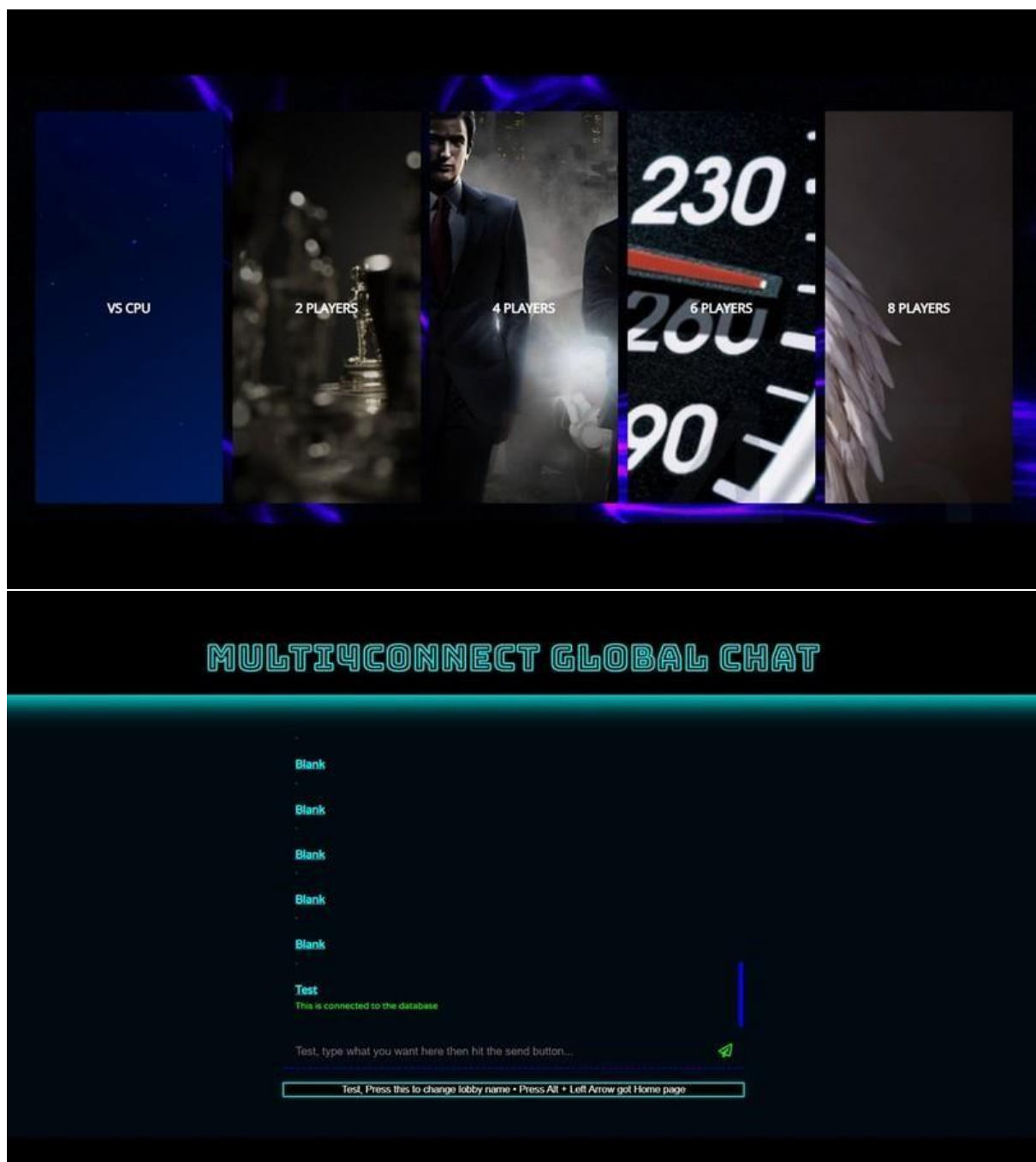
PLAY AGAINST THE CPU.

Presently, computer dominate humans in almost everything.
This bot will try to at least hold a draw.
Can you defend it? or better, call it a bluff?
This is the best way to improve your skills for competitive matches.

PLAY AGAINST CPU

It's the yellow player's move.

1st Developers Connect Clash

The first tournament between developers, Nov 14, 2022

Date of play - (Expected) - January 2023

The first tournament ever will be between the developer team. This will also be an alpha testing for the team before a release.

REGISTER

1st Open 4-Player Connect Clash

The first open-to-all tournament, Nov 14, 2022

Date of play - (Expected) - 1-2 Weeks after 1st Developers Connect Clash

The first open 4-Player connect clash is likely to happen after a few weeks after the first developers connect clash. This should allow enough time to fix any bugs in tournament mode.

REGISTER

Last Month Winners

Don't see your name in the winner list? Let us know!

Hey, I came 1st in '1st Open 4-Player Connect Clash' my name is not visible. Username-XYZ

SUBMIT

Quick Overview of Tournaments

1st Developers Connect Clash

1st Open 4-Player Connect Clash

SELECT GAME MODE

NEW GAME