

A
PROJECT
ON

“Let’s Play it”

Submitted to

Shiksha Mandal’s
G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR
(AUTONOMOUS)

In the Partial Fulfillment of

B.Com. (Computer Application) Final Year

Submitted by
Gaurav Gajanan Hatewar

Under the Guidance of
Pravin J. Yadao



Shiksha Mandal’s
G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR
(AUTONOMOUS)

2021-2022

Shiksha Mandal's
**G. S. COLLEGE OF COMMERCE & ECONOMICS,
NAGPUR
(AUTONOMOUS)
CERTIFICATE
(2021 - 2022)**

This is to certify that Mr. Gaurav Gajanan Hatewar has completed their project on the topic of Let's Play it prescribed by G. S. College of Commerce & Economics, Nagpur (Autonomous) for B.Com. (Computer Application) – Semester-VI.

Date:

Place: Nagpur

Pravin J. Yadao

Project Guide

External Examiner

Internal Examiner

ACKNOWLEDGEMENT

We take this opportunity to express our deep gratitude and whole hearted thanks to project guide Prof. Pravin Yadao, Coordinator for his guidance throughout this work. We are very much thankful to him for his constant encouragement, support and kindness.

We are also grateful to our teachers Prof. Rahul Tiwari, Prof. Sushma Gawande, Prof. Preeti Rangari, Prof. Prajkta Deshpande and Prof. Haresh Naringe for their encouragement, help and support from time to time.

We also wish to express our sincere thanks to Principal Dr. N. Y. Khandait for providing us wide range of opportunities, facilities and inspiration to gather professional knowledge and material without which this project could not have been completed.

Student Names & Signature

Date:

Place: Nagpur

DECLARATION

I **Gaurav Gajanan Hatewar** hereby honestly declare that the work entitled “**Let’s Play it**” submitted by me at G. S. College of Commerce & Economics, Nagpur (Autonomous) in partial fulfillment of requirement for the award of B.Com. (Computer Application) degree by Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur has not been submitted elsewhere for the award of any degree, during the academic session 2021-2022.

The project has been developed and completed by us independently under the supervision of the subject teacher and project guide.

Student Name & Signature

Date:

Place: Nagpur

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INTRODUCTION

Introduction

Nowadays, in our country's there is big growth in the gaming industry. The pandemic era has seen huge growth in the gaming segment in the country and the gaming market is estimated to reach USD 3.9 billion by 2025, as said by a report. It is also noted that the sector is attracting huge investment interest, with nearly USD 1 billion being invested in the last six months.

India is currently home to over 430 million gamers and the number of gamers is estimated to grow to 650 million by 2025. Currently, mobile gaming dominates the Indian gaming sector, contributing more than 90 per cent to the USD 1.6 billion gaming market and is expected to further grow to generate USD 3.9 billion value by 2025.

So, as gaming sector is growing rapidly after pandemic and as the user has many choices of games to play, it has provided tremendous growth to the sector.

As nowadays, user play games more on mobile and mobile app doesn't provide different types of games on one mobile game app . So, user have to download different game app to play different game which consumes their mobile data as well as internal storage of their device.

In this modern era of technology games are not only limited up to the fields of indoor or outdoor games but there has been a huge innovation taken place in the form of virtual gaming development. It as has attracted people from all age groups and now a days the virtual gaming is becoming a part of human life as its cover all the rage of human interest.

So, we likely developed the gaming application here we have developed 3 gaming application

1. Snake game
2. Tic Tac Toe
3. Memory Game

These all games are developed by keeping user interest in mind and with the purpose of entertainment . So, that the user can enjoy playing the game.

OBJECTIVES

Objectives

Following are the main objectives of the project “Let’s Play it”:

1. Availability: User can play game anytime anywhere as web is ubiquitous (present everywhere). User can play game on any device like mobile, laptop, tablet, pc, etc.

2. Provide system independent environment: Most of the application have this limitation i.e. they cannot run on different computers, operating system and hardware configuration.

3. User interface: Interface of website and games on website are user friendly. User will enjoy playing the game.

4. Storage: As games are present on the web, user don’t have to download the game. So, it saves internal storage of users device.

5. Accuracy: The game increases accuracy of user as if the user does not play the game accurately the user will not win the game.

6. Logical ability: By playing games like tic tac toe increases core logic of the user, as user have to the block the move of his opponent which increases logical ability of the user.

7. Easy to handle: The game on the website are easy to handle it means that the games are easy to play so that the user of any age can play.

8. Provides scoreboard: Scoreboard helps to make the game more interactive as user plays the game the score are registered on scoreboard and it helps the user to know the score and also help to know whether he won the game or lose the game.

9. Consumes low data (internet): The games present on the website consumes less data (internet) as compared to other game apps which consumes more data.

10. Security: The website is completely secure as it doesn't ask for any personal information of user before playing the games. User can play the game freely and securely.

11. No ads: There are no ads on website and also no ads while playing the game. So user can play the game without any interruption.

PRELIMINARY SYSTEM ANALYSIS

PRELIMINARY INVESTIGATION

The first step in the System Development Life Cycle (SDLC) is the identification of the need. This is the user request to change, improve or enhance an existing system. Because there is likely to be a stream of such requests, standard procedures must be established to deal with them. The initial investigation is one way of handling this situation.

In this process, the development team visit the customer and studies the system. They investigate the need for possible software automation of the given system by the end of the preliminary investigation. Our project furnish the document that hold the different specific recommendation of the needs of the user.

Investigate the present system and identify the function to be performed

This phase is used to recognize the need of the system. It is very important step as it provided an overall scenario and objectives of the development of any application.

At present there are very few websites that are platform independent and run on all operating system. So, in this application we have made a website which has different types of games and is accessible on all platform anytime anywhere.

Identify the objectives and scope of new system

This website is available 24/7 hours for user whenever user want to play the game he can play it anytime anywhere and on any device like mobile, laptop, tablet, desktop (PC), etc.

Identify problems and suggest few solutions

This phase is done to find out alternative solutions for developing the system. The best way to do this is to interview the concerned people in the organization. Select the appropriate solution from the several one.

Thus, every system has a common thing that is,

- 1) It is organized combination of different components.
- 2) They are independent and inter related.
- 3) They work for common objective.

With the help of preliminary investigation, an accurate solution to the problem can be found at this stage only a rough estimate of the development of the project may be reached.

IDENTIFICATION OF NEED

The success of a system depends largely on how accurately a problem is defined, thoroughly investigated, and properly carried through the choice of solution. User need identification and analysis are concerned with what the user needs rather than what he/she wants. Not until the problem has been identified, defined, and evaluated and the analyst should think about the solution and whether the problem is worth solving. This step is intended to help the user and the analyst understand the real problem rather than its symptoms.

So it is necessary to identify the actual problem. The initial investigation must satisfy the following conditions:

- 1) What the real problem is ?
- 2) Measure should be specified for the upcoming errors ?
- 3) Is it necessary to solve ?
- 4) How critical the problem is ?
- 5) Is required necessary essentials for undertaking the software ?

When we select to develop a project in this field, we opted together the information by visiting users and asking them about present gaming websites in this field and what changes they want to implement into the system.

This project identification is done on the basis that user should get effective and user friendly games. User should get different games on one place, so that's why i try to develop it.

FLAWS IN THE PRESENT SYSTEM

It is necessary to know what defects are present in the current system or the problem occurring in the current system.

There were many flaws in existing system which are as follows:

1. Storage: For playing different games user have to install or download games which consumes internal storage of our mobile which reduces efficiency of users mobile.

2. Consume more data (internet): For playing the games or downloading the game it consumes more data (internet).

3. Not compatible in all platform: All games cannot be on all platforms or on all operating systems like many games doesn't run on mac os, linux, etc.

4. Advertisement: Nowadays, many online games runs advertisement in the middle of the game which interrupts user while playing the game.

5. Security: Many games or game website lack security issue as they take user personal information or data without user permission and might contain viruses.

NEED OF NEW SYSTEM

To solve all these problems we require a website which contain different games so that the user don't have to download or install it separately due to which consumption of users internal storage of mobile reduces. In today's world where number of games and users playing game are increasing day by day we need a website which contain all types of games so that user don't have to search for different games at different place.

Following are the points that tells about the project "Let's Play it". They are:

1. Availability: User can play game anytime anywhere as web is ubiquitous (present everywhere). User can play game on any device like mobile, laptop, tablet, pc, etc.

2. Provide system independent environment: Most of the application have this limitation i.e. they cannot run on different computers, operating system and hardware configuration.

3. Storage: As games are present on the web, user don't have to download the game. So, it saves internal storage of users device.

4. Consumes low data (internet): The games present on the website consumes less data (internet) as compared to other game apps which consumes more data.

5. Security: The website is completely secure as it doesn't ask for any personal information of user before playing the games. User can play the game freely and securely.

6. No ads: There are no ads on website and also no ads while playing the game. So user can play the game without any interruption.

FEASIBILITY STUDY

Feasibility study is a study to evaluate feasibility of proposed project or system. Feasibility study is one of stage among important stages of SDLC Process. As name suggests feasibility study is the feasibility analysis or it is a measure of the software product in terms of how much beneficial product development will be for the organization in a practical point of view. Feasibility study is carried out based on many purposes to analyze whether software product will be right in terms of development, implantation, contribution of project to the organization etc.

Feasibility study is so important stage of SDLC as after completion of feasibility study it gives a conclusion of whether to go ahead with proposed project as it is practically feasible or to stop proposed project here as it is not right/feasible to develop or to think/analyze about proposed project again. Along with this Feasibility study helps in identifying risk factors involved in developing and deploying system and planning for risk analysis also narrows the business alternatives and enhance success rate analyzing different parameters associated with proposed project development.

1. Technical Feasibility

In this Proposed System, this is concerned with specifying equipment and software that will successfully satisfy the user requirement. The technical needs of the system may vary considerably, but might include:

The facility to produce outputs in a given time.

- Response time under certain conditions.
- Facility to communicate data to distant location.

2. Economical Feasibility

In this system, Development Cost:

- Once the required hardware and software requirements gets fulfilled, there is no need for the user of our system to spend for any additional overhead.
- Equipment's required for developing the software are easily available.

3. Social Feasibility

Social Feasibility is a determination of whether this proposed system will be acceptable to the people or not. This determination typically examines the probability of the project accepted by the group directly affected by the proposed system change.

- It describes the effect on users from the introduction of the new system considering whether there will be need for retraining the workforce.
- It describes how you propose to ensure user co-operation before changes are introduced.

PROJECT CATEGORY

PROJECT CATEGORY

A category of a project is game website named “Let’s Play it”. It consist of different types of games. A web page and games are designed using HTML, CSS and Javascript.

Programming languages used in project :

1) HTML : HYPERTEXT MARKUP LANGUAGE

HTML stands for HyperText Markup Language. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. A markup language is used to define the text document within tag which defines the structure of web pages. This language is used to annotate (make notes for the computer) text so that a machine can understand it and manipulate text accordingly. Most markup languages (e.g. HTML) are human-readable. The language uses tags to define what manipulation has to be done on the text.

HTML elements are the building blocks of HTML pages. With HTML constructs images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a mean to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as and <input/> directly introduce content into the page. Other tags such as <p> surround and provide information about document text and may include other tags and sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content.

2) CSS : CASCADING STYLE SHEETS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braillebased tactile devices.

CSS also has rules for alternate formatting if the content is accessed on a mobile device. The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable. A CSS framework is a library allowing for easier, more standards-compliant web design using the Cascading Style Sheets language. Most of these frameworks contain at least a grid. More functional frameworks also come with more features and additional JavaScript based functions, but are mostly design oriented and focused around interactive UI patterns

3) JAVASCRIPT : JavaScript is an object-based scripting language which is lightweight and cross-platform.

JavaScript is not a compiled language, but it is a translated language. The JavaScript Translator (embedded in the browser) is responsible for translating the JavaScript code for the web browser.

JavaScript (js) is a light-weight object-oriented programming language which is used by several websites for scripting the webpages. It is an

interpreted, full-fledged programming language that enables dynamic interactivity on websites when applied to an HTML document. With JavaScript, users can build modern web applications to interact directly without reloading the page every time. The traditional website uses js to provide several forms of interactivity and simplicity.

Although, JavaScript has no connectivity with Java programming language. The name was suggested and provided in the times when Java was gaining popularity in the market. In addition to web browsers, databases such as CouchDB and MongoDB uses JavaScript as their scripting and query language.

**SOFTWARE AND HARDWARE
REQUIREMENT
SPECIFICATION**

HARDWARE

The hardware means the basic physical component which together with connectivity in them form the machine called computer without the hardware computer can't perform.

Hardware Required :

- 1. PROCESSOR :** Core i3 or Above
- 2. RAM :** 4 GB RAM and Above
- 3. HARDDISK :** 500 GB or Above
- 4. Keyboard :** 104 keys
- 5. Mouse :** 2 Buttons/ 3 Buttons
- 6. Monitor :** Resolution 1024*768 or Above

SOFTWARE

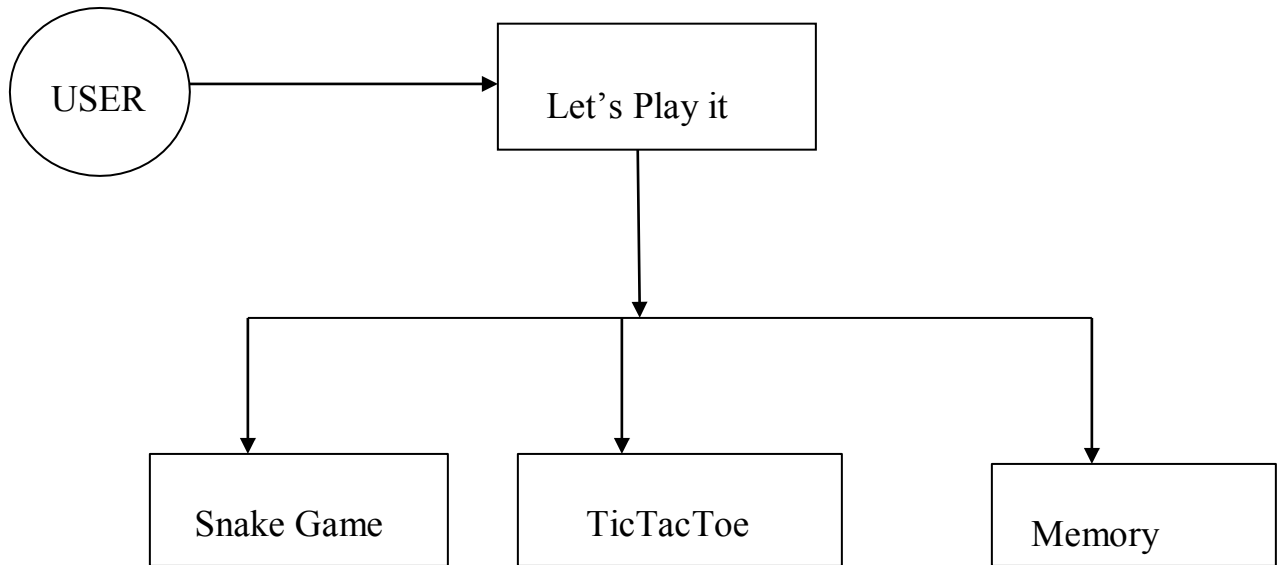
Software can be termed as the group of instructions that are commonly used by the computer to accomplish the given task. In today's world generation of software is never ending. It is an evaluation of dignified technology.

Software Required :

- 1. Operating System :** Microsoft Windows 7 or Above
- 2. Languages used:** HTML, CSS and Javascript

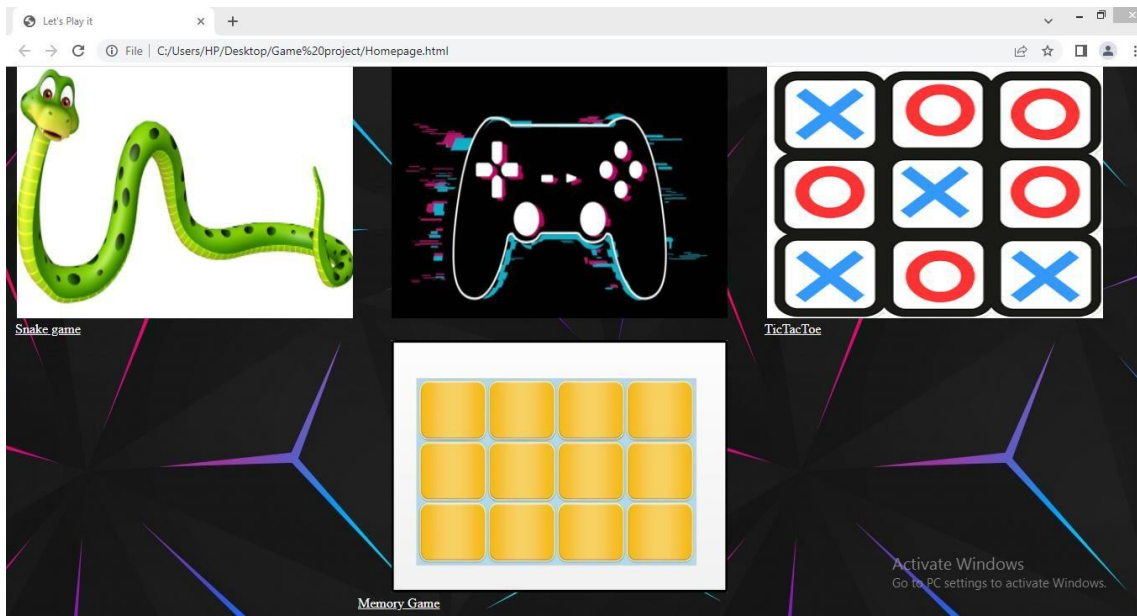
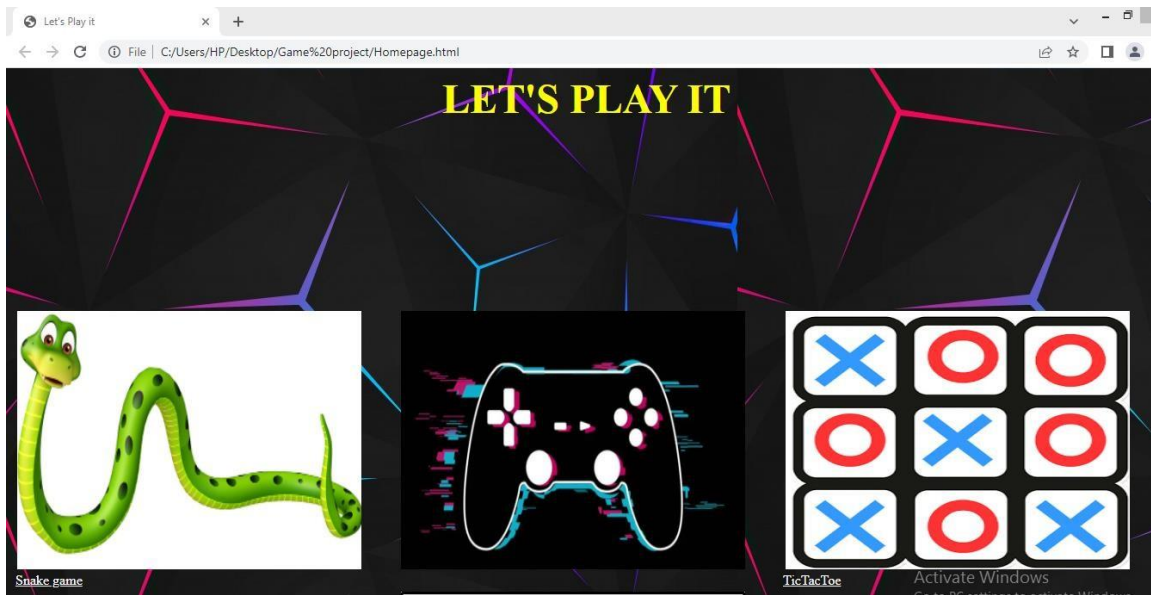
DETAILED SYSTEM ANALYSIS

Data Flow Diagram

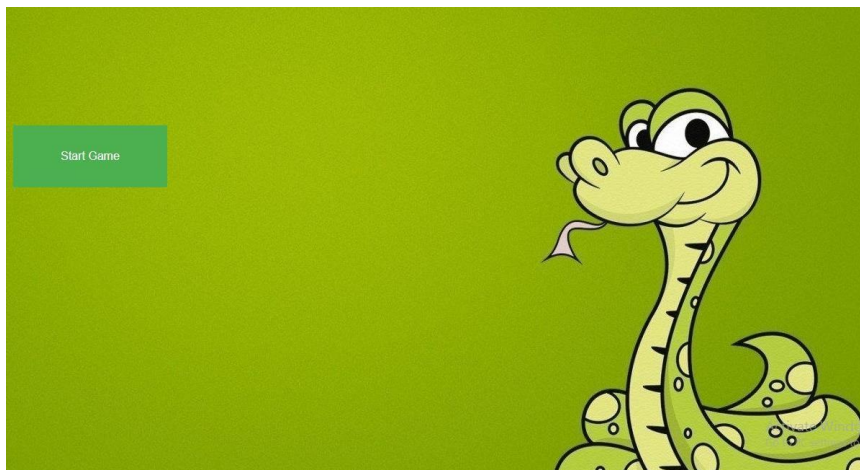


SYSTEM DESIGN

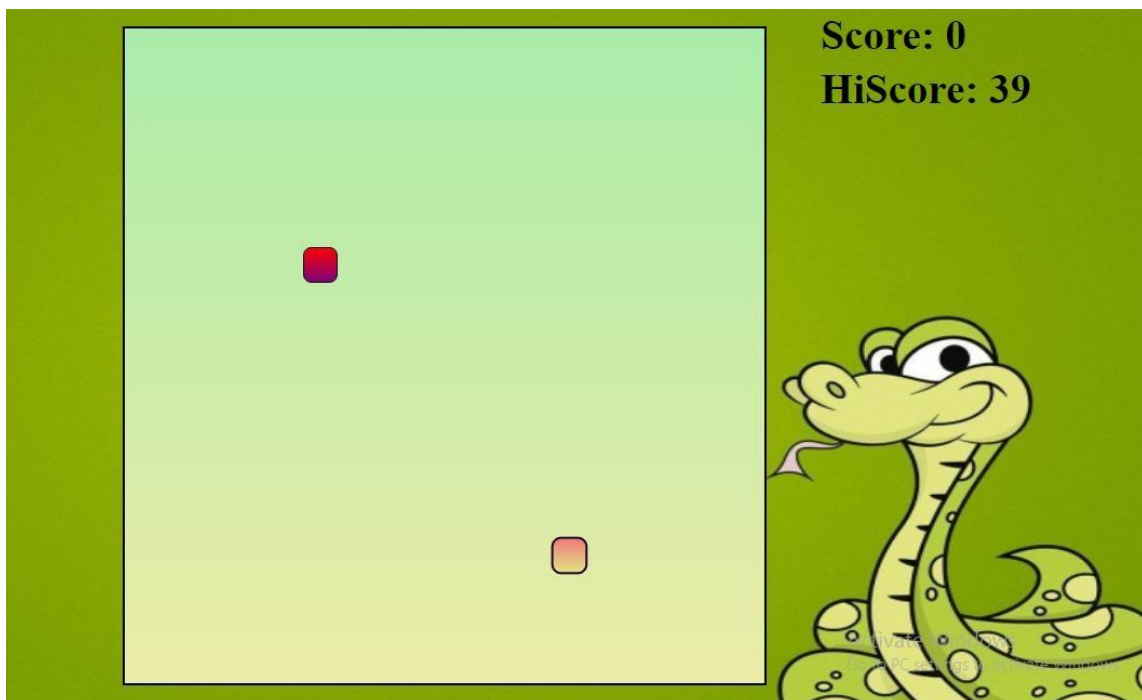
HOME PAGE



SNAKE GAME MAIN MENU

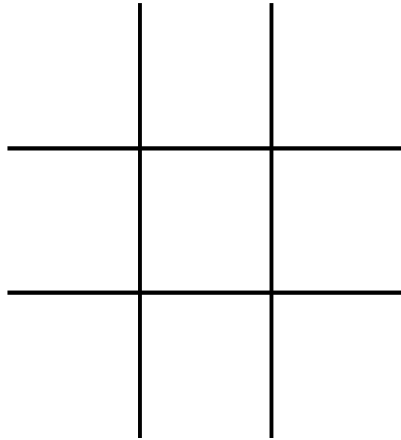


SNAKE GAME



TIC TAC TOE GAME

MyTicTacToe.com

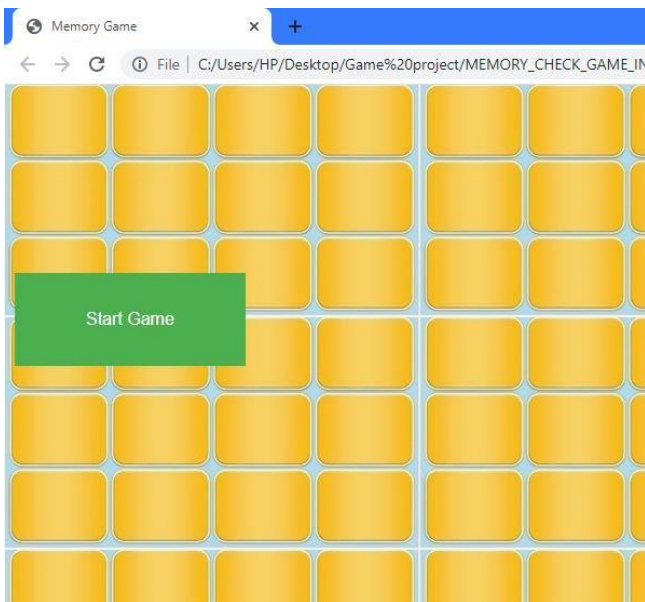


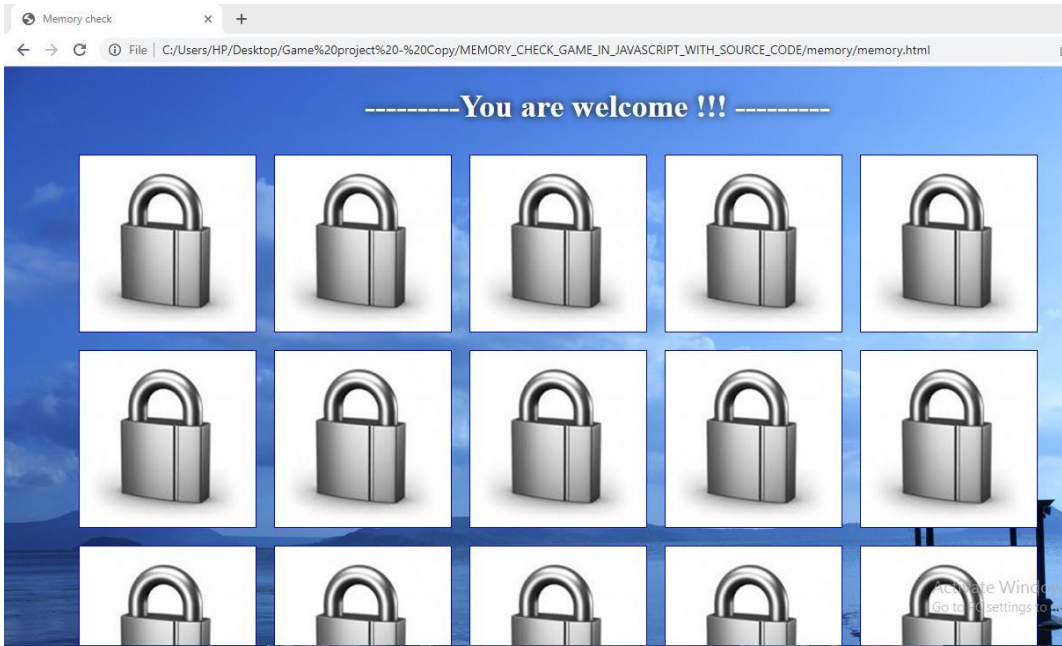
Welcome to Tic Tac MyTicTacToe

Turn for X

Reset

MEMORY GAME





Source Code

HOME PAGE

```
<html>
<head>
<title>Let's Play it</title>
</head>
<body background="C:\Users\HP\Desktop\Game project\bg1.jpg" alt=site
not responding >
<center><b><font size="200" color="#FFFF00">LET'S PLAY
IT</font></b></center>
<br>
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```


SNAKE GAME MAIN MENU

```
<html>
<head>
<title>SnakeMania</title>
<style>
.button {
  background-color: #4CAF50;
  border: none;
  color: white;
  padding: 15px 32px;
  text-align: center;
  text-decoration: none;

  display: inline-block;
  justify-content: center;
  font-size: 16px;
  margin: 4px 2px;
  cursor: pointer;
}
</style>
</head>
<bodybackground="C:\Users\HP\Desktop\Gameproject\SnakeGame\Snake
Game\Startgame image.jpg"alt= SnakeMania>
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```
<div class="button">
<a href="file:///C:/Users/HP/Desktop/Game%20project/SnakeGame/SnakeGame/index.html"><button class="button">Start Game</button></a>
</div>
</body>
</html>
```

SNAKE GAME

Html code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">

<title>SnakeMania</title>
  <link rel="stylesheet" href="css/style.css">
</head>
<body>
  <div class="body">

    <div id="scoreBox">Score: 0</div>
    <div id="hiscoreBox">HiScore: 0</div>
    <div id="board"></div>
  </div>
</body>
<script src="js/index.js"></script>
</html>
```

CSS code

```
*{
  padding: 0;
  margin: 0;
}

.body{
  background: url("../img/bg.jpg");
  min-height: 100vh;
  background-size: 100vw 100vh;
  background-repeat: no-repeat;
  display: flex;
  justify-content: center;
  align-items: center;
}

#scoreBox{
  position: absolute;
  top: 9px;
  right: 200px;

  font-size: 39px;
  font-weight: bold;

  font-family: 'New Tegomin', serif;
}

#hiscoreBox{
  position: absolute;
  top: 59px;
  right: 140px;
  font-size: 39px;
  font-weight: bold;
  font-family: 'New Tegomin', serif;
}
```

```
#board{
  background: linear-gradient(rgb(170, 236, 170), rgb(236, 236, 167));
  width: 90vmin;
  height: 92vmin;
  border: 2px solid black;
  display: grid;
  grid-template-rows: repeat(18, 1fr);
  grid-template-columns: repeat(18, 1fr);
}
```

```
.head{
  background: linear-gradient(rgb(240, 124, 124), rgb(228, 228, 129));
  border: 2px solid rgb(34, 4, 34);
  transform: scale(1.02);
  border-radius: 9px;
}
```

```
.snake{
  background-color: purple;
```

```
border: .25vmin solid white;
```

```
border-radius: 12px;
}
```

```
.food{
  background: linear-gradient(red, purple);
  border: .25vmin solid black;
  border-radius: 8px;
}
```


Javascript code

```
// Game Constants & Variables
let inputDir = {x: 0, y: 0};
const foodSound = new Audio('music/food.mp3');
const gameOverSound = new Audio('music/gameover.mp3');
const moveSound = new Audio('music/move.mp3');
const musicSound = new Audio('music/music.mp3');
let speed = 19;
let score = 0;
let lastPaintTime = 0;
let snakeArr = [
  {x: 13, y: 15}
];

food = {x: 6, y: 7};

// Game Functions
function main(ctime) {
  window.requestAnimationFrame(main);
  // console.log(ctime)
  if((ctime - lastPaintTime)/1000 < 1/speed){

    return;

  }

  lastPaintTime = ctime;
  gameEngine();
}

function isCollide(snake) {
  // If you bump into yourself
  for (let i = 1; i < snakeArr.length; i++) {
    if(snake[i].x === snake[0].x && snake[i].y === snake[0].y){
      return true;
    }
  }
}
```

```

    // If you bump into the wall
    if(snake[0].x >= 18 || snake[0].x <=0 || snake[0].y >= 18 || snake[0].y
    <=0){
        return true;
    }

    return false;
}

function gameEngine(){
    // Part 1: Updating the snake array & Food
    if(isCollide(snakeArr)){
        gameOverSound.play();
        musicSound.pause();
        inputDir = {x: 0, y: 0};
        alert("Game Over. Press any key to play again!");
        snakeArr = [{x: 13, y: 15}];
        musicSound.play();

        score = 0;
    }

    // If you have eaten the food, increment the score and regenerate the food
    if(snakeArr[0].y === food.y && snakeArr[0].x === food.x){

        foodSound.play();
        score += 1;
        if(score > hiscoreval){
            hiscoreval = score;
            localStorage.setItem("hiscore", JSON.stringify(hiscoreval));
            hiscoreBox.innerHTML = "HiScore: " + hiscoreval;
        }
        scoreBox.innerHTML = "Score: " + score;
        snakeArr.unshift({x: snakeArr[0].x + inputDir.x, y: snakeArr[0].y +
inputDir.y});
        let a = 2;
        let b = 16;

```

```

    food = {x: Math.round(a + (b-a)* Math.random()), y: Math.round(a +
(b-a)* Math.random())}
    }

    // Moving the snake
    for (let i = snakeArr.length - 2; i>=0; i--) {
        snakeArr[i+1] = {...snakeArr[i]};
    }

    snakeArr[0].x += inputDir.x;
    snakeArr[0].y += inputDir.y;

    // Part 2: Display the snake and Food
    // Display the snake

    board.innerHTML = "";
    snakeArr.forEach((e, index)=>{

        snakeElement = document.createElement('div');
        snakeElement.style.gridRowStart = e.y;
        snakeElement.style.gridColumnStart = e.x;

        if(index === 0){
            snakeElement.classList.add('head');
        }

        else{
            snakeElement.classList.add('snake');
        }
        board.appendChild(snakeElement);
    });

    // Display the food
    foodElement = document.createElement('div');
    foodElement.style.gridRowStart = food.y;

```

```

foodElement.style.gridColumnStart = food.x;

    foodElement.classList.add('food')
    board.appendChild(foodElement);

}

// Main logic starts here
musicSound.play();
let hiscore = localStorage.getItem("hiscore");
if(hiscore === null){

    hiscoreval = 0;
    localStorage.setItem("hiscore", JSON.stringify(hiscoreval))
}
else{

hiscoreval = JSON.parse(hiscore);

    hiscoreBox.innerHTML = "HiScore: " + hiscore;
}

window.requestAnimationFrame(main);
window.addEventListener('keydown', e =>{
    inputDir = {x: 0, y: 1} // Start the game
    moveSound.play();
    switch (e.key) {
        case "ArrowUp":
            console.log("ArrowUp");
            inputDir.x = 0;

            inputDir.y = -1;
            break;

        case "ArrowDown":

```

```
    console.log("ArrowDown");
    inputDir.x = 0;

    inputDir.y = 1;
    break;

case "ArrowLeft":
    console.log("ArrowLeft");
    inputDir.x = -1;
    inputDir.y = 0;
    break;

case "ArrowRight":
    console.log("ArrowRight");
    inputDir.x = 1;
    inputDir.y = 0;

    break;
default:

    break;
}

});
```

TIC TAC TOE GAME

Html code

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
  />
  <title>Tic Tac Toe</title>
  <link rel="stylesheet" href="style.css" />
</head>
<body>
  <nav>
    <ul>
      <li>MyTicTacToe.com</li>
    </ul>
  </nav>

  <div class="gameContainer">
    <div class="container">
      <div class="line"></div>
      <div class="box bt-0 bl-0"><span class="boxtext"></span></div>
      <div class="box bt-0"><span class="boxtext"></span></div>

      <div class="box bt-0 br-0"><span class="boxtext"></span></div>
      <div class="box bl-0"><span class="boxtext"></span></div>
      <div class="box"><span class="boxtext"></span></div>
      <div class="box br-0"><span class="boxtext"></span></div>

      <div class="box bl-0 bb-0"><span class="boxtext"></span></div>
      <div class="box bb-0"><span class="boxtext"></span></div>
      <div class="box bb-0 br-0"><span class="boxtext"></span></div>
    </div>
  </div>
```

```
<div class="gameInfo">
  <h1>Welcome to Tic Tac MyTicTacToe</h1>
  <div>
    <span class="info">Turn for X</span>
    <button id="reset">Reset</button>
  </div>
  <div class="imgbox">
    
  </div>
</div>
</div>
<script src="script.js"></script>
</body>
</html>
```

CSS code

```
*{
  margin: 0;
  padding: 0;
}

nav{
  background-color: rgb(37, 9, 37);
  color: white;
  height: 65px;
  font-size: 27px;
  display: flex;
  align-items: center;
  padding: 0 12px;
  font-family: 'Roboto', sans-serif;
}

nav ul{
  list-style-type: none;
}
```

```
.gameContainer{  
  
    display: flex;  
    justify-content: center;  
    margin-top: 50px;  
}  
  
.container{  
    display: grid;  
    grid-template-rows: repeat(3, 10vw);  
    grid-template-columns: repeat(3, 10vw);  
    font-family: 'Roboto', sans-serif;  
    position: relative;  
  
}  
  
.box{  
    border: 2px solid black;  
    font-size: 8vw;  
    cursor: pointer;  
    display: flex;  
    justify-content: center;  
    align-items: center;  
}  
  
.box:hover{  
    background-color: rgb(242, 234, 250);  
}  
  
.info {  
    font-size: 22px;  
}  
  
.gameInfo{  
    padding: 0 34px;  
    font-family: 'Baloo Bhaina 2', cursive;  
}
```



```
.gameInfo h1 {
  font-size: 2.5rem;
}

.imgbox img{
  width: 0;
  transition: width 1s ease-in-out;
}

.br-0{
  border-right: 0;
}

.bl-0{
  border-left: 0;
}

.bt-0{
  border-top: 0;
}

.bb-0{
  border-bottom: 0;
}

#reset {
  margin: 0 23px;
  padding: 1px 18px;
  background: #f3e7f9;
  border-radius: 6px;
  cursor: pointer;
  font-family: 'Baloo Bhaina 2';
  font-size: 15px;
  font-weight: bolder;
}
```

```

.line{
  background-color: black;
  height: 3px;
  width: 0;
  position:          absolute;
  background-color: #911d91;

  transition: width 1s ease-in-out;
}

@media screen and (max-width: 950px)
{
  .gameContainer{
    flex-wrap: wrap;
  }
  .gameInfo{
    margin-top: 34px;
  }
  .gameInfo h1 {
    font-size: 1.5rem;
  }
  .container {
    grid-template-rows: repeat(3, 20vw);
    grid-template-columns: repeat(3, 20vw);
  }
}

```

Javascript code

```

console.log("Welcome to Tic Tac Toe")
let music = new Audio("music.mp3")
let audioTurn = new Audio("ting.mp3")
let gameover = new Audio("gameover.mp3")
let turn = "X"
let isgameover = false;

// Function to change the turn
const changeTurn = ()=>{
  return turn === "X"? "O": "X"
}

```

```

// Function to check for a win
const checkWin = ()=>{
  let boxtext = document.getElementsByClassName('boxtext');

  let wins = [

    [0, 1, 2, 5, 5, 0],
    [3, 4, 5, 5, 15, 0],
    [6, 7, 8, 5, 25, 0],
    [0, 3, 6, -5, 15, 90],
    [1, 4, 7, 5, 15, 90],
    [2, 5, 8, 15, 15, 90],
    [0, 4, 8, 5, 15, 45],
    [2, 4, 6, 5, 15, 135],
  ]
  wins.forEach(e =>{
    if((boxtext[e[0]].innerText === boxtext[e[1]].innerText) &&
(boxtext[e[2]].innerText === boxtext[e[1]].innerText) &&
(boxtext[e[0]].innerText !== "")) {
      document.querySelector('.info').innerText = boxtext[e[0]].innerText
+ " Won"
      isgameover = true

document.querySelector('.imgbox').getElementsByTagName('img')[0].style.
width = "200px";
      document.querySelector(".line").style.transform =
`translate(${e[3]}vw, ${e[4]}vw) rotate(${e[5]}deg)`
      document.querySelector(".line").style.width = "20vw";
    }
  })
}

// Game Logic
// music.play()

let boxes = document.getElementsByClassName("box");
Array.from(boxes).forEach(element =>{
  let boxtext = element.querySelector('.boxtext');
  element.addEventListener('click', ()=>{

```

```

    if(boxtext.innerText === ""){
        boxtext.innerText = turn;
        turn = changeTurn();

        audioTurn.play();
        checkWin();
        if (!isgameover){
            document.getElementsByClassName("info")[0].innerText =
"Turn for " + turn;
        }
    }
})
})

// Add onclick listener to reset button
reset.addEventListener('click', ()=>{
    let boxtexts = document.querySelectorAll('.boxtext');
    Array.from(boxtexts).forEach(element => {
        element.innerText = ""
    });
    turn = "X";
    isgameover = false
    document.querySelector(".line").style.width = "0vw";
    document.getElementsByClassName("info")[0].innerText = "Turn for " +
turn;

    document.querySelector('.imgbox').getElementsByTagName('img')[0].style.
width = "0px"
})

```

MEMORY GAME

Memory game start menu code

```
<html>
<head>
<title>Memory Game</title>
<style>
.button {
  background-color: #4CAF50;
  border: none;
  color: white;
  padding: 15px 32px;
  text-align: center;
  text-decoration: none;
  display: inline-block;
  justify-content: center;
  font-size: 16px;
  margin: 4px 2px;
  cursor: pointer;
}
</style>
</head>
<body background="C:\Users\HP\Desktop\Game project -
Copy\MEMORY_CHECK_GAME_IN_JAVASCRIPT_WITH_SOURCE_
CODE\memory\Startgame img of memory game.jpg" height="500"
width="600" alt= Memory Game>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
```

```

<br>

<div class="button">
<a href="file:///C:/Users/HP/Desktop/Game%20project%20-%20Copy/MEMORY_CHECK_GAME_IN_JAVASCRIPT_WITH_SOURCE_CODE/memory/memory.html"><button class="button">Start Game</button></a>
</div>
</body>
</html>

```

Html code

```

<!DOCTYPE HTML>
<html>
  <head>
    <meta char="utf-8" />
    <title>Memory check</title>
    <meta name="description" content="opis zawartości" />
    <meta http-equiv="X-UA-compatible"
content="IE=edge,chrome=1" />
    <link rel="stylesheet" href="style.css" />

    <script type="text/javascript">

      window.onload=tailGeneration;

      var click = new Audio("sound/click.mp3");
      var traf= new Audio("sound/done.mp3");
      var win= new Audio("sound/win2.mp3");

      function tailGeneration()
      {
        var divs = "";
        for(i=1;i<=20;i++)
        {
          divs = divs + '<div class="tail" id="ta'+i+'"'
></div>';

```

```
        if (i%5==0) divs = divs + '<div  
style="clear:both" ></div>';  
    }
```

```
    document.getElementById("tresc").innerHTML=divs;  
  
        generate();  
    }  
  
    //tablica generowana losowo, która zawiera aktualne  
położenie obrazków
```

```
    var otwarteId = new Array(3);  
    var otwartePict = new Array(3);
```

```
    /*function generate()  
    {  
  
        for (i=0;i<20;i++)  
        {  
  
            pictures[i]= Math.floor(Math.random() * 10 + 1);  
  
        }  
    }  
    */
```

```
    var pictures =new Array(20);
```

```

function generate()
{
    for (i=0;i<10;i++)
    {
        pictures[i]=i+1;
    }

    for (i=10;i<20;i++)
    {
        pictures[i]=i-9;
    }

    var step =20;
    var images =new Array(20);

    for (i=0;i<20;i++)
    {
        var numerK = Math.floor(Math.random() *
step);

        images[i]=pictures[numerK];
        pictures[numerK]=pictures[step-1];
        step=step-1;

    }
    pictures=images;

}

var iloscOtwartych = 0;

function openTail(nr)
{
    var pictureNr = pictures[nr-1];

```



```
document.getElementById("ta"+nr).innerHTML=''
```

```
        iloscOtwartych++;  
  
        if (iloscOtwartych==1)  
        {  
            otwartePict[0]=pictures[nr-1];  
  
    otwarteId[0]=nr;  
    }  
  
        else if (iloscOtwartych==2)  
        {  
            otwartePict[1]=otwartePict[0];  
            otwartePict[0]=pictures[nr-1];  
  
            otwarteId[1]=otwarteId[0];  
            otwarteId[0]=nr;  
  
        }  
        else if (iloscOtwartych==3)  
        {  
            otwartePict[2]=otwartePict[1];  
            otwartePict[1]=otwartePict[0];  
            otwartePict[0]=pictures[nr-1];  
  
            otwarteId[2]=otwarteId[1];  
            otwarteId[1]=otwarteId[0];  
            otwarteId[0]=nr;  
            /*alert  
            (  
                "kafelek nr:"+otwarteId[0]+  
                " -1 kafelek nr:"+otwarteId[1]+  
                " -2 kafelek nr:"+otwarteId[2]+  
                " obrazek nr:"+otwartePict[0]+  
                " -1 obrazek nr:"+otwartePict[1]+
```

```

        " -2 obrazek nr:"+otwartePict[2]
    );
    */
}

    if (iloscOtwartych>2)
    {
        closeTail(otwarteId[2]);
        iloscOtwartych=iloscOtwartych-1;

    }

    if(otwartePict[0]==otwartePict[1])
    {
        trafione(otwarteId[0],otwarteId[1]);
        iloscOtwartych=iloscOtwartych-2;

    }
    else click.play();
}

function closeTail(numerTail)
{

    document.getElementById("ta"+numerTail).innerHTML='';

}

var licznik=0;
function trafione(firstTail,secondTail)
{
    //obrazki zostaja po odgadnięciu
    /*var pictNr = pictures[firstTail-1];

```

```

        document.getElementById("ta"+firstTail).innerHTML='';

                var        pictNr        =        pictures[secondTail-1];

        document.getElementById("ta"+secondTail).innerHTML='';

        document.getElementById("ta"+firstTail).style.boxShadow="none";

        document.getElementById("ta"+secondTail).style.boxShadow="none
";

                */
                //obrazki znikają po odgadnięciu

                traf.play();

        document.getElementById("ta"+firstTail).innerHTML=null;

        document.getElementById("ta"+firstTail).style.boxShadow="none";

        document.getElementById("ta"+firstTail).style.background="none";

        document.getElementById("ta"+firstTail).style.border="none";

        document.getElementById("ta"+firstTail).style.width="202px";

        document.getElementById("ta"+firstTail).style.height="202px";

        document.getElementById("ta"+secondTail).innerHTML=null;

        document.getElementById("ta"+secondTail).style.boxShadow="none
";

        document.getElementById("ta"+secondTail).style.background="none
";

```

```

document.getElementById("ta"+secondTail).style.border="none";

document.getElementById("ta"+secondTail).style.width="202px";

document.getElementById("ta"+secondTail).style.height="202px";

        licznik++
        if(licznik==10)
        {
win.play();

        document.getElementById("tytul").innerHTML='<span
id="bravo">Congratulations You won !!! </span><br /> <input
type="button" value="Once again!" onclick="location.reload()">';

        document.getElementById("tytul").style.paddingTop="100px";

        document.getElementById("bravo").style.fontSize="48px";

}
}

        </script>

</head>

<body >
        <div id="container">

        <div id="tytul"><h1>-----You are welcome !!! -----
- </h1></div>
        <div id="tresc"></div>

        </div>

</body>

</html>

```

CSS code

```
body
{
    color: #fff;
    background-image: url(img/tlo3.jpg);
    background-size:100vw;
}
#container
{
    width: 1200px;
    margin-left: auto;
    margin-right: auto;
    text-align:center;
}
#tytul
{
    font-size: 18px;
    text-shadow:0px 0px 10px #000000;
}
.tail
{
    width: 200px;
    height:200px;
    margin: 10px;
    float:left;
    border: solid 1px #0000c0;
    background-color:#fff;
}
.tail:hover
{
    -webkit-box-shadow: 0px 0px 30px -3px rgba(18,18,79,1);
    -moz-box-shadow: 0px 0px 30px -3px rgba(18,18,79,1);
    box-shadow: 0px 0px 30px -3px rgba(18,18,79,1);
}
```

```
input
{

    margin-top:30px;
    font-size: 28px;
    color:#fff;
    padding: 10px;
    border: solid 1px #fff;
    background-color:#007a99;
    opacity:0.8;
    border-radius:10px;

}
input:hover
{
    background-color:#33ff33;
    border-color:#000;
    color:#000;
    -webkit-box-shadow: 0px 0px 84px -9px rgba(255,255,255,1);
    -moz-box-shadow: 0px 0px 84px -9px rgba(255,255,255,1);
    box-shadow: 0px 0px 84px -9px rgba(255,255,255,1);

}
```

TESTING

TESTING

Testing plays important role to identify the quality of any software. Testing actually refers to detecting errors in the system. Before testing can begin, a test plan needs to be developed. Test plan actually includes the type of testing that has to be performed on the code, resources for testing, how the software will be tested.

Before testing the system, we need to consider following questions in our mind:

- What is the actual problem?
- How critical the problem is?
- Measures should be taken for the upcoming problems or errors?

Testing gives chance to upgrade or to improve if any drawbacks prevails in the application. Testing is generally done at two levels,

testing of individual modules

and testing entire system.

During system testing, the system is used experimentally to ensure that the software does not fail. that it will run according to its specification and in the way users expect. Testing is done throughout system development at various stages.

Following are the type of testing done in the project:

1. Program Testing: In this, we have to concentrate on the software part, system software should be free from errors. whether it is syntax error or logical error. In this system, we have done software testing and the output of this test is satisfactory. It fulfills all the conditions, which was required for the program testing.

2. Stress Testing: This testing is conducted to check the performance of the system in main hours. It finds out how much workload the system can bear. In stress testing of this system, we come to know that this software can work easily and accurately at any condition. The concentration is made on the performance of the system by checking the giving input and their expected outputs.

**IMPLEMENTATION,
EVALUATION AND
MAINTENANCE**

IMPLEMENTATION

Implementation refers to that stage of project during which the theory is turned into practice i.e. converting soft ideas into actual process. In this stage physical system specifications are converted into working and reliable solution. This is where the system is developed. It is followed by testing and then again implementation.

Implementation phases:

- **Coding:** this includes implementation of the design document into executable programming language code. The output of the coding phase is the source code for the software that acts as input to the testing and maintenance phase.
- **Integration and Testing:** It includes detection of errors in the software. The testing process starts with a test plan recognizes test-related activities, such as test case generation, testing criteria and resource allocation of testing. The code is tested and mapped against the design document created in the design phase.
- **Installation:** New system is installed and rolled out.

The steps involved in this phase are:

1. Acquisition and installation of hardware and software.
2. **Conversion:** It actually means to convert the old data to new format for proper functioning of the application in the new system.
3. **User Training:** User in this case has to be trained to use the system properly so that it is easy for them to grab control over the use of the application.
4. **Documentation:** This provides details of how to operate the given software, application and website.

The hardware and relevant software required for running the application must be installed and fully checked before implementation. In this phase conversion plays a crucial role. It actually means to convert the old data to a new format for proper functioning of the application in the new system. During the phase all the required programs are loaded onto user's computer. User must be trained.

The documentation is a complete description of the system from the users point of view as it provides details of how to operate the given software and application. It also includes certain error messages that a user is expected to encounter during its usage and solution to the expected problems. It involves detailed and step by step information of the project development so as to modify or update as per the new user requirements.

EVALUATION

Evaluation phase is the next to the implementation and it evaluates whether or not the system has met its requirements by comparing with the standards that were set before its actual development. The evaluation process includes the study of the current system and their drawbacks (if any) and various alternatives to improve and solve those prevailing problems. Evaluation is done by keeping the preliminary requirements of the user in mind.

Evaluation is included as a part of the final phase, but practically, evaluation takes place during each and every phase. The concentration should be on the satisfying the primary requirement of the users. The system is evaluated on the basis of following points:

- **System Availability:** whether the required system is available or not.
- **Compatibility:** whether the application is compatible with the system or not.
- **Cost:** whether the developed application is affordable and has low maintenance cost.
- **Performance:** it basically checks the efficiency of the application. Efficiency in handling the rush and fired queries simultaneously. It evaluates whether the application generates result at same speed when load is given to it as when it is stress free.
- **Usability:** whether the developed application is easily accessible and user friendly.

Evaluation in this system is done as follows:

- The errors generated in the code due to compatibility issues are debugged.
- Ease of installation and training.
- Adequacy and cost of hardware maintenance.

- Performance and its efficiency to handle the stress.
- Low maintenance cost.

In this proposed system, evaluation is made on existing system, what are their drawbacks what improvement can be made to provide facility to users. Collecting the information required for improvement in the project and then implementing it in real use.

MAINTENANCE

Maintenance is the final stage after the development process. After the system is installed, it must be maintained means that the computer programs must be modified and kept up to date. The average amount of time spent on maintenance is 60% of the total time. Estimates of the time spent by departments on maintenance have ranged from 48 to 60 percent of the total time spent developing systems. As the number of programs written increases, so does the amount of maintenance they require.

Maintenance covers a wide range of activities including correcting, coding, designing errors and updating user support. The project needs maintenance in further if any enhancements are made, maintenance of the hardware and software is also required.

The maintenance phase occurs once the system is operational. It includes implementation of changes that software might undergo over a period of time, or implementation of new requirements after the software is deployed at the customer location. The maintenance phase also includes handling the residual errors that may exist in the software even the testing phase.

The maintenance phase also monitors system performance, rectifies bugs and requested changes are made.

Maintenance is performed for two reasons:

- **First** is to correct software errors. No matter how thoroughly the system is tested, bugs or errors creep into the computer programs. Bugs in commercial PC software are often documented as “known anomalies” and are corrected when new versions of the software are released or in an interim release. In custom software (also called bespoke software), bugs must be corrected as they are detected.
- **Second**, for performing system maintenance is to enhance the software’s capabilities in response to changing organizational needs, generally involving one of the following three situations:

1. Users often request additional features after they become familiar with the computer system and its capabilities.
2. The business changes over time.
3. Hardware and software are changing at an accelerated pace.

In summary, Maintenance is an ongoing process over the life cycle of a system. After the application is installed, maintenance usually takes the form of correcting previously undetected program errors. Once these are corrected, the system approaches a steady state, providing dependable service to its users.

FUTURE SCOPE OF APPLICATION

FUTURE SCOPE OF THE PROJECT

1) User Friendly: The system could be made flexible in nature and method to record any data could be modified. Thus, the system can be made more friendly by modifying certain areas in the system.

2) Flexible: The basic scope of this application is to make user flexible with the system.

3) Extra Features: Success of this application provides the extra ordinary features to the user.

4) Reliability: This application can be run or expected into the current operating software's also.

5) Interactive GUI: This application provides the data into the graphical mode for elements with the help of Html, CSS and Javascript.

6) Addition of more game: Currently this application only contains limited numbers of game. It only contains 2 games currently but in near future developer will add many more additional games like car racing, puzzle, chess, etc. in it.

CONCLUSION

CONCLUSION

1) Usefulness: The project is useful for all the persons no matter what the age or gender of the person is.

2) Refreshing and Enhances Mind Power: This project is made basically to refresh the mind of people as well as it also enhances the concentration power of the user.

3) Premium Quality: The main motive behind developing this project is to provide good quality software.

4) Fulfillment of User Satisfaction: The basic concern behind developing this software is to provide good quality of website and provide high level of satisfaction to the user.

BILBOGRAPHY

BILBOGRAPHY

References :

1) <http://www.tutorialspoint.com/>

2) Youtube

3) Stackflow.com

4) Google

A
PROJECT SYNOPSIS
ON

“Let’s Play it”

Submitted to

**G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR
AUTONOMOUS**

In the Partial Fulfillment of

B.Com. (Computer Application) Final Year

**Synopsis Submitted by
Gaurav Hatewar**

Under the Guidance of

Pravin J. Yadao



**G. S. COLLEGE OF COMMERCE & ECONOMICS, NAGPUR
AUTONOMOUS**

2021-2022

1. Introduction:

Game has become integral part of everyday life for many people. The project is about gaming website in which there are different games. The theme of the game is to survive as long as possible and get highest possible score while avoiding obstacles on the track. The application is targeted to the audience who enjoy playing games.

2. Objectives of the project:

- 1) One major objective is to learn problem-solving strategy ,trust,calculated risk-taking,etc.The rules of most games can have far-reaching positive effects when they are applied to real-life situations.
- 2) To relax the user from day to day tension by diverting their mind.
- 3) To help user to enjoy when they are frustrated.
- 4) It teaches you to be keep patience as obstacles will come but you have to tackle it and move forward.

3. Project Category: Game

4. Tools/ Platform/ Languages to be used: Html, CSS, Javascript

5. Scope of future application:

- 1) In future, there will be more updates by which the user playing the game will enjoy playing the game.
- 2) Provide the interface as best as possible.
- 3) Provide different types of games at one place.
- 4) Provide user friendly games.

Submitted by,

Gaurav Hatewar

Approved by,

**Prof. Pravin Yadao
Project Guide**

Name and Signature of the student