WEBSITE DEVELOPMENT BOOTCAMP UDEMY LAB BASED PROJECT REPORT FOR DICE GAME CHALLENGE

Submitted in partial fulfillment of requirements for the

Degree of Bachelors of technology

Submitted by:

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21301012021- enrollment no.

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I would also give a special thanks to my parents and friends who are there with me always.

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DECLARATION

I, Aditi Tomar, declare that this project is completed by me and its free from plagiarism.

This is my original work and its not shared with other university before.

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B.Tech CSE

CERTIFICATE



Certificate no: UC-1d/77907a-6c69-403d-a7e1-7b5060183855
Certificate url: ude.my/UC-1d/77907a-6c69-403d-a7e1-7b5060183855
Reference Number: 0004

CERTIFICATE OF COMPLETION

The Complete 2022 Web Development Bootcamp

Instructors Dr. Angela Yu

Aditi tomar

Date July 30, 2022 Length 65.5 total hours

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LIST OF FIGURES

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Chapter 1: introduction

We will be building a Dice Game Project using HTML, CSS, and JavaScript. The Dice Game is based on a two-player. Both players roll the dice and the player who gets the highest phase value will win the game.

- HTML stands for Hyper Text Markup Language
- An HTML element is defined by a start tag, some content, and an end tag:
- <tagname> content </tagname>

CSS-

CSS is the language we use to style an HTML document.

CSS describes how HTML elements should be displayed.

CSS removed the style formatting from the HTML page!

Eg. Of CSS:

```
p. {
  border-style: solid;
  border-color: #ff0000 #0000ff;
}
.container {
  border-style: line;
  border-color: #ff0000 #00ff00 #0000ff;
}
```

While using CSS we need to link our files with HTML which is explained in the coming slides. CSS can be added to HTML documents in 3 ways:

- **Inline** by using the style attribute inside HTML elements
- **Internal** by using a <style> element in the <head> section
- External by using a < link > element to link to an external CSS file

The most common way to add CSS, is to keep the styles in external CSS files.

ABSOLUTE AND RELATIVE POSITIONING IN CSS:

An element with **position:**

absolute is positioned at the specified coordinates relative to your screen top-left corner. The element is removed from the normal document flow, and no space is created for the element in the page layout. It is positioned relative to its closest positioned ancestor, if any; otherwise, it is placed relative to the initial block. Its final position is determined by the values of top, right, bottom, and left.

RELATIVE POSITIONING:

Elements with position: relative remain in the normal flow of the document. But, unlike static elements, the left, right, top, bottom and z-index properties affect the position of the element. An offset, based on the values of left, right, top and bottom properties, is applied to the element relative to itself.

Let's repla

Some tags commonly used in html are describes below:

- 1)<head > this tag contains the title and in case we want properties of the body tag to be changed like its bg color, width, relative position they can be changed easily used by putting within this head section.
- 2)<body> this tag contains the main content . while writing a letter we put the major points within the body of the letter similarly here in html body contains the main content paragraph to be described fully.
- 3)<h1>,<h2> these tags are for the headings..as the number written with h goes on decreasing from 1 to 4 and so on the size our heading decreases.
- 4), these tags are used to make lists..and besides the coomomly used ones are tag for making any table in html.

The table contains header, footer, body <thead>,<tfoot>,

5) table header , for table data, within tr table data is put.

Java-One of many JavaScript HTML methods is getElementById().

The example below "finds" an HTML element (with id="demo"), and changes the element content (innerHTML) to "Hello JavaScript":

Example

document.getElementById("demo").innerHTML = "Hello gamer"

JavaScript (JS)

is a lightweight, or just-in-time compiled programming language with first-class functions.

While it is most well-known as the scripting language for Web pages, <u>many non-browser environments</u> also use it, such as <u>Node.js</u>, <u>Apache CouchDB</u> and <u>Adobe Acrobat</u>.

It has various features like it stores useful values inside the variables, js helps in running code in response to certain events on a web age.

The standards for JavaScript are the <u>ECMAScript Language Specification</u> (ECMA-262) and the <u>ECMAScript Internationalization API specification</u> (ECMA-402).

JS allows us to make web pages.

some common examples include the search box on amazon and in refreshing the twitter feed.

In creating mobile apps ...popular javascript front end includes React, React native.

Many companies used Node.js and other examples are Linkedin, Netflix and uber!

- Rules for playing game:
- It has 2 players, playing in rounds;
- In each turn, a player rolls dice. Each result gets added to his score;
- But, if the players rolled a 1, they lose their turn. If they rolled a 6, they double their score.
- The players may also can have a draw.

Chapter 2: LITERATURE SURVEY

Some challenges in web d and how they are different from this project:

The websites which prove helpful to customers and easy to access are in more demand. In E commerce most of us make use of inspirational websites that help and educate others.

1)job sites:

Job sites

We've all spent plenty of time looking through job sites. Many seem like an endless scroll with no clear organization. Finding any type of job in the bulk of posts can be a frustrating task

2) Online learning websites

Quite a few platforms out there will host online courses for you.

Infact during covid time these learning sites helped a lot to all of us learnt it.

5. E-Learning Blog

Many bloggers also sell products and services such as online courses, consulting sessions, books, and merch. A blog functions as a space to showcase one's expertise and share knowledge.

6. Photography website

Like any creative pursuit, putting together a photography website is essential in bringing exposure to your art. A <u>photography portfolio website</u> not only gives you a platform to show off your art, but can also market it to a wider audience.

the products and services you sell.

Beyond these some review websites, food websites ,portfolio websites are there.



There is an image of travel blog website seen above.

Chapter 3: OBJECTIVE

This game being helpful in understanding the basics of any website and also gives view of HTML,CSS AND JAVA SCRIPT

Roll Dice Game project is a web application which is developed in WEB platform. Dice (singular die or dice) are small, throwable objects with marked sides that can rest in multiple positions. They are used for generating random numbers, commonly as part of tabletop games, including dice games, board games, role-playing games, and games of chance.

Loaded dice are designed to favour some results over others for cheating or entertainment.

Chapter 4: METHODOLOGY

- 1)Firstly we need to create a folder where we will save the files like index.html,index.js and styles.css
- 2)now making of the structure ...which is done using html inside the html we had used styles and link ref tags to refer to javascript and css respectively.
- 3)footer is also included named as ADITI FROM IGDTUW.
- 4)CSS as said earlier is used to add styles and font to your work
- 5)its being used here in <h1> tag, tag,<footer >tag and <container> tag.
- 6) Its being provided a suitable font family, width to all these using proper way of writing.
- 7)inside the container width, margin, text aligned are done.
- .dice{text align, display are modified.

Inside the heading tag <h1> margin,font family,text shadow, colour using the different color pallets is done in this project.

TALKING ABOUT JAVASCRIPT

In this we generated 6 random numbers to represent the overall result.

We then printed the final result.

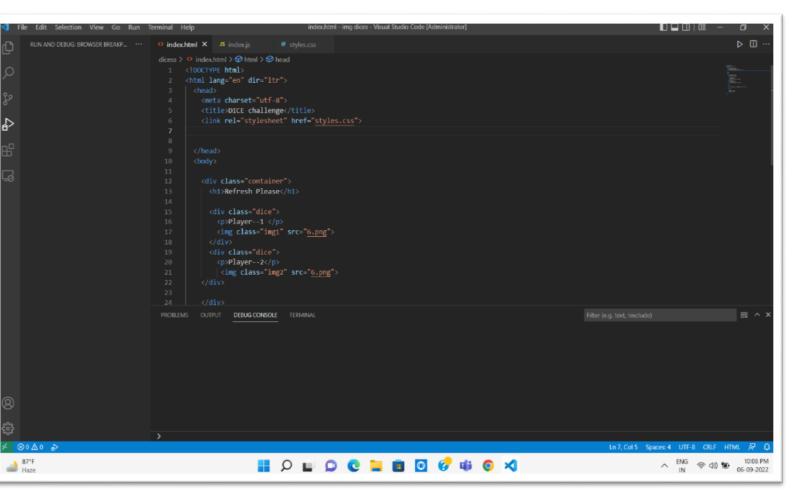


fig 1:HTML file is shown above

```
JS index.js X # styles.cs
                                    var randomNumber1 = Math.floor(Math.random() * 6) + 1; //1-6
                                    var randomDiceImage = "dice" + randomNumber1 + ".png"; //dice1.png - dice6.png
ď
                                    var randomImageSource = "images/" + randomDiceImage; //images/dice1.png - images/dice6.png
                                    var image1 = document.querySelectorAll("img")[0];
                                    image1.setAttribute("src", randomImageSource);
                                    var randomNumber2 = Math.floor(Math.random() * 6) + 1;
                                    var randomImageSource2 = "images/dice" + randomNumber2 + ".png";
                                    document.querySelectorAll("img")[1].setAttribute("src", randomImageSource2);
                                    OUTPUT DEBUG CONSOLE TERMINAL
                                                                                                                                                    ■ ^ ×
 87°F
Haze
                                                   🔡 🔎 📦 🗯 🥲 🔞 🔞 🗸
```

Fig 2:JS file shown above

Fig 3: CSS file(used for styling) is shown above.

For linking our CSS file we have used the k href= "stylesheet" href= "styles.css">

Fig 4: linking css file with html



Dice game!!!

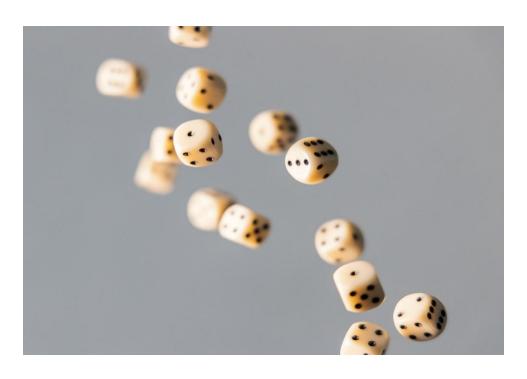
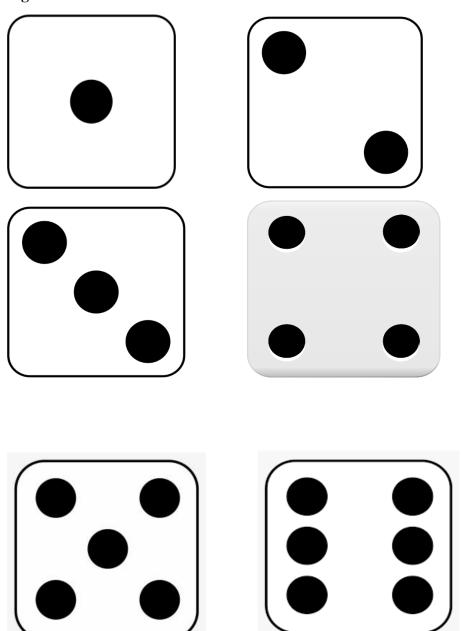


Fig 5: DICE IMAGES



Implementation of this project

In the above example, we ask the user to input the total number of dice. Since the user entered 6, we generated 6 random numbers between 1 and 6 to represent the result of each dice. We added the result for each observation and printed the result.

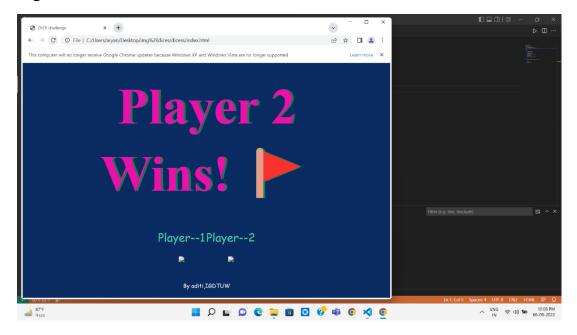
We can generate more complicated games by using this as a base.

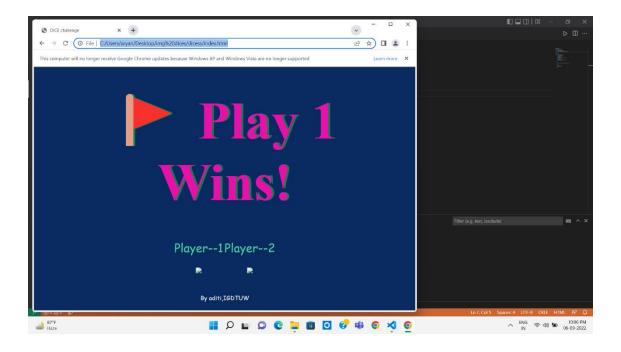
In mobile game development using 2D and 3D we are making major use of javascript.

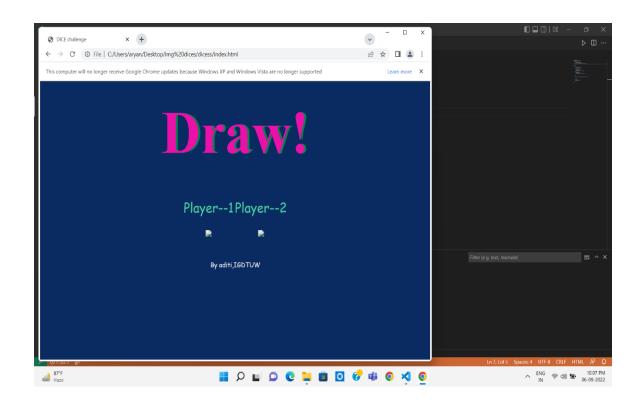
Chapter 5: RESULT DISCUSSION

The following result is obtained getting higher values on the dice there are chances of both the players to win this game and sometimes the match is draw because both the players obtained the same values on dice.

Fig 6 and 7 and 8 are the results:







Chapter 6: CONCLUSION

Playing Dice games is a simple thing, everybody plays, from kids to seniors. In this Roll dice Game project using web application it helps users to tap into positive emotions, like curiosity and creativity.

Users enjoy it just for the sake of relaxation. But those emotions stay up hours after they play! Unless someone beats users high-score. Playing Roll Dice games bring people together, it is the competition amog peers that adds adrenaline.

This game is fully in javascript and uses some sprite images. You can simply use any kind of code editor for this project. This is a simple dice game with much simple game rules. You will roll the dice and try to earn as many points as you can. two 6's in succession will result in losing all the points you collected while rolling the dice. It relaxes ones mind and free us from any stress.

REFERENCES:

1}Firstly the course I had taken.. ie

UDEMY THECOMPLETE 2022 WEB DEVELOPMENT BOOTCAMP BY ANGELA YU(PROFESSOR)

- 2}SOMES SITES AND YOUTUBE CHANNEL FOR UNDERSTANDING THE TOPIC BETTER LIKE JAVA SCRIPT
- 3}name of some youtube channels like apni shiksha, Joe dracup channel, code league.
- 4}some sites like coderanch.com, https://www.commudle.com/labs/how-to-make-a-dice-game-using-javascript, https://www.geeksforgeeks.org/building-a-dice-game-using-javascript/

https://www.geeksforgeeks.org/building-a-dice-game-using-javascript/ Done coding to all these using vs code.

