ROLL DICE GAME USING WEB APPLICATION

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Abstract: This deals with a non deterministic dice-based game: Heckmeck am Bratwurmeck (Pickomino). This game is based on dice rolling and on the stop or roll principle. To decide between going on rolling or stopping a player has to estimate his chances of improving his score and of losing. To do so he takes into account the previous dice rolls and evaluates the risk for the next ones. Since the standard methods for nondeterministic games cannot be used directly, we conceived original algorithms for Pickomino presented in this paper. The first ones are based on hard rules and not really satisfactory as their playing level proved to be weak. We propose then an algorithm using a Monte-Carlo method to evaluate probabilities of dice rolls and the accessibility of resources. By using this tactical computing in different ways the programs can play according to the stage of the game (beginning or end). Finally, we present experimental results comparing all the proposed algorithms. Over 7,500,000 matches opposed the different AIs and the winner of this contest turns out to be a strong opponent for human player Games represent an exciting challenge for Artificial Intelligence. The ability of computers to confront human beings in a convincing manner, or even to defeat them, fascinates most people. Besides, games are a good framework to test algorithms developed for more general problems. Thus games are a good area to test out AI techniques and to develop n Determination and Evaluation of Efficient Strategies for a Stop. Dice roll game in java script is a dice based game. This game is fully in java script and uses some sprite images. You can simply use any kind of code editor for this project. This game is in 2D format. This is a simple casino-style game in java script. All you have to do is roll the dice and try to reach 100 points faster than your opponent player. 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. Remember, two 6's in succession will result in losing all the points you collected while rolling the dice. This roll dice game is mainly runs in web application /web Browser.

*Index Terms –***Artificial Intelligence, Roll Dice, JavaScript.**

I. INTRODUCTION

Ever since Dungeons & Dragons was published in 1974, randomization has, with a few exceptions, been a part of role-playing games. Randomization has been used for creating characters, determining if actions are successful, determining the amount of damage dealt by a weapon, determining encounters ("wandering monsters", etc.) and so on. We will look mainly at randomizers for action resolution – the act of determining how successful an attempted action is. The reason for this is that this is in many ways the most critical part of an RPG and the part that is hardest to get right. Dice of various types are the most common randomizers in role-playing games, and D&D was indeed known for introducing non-cubic dice into modern games, but a few games (such as Castle Falkenstein and the Saga system) use cards as randomizers, and some "diceless" games, like Amber, use no randomizers at all, apart from the inherent unpredictability of human behaviour. We will focus on dice in this article, but briefly touch on other randomizers. We start by discussing some aspects of action resolution that it might be helpful to analyse when choosing a dice-roll mechanism, then a short introduction to probability theory followed by an analysis of some existing and new dice-roll mechanisms.

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.A traditional die is a cube with each of its six faces marked with a different number lf dots (pips) from one to six. When thrown or rolled, the die comes to rest showing a random integer from one to six on its upper surface, with each value being equally likely. Dice may also have polyhedral or irregular shapes and may have faces marked with numerals or symbols instead of pips. Loaded dice are designed to favor some results over others for cheating or entertainment.
Dice have been used since before recorded history, and it is uncertain where they originated. It is theorized that dice developed from the practice of fortune-telling with the talus of hoofed animals, colloquially known as knucklebones. The Egyptian game of senet was played with flat two-sided throwsticks which indicated the number of squares a player could move, and thus functioned as a form of dice. Senet was played before 3000 BC and up to the 2nd century AD. Perhaps the oldest known dice were excavated as part of a backgammon-like game set at the Burnt City, an archeological site in south-eastern Iran, estimated to

be from between 2800 and 2500 BC. Bone dice from Skara Brae have been dated to 3100–2400 BC. Excavations from graves at Mohenjo-daro, an Indus Valley civilization settlement, unearthed terracotta dice dating to 2500–1900 BC.

Games involving dice are mentioned in the ancient Indian Rigveda, Atharvaveda, Mahabharata and Buddhist games list. There are several biblical references to "casting lots" (Hebrew: yappîlū ḡōrāl), as in Psalm 22, indicating that dicing (or a related activity) was commonplace when the psalm was composed. Knucklebones was a game of skill played in ancient Greece; a derivative form had the four sides of bones receive different values like modern dice. Twenty-sided serpentinite die from Ptolemaic Egypt.Although gambling was illegal, many Romans were passionate gamblers who enjoyed dicing, which was known as aleam ludere ("to play at dice"). There were two sizes of Roman dice. Tali were large dice inscribed with one, three, four, and six on four sides. Tesserae were smaller dice with sides numbered from one to six. Twenty-sided dice date back to the 2nd century AD and from Ptolemaic Egypt as early as the 2nd century BC.

Dominoes and playing cards originated in China as developments from dice. The transition from dice to playing cards occurred in China around the Tang dynasty, and coincides with the technological transition from rolls of manuscripts to block printed books. In Japan, dice were used to play a popular game called sugoroku. There are two types of sugoroku. Ban-sugoroku is similar to backgammon and dates to the Heian period, while e-sugoroku is a racing game.

Dice are thrown onto a surface either from the hand or from a container designed for this (such as a cup or tray). The face of the die that is uppermost when it comes to rest provides the value of the throw. The result of a die roll is determined by the way it is thrown, according to the laws of classical mechanics. A die roll is made random by uncertainty in minor factors such as tiny movements in the thrower's hand; they are thus a crude form of hardware random number generator. One typical contemporary dice game is craps, where two dice are thrown simultaneously and wagers are made on the total value of the two dice. Dice are frequently used to introduce randomness into board games, where they are often used to decide the distance through which a piece will move along the board (as in backgammon and Monopoly).

II.EXISTING SYSTEM:

Java script is used in this game.This JavaScript code contains the functionality of Dice Game. The first functionality is to rename the player name after clicking the button. Another functionality is to roll the dice after clicking the button. After rolling the dice by both the player, anyone player will win who get the highest phase value. If both players get the same phase value then the game will draw.HTML(Hyper Text MarkUp Language).HTML is the markup language that displays your content in the web browser. CSS(Cascading Style Sheets).CSS is used for creating some excess styles to the project.CSS is used to format and style your HTML elements. You can style all of a particular element or you can create a class.Css styles include not only colors format, it also gives changes for Font style, background color, Margins,Borders etc .Css formats HTML: color, size, shape, font etc.

DISADVANTAGES:
- Don't support some new javascript functions and we need to check them as well.
- A single code error can stop the rendering of the entire JavaScript code on the website.
- CSS renders different dimensions with each browser. Programmers are required to consider and test all code across multiple browsers The browser interprets JavaScript differently in different browsers. Thus, the code must be run on various platforms before publishing.
- The older browsers for compatibility before taking any website .
- There are different levels to CSS: CSS; CSS 2; CSS 3. This has been confusing for developers and browsers. One language is preferred.

III.PROPOSED SYSTEM:

The practical effect of this is that in a dice game, characters are less likely to flub a roll they should be able to pass, or succeed a roll that should be far beyond them. Major advantage of a dice pool system is that a character's abilities are always appropriately relevant. Said abilities determine the number of dice rolled, and thus will always effect the random number generated. In the example of a single d20, a low level character may only add +4 to the roll, while a high level one might add as much as +20. The low level character's skill barely effects the roll at all, while the high level character's skill is actually more important than the roll itself.

ADVANTAGES:
- No installation costs.
- Easily understandable code.
- Easy installation of web browser.
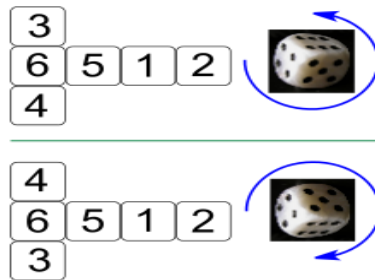
IV. GAME CONSTRUCTION:

Figure No.1: Arrangement

Chirality of dice. Faces may be placed counterclockwise (top) *or* clockwise.

Common dice are small cubes, most often 1.6 cm (0.63 in) across, whose faces are numbered from one to six, usually by patterns of round dots called pips. (While the use of Arabic numerals is occasionally seen, such dice are less common.)Opposite sides of a modern die traditionally add up to seven, requiring the 1, 2, and 3 faces to share a vertex. The faces of a die may be placed clockwise or counterclockwise about this vertex. If the 1, 2, and 3 faces run counterclockwise, the die is called "right-handed". If those faces run clockwise, the die is called "left-handed". Western dice are normally right-handed, and Chinese dice are normally left-handed.
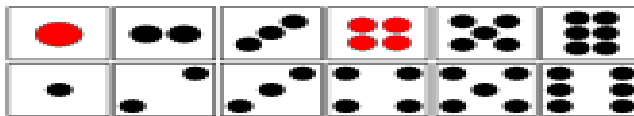

Figure No.2: Different faces in dice

Typical facets showing the more compact pip arrangement of an Asian-style die (top) vs. a Western-style die (bottom).The pips on standard six-sided dice are arranged in specific patterns as shown. Asian style dice bear similar patterns to Western ones, but the pips are closer to the center of the face; in addition, the pips are differently sized on Asian style dice, and the pips are colored red on the 1 and 4 sides. Red fours may be of Indian origin.
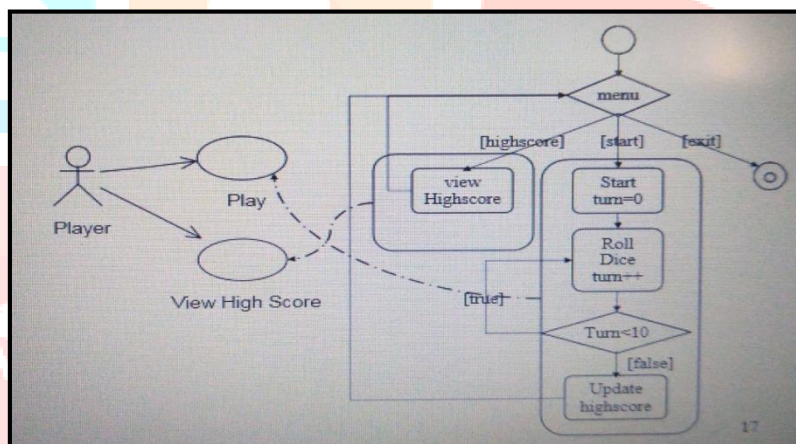

Figure No.2: Activity diagram for Roll Dice Game

For roll dice game we used activity diagram. The above activity diagram explains that players has two choices either he plays the game or he can view his high score/final score in the game. When the game has started at first the initial score=0 next after rolling the dice the score gets increased(++),if the score is lessthan 10 again player gets a chance to increase the score if not update the final score of the game.

V.RESULTS

Figure No.3: Initially before starting the roll dice game the score of two players is set to "0"
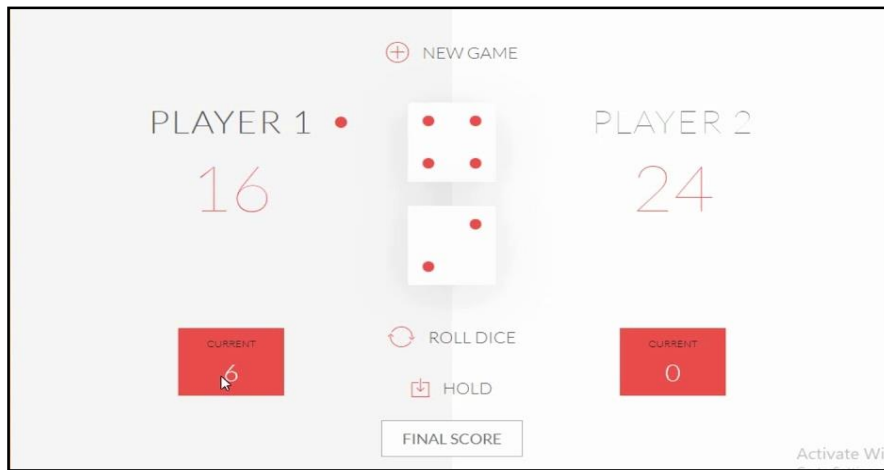
Figure No4: The game started and each player will get a chance one after another by pressing hold button on the screen.
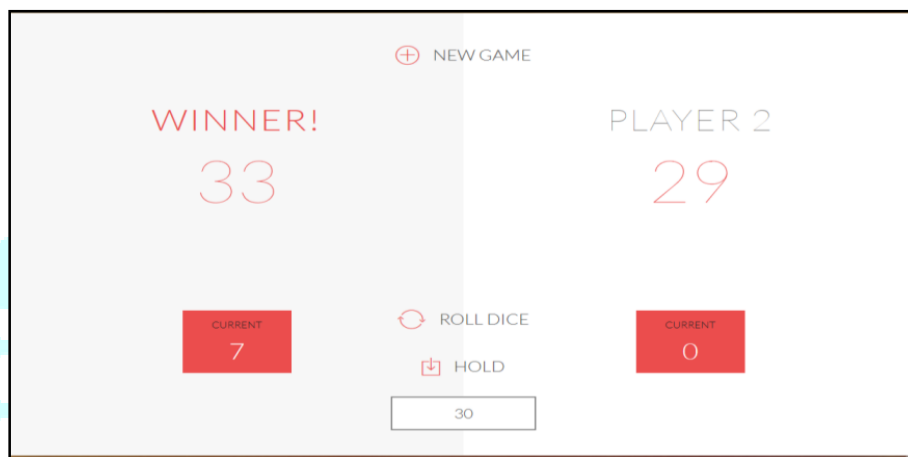

Figure No 5: Before starting the game fix the final score, so that the game reaches the final score and the final score reached player will be the winner.
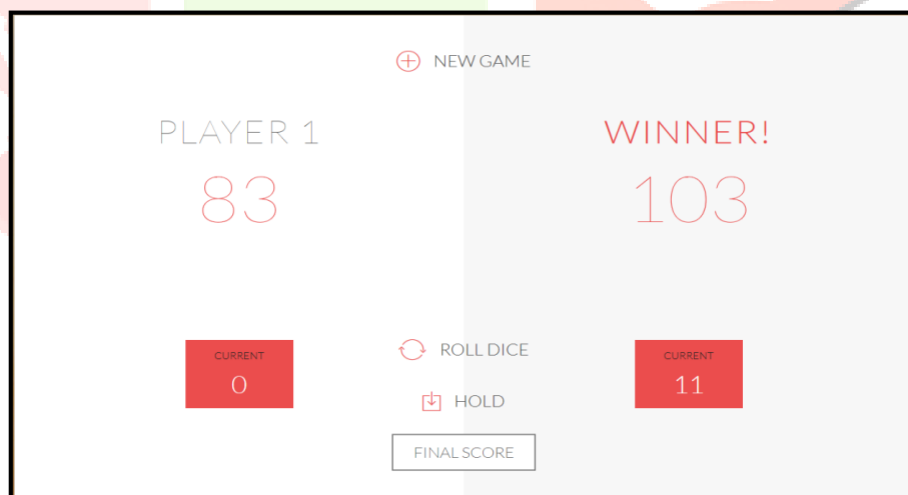

Figure No 6: Without fixing score also the game comes to an end automatically when the scores of the player reaches "100".Then the player whose score reaches 100 will be announced as the WINNER.

VI CONCLUSION

Playing Dice games is a cross-generational 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, optimism, 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. After a success in a game, users are more likely to set an ambitious goal for theirselves, even outside of gaming. Basically, dice games can turn their superpowers on. This game is fully in javascript and uses some sprite images. You can simply use any kind of code editor for this project. This game is in 2D format. All you have to do is roll the dice and try to reach 100 points faster than your opponent player. 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. Based on the observed results from Roll Dice Game using Web Application project and its benefits to the users in sharpening their brains , stress relief, we have created an user-friendly web browser. we gathered a lot of information regarding the flaws, difficulties that users are facing, using web browser. This project is useful to many people as it works as stress relief, brain exercise. and it is useful to improve problem solving skills. The user can use our roll

dice game to get competition with their friends. and can easily become a winner in the game through our project, with some easy tricks.

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