SNAKE AND LADDER GAME

(Python Project)

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1. Introduction –

The Objective of the project is to roll the dice and the player will only open its token when Number 1 appears on the dice roll. It's a 2 player game and whoever finishes the game passing through all the hurdles as snakes and ladder win.

2. Folders and Python files –

1. main.py – This is the file that has to run on the pygame to see interactive visuals as well as automatic token movements.

2. Assets –

1. images - blue token, red token, dice images 1-6, background image, play button, board image.
2. sound- dice roll sound, game over sound, ladder laugh sound, snake sound.

3.Entities-

1. dice.py- In this file, the function is made namely **goti_number()** in this when the player clicks on the play button a random number is generated between 1 to 6. Any number that appears will generate a dice image on the screen of the same number.
2. ladder.py- In this file, the function is made namely **ladder()** this when the player climbs to a number where the ladder is present, the player will climb to the other side of the ladder. It checks if the ladder is present on the number, if the condition is true then it returns another number which is the other side of the ladder.
3. matrix.py- In this file, the function is made namely **board()** this will return the coordinates on which the token moves. It takes the number and returns that number's index value of the list which is the coordinates of the board
4. snake.py- In this file, the function is made namely **snakes()** this when the player reaches a position where the snake's mouth appears to be present, it sends the token to the tail of the snake. It checks if the snake is present on the number, if the condition is true then it returns another number which is the tail of the snake.

4.Utilities-

1. background.py- In this file, it displays the image like background image, board image, and play button image.
2. players.py- In this file, it has a function that displays strings 'Player1', 'Player2', and 'Your turn!!!'.
3. screen_size.py- In this file, it contains the width and height of the screen.

3. Key Feature–

Added some sound effects in the dice roll, snake, ladder, and when the player wins.

4. Language Used –

The programming language is used python 3.8.10

5. Future aspect –

I will make it multiplayer

Also will try to explore pygame

6.Used Library –

Pygame, sys, time, random