



VISHNU
UNIVERSAL LEARNING

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN(A)

BHIMAVARAM

COLORED LINES

TEAM MEMBERS

- 20B01A05D0 : Paluri Sita Sowmya
- 20B01A05D1 : Pamidi Usha Shanmukhi
- 20B01A04B7 : Pogula Sre Jaya Lakshmmmy
- 20B01A04B8 : Prathipati Satya Durga Lavanya
- 20B01A1221 : Budda R.S. Manisri
- 21B05A1201 : Booraga Jassika

INTRODUCTION

Colored Lines is a single player board game which is played on 9x9 grid.

Goal: To match 5 or 6 balls of same color.

Tasks Performed are:

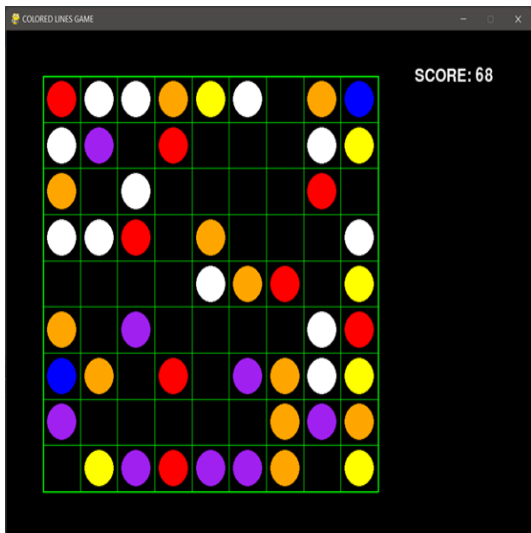
Task 1: Grid Formation.

Task 2: Insertion of balls into the grid and working on position.

Task 3: Movement of balls and Score Board.

DESCRIPTION

Colored Lines is a single player board game which is played on 9x9 grid by moving balls from cell to cell to group them into lines of same color. The more balls you move at once the greater your score is.



PROJECT FLOW

DAY 1

Understood the project description & installed required tools



DAY 2

Analysed the number of funtions required to built the project & started the basic code



DAY 3

Worked on intermediate code

Documentation is done and executed the code & rectified the errors



DAY 4

Presented by team members & submitted the project

DAY 5

Each Member Contribution

- Sowmya - Code Implementation Verification, Worked on Latex
- Usha - Code Implementation Verification
- Jaya - Code Verification Test Cases
- Lavanya - Code Implementation Latex
- Manisri - Code Verification Worked on Latex
- Jassika - Code Verification Latex

CHALLENGES

- Creating and Insertion of ball into the cell.
- Movement of balls according to the corresponding valid positions.
- **How we overcame:**
 - Identified to work in pygame.
 - By combined ideas of all team members.

LEARNINGS

- Learned how and where to use
Library: pygame and
Modules: copy, time, random
according to our necessity for the implementation of code.
- Problem Solving
- Logical Thinking

Technical Stack

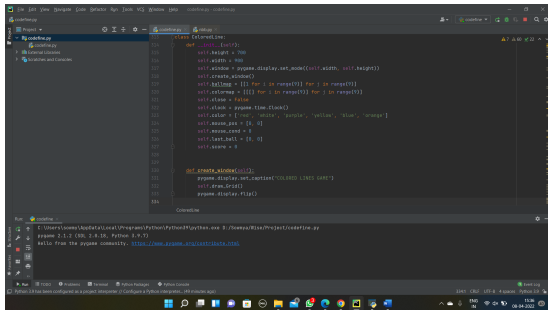
- **Languages:**

- Python

- **Tools:**

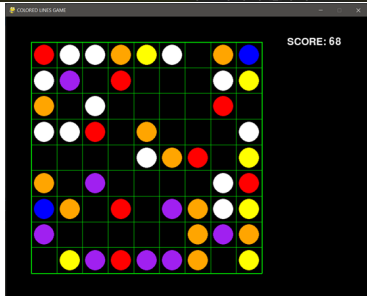
- GUI - Pygame
- PyCharm

DEMO SCREENSHOTS



The screenshot shows a code editor with a Python script for a game. The code defines a `ColoredLine` class that manages a Pygame window and a 10x10 game grid. The grid is populated with colored circles representing different player pieces. The code includes methods for creating the window, initializing the grid, and updating the display. The game title is set to "COLORED LINES GAME".

```
171 class ColoredLine:
172     def __init__(self):
173         self.height = 700
174         self.width = 700
175         self.window = pygame.display.set_mode((self.width, self.height))
176         self.create_window()
177         self.ballimg = [[[] for i in range(10)] for j in range(10)]
178         self.colors = [[[] for i in range(10)] for j in range(10)]
179         self.start = False
180         self.clock = pygame.time.Clock()
181         self.colors = ['red', 'white', 'purple', 'yellow', 'blue', 'orange']
182         self.move_x = [0, 0]
183         self.move_y = [0, 0]
184         self.test_ball = [0, 0]
185         self.start = False
186
187     def create_window(self):
188         pygame.display.set_caption("COLORED LINES GAME")
189         self.draw_grid()
190         pygame.display.flip()
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```



CODE STATUS

- Lines of code : 505
- No.of functions : 21

`https://gitlab.com/sowmyapaluri/coloredlines`

THANK YOU!!