

# The Breakout Game Using Pygame Library

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# Outline

- ☐ **Introduction and Demo**
- ☐ **Features**
- ☐ **Limitations**
- ☐ **Future Implementations**

# Introduction

- ▶ Breakout is one of the earliest arcade video games, first released in 1976 by Atari. It was derived from the game Pong (released by Atari in 1972).
- ▶ This one-player game features simple 2D graphics.
- ▶ It consists of one paddle used to return a bouncing ball back and forth across the screen.
- ▶ The aim of the game is to break the bricks of a brick wall by getting the ball to hit/bounce on the bricks.
- ▶ The score correspond to the number of bricks being hit.

# Demo



# Features

- ▶ User friendly UI.
- ▶ Game window size can be changed. Game objects are responsive to size.
- ▶ Paddle can shoot the bricks.
- ▶ Paddle can move up, down, left right.
- ▶ Bricks keep going down after some frames interval
- ▶ Balls are doubled if hit some special bricks.

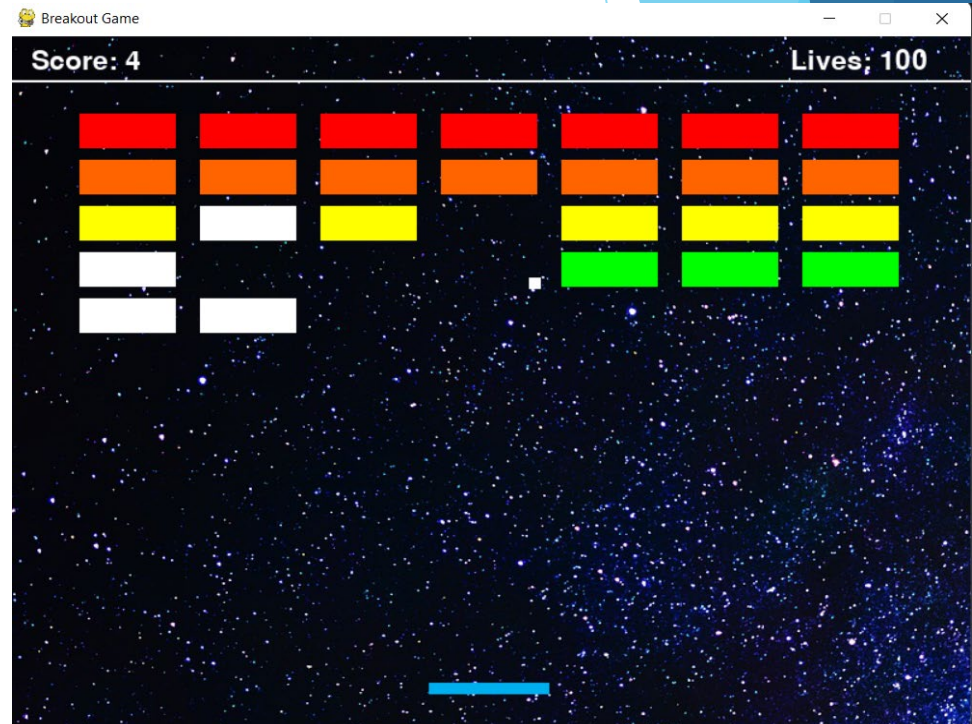
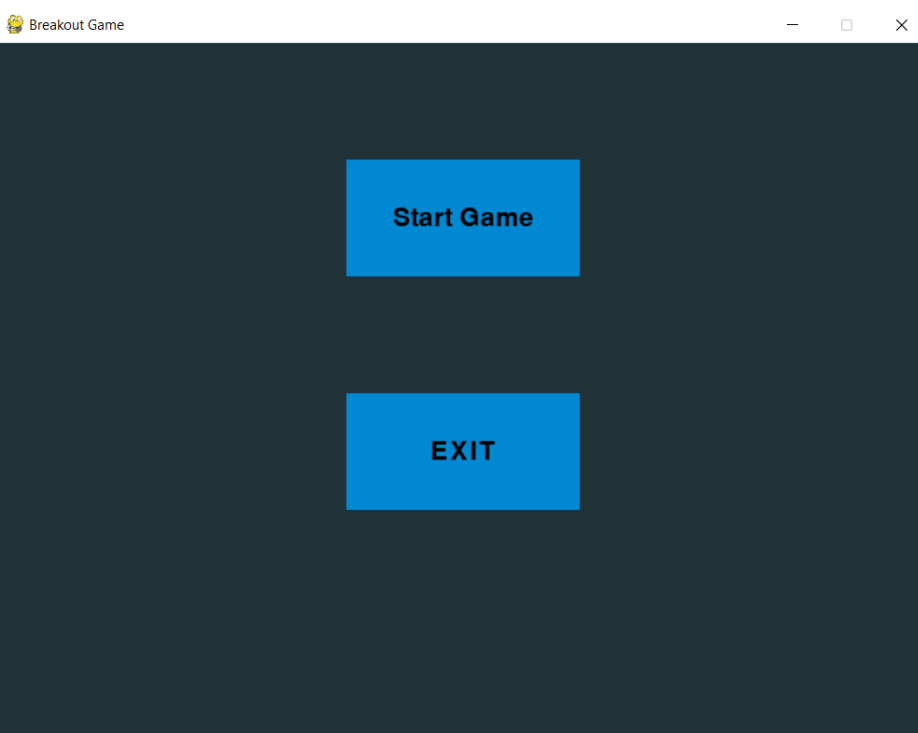
# Limitations

- ▶ Full screen view feature not implemented.
- ▶ Difficulty levels are not defined.

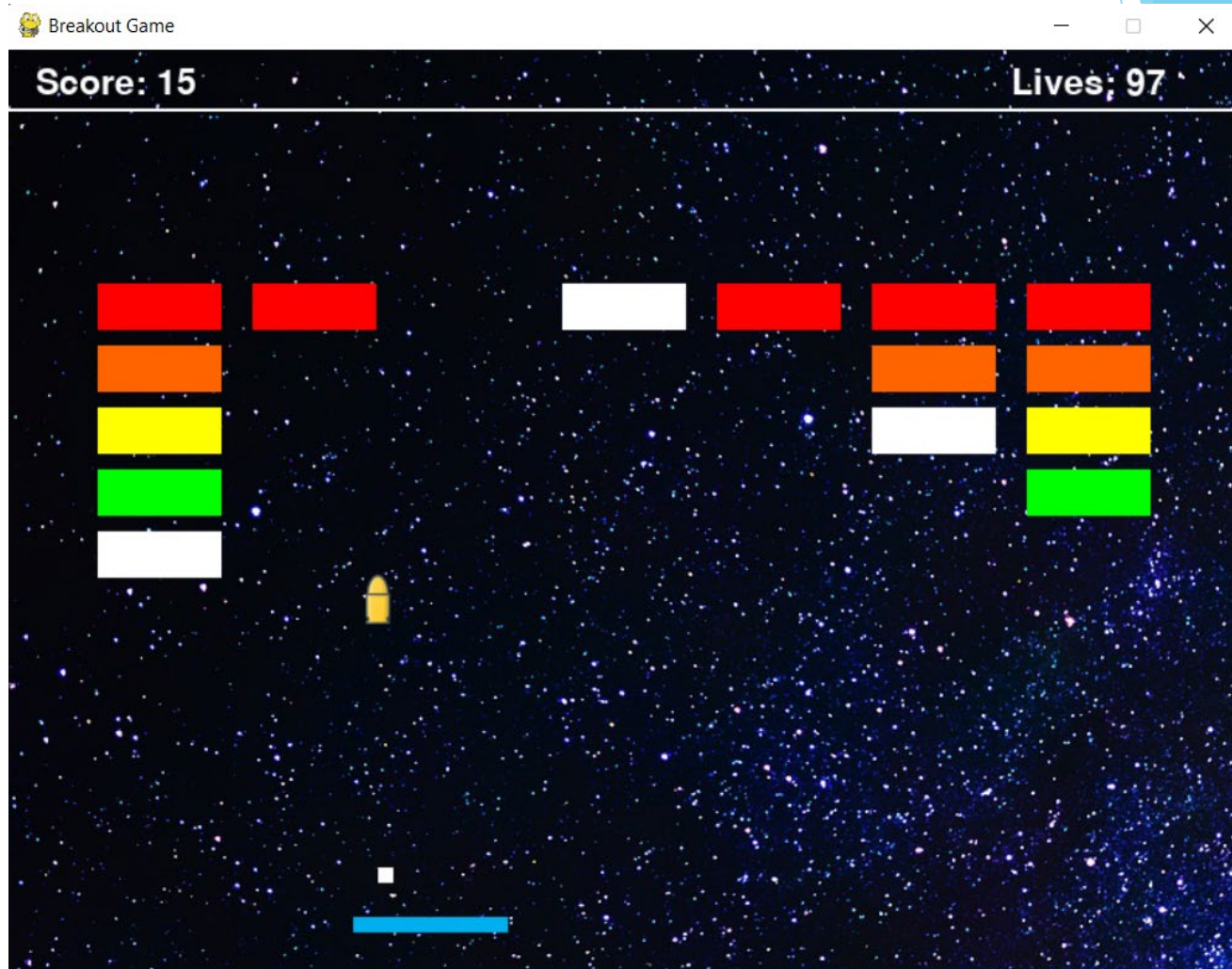
# Future Implementation

- ▶ Choose difficulty level at the start
- ▶ Solve full screen view issue.
- ▶ Build an AI bot to play the game using Q learning

- User friendly UI

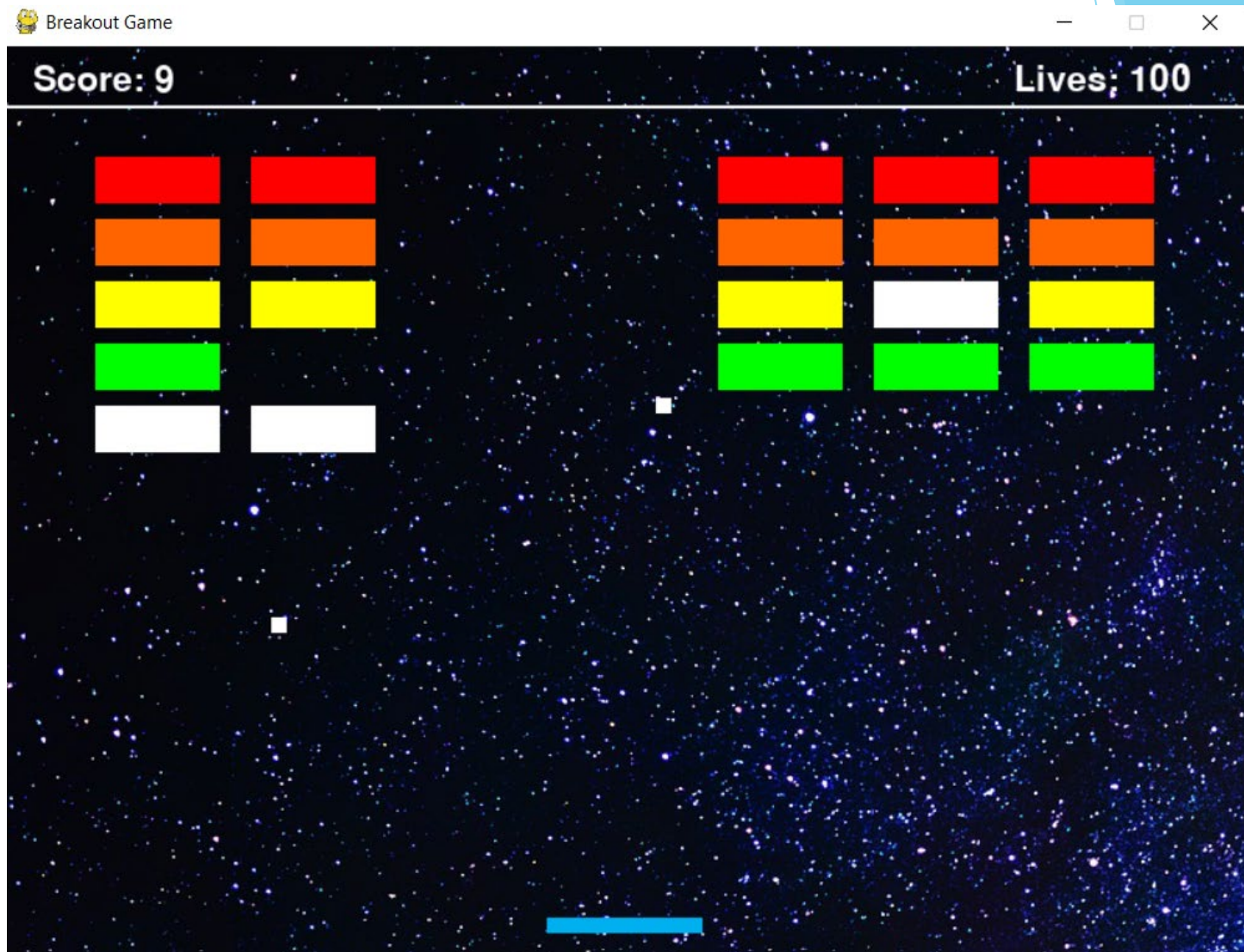


- Paddle can shoot the bricks.





- Multiple balls when hit some special bricks



The background of the slide features abstract, overlapping geometric shapes in various shades of blue, primarily concentrated on the right side, creating a modern and dynamic feel.

Thank you

Feel free to ask questions