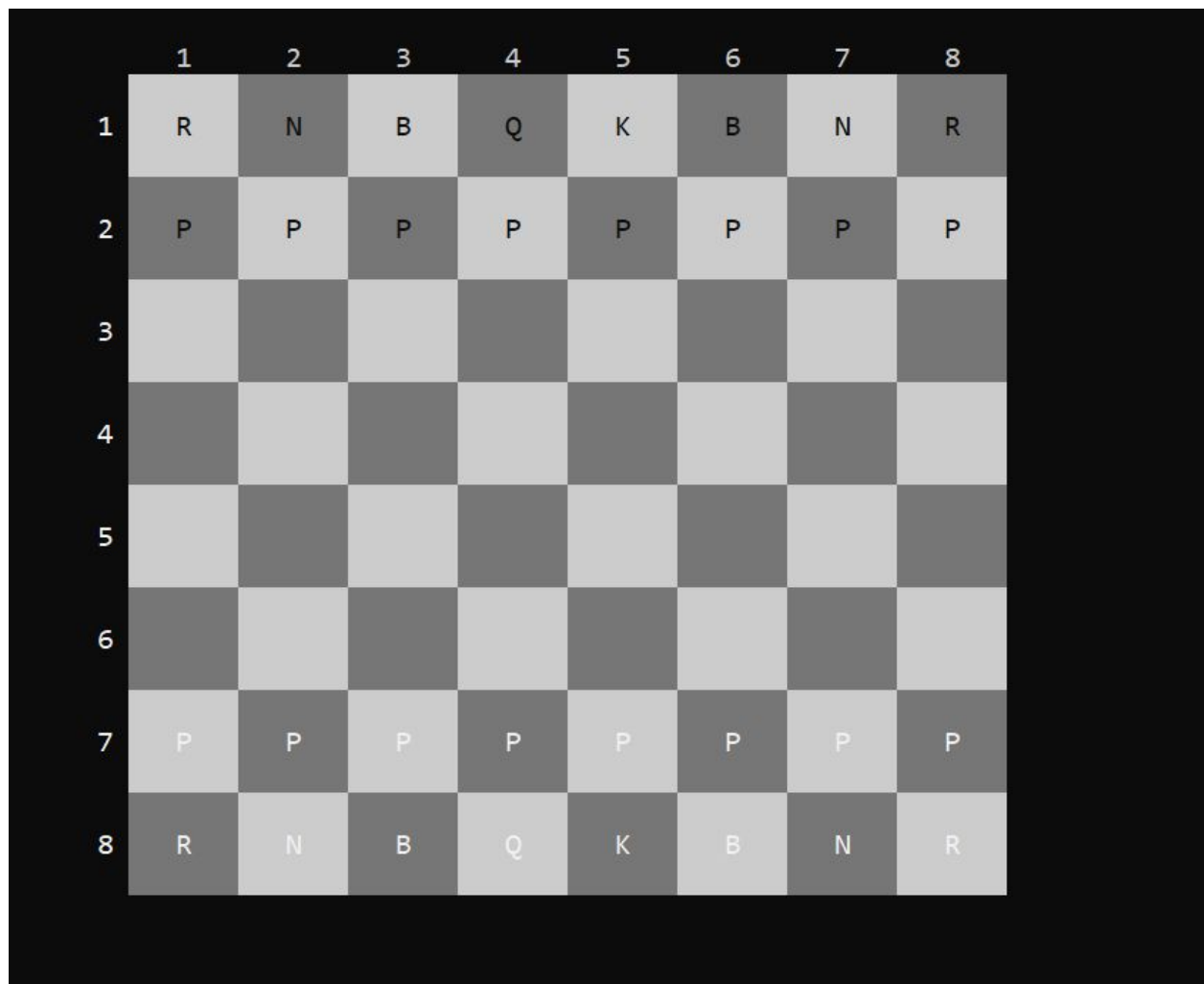


Chess Game

A two player chess game

By Siddharth Kale (Sid_330s)



Concepts Used

- Abstract classes
 - Pure Virtual Functions
 - Function Overriding
-

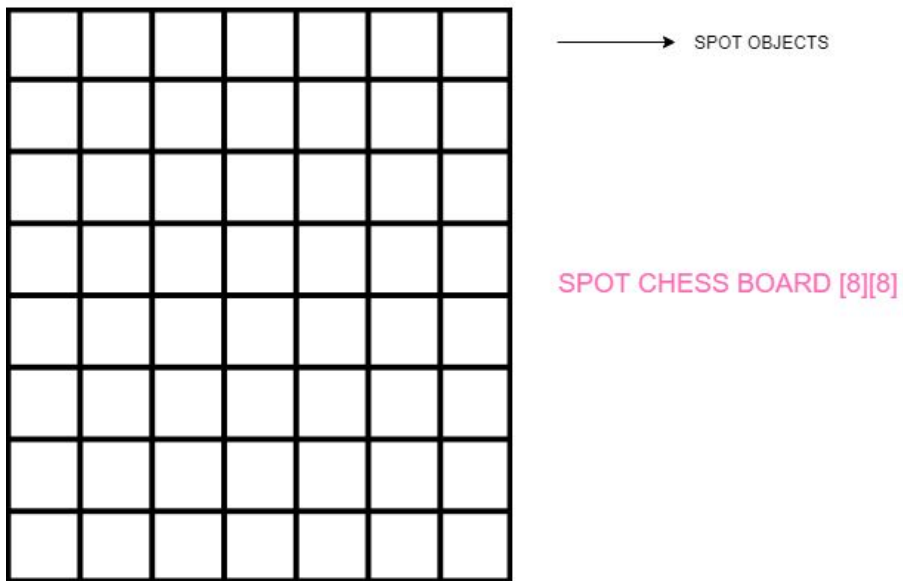
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- Hierarchical Inheritance
 - Constructor (for initialization of game)
 - Parameterized Constructor (getting features of all pieces)
 - Pointers and Functions
 - Goto Keyword and Labels
 - SetConsoleTextAttribute (Windows.h) for GUI
 - Console I/O

Classes Descriptions

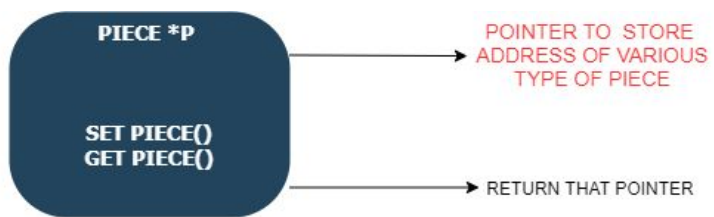
- **Spot:** A spot represents one block of the 8×8 grid and an optional piece.
- **Piece:** The basic building block of the system, every piece will be placed on a spot. Piece class is an abstract class. The extended classes (Pawn, King, Queen, Rook, Knight, Bishop) implement the abstracted operations.
- **Game:** This Class Initializes the Game placing pieces to their original positions. It keeps track of all the game moves.

Methods And Variables Description

- **Main():** It controls the flow of a full game till one player wins.
- **chessBoard [8][8]:** Board is an 8×8 set of boxes containing all active chess pieces.
- **isMoveValid():** This Function is Present in Piece (Virtually) and Every Sub-Piece (Pawn, King, Queen, Rook, Knight, Bishop).
- **PieceAtxy:** Every Piece is assigned a number to be identifiable uniquely.



Spot Class



Hierarchical Inheritance

