WALRUS APCS pd 8

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**UMLs: 2048** 

## Board

- int [][] grid

- + Board() //Default constructor
- String strArr(int [][]) //Returns the inputted 2d array as a string
- + void printBoard() //Prints the board in terminal format
- + boolean shiftRight() //Moves all the tiles right, combining tiles along the way. Returns false if the move is impossible.
- + boolean shiftLeft() //Moves all the tiles left, combining tiles along the way. Returns false if the move is impossible.
- + boolean shiftDown() //Moves all the tiles down, combining tiles along the way. Returns false if the move is impossible.
- + boolean shiftUp() //Moves all the tiles up, combining tiles along the way. Returns false if the move is impossible.
- void moveRight() //Moves all the tiles right
- void moveLeft() //Moves all the tiles left
- void moveDown() //Moves all the tiles down
- void moveUp() //Moves all the tiles up
- void mergeRight() //Combines tiles to the right
- void mergeLeft() //Combines tiles to the left
- void mergeDown() //Combines tiles to the down
- void mergeUp() //Combines tiles to the up
- + void newTile() //Creates a new tile in a random empty index of the grid
- + boolean isEnded() //Returns a boolean based on if the game has ended, prints a message if it has

## Woo

- String acceptedInputs
- + void main (String[]) //Creates a board, and runs through a loop of displaying it, asking for input, and updating the board
- + String inputGet() //Gets valid input from the player
- + String begInputGet() //Handles the beginning of the game
- + boolean moverDoer(String, Board) //Attempts to execute the player's move, returns false if the move is impossible.