

```
import java.util.ArrayList;
```

```
public class Board {
```

```
    private Card[][] board;
```

```
    public static final int SIZE = 3;
```

```
    /**
```

```
     * Constructs a new board
```

```
     */
```

```
    public Board() {
```

```
        board = new Card[SIZE][SIZE];
```

```
    }
```

```
    /**
```

```
     * Sets a spot on the board with a given value.
```

```
     */
```

```
    public void set(int r, int c, Card card) {
```

```
        board[r][c] = card;
```

```
    }
```

```
    /**
```

```
     * Returns a list of all the cards on the board
```

```
     */
```

```
    public ArrayList<Card> getAllCards() {
```

```
        ArrayList<Card> cards = new ArrayList<>();
```

```
        for(int r = 0; r < SIZE; r++) {
```

```
            for(int c = 0; c < SIZE; c++) {
```

```

        cards.add(board[r][c]);
    }
}

return cards;
}

/**
 * Returns true if the board contains a given card
 */
public boolean contains(Card c) {
    return getAllCards().contains(c);
}

/**
 * Replaces the first occurrence of oldCard with newCard
 */
public void replace(Card oldCard, Card newCard) {
    for(int r = 0; r < SIZE; r++) {
        for(int c = 0; c < SIZE; c++) {
            if (board[r][c].equals(oldCard)) {
                board[r][c] = newCard;
                return;
            }
        }
    }
}
}

```

```
/**
 * Returns a string representation of the board
 */
public String toString() {

    String s = "";

    for(int r = 0; r < board.length; r++) {
        for(int c = 0; c < board[0].length; c++) {
            s += board[r][c] + " ";
        }

        if(r != board.length-1)
            s += "\n";
    }

    return s;
}
}
```