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classdef card < handle
    properties
        cardNumber = 0;
        value = 0;
        altValue = 0;
        played = 0;
        inPlay = 0;
        position = 0;
        faceup = 0;
        image;
    end
    methods
        % Constructor function
        % Joker card has cardNumber and value = 0
        function obj = card(cardNumber)
            obj.cardNumber = cardNumber;
            if cardNumber == 0
                obj.value = 0;
            else
                cardValues = [10;1;2;3;4;5;6;7;8;9;10;10;10];
                altCardValues = [2;11;10;9;8;7;6;5;4;3;2;2;2];
                remainder = mod(cardNumber,13);
                obj.value = cardValues(remainder+1);
                obj.altValue = altCardValues(remainder+1);
            end
            cardImages = ["joker.png";
                'ace_of_spades.png';
                '2_of_spades.png';
                '3_of_spades.png';
                '4_of_spades.png';
                '5_of_spades.png';
                '6_of_spades.png';
                '7_of_spades.png';
                '8_of_spades.png';
                '9_of_spades.png';
                '10_of_spades.png';
                'jack_of_spades2.png';
                'queen_of_spades2.png';
                'king_of_spades2.png';
                'ace_of_hearts.png';
                '2_of_hearts.png';
                '3_of_hearts.png';
                '4_of_hearts.png';
                '5_of_hearts.png';
                '6_of_hearts.png';
                '7_of_hearts.png';
                '8_of_hearts.png';
                '9_of_hearts.png';
                '10_of_hearts.png';
                'jack_of_hearts2.png';
                'queen_of_hearts2.png';
                'king_of_hearts2.png';
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        'ace_of_diamonds.png';
        '2_of_diamonds.png';
        '3_of_diamonds.png';
        '4_of_diamonds.png';
        '5_of_diamonds.png';
        '6_of_diamonds.png';
        '7_of_diamonds.png';
        '8_of_diamonds.png';
        '9_of_diamonds.png';
        '10_of_diamonds.png';
        'jack_of_diamonds2.png';
        'queen_of_diamonds2.png';
        'king_of_diamonds2.png';
        'ace_of_clubs.png';
        '2_of_clubs.png';
        '3_of_clubs.png';
        '4_of_clubs.png';
        '5_of_clubs.png';
        '6_of_clubs.png';
        '7_of_clubs.png';
        '8_of_clubs.png';
        '9_of_clubs.png';
        '10_of_clubs.png';
        'jack_of_clubs2.png';
        'queen_of_clubs2.png';
        'king_of_clubs2.png'];];
    obj.image = imread(strcat("./card_images
\",cardImages(cardNumber + 1)));

end

% Call if card is drawn from deck
function cardPlayed(obj)
    obj.played = 1;
    cardInPlay(obj)
end

% Call if card is on the table
function cardInPlay(obj)
    obj.inPlay = 1;
end

% Call when card is discarded
function discard(obj)
    obj.inPlay = 0;
    obj.faceup = 0;
end

% Call when card is face up
function cardFaceUp(obj)
    obj.faceup = 1;
end

% Call when card is face down

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function cardFaceDown(obj)
    obj.faceup = 0;
end

% Call when deck is reshuffled
function reshuffle(obj)
    obj.played = 0;
    obj.inPlay = 0;
    obj.faceup = 0;
end
end
end
```

*Not enough input arguments.*

*Error in card (line 16)*  
    *obj.cardNumber = cardNumber;*

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