# AI.cs

A basic AI that can play Durak. It always attacks if able and always defends if able. It chooses which card to attack or defend with randomly.

# Properties

## **Private** player : *Player*

Reference to the *Player* component of this gameobject.

## **Private** board : *Board*

Reference to the *Board* gameobject in the scene.

## **Private** hand : *Hand*

Reference to the *Hand* component of this gameobject.

## **Serialized** maxThinkingTime : *float*

The maximum amount of time that the AI can spend thinking on any action.

## **Serialized** minThinkingTime : *float*

The minimum amount of time that the AI will spend thinking on any action.

# Lifecycle Methods

## Awake:

Gets references for the player, board, and hand properties.

# Methods

## **Private** Reevaluate

### Parameters: None

### Return: None

After waiting for a random amount of time between minThinkingTime and maxThinkingTime, the AI evaluates the board state and decides what card(s) to play.

## **Private** DefendAgainstBoard

### Parameters:

#### playableCards : List<Card>

List of playable cards in the player’s hand.

### Return: None

This function causes the AI to attempt to defend against every attacking card on board.

## **Private** PickRandomCardFromList

### Parameters:

#### cards:: List<cCard>

List of cards to pick from.

### Return: *Card*

Returns the card that was picked.

This function picks a card at random from the list.

## **Private** GetDefendingCards

### Parameters:

#### playableCards : List<Card>

List of playable cards in hand.

#### attackingCard : Card

card that is being defended against.

### Return: *List<card>*

Returns the list of cards that can defend against the attacking card.

## **Private** PlayCardInFirstSlot

### Parameters:

#### card : Card

### Return: None

This function plays the card in the first cardslot without another card in it.

## **Private** FindCardToAttackWith

### Parameters:

#### playableCards : List<Card>

List of playable cards in hand

### Return: *Card*

Returns the chosen card to attack with.

# Scene Settings:

This class expects there to be a *Board*gameobject in the scene.