

Agent implementation

Your agent must run on the students server. It will work with the basic set of cards from the files GREEN.txt and RED.txt. It can either include these cards in the source code or read them from external files.

It will be invoked from the command line with the command:

```
./agent <NUMBER OF PLAYERS> <NUMBER OF POINTS TO WIN> <GREEN EXTENSION FILE NAME> <RED EXTENSION FILE NAME>
```

The four parameters must come precisely in this order.

Their meaning is:

<NUMBER OF PLAYERS> - how many players are in the game. Normally, 4-10, but it does not have to be verified.

<NUMBER OF POINTS TO WIN>- how many points (green cards) a player needs to win.

<GREEN EXTENSION FILE NAME> - the name of the file containing the extension set for Green cards.

<RED EXTENSION FILE NAME> - the name of the file containing the extension set for Red cards.

NOTE: The extension sets are not known. They will be revealed at running time. The ones provided are just examples.

The agent will add the two sets of extensions to the corresponding basic sets and use the new(compound) sets.

After reading the two sets of extensions, the agent will have at most 60 minutes to analyze/train on the new sets. Then it must start playing.

For example, the provided agent will be invoked as:

```
./A2A 6 10 GREENExt.txt REDEExt.txt
```

Agent behaviour

The agent must replicate the behaviour of the sample agent (A2A).

It will:

Assume that it is player 1.

Ask for the hand of red cards it was dealt (7 red cards)

It will repeat until the end of the game the following sequence:

Ask for the role in this round – Player or Judge

If it is the judge:

It will select a green card from the deck of REMAINING green cards

It will read the red cards played by the other players

It will decide which red card won

It will ask for the player who won – this is for keeping track of the score

If it is Player

It will ask for the green card selected by the judge

It will play a red card from its hand

It will ask who the winner is

It will read the red cards played by the other players

It will ask for the new red card which was dealt to it

Card Deck Format

Each deck of cards will be represented as a text file containing a card on each line.

A card is represented by two parts separated by the & sign:

Part one – a noun/noun phrase for a red card or adjective for a green card

Part two – the extra definitions or synonyms printed on the card.

Example:

A red card: A Car Crash&"Hey, it was an accident!"

A green card: Adorable&lovable, charming, delightful

Your agent may use the entire card, including the definition, or just Part one.