# Card-Game

This is a project is a game made for INST326. Welcome to Blind Bidding! In this game you and another player will bid secretly bid on mystery cards- each card does something with your money(called "resources" in game)

# How It Works

Everyone starts with 50 in resources. In each round they...

1. Bid a portion of the resources
2. The card affecting said bid is revealed
3. The card they bid on amy increase, decrease or have no effect on thier resources
4. The game ends when there are no cards left or the players run out of resources.

# What Each Secret Card Does

The amount a player will lose/gain/steal is determined by the "amount" value for the "Resource Loss" card in card_definitions.

### Gain: The player who won the bid for this card is set to gain ten resources!

### Loss: The player who won the bid for this card will lose 8 resources!

### Steal: The player who won the bid for this card will steal 5 resources!

### No Effect: The winner of this card will have no affect on anyone's resources.

# What You See

The game will start with Round 1 where both players are shown thier resources(50) and the cards remaining(14), after which each player can bid any amount of resources on the secret card. Their possibility for gianing, losing, stealing or having no effect is accounted for in the next round.

# Start The Game

In this folder, ensure that you open and run Blind_Bidding.py from your terminal! Do not run Blind.Bidding.py--that one has name errors!

# Interesting Bugs

So our program sometimes will allow players to go into the negative with resources. I mean it's not like our CPU will come find you for credit debt collections but still it's a little awkward when player 2 wins by like 30 because player 1 was in the negative!

# Improvements

Though it wasn't technically a bug, our program would end the game after one round...and that was sort of meh. We want to aim for something where we can actually play for more than a minute so we (as suggested) added a while loop. Now players can play until there are either no cards left or the two are out of resources.

# The Purpose of Each File

Blind.Bidding.py - This is a test run file where we combined all of our algorithms to see and compare the logic of it all.

Blind_Bidding.py - This is the main execution file, we update this file and make any new additions to it.

Card.py - This is the initial landing page for all group members. This in essence was an attendance sheet to make sure everyone could see how GitHub works.

Ibrahim_algorithm.py - This is Ibrahim’s algorithm file, showcases his work.

Isabelle_algorithm - This is Isabelle's algorithm file, showcases her work.

Kevin_algorithm.py - This is Kevin's file, showcases his work.

README.pdf - This is the README file which gives all of the details on how to run the game, some challenges and improvements, and what we did to contribute to the project.

andrews_algorithm.py - This is Andrew’s file, showcases his work.

# What Each of Us Did

| Function | Primary Author | Techniques Demonstrated |
|---|---|---|
| resolve_bid_round() | Andrew Parson | List comprehension, use of max() with key function |
| generate_deck() | Kevin Escalante | Loops and dictionary |
| resource_management_update() | Ibrahim Boiro | Optional parameters, Conditional expressions |
| get_player_bid() | Andrew Parson | Type conversion |
| display_game_state() | Ibrahim Boiro | Keyword arguments |
| display_round_start() | Isabelle Ortiz | f-strings containing expressions |
| display_bidding_outcome() | Isabelle Ortiz | Multi-line formatting, Output formatting |
| reveal_card() | Kevin Escalante | `with` statement |

## Works Cited

Bicycle Playing Cards. (2025). Learn how to play card games. The United States Playing Card Company.

https://bicyclecards.com/how-to-play

Description: This website offers an insightful and detailed guide on how to play many types of card games, especially well-known ones such as Go Fish and poker. It is user-friendly and allows users to quickly understand the rules, strategies, and scoring systems of various card games. This resource aids in shaping game rules and provides ideas on structuring custom card games. The sections categorizing games by player count and type are particularly useful for understanding game balance, and the strategies provided influence resource management and bidding aspects in game design.