# HI-Low Game Abstraction

* Just so we can keep our ideas in order, please choose a color for your font and put it in the key so we can see whose ideas belong to which person.
* Key

Black = What we discussed as group.

Green = William

Blue = Ramón

Pink = Nikki

* Player that starts with 300 points

Class Player

Possible attributes of player

Player has points

Points start at 300

Points can increase by 100 or decrease by 75

Possible behaviors

Player will make choice to GUESS or to END the game.

Player makes choice to of higher or lower.

* Cards 1 – 13

Class Cards

Possible attributes:

Suits (Diamonds, Clubs, Hearts, Spades) Enhancement for cards can work on it later

Jack= 13, Queen = 14 , King=15, Ace = 1 Enhancement for cards can work on it later.

Card name = Number on the card.

Possible Behaviors

(maybe shuffle first, which would be choosing a random number)

Select card = Remove 1 card from deck of cards.

Draw Base card = First card drawn and player will make their guess based on that card.

Shuffle Again

Draw Guess card = The second card that will compared to the first card.

Discard card from deck or return card to deck

We can make the game so the cards that are selected are no longer part of the deck

* 2 Displays. One for the first card (player will see first) and the second card (will be the next card or second card after guess)

Display Card 1 = The first card that will be the base the player uses to determine a guess.

Display Card 2 = This will display to user the random card that is randomly pulled.

Display results (points received/lost and point total)

* 2 Player input. Player will guess. Player will decide to continue or quit.

Possible user input

Guess = The input the user will say Higher or Lower

Continue or quit = The input the user will say Yes to continue playing or No to end the game.

* Results

Correct guess will result in 100 points received. (Behaviors

Incorrect guess will result in 75 points decreased

correctGuess = ‘ ’

playerGuess = input(‘Higher or lower?(h/l): ’)

if playerGuess === correctGuess:

points += 100

elif playerGuess != correctGuess:

points += 75

Game won or lost

Possible Behavior

Victory condition game 1 = 700 points or points higher than 0

if points >= 700:

messagebox.showinfo("Congratulations!, “You guessed correctly! You win!")

disableButtons()

Victory condition game 2 = when the points the 700

Game over game 1 = When points equal 0 or points equal 0 when 1 card is left.

Game over game 2 = When points equal 0

* Game Over.

Conditions are if points reach 0 or if player quits.

* Victory Condition

If points reach 700 the player will win. (Subject to change)

I

* Objects

Player

Deck

Cards

Displays

Attributes:

Cards

Score or results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| |  | | --- | | **Game** | | is\_playing: bool  total\_score: int (300) | | start\_game():None  get\_inputs():None  do\_updates():None  do\_outputs():None | | |
| |  | | --- | | **Card** | | card\_number: int | | card\_select():int  discard\_card():None | | |  | | --- | | **Player** | | points: int  card\_guess: str | |  | |
|  |  |

The methods in Game class I think could be similar to the methods in the Director class from the game of dices.

I’m not sure how to add some methods in Player class

Methods in the Card class could perform the actions that you mention at the beginning of this document

* Last line of document.

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