

GAME APPLICATION

Player Module – Design Documentation

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Overview:

A game, where the player plays against the computer. The player wins if the number chosen is higher than what the computer chose.

The team is required to implement the player-module in a modular way, so that our in-house dev team could integrate it with our administrator setup.

Game Outline

1. The player declares a number between 1 and 10;
2. The administrator selects a card from a pile of cards each with a number between 1 and 10 and places it face down on the table;
3. The player can either pick the card on the table or keep their number;
4. The administrator reveals the card;
5. The player wins if their choice is the one with the bigger number.

Player Module - Design Overview

These are the main modules expected from the team :

1. `player_number_generator()`
2. `player_option_picker()`

Player Module – Detailed Design Specifications

(1) player_number_generator():

This module should allow the user to declare a whole number between 1 and 10(both included).

1. The module should be made private and be accessible only by helper functions.
2. The user should not be able to modify the declared number once set in a game.
3. The set value must be reset when a new game begins.
4. The player can declare only one number in a game.
5. The module must return the declared whole number when called and allow the player to declare the whole number the first time the function is called.

(2) player_option_picker():

This module should help the player choose only one of the following options:

1. Either retain the number declared by the user using *player_number_generator()*
 2. Choose a card (which has an unknown number) placed by the administrator. *(Provided by the administrator)*
- Only one of these tasks should be allowed by this function and return the value of the selected option.
 - Value modification should be strictly restricted.