

**Project Documentation**

**Task 1**

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Introduction:

Simultaneous QUATRO-UNO is a Python implementation of a strategic card game where two players compete to outmaneuver each other. The game is designed with a graphical user interface (GUI) using the Tkinter library. It allows players to make selections, play the game, and view the results.

Game Rules:

* Each player receives four cards: "1", "2", "3", and "4".
* Players take turns revealing their leftmost card.
* The lower card is discarded, and the higher card remains.
* If both cards are identical, they are removed from play.
* Exception: If one card is a "1" and the other a "4", both cards are discarded.
* The player who empties their pile first loses the game.

Steps:

* Select your cards.
  + The program window will display four buttons labeled with the card values "1", "2", "3", and "4". These buttons represent the cards available for you to choose from.
  + Click on the buttons corresponding to the four cards you want to play in your secret selection.

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* Game play.
  + Upon clicking "Start Game," the program will perform the following actions:
  + It will randomly select four cards from the available deck ("1", "2", "3", and "4") to represent the computer's secret selection.
  + The program will reveal the computer's chosen cards on the screen.

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* Game loop (automatic).
  + The program will enter a loop that automatically resolves the round based on the chosen cards:
  + The first card from your selection and the first card from the computer's selection will be compared.
  + There are four possibilities:
  + If your card has a lower value than the computer's card, the computer wins two cards from your pile.
  + In the special case of "1" vs "4", both cards are removed from the piles
  + The loop repeats, comparing the next cards from each pile until:
  + One player's pile is empty (that player loses).
  + Both players' piles are empty (a draw).
* Game Over.
  + Once the game loop determines a winner (or a draw), a message box will pop up on the screen. The message will indicate:
  + "Player wins" if you emptied the computer's pile first.
  + "Computer wins" if the computer emptied your pile first.
  + "DRAW" if both players' piles are empty

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* Reset the game (optional).
  + The program window might provide a button labeled "Reset Game." Clicking this button will clear your previous selections and the computer's cards, allowing you to start a new round.



Screenshots for trying :

A screenshot of a computer game

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A screenshot of a table

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A screenshot of a computer

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Description automatically generatedA screenshot of a computer screen

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