

Project Description: Roulette Game with Tkinter

This project is a simple **Roulette Game** implemented using **Python** and **Tkinter** for the graphical user interface (GUI). The game mimics a basic betting system in a roulette game, where players can place a bet on a specific number (1-36) and a color (red or black). The game then simulates spinning the roulette wheel, determines the winning number and color, and checks if the player's bets match the outcome.

Goal of the Project:

The main goal of this project is to simulate a basic roulette betting system in a fun and interactive way. The user can place two types of bets:

1. **Number Bet:** The user chooses a number between 1 and 36.
2. **Color Bet:** The user selects a color, either **red** or **black**.

After the player places their bets, the roulette wheel spins (randomly generates a number between 1 and 36) and determines whether the player won or lost the bets. The outcome is displayed in a pop-up window that shows the winning number, its corresponding color, and whether the player won either of their bets.

Features:

- **Bet Placement:** The user can input a number bet (1-36) and a color bet (red or black) using dialog boxes.
- **Spin Simulation:** The wheel spins randomly to determine the winning number and color.
- **Result Feedback:** The result of the spin is displayed in a pop-up message, showing whether the player won the number bet, the color bet, or both.

Educational Value:

- **Randomization:** Demonstrates how to use Python's random module to simulate unpredictable outcomes (like spinning a roulette wheel).
- **Logic Building:** Implements logic to evaluate and compare bets with the randomly generated winning outcomes.
- **GUI Interaction:** Uses **Tkinter** to build a simple GUI where users can interact with the game via buttons and dialog boxes.
- **Basic Gambling Concepts:** Teaches basic roulette betting rules in a virtual and risk-free environment.