## **CSAP – Chap 7 Game of Chance**

In the Game of Chance, a pair of dice is rolled and points are gained or lost depending on the roll. At the start of the game, ask the user to input the initial amount of points to a point balance and the amount of the first bet.

- On the first roll, If 2, 3, or 12 is rolled, the player loses that game and the bet amount is subtracted from the point balance.
- Also on the first roll, if 7 or 11 is rolled, the player wins that game and the bet amount is added to the point balance.
- If first roll is <u>not</u> 2, 3, 7, 11 or 12, then the roll becomes the winning set number for the round. Continue rolling until the set number is rolled again to win the round. However, if a 7 is rolled in the process of trying to get the set number, the play loses that round.
- For each round,
  - O If the roll matches, the round is over, player has won. Add points
  - o if the roll doesn't match,
    - ask player if they want to play again
      - if they want to quit, lose points
      - if they want to continue, add the bet amount (must be >= 1 and less than balance)
  - o roll the dice
- At the end of the game, the program should display the amount of the user's current point balance and offer the user an opportunity to play again.

Design and implement a **GameOfChance** machine that allows the user to play.

Your program should be robust, making error checking for every input from the user.

The complete game can be coded within public static void main.

## Discuss with a friend:

## **Genius Project Challenge:**

Create a GUI interface with buttons that plays the same game.