## **Unit 13: Decision Structures and Program Flow**

## Project 1:

Create a Blackjack application to simulate a simplified version of the game "21", otherwise referred to as "Blackjack."

You will need to use a "deck of cards" numbered 1 through 10. Any number can be repeated. The user will be dealt two randomly-selected cards and the computer will be dealt three randomly-picked cards. The user's cards are revealed but the three cards dealt to the computer will not be revealed until the Check Scores button is clicked.

Once the original cards are dealt, the user may draw, three additional cards (one at a time). The user's objective is to have his/her cards total 21 or as close to 21 as possible without going over 21. Use a label to keep a running total of the player's cards.

When the Check Score button is clicked, a winner will be declared as follows:

- If both the user's score and the computer's score are over 21, or if both are equal but under 21, the game is declared a draw.
- Otherwise, the winner is the one with the highest score that is less than or equal to 21.
- If one score is over 21 and the other is 21 or less, the player with 21 or less is declared the winner.

The result (i.e. Player wins, Computer wins or Draw) should be displayed in a **message box** with the player's win/loss record.

The application interface should look similar to the following:

Blackjack!	
The Player is dealt:	The Computer is dealt:
9 8	2 8 10
Player Draws: 4	
Draw Card Check Play Again Quit	

Save your project as vbpUnit13\_Blackjack.