
C:\Users\JMH\Desktop\JMHRec\D7Q3\Question3TripleTTyresU.pas

```
unit Question3TripleTTyresU;
```

```
interface
```

```
uses
```

```
Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,  
Dialogs, StdCtrls, DB, ADODB, Grids, DBGrids, ExtCtrls, Buttons,  
jpeg;
```

```
type
```

```
TfrmBonanzaQuestion = class(TForm)  
    pnlMain: TPanel;  
    Label1: TLabel;  
    lstPrizes: TListBox;  
    Label2: TLabel;  
    strgPrizePlay: TStringGrid;  
    Label3: TLabel;  
    imgPrizePic: TImage;  
    Label4: TLabel;  
    Image1: TImage;  
    BitBtn1: TBitBtn;  
    Label5: TLabel;  
    Label6: TLabel;  
    edtRow: TEdit;  
    edtCol: TEdit;  
    btnDraw: TButton;  
    Label7: TLabel;  
    procedure FormShow(Sender: TObject);  
    procedure btnDrawClick(Sender: TObject);
```

```
private  
    { Private declarations }  
public  
    { Public declarations }
```

```
end;
```

```
var
```

```
frmBonanzaQuestion: TfrmBonanzaQuestion;  
var arrPrizeGrid : array [1..10,1..10] of integer;
```

```
implementation
```

```
{ $R *.dfm }
```

```
//=====
```

```
procedure TfrmBonanzaQuestion.btnDrawClick(Sender: TObject);
```

```
var
```

```
go : boolean;  
col, code : integer;  
R , C : Integer;
```

```
begin
```

```
edtRow.Text := UpperCase(edtRow.Text);  
edtRow.Text := Trim(edtRow.Text);  
edtCol.Text := Trim(edtCol.Text);
```

```
go := false;
```

```
if ((edtRow.Text[1] >= 'A') and (edtRow.Text[1] <= 'Z')) then  
begin
```

```
go := true;  
val(edtCol.Text,col,code);  
if (code = 0) then
```

```
begin
```

```
if ((col >= 1) and (col <= 10)) then
```

```
begin
```

```
go := true;
```

```
end
```

```
else
```

```
begin
```

```
ShowMessage('You must enter an 1 to 10 for the column');
```

```

        go := false;
        edtCol.Clear;
        edtCol.SetFocus;
    end;
end
else
begin
    ShowMessage('You must enter an 1 to 10 for the column');
    go := false;
    edtCol.Clear;
    edtCol.SetFocus;
end;
end
else
begin
    ShowMessage('You must enter an A to Z for the row');
    edtRow.Clear;
    go := false;
    edtRow.SetFocus;
end;

if go then
begin

    case (edtRow.Text[1]) of // could have used ord (better)
        'A': R := 1;
        'B': R := 2;
        'C': R := 3;
        'D': R := 4;
        'E': R := 5;
        'F': R := 6;
        'G': R := 7;
        'H': R := 8;
        'I': R := 9;
        'J': R := 10;
    end;

    C := StrToInt(edtCol.Text);

    if (strgPrizePlay.Cells[C,R] <> '?') then
    begin
        ShowMessage('That block has already been played');
    end
    else
    begin
        if (arrPrizeGrid[R,C] > 0) then // won prize
        begin
            imgPrizePic.Picture.LoadFromFile(lstPrizes.Items[arrPrizeGrid[R,C]-1] + '.bmp');
            ShowMessage('Congratulations!! You won a ' + lstPrizes.Items[arrPrizeGrid[R,C]-1]);
            arrPrizeGrid[R,C] := 0;
            imgPrizePic.Refresh;
            strgPrizePlay.Cells[C,R] := 'W';
            Sleep(2000);
            imgPrizePic.Picture.LoadFromFile('qmark.bmp');
        end
        else
        begin
            strgPrizePlay.Cells[C,R] := 'X';
            imgPrizePic.Picture.LoadFromFile('noprize.bmp');
            imgPrizePic.Refresh;
            ShowMessage('Sjaaim - No Prize today (Better Luck Next Time)');
            Sleep(1500);
            imgPrizePic.Picture.LoadFromFile('qmark.bmp');
        end;
    end;

end;

end;

end;
//=====
procedure TfrmBonanzaQuestion.FormShow(Sender: TObject);
var
    R , C : Integer;
    L : char;
    placer : integer;
begin

```

```

// given code
strgPrizePlay.FixedCols := 1;
strgPrizePlay.FixedRows := 1;
strgPrizePlay.RowCount := 11;
strgPrizePlay.ColCount := 11;
strgPrizePlay.DefaultColWidth := 26;
strgPrizePlay.DefaultRowHeight := 26;
edtRow.Text := "";
edtCol.Text := "";
// code from here

// Fill the listbox with the prizes
lstPrizes.Items.LoadFromFile('Prizes.txt'); //1

// Write the code to add the headings to the stringgrid
// using a loop
// Fill the arrPrizeGrid elements with all 0's and set all the white cells
// (non fixed cells) of the stringgrid to '?'
L := 'A';
for R := 1 to 10 do //1
begin
    strgPrizePlay.Cells[0,R] := L; //1
    strgPrizePlay.Cells[R,0] := IntToStr(R); //1
    inc(L);
    for C := 1 to 10 do //1
        begin
            arrPrizeGrid[R,C] := 0; //1
            strgPrizePlay.Cells[C,R] := '?'; //1
        end;
    end;
end;

// Load picture

imgPrizePic.Picture.LoadFromFile('qmark.bmp'); //1

// write the code to randomly place the values 1 to 10
// in the arrPrizeGrid, ensure that the value appear only
// once and that all the values are placed

placer := 1;
Randomize; //1

while placer < 11 do //1
begin
    R := Random(10) + 1; //1
    C := Random(10) + 1;
    while (arrPrizeGrid[R,C] > 0) do //1
        begin
            R := Random(10) + 1; //1
            C := Random(10) + 1;
        end;
    end;
    arrPrizeGrid[R,C] := placer; //1
    //net om te sien of dit werk
    //strgPrizePlay.Cells[C,R] := '#';
    inc(placer); //1
end;

end;
//=====
end.

```
