



CL2005- Database Systems Lab

Mid Project Game – Windows Form (Visual Studio)

Instructor	Aliza Saeed
Semester	Spring 2022

FAST School of Computing & Emerging Science

Instructions:

- ✚ Before starting, firstly read/understand all task features.
 - ✚ You can implement this Game in **any language**, but use of **Windows Form Visual Studio** is mandatory.
 - ✚ Only Two Members per Group are allowed.
 - ✚ **Plagiarism will lead to negative marking.**
 - ✚ **Deadline== 6th March,2022 (Sunday)**
-

Carrom Game

Carrom or Karom is a game that has long been played throughout India and South East Asia but the game has become increasingly popular throughout much of the rest of the world during the last century. There are a huge number of variations in the rules even though an international regulatory body and several major national bodies exist - even these have rule variations depending upon the situation. Masters Games has based the following rules on those from the UK Carrom Club, tailoring them for simplicity where possible.

Your task is to implement this game in **Windows Form using any language** in Visual Studio. Your game should only have the following functionalities and **not anything more than that**. Adding unnecessary functionalities will result in marks deduction.

- A carrom board which will contain nine white/light pieces, nine black/dark pieces and one red colored "Queen".
- A striker ball colored "white" which will be used to strike the balls by the player.

Objective

Players take turns to play. A turn consists of one or more strikes. A player wins by pocketing all the pieces of their colored balls plus the queen. Queen must not be pocketed before having pocketed all your colored pieces (i.e., Player one must pocket all nine pieces of white balls first, before pocketing queen ball)

Striking

- For each strike, the player must position the striker within the baseline OR on one of the two circles at either end of the baseline.
- A striker within the baseline must touch both the front line and the rear line.
- The striker may not "cut the moon" - be placed partially within the baseline and partially within the circle.
- The player must flick the striker with one finger so that it crosses the front baseline - it is not permitted to flick backwards or horizontally.

- A piece that is on or behind the front baseline must not be struck by the striker until the striker has crossed the front baseline.

Basic rules

- First turn is given randomly to one of the two players.
- It doesn't matter which piece the striker hits first and it doesn't matter if the striker hits no pieces.
- Player retains the turn if it pockets his own piece(s).
- If the player pockets no pieces or commits a foul, the turn finishes.

Fouls

When a player commits a foul, **the turn comes to an end immediately.**

A foul is recorded in the following situations:

- The striker is pocketed.
- A player pockets an opponent's piece(s). Additionally, opponent pocketed piece will not be returned to the board and turn ends immediately after this, even if player had pocketed his own ball in the same turn.
- A player pockets the Queen, without having pocketed all his pieces first (in this case, Queen returns to its starting position on board as well after the turn). Moreover, since the player had pocketed the queen, one piece of the same player will be added to the board (if there already exists 9 pieces, then no piece will be added)

Submission Guidelines

1. Copy and paste all the relevant material (**Complete Game Project**) in a Zip file and name as **“FXX_XXXX_FXX_XXXX_Section”** (Replace the ‘X’ with your roll no. (Both Members)).
2. Submit the folder on **Google Classroom** before the deadline.
3. **No** submissions will be **accepted after the deadline.**
4. **Deadline== 4th March,2022 (Friday) till 10:00 PM**

GOOD LUCK ☺