

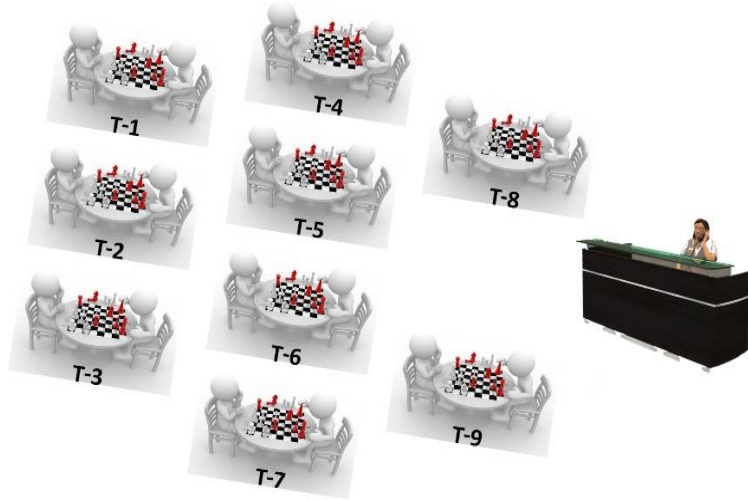
# Visual Programming

## Assignment 1

Due date: 8<sup>th</sup> October 2017

### C<sup>3</sup> (Chess Challenge Consortium)

C Cube (C<sup>3</sup>) is Chess Challenge Consortium where players reserve their tables for chess games with opponents or without opponents. In case of a player arrives without opponent, the manager on reception desk helps him to find the opponent. Game is played and results of the game is stored by the manager along with the information of players, table id and date time. There are total nine tables available at a time. In case all tables are busy, the player has to wait till the result of ongoing game is concluded. Your task is to design a system which will store the information of players, their reservations and results of the game they played with the opponent. Your system should have at least the following features:



1. System should allow user to register the information of player such as, Name CNIC. Only if player is not already registered.
2. In case of 2 players arrive to play, the table should be assigned immediately.
3. In case player single player is arrived, your system should reserve table for him, or should assigned already single player waiting for game.
4. In case 2 players arrive to play and table is not available then the reserved table of single player should be assigned to them for immediate start of game.
5. Result of the game should be store along with the table id, date and time. Result of game should be saved with player's statistics.
6. System should show the current status of all the tables.
7. System should be able to search a player's information by any mean along with total games he played and total wins/draw/lose.
8. System should store data in file(s).

**You are required to submit the following artifacts in assignment in printed form.**

1. UML class diagram, clearly showing the class name, attributes and functions. Among classes, clearly show the relationships with relationship name. Do not submit auto generated .NET class diagram.
2. Provide the complete source code.
3. Show the screenshots with sample transactions performed on system.
4. You have to upload source code to turnitin.com.
5. Class ID and Password for turnitin.com is already uploaded to piazza home page.

#### **Important**

1. Use the table number given in the image above.
2. Assignment 1 will be done on console.
3. Assignment 1 is base for next 3 assignments, so don't miss it.
4. Apply OOP concepts while writing code.
5. Your program should be user friendly.
6. Proper errors messages should be displayed.
7. Validate all inputs.
8. Deadline is 8.10.17, 11:59pm. No extension in deadline.

# Do it Yourself, Do not Cheat