

# Table Tennis Tournament

## 1. Class Match

- Captures match number
- Captures the set number
- Sets the match type(Singles or Doubles)
- Sets the entity Venue
- Captures the playing entities(Team or Player)
- Sets umpire(an employee who is not in any of the playing teams given that there are at least two teams.)
- Stores the score of teams individually
- Updates the winning score(2-1, etc.)
- Captures the winning entity(Team or Player)
- Captures entity Schedule
- Captures entity Pool
- Captures entity Venue

## 2. Class Venue

- Having the venue name
- Having the table number
- Returns entity Venue for respective Match

## 3. Class Employee

- Sets the employee details:
  - Employee ID
  - Name
  - Age
  - Email ID

#### 4. Class Player

- Extends entity Employee
- Captures team name
- Registers a player in tournament one time only

#### 5. Class Team

- Sets the team name
- Creates a list of players
- Captures the winning score

#### 6. Class PointsTable

- Captures entity Team
- Captures the list of entity (Team)
- Sorts list of team by respective scores
- Returns the list of points.

#### 7. Class Schedule

- Dependent on entity Pool
- Sets details of entity Match
- Captures the time and date

#### 8. Class ScoreBoard

- Captures the entity Schedule
- Generates scoreboard consisting scorecard of every match according to schedule

#### 9. Class Pool

- Captures the list of entity Teams
- Divide teams in different Pools
- Returns list of entity Teams in respective Pool

#### 10. Class TableTennisTournament

- Sets the tournament details:
  - Name of tournament
  - Year
  - Start and end date of respective tournament
  - entity Category
- Displays the following:
  - entity Scoreboard
  - entity Schedule
  - entity Points Table

#### 11. Class Category

- Captures the category

#### 12. Class Singles

- Extends entity Category
- Captures gender

#### 13. Class Doubles

- Extends entity Category
- Captures mixed Category
- Captures gender