

Assignment No -: 2

Purpose :- Understanding the implementation details of relationships among classes

*****BussinesLogicPackage*****

1) Address.java

```
package CCOEW;
```

```
public class Address {
    private int buildignNo;
    private String buildingName;
    private String streetName;
    private int pincode;

    public int getBuildignNo() {
        return buildignNo;
    }

    public void setBuildignNo(int buildignNo) {
        this.buildignNo = buildignNo;
    }

    public String getBuildingName() {
        return buildingName;
    }

    public void setBuildingName(String buildingName) {
        this.buildingName = buildingName;
    }

    public String getStreetName() {
        return streetName;
    }

    public void setStreetName(String streetName) {
        this.streetName = streetName;
    }

    public int getPincode() {
        return pincode;
    }

    public void setPincode(int pincode) {
        this.pincode = pincode;
    }

    @Override
    public String toString() {
        return "Address [buildignNo=" + buildignNo + ", buildingName="
            + buildingName + ", streetName=" + streetName + ", pincode="
            + pincode + "];";
    }
}
```

```
    }  
}
```

2)Coach.java

```
package CCOEW;
```

```
public class extends People{  
  
    private int level_of_accreditation ;  
    private int no_of_experience ;  
  
    public int getLevel_of_accreditation() {  
        return level_of_accreditation;  
    }  
    public void setLevel_of_accreditation(int level_of_accreditation) {  
        this.level_of_accreditation = level_of_accreditation;  
    }  
    public int getNo_of_experience() {  
        return no_of_experience;  
    }  
    public void setNo_of_experience(int no_of_experience) {  
        this.no_of_experience = no_of_experience;  
    }  
    @Override  
    public String toString() {  
        return "[level_of_accreditation=" + level_of_accreditation  
            + ", no_of_experience=" + no_of_experience + "];"  
    }  
  
}
```

3) Game.java

```
package CCOEW;
```

```
import java.util.ArrayList;
```

```
public class Game {  
    private int score ;  
    private Location location ; //should use Enum  
    private ArrayList<Team>setofteams ;  
  
    /*public Game(int score, String location) {  
        super();  
        this.score = score;  
        this.location = location;  
    }  
    */  
    public Game (int score, Location location,Team t1,Team t2){  
        super();  
        this.score = score;  
        this.location = location;  
        // set of team will depicted by using ArrayList  
        setofteams = new ArrayList<Team>();  
    }  
}
```

```

        setofteams.add(t1);
        setofteams.add(t2);
    }
    public int getScore() {
        return score;
    }

    public void setScore(int score) {
        this.score = score;
    }

    public Location getLocation() {
        return location;
    }

    public void setLocation(Location location) {
        this.location = location;
    }

    @Override
    public String toString() {
        return "Game [score=" + score + ", location=" + location + "]";
    }

    public void display() {
        System.out.println("Location : " + location + "\tScore : " + score);
        System.out.println("Teams : ");
        for(Team t:setofteams){
            System.out.println(t.getName());
            System.out.println(t.getRecord());
            System.out.println(t.getPlayerSet());
        }
        System.out.println("Score : " + score);
    }
}

```

4) HockeyLeague.java

```

package CCOEW;
import java.util.ArrayList;

public class HockeyLeague {

    private ArrayList<Team> Hsetofteams ;

    public HockeyLeague(Team t1,Team t2,Team t3,Team t4){
        super();
        Hsetofteams = new ArrayList<Team>();
        Hsetofteams.add(t1);
        Hsetofteams.add(t2);
        Hsetofteams.add(t3);
        Hsetofteams.add(t4);
    }
}

```

```

    }

    @Override
    public String toString() {
        return "HockeyLeague []";
    }

    public void display(){
        System.out.println("Teams in Hockey League :");
        for(Team t : Hsetofteams){
            System.out.println(t);
        }
    }
}

```

5) Location.java

package CCOEW;

```

public enum Location {
    PANAJIM,PUNE,DELHI,MUMBAI ;
}

```

6)People.java

package CCOEW;

```

public class People {
    private String name;
    private Address address ;

    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public Address getAddress() {
        return address;
    }
    public void setAddress(Address address) {
        this.address = address;
    }
    @Override
    public String toString() {
        return "[name=" + name + ", address=" + address + "]";
    }
    public void display(){
        System.out.println("People");
        System.out.println("Name="+getName());
        System.out.println("Address="+getAddress());
    }
}

```

7)Player.java

package CCOEW;

```
public class Player extends People {
    private int number ;
    private Position position ;

    public Player(){
        super();
    }
    public int getNumber() {
        return number;
    }
    public void setNumber(int number) {
        this.number = number;
    }
    public Position getPosition() {
        return position;
    }
    public void setPosition(Position position) {
        this.position = position;
    }
    @Override
    public String toString() {
        return "Player [number=" + number + ", position=" + position
            + ", Name =" + getName() + ", Address=" + getAddress()+"]";
    }
}
```

8)Position.java

package CCOEW;

```
public enum Position {
    goalie,fullbacks,goalkeeper;
}
```

9) Team.java

package CCOEW;

import java.util.HashSet;

```
public class Team {

    private String record;
    private String name;
    private HashSet<Player>playerSet ;
    private Coach coach ;

    public Team(String name, String record,HashSet<Player>playerSet,Coach coach) {
```

```

        super();
        this.name = name;
        this.record = record;
        this.playerSet = playerSet ;
        this.coach = coach;
    }

    public Coach getCoach() {
        return coach;
    }

    public void setCoach(Coach coach) {
        this.coach = coach;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public HashSet<Player> getPlayerSet() {
        return playerSet;
    }

    public void setPlayerSet(HashSet<Player> playerSet) {
        this.playerSet = playerSet;
    }

    public String getRecord() {
        return record;
    }

    public void setRecord(String record) {
        this.record = record;
    }
    @Override
    public String toString() {
        return "Name= "+name+", Record= " + record ;
    }

    public void display() {
        //System.out.println(getName());
        //System.out.println(getRecord());
        System.out.println("Name : "+name);
        System.out.println("Record : "+record);
        System.out.println("Coach : "+coach);
    }

```

```
}
```

```
*****Client Package*****
```

Test.java

```
package Client;
```

```
import java.util.HashSet;
```

```
import CCOEW.Address;
```

```
import CCOEW.Coach;
```

```
import CCOEW.Game;
```

```
import CCOEW.HockeyLeague;
```

```
import CCOEW.Location;
```

```
import CCOEW.Player;
```

```
import CCOEW.Position;
```

```
import CCOEW.Team;
```

```
public class Test {
```

```
    /**
```

```
     * @param args
```

```
     */
```

```
    public static void main(String[] args) {
```

```
        //Address
```

```
        Address add1 = new Address();
```

```
        add1.setBuildignNo(2);
```

```
        add1.setBuildingName("Aditya Garden");
```

```
        add1.setStreetName("Pune");
```

```
        add1.setPincode(411058);
```

```
        Address add2 = new Address();
```

```
        add2.setBuildignNo(3);
```

```
        add2.setBuildingName("Dipti Apartment");
```

```
        add2.setStreetName("Pune");
```

```
        add2.setPincode(411058);
```

```
        Address add3 = new Address();
```

```
        add3.setBuildignNo(3);
```

```
        add3.setBuildingName("Dipti Apartment");
```

```
        add3.setStreetName("Pune");
```

```
        add3.setPincode(411058);
```

```
        //Player
```

```
        Player player1=new Player( );
```

```
        player1.setNumber(1);
```

```
        player1.setPosition(Position.goalie);
```

```
        player1.setName("A");
```

```
        player1.setAddress(add1);
```

```
        Player player2=new Player( );
```

```
player2.setNumber(2);
player2.setPosition(Position.fullbacks);
player2.setName("B");
player2.setAddress(add2);
```

```
Player player3=new Player();
player3.setNumber(3);
player3.setName("C");
player3.setPosition(Position.fullbacks);
player3.setAddress(add3);
```

```
Player player4=new Player();
player4.setPosition(Position.goalkeeper);
player4.setNumber(4);
player4.setName("D");
player4.setAddress(add2);
```

```
Player player5=new Player();
player5.setNumber(5);
player5.setName("E");
player5.setPosition(Position.fullbacks);
player5.setAddress(add1);
```

```
Player player6=new Player();
player6.setNumber(6);
player6.setName("F");
player6.setPosition(Position.goalie);
player6.setAddress(add3);
```

```
//Player Set
HashSet<Player>setOfPlayer = new HashSet<Player>();
setOfPlayer.add(player1);
setOfPlayer.add(player2);
setOfPlayer.add(player3);
```

```
HashSet<Player>setOfPlayer2 = new HashSet<Player>();
setOfPlayer2.add(player4);
setOfPlayer2.add(player5);
setOfPlayer2.add(player6);
```

```
HashSet<Player>setOfPlayer3 = new HashSet<Player>();
setOfPlayer3.add(player4);
setOfPlayer3.add(player1);
setOfPlayer3.add(player5);
```

```
HashSet<Player>setOfPlayer4 = new HashSet<Player>();
setOfPlayer4.add(player6);
setOfPlayer4.add(player3);
setOfPlayer4.add(player2);
```

```
//Coach
```



```
Coach coach1 = new Coach();
coach1.setName("PQR");
coach1.setAddress(add3);
coach1.setLevel_of_accreditation(10);
coach1.setNo_of_experience(10);
```

```
Coach coach2 = new Coach();
coach2.setName("ABC");
coach2.setAddress(add1);
coach2.setLevel_of_accreditation(8);
coach2.setNo_of_experience(15);
```

```
Coach coach3 = new Coach();
coach3.setName("MNO");
coach3.setAddress(add2);
coach3.setLevel_of_accreditation(5);
coach3.setNo_of_experience(3);
```

```
Coach coach4 = new Coach();
coach4.setName("DEF");
coach4.setAddress(add1);
coach4.setLevel_of_accreditation(1);
coach4.setNo_of_experience(0);
```

```
//Team
```

```
Team team1 = new Team("team1", "ABC",setOfPlayer,coach1);
Team team2 = new Team("team2", "PQR",setOfPlayer2,coach2);
Team team3 = new Team("team3","MNO",setOfPlayer3,coach3);
Team team4 = new Team("team4","DEF",setOfPlayer4,coach4);
```

```
System.out.println("Teams : ");
team1.display();
System.out.println("");
team2.display();
System.out.println("");
team3.display();
System.out.println("");
team4.display();
System.out.println(" ");
```

```
//Hockey League
```

```
System.out.println("Hockey League");
HockeyLeague hk = new HockeyLeague(team1,team2,team3,team4);
hk.display();
System.out.println(" ");
System.out.println(" ");
```

```
//Game = 1 ; Team 1 && Team 2
```

```
System.out.println("Game 1");
Game game1 = new Game(100,Location.MUMBAI, team1, team2);
game1.display();
System.out.println("");
```

```
System.out.println(" ");
```

```
//Game = 2 ; Team 3 && Team 4
```

```
System.out.println("Game 2");
```

```
Game game2 = new Game(150,Location.PUNE, team3, team4);
```

```
game2.display();
```

```
}
```

```
}
```