**Soal Praktikum**

Dari apa yang sudah Anda buat pada Modul 1. Terapkan:

1. Terapkan Package pada project anda.

2. Menerapkan Relasi Antar Object (Minimal 3 relasi).

3. Menerapkan Inheritance(Pewarisan) pada project kalian.

4. Terapkan Enkapsulasi.

5. Terapkan Polimorphism.

**Langkah Pertama  
*1. Membuat Package***

**Source Code**

package Entity\_07223;

import java.util.Date;

public class Aldo07223\_PesertaEntity {

String nama,region,email,nohp;

Date TanggalLahir;

int indexucl;

int indexpes;

public Aldo07223\_PesertaEntity(String nama,String region,

String email,String nohp,Date tanggallahir,int indexucl){

this.nama=nama;

this.region=region;

this.email=email;

this.nohp=nohp;

this.TanggalLahir=tanggallahir;

this.indexucl=indexucl;

}

String getNama(){

return this.nama;

}

String getRegion(){

return this.region;

}

String getEmail(){

return this.email;

}

String getNoHp(){

return this.nohp;

}

Date getDate(){

return this.TanggalLahir;

}

int getIndexUCL(){

return indexucl;

}

}

package Entity\_07223;

public class Aldo07223\_UCLTeamEntity {

static String [] UCLTeam = {"Manchester United","PSG","RB Liepzig","Instanbul Basaksehir",

"Bayern Munchen","Sevilla","Real Madrid","Liverpool","Juventus","Zenit","Porto","Barcelona",

"Atletico Madrid","Manchester City","Shakhtar Donetsk","Dortmund","Chelsea","Ajax","Dynamo Kiev","FC Salzburg",

"Inter Milan","Olympiacos","Lazio","Krasnodar","Atlanta","Lokomotiv Moskva","Marseille","Club Brugge",

"Borussia Monchengladbach","Rennes","Ferencvaros"};

}

**Screenshot**

Masukkan hasil screenshot output program

**Analisa**

disini saya membuat package agar bisa menerapkan relasi dan menerapkan pewarisan

**Langkah Kedua**menerapkan relasi antar object

**Source Code**

package aldo07223;

import Entity\_07223.\*;

import java.text.SimpleDateFormat;

import java.util.ArrayList;

import java.util.Date;

import java.util.Scanner;

public class Aldo07223\_PES2021 {

public static ArrayList <Aldo07223\_PesertaEntity> datapeserta = new ArrayList();

public static Scanner input = new Scanner(System.in);

public static void main(String[] args) {

Aldo07223\_PES2021 program = new Aldo07223\_PES2021();

System.out.println("Selamat Datang Di UEFA Champions League PES 2021 Competition!!");

int pil;

int indexdata;

do{

System.out.println("1. Daftar");

System.out.println("2. Tampilkan Data");

System.out.println("3. Hapus");

System.out.println("4. Edit");

System.out.println("5. Exit");

System.out.print("Pilih = ");

pil = input.nextInt();

switch(pil){

case 1:

program.daftar();

break;

case 2:

program.view();

break;

case 3:

System.out.println("Hapus Data Ke = ");

indexdata=input.nextInt();

program.remove(indexdata);

break;

case 4:

System.out.println("Edit Data Ke = ");

indexdata=input.nextInt();

program.edit(indexdata);

}

}while(pil!=5);

}

void daftar(){

System.out.print("Input Nama = ");

String nama = input.next();

System.out.print("Input Region = ");

String region = input.next();

System.out.print("Input Email = ");

String email = input.next();

System.out.print("Input No HP = ");

String nohp = input.next();

System.out.print("Input Tgl Lahir (mm/dd/yyyy) = ");

Date tanggal = new Date(input.next());

for(int i=0;i<Aldo07223\_UCLTeamEntity.UCLTeam.length;i++){

System.out.println(i+". "+Aldo07223\_UCLTeamEntity.UCLTeam[i]);

}

System.out.print("Pilih Team = ");

int indexucl = input.nextInt();

datapeserta.add(new Aldo07223\_PesertaEntity(nama,region,email,nohp,tanggal,indexucl));

}

void view(){

for(int i=0;i<datapeserta.size();i++)

{

System.out.println("Data"+i);

System.out.println("Nama = "+datapeserta.get(i).getNama());

System.out.println("Region = "+datapeserta.get(i).getRegion());

System.out.println("E-Mail = "+datapeserta.get(i).getEmail());

System.out.println("No Telp = "+datapeserta.get(i).getNoHp());

System.out.println("Tanggal Lahir = "+new SimpleDateFormat("mm-dd-yyyy").

format(datapeserta.get(i).getDate()));

System.out.println("Team = "+Aldo07223\_UCLTeamEntity.

UCLTeam[datapeserta.get(i).indexucl]);

System.out.println(" ");

}

}

void remove(int indexdata){

datapeserta.remove(indexdata);

System.out.println("Data Berhasil Dihapus");

}

void edit(int indexdata){

System.out.print("Input Nama = ");

String nama = input.next();

System.out.print("Input Region = ");

String region = input.next();

System.out.print("Input Email = ");

String email = input.next();

System.out.print("Input No HP = ");

String nohp = input.next();

System.out.print("Input Tgl Lahir (mm/dd/yyyy) = ");

Date tanggal = new Date(input.next());

for(int i=0;i<Aldo07223\_UCLTeamEntity.UCLTeam.length;i++){

System.out.println(i+". "+Aldo07223\_UCLTeamEntity.UCLTeam[i]);

}

System.out.print("Pilih Team = ");

int indexucl = input.nextInt();

Aldo07223\_PesertaEntity update = new Aldo07223\_PesertaEntity(nama,region,email,nohp,

tanggal,indexucl); //jika data banyak

datapeserta.set(indexdata,update);//new Aldo07223\_PesertaEntity(nama,region,email,nohp,tanggal,indexucl)); Dibuat Data jika sedikit

}

}

**Screenshot**

Masukkan hasil screenshot output program

**Analisa**

dari package yang saya buat, lalu saya relasikan ke main class tersebut.