**Tugas Pertama**

Membuat program Create Read Update Delete dan FindbyValue dengan menggunakan ArrayList sebagai tempat penyimpanan data Object dari Class Entitasnya.

**Source Code**

Class DataPegawai.java

public class DataPegawai {

String nama, nip;

public DataPegawai(){

}

public DataPegawai(String name, String nip){

this.nama = name;

this.nip = nip;

}

public String getNama() {

return nama;

}

public String getNip() {

return nip;

}

public void setNama(String nama) {

this.nama = nama;

}

public void setNip(String nip) {

this.nip = nip;

}

public void data(){

System.out.println("Nama: "+nama);

System.out.println("NIP: "+nip);

System.out.println();

}

}

Class Pendataan.java

import java.util.ArrayList;

public class Pendataan {

static ArrayList<DataPegawai> data = new ArrayList<>();

public static void initial(){

DataPegawai pegawai = new DataPegawai("Noname", "null");

data.add(pegawai);

// data.add(new DataPegawai("Noname", "Null"));

}

public static void cekData(){

for (DataPegawai jumlah : data){

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

System.out.println("nama: "+jumlah.getNama());

System.out.println("NIP: "+jumlah.getNip());

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

}

}

public static void add(String nama, String nip){

DataPegawai nilaiData = new DataPegawai(nama, nip);

data.add(nilaiData);

}

public static DataPegawai search(String nip){

for(DataPegawai jumlah: data){

if(jumlah.getNip().equals(nip)){

return jumlah;

}

}

return null;

}

public static int index(DataPegawai nilaiData){

int indexData = data.indexOf(nilaiData);

return indexData;

}

public static void edit(String nip, String newName, String newNip){

DataPegawai searchpegawai = search(nip);

if (searchpegawai != null) {

int index = index(searchpegawai);

data.get(index).setNama(newName);

data.get(index).setNip(newNip);

System.out.println("Data diperbarui!!!");

}

else{

System.out.println("NIP tidak ditemukan!!!");

}

}

public static void delete(String nip){

DataPegawai searchPegawai = search(nip);

if(searchPegawai != null){

data.remove(searchPegawai);

}

}

}

Class Main.java

import java.util.Scanner;

public class Main {

Scanner input = new Scanner(System.in);

public static void main(String[] args) {

Pendataan.initial();

new Main().cetak();

}

public void cetak(){

String nama, nip, newName, newNip;

int pilihan;

do {

System.out.print("""

Pilihan Menu:

1. Lihat Data

2. Tambah Data

3. Edit Data

4. hapus Data

0. keluar

""");

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

pilihan = input.nextInt();

input.nextLine();

switch (pilihan){

case 1:

System.out.println();

Pendataan.cekData();

System.out.println();

break;

case 2:

System.out.println();

System.out.print("Nama: ");

nama = input.next();

System.out.print("NIP: ");

nip = input.next();

Pendataan.add(nama, nip);

System.out.println();

break;

case 3:

System.out.println();

System.out.print("Cari NIP: ");

nip = input.next();

System.out.print("Nama Pegawai Baru: ");

newName = input.next();

System.out.print("NIP Pegawai Baru: ");

newNip = input.next();

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

Pendataan.edit(nip, newName, newNip);

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

System.out.println();

break;

case 4:

System.out.println();

System.out.print("Cari NIP Pegawai yang Keluar: ");

nip = input.next();

Pendataan.delete(nip);

System.out.println();

break;

case 0:

System.out.println("Keluar Program...");

break;

default:

System.out.println("Menu tidak tersedia!!!");

break;

}

} while(pilihan != 0);

}

}

**Output Program**

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