PACKAGE

```java
package model;

public class userInstansi
extends Instansi {
    private String
departemen;

    public userInstansi(int
id, String username, String
password, String departemen
) {
        super
(id, username, password);
        this.departemen =
 departemen;
    }

    public String
getDepartemen() {
        return departemen;
    }

    @Override
    public void displayRole
() {
        System.out.println(
"Role: Instansi Pemerintah -
Departemen: "
 + departemen);
    }
}
```

```java
package model;

public class userAdmin
extends User {
    public userAdmin(int id
, String username, String
password) {
        super
(id, username, password, "u"
);
    }

    @Override
    public void displayRole
() {
        System.out.println(
"Role: u - Mengelola sistem"
);
    }
}
```

```java
package model;

public class User {
    private int id;
    private String username;
    private String password;
    private String role;

    public User(int id,
String username, String
password, String role) {
        this.id = id;
        this.username =
 username;
        this.password =
 password;
        this.role = role;
    }

    public int getId() {
        return id;
    }

    public String
getUsername() {
        return username;
    }

    public String
getPassword() {
        return password;
    }

    public String getRole
() {
        return role;
    }

    public void displayRole
() {
        System.out.println(
"Role: " + role);
    }
}
```

```java
package model;

public class
LaporanPrioritas extends
Laporan {
    private String prioritas
;

    public LaporanPrioritas(
int id, String deskripsi,
String status, String
kategori, int userId, String
 prioritas) {
        super
(id, deskripsi, status, kate
gori, userId);
        this.prioritas =
 prioritas;
    }

    public String
getPrioritas() {
        return prioritas;
    }

    @Override
    public void display() {
        super.display();
        System.out.println(
"Prioritas: " + prioritas);
    }
}
```

```java
package model;

public class Laporan {
    private int id;
    private String deskripsi;

    private String status;
    private String kategori;
    private int userId;

    public Laporan(int id,
String deskripsi, String
status, String kategori, int
 userId) {
        this.id = id;
        this.deskripsi =
 deskripsi;
        this.status =
 status;
        this.kategori =
 kategori;
        this.userId =
 userId;
    }

    public int getId() {
        return id;
    }

    public String
getDeskripsi() {
        return deskripsi;
    }

    public String getStatus
() {
        return status;
    }

    public void setStatus(
String status) {
        this.status =
 status;
    }
```

```java
package model;

public class Komentar {
    private int idLaporan;
    private int userId;
    private String isiKomentar;

    public Komentar(int idLaporan, int userId, String isiKomentar) {
        this.idLaporan = idLaporan;
        this.userId = userId;
        this.isiKomentar = isiKomentar;
    }

    public int getIdLaporan() {
        return idLaporan;
    }

    protected int getUserId() {
        return userId;
    }

    public String getIsiKomentar() {
        return isiKomentar;
    }

    public void display() {
        System.out.println("Laporan ID: " + idLaporan + " | User ID: " + userId + " | Komentar: " + isiKomentar);
    }
}
```

```java
package model;

public class Instansi
extends User {
    public Instansi(int id,
String username, String
password) {
        super
(id, username, password,
"instansi");
    }

    @Override
    public void displayRole
() {
        System.out.println(
"Role: Instansi - Menangani
laporan"
);
    }
}
```

APP

```java
    private static void
hapusLaporanSendiri() {
        System.out.print(
"Masukkan ID Laporan yang ak
an dihapus: "
);
        int id = getIntInput
();
        laporanList.removeIf
(laporan -> laporan.getId()
== id && laporan.getUserId
() == currentUser.getId());
        System.out.println(
"Laporan berhasil dihapus!"
);
    }

    private static void
tampilkanLaporanByKategori
() {
        System.out.print(
"Masukkan Kategori: ");
        String kategori =
scanner.nextLine();

        for (Laporan laporan
: laporanList) {
            if (laporan.
getKategori().
equalsIgnoreCase
(kategori)) {
                laporan.
display();
            }
        }
    }

    private static void
updateLaporanStatus() {
        System.out.print(
"Masukkan ID Laporan yang ak
an diubah: "
);
        int id = getIntInput
();
        System.out.print(
"Masukkan Status baru: ");
        String status =
scanner.nextLine();

        for (Laporan laporan
: laporanList) {
            if (laporan.
getId() == id) {
                laporan.
setStatus(status);
                System.out.
println(
"Status laporan berhasil diu
bah!"
);
                return;
            }
        }
        System.out.println(
"Laporan tidak ditemukan!");
    }

    private static void
tambahKomentar() {
        System.out.print(
"Masukkan ID Laporan yang di
komentari: "
);
        int idLaporan =
getIntInput();
        System.out.print(
"Masukkan Komentar: ");
        String isiKomentar =
scanner.nextLine();

        komentarList.add(new
Komentar(idLaporan,
currentUser.getId
(), isiKomentar));
        System.out.println(
"Komentar berhasil ditambahk
an!"
);
    }

    private static void
kelolaPengguna() {
        System.out.println(
"Daftar Pengguna: ");
        for (User user :
users) {
            System.out.
println(
                "ID: " +
user.getId() +
" | Username: " + user.
getUsername() + " | Role: "
+ user.getRole());
```

```java
    private static void
displayInstansiMenu() {
        System.out.println(
"1. Lihat Laporan Berdasarka
n Kategori"
);
        System.out.println(
"2. Ubah Status Laporan");
        System.out.println(
"3. Tambah Komentar");
        System.out.println(
"0. Logout");
        handleMenu(getIntInput
());
    }

    private static void
displayAdminMenu() {
        System.out.println(
"1. Kelola Pengguna");
        System.out.println(
"2. Kelola Laporan");
        System.out.println(
"3. Kelola Komentar");
        System.out.println(
"0. Logout");
        handleMenu(getIntInput
());
    }

    private static void
handleMenu(int pilihan) {
        if (pilihan == 0) {
            currentUser = null;
            mainMenu();
            return;
        }

        switch (currentUser.
getRole()) {
            case "warga" ->
handleWargaMenu(pilihan);
            case "instansi" ->
handleInstansiMenu(pilihan);
            case "admin" ->
handleAdminMenu(pilihan);
            default -> System.
out.println(
"Pilihan tidak valid!");
        }
    }

    private static void
handleWargaMenu(int pilihan
) {
        switch (pilihan) {
            case 1 ->
tambahLaporan();
            case 2 ->
tampilkanLaporan();
            case 3 ->
tambahKomentar();
            case 4 ->
tampilkanLaporanSendiri();
            case 5 ->
hapusLaporanSendiri();
            default -> System.
out.println(
"Pilihan tidak valid!");
        }
    }

    private static void
handleInstansiMenu(int
pilihan) {
        switch (pilihan) {
            case 1 ->
tampilkanLaporanByKategori
();
            case 2 ->
updateLaporanStatus();
            case 3 ->
tambahKomentar();
            default -> System.
out.println(
```

```java
import model.*;
import java.util.*;

public class App {
    private static ArrayList
<User> users = new ArrayList
<>();
    private static ArrayList
<Laporan> laporanList = new
ArrayList<>();
    private static ArrayList
<Komentar> komentarList =
new ArrayList<>();
    private static Scanner
scanner = new Scanner(System
.in);
    private static User
currentUser = null;

    public static void main(
String[] args) {
        seedUsers();
        mainMenu();
    }

    private static void
seedUsers() {
        users.add(new
userAdmin(1, "admin", "123"
));
        users.add(new
Instansi(2, "instansi",
"123"));
        users.add(new
userInstansi(3, "pemerintah"
, "123", "Kesehatan"));
        users.add(new User(4
, "warga", "123", "warga"));
    }

    private static void
mainMenu() {
        while (true) {
            System.out.
println("\nMenu Utama:");
            System.out.
println("1. Login");
            System.out.
println("2. Daftar");
            System.out.
println("0. Keluar");
            System.out.print
("Pilih menu: ");
            int pilihan =
getIntInput();
            switch
(pilihan) {
                case 1 ->
login();
                case 2 ->
register();
                case 0 -> {
                    System.
out.println(
"Terima kasih telah mengguna
kan aplikasi!"
);
                    System.
exit(0);
                }
                default ->
System.out.println(
"Pilihan tidak valid!");
            }
        }
    }

    private static void
register() {
        System.out.print(
"Masukkan Username: ");
        String username =
scanner.nextLine();
        System.out.print(
"Masukkan Password: ");
        String password =
scanner.nextLine();
        System.out.print(
"Masukkan Role (warga/instan
si/admin): "
);
        String role =
scanner.nextLine();
```