

ACTIVITY PERTEMUAN 1

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MATA PRAKTIKUM : RPL 2

Class adalah blueprint atau cetakan untuk membuat objek. Di dalam class, kita mendefinisikan data (disebut atribut) dan perilaku (disebut method) yang dimiliki oleh objek.

Komponen Utama Class

1. Nama Class

Ini adalah identitas dari class. Biasanya ditulis dengan huruf kapital di awal, misalnya Mahasiswa.

2. Atribut (Field)

Variabel yang menyimpan data milik objek. Contohnya: nama, umur, nilai.

3. Method (Fungsi)

Fungsi yang mendefinisikan aksi atau perilaku objek. Misalnya: tampilkanInfo(), hitungNilai().

4. Constructor

Method khusus yang dipanggil saat objek dibuat. Digunakan untuk menginisialisasi atribut.

5. Access Modifier

Kata kunci seperti public, private, dan protected yang menentukan siapa yang boleh mengakses bagian dari class.

```
public class Mahasiswa {  
    // Atribut  
    private String nama;  
    private int umur;
```

```
// Constructor
public Mahasiswa(String nama, int umur) {
    this.nama = nama;
    this.umur = umur;
}

// Method
public void tampilanInfo() {
    System.out.println("Nama: " + nama);
    System.out.println("Umur: " + umur + " tahun");
}

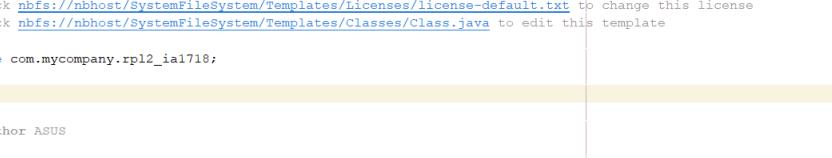
// Getter
public String getNama() {
    return nama;
}

// Setter
public void setNama(String nama) {
    this.nama = nama;
}
```



The screenshot shows the NetBeans IDE interface with the title bar "Rpl2_ia1718.java [-/A]". The menu bar includes "File", "Edit", "Tools", "View", "Project", "Source", "History", and "Help". Below the menu is a toolbar with icons for file operations like Open, Save, Find, and Run. The code editor displays the following Java code:

```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   */
4
5  package com.mycompany.rpl2_ia1718;
6
7  /**
8   *
9   * @author ASUS
10  */
11 public class Rpl2_ia1718 {
12
13     public static void main(String[] args) {
14         User user =new User();
15         user.login();
16         user.logout();
17
18         Buyer buyer =new Buyer();
19         buyer.login();
20         buyer.logout();
21
22         Seller seller = new Seller();
23         seller.addproduct("nasi goreng");
24
25         Admin admin =new Admin();
26         admin.login();
27         admin.logout();
28         admin.manageUser();
29     }
30 }
31
32
33
```



The screenshot shows the NetBeans IDE interface with the following details:

- Title Bar:** Rpl2_ia1718.java [-/A] x User.java [-/A] x
- Toolbar:** Source, History, Find, Replace, Copy, Paste, Cut, Delete, Undo, Redo, Open, Save, Save All, Build, Run, Stop, Help.
- Code Editor:** The code for the User.java class is displayed. The class has three private fields: nama, email, and npm. It contains two methods: login() which prints "User melakukan login", and logout() which prints "User melakukan logout". A license comment at the top of the file indicates it can be modified via nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt or nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java.

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class User {
    String nama;
    String email;
    String npm;
    public void login(){
        System.out.println("User melakukan login");
    }
    public void logout(){
        System.out.println("User melakukan logout");
    }
}
```

The image shows three separate Java code editors side-by-side, each with a title bar and tabs for multiple files.

Top Editor (Buyer.java):

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Buyer extends User{

    @Override
    public void login(){
        System.out.println("Buyer melakukan login");
    }
    @Override
    public void logout(){
        System.out.println("Buyer melakukan logout");
    }
}
```

Middle Editor (Seller.java):

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Seller extends User{
    private String product;

    public void addproduct(String productName){
        System.out.println("Seller menggunakan produk : " + productName);
        this.product = productName;
    }
}
```

Bottom Editor (Admin.java):

```
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
 */
package com.mycompany.rpl2_ia1718;

/**
 *
 * @author ASUS
 */
public class Admin extends User{

    public void login(){
        System.out.println("Admin melakukan login");
    }
    public void logout(){
        System.out.println("Admin melakukan logout");
    }
    public void manageUser(){
        System.out.println("Admin mengelola user");
    }
}
```

```
Output - Run (Rp12_ia1718) x

cd C:\Users\ASUS\Documents\NetBeansProjects\rp12_ia1718; "JAVA_HOME=C:\\Program Files\\Java\\jdk-23" cmd /c "\"C:\\Program Files\\NetBeans\\2
Scanning for projects...

-----< com.mycompany:rp12_ia1718 >-----
Building rp12_ia1718 1.0-SNAPSHOT
from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ rp12_ia1718 ---
skip non existing resourceDirectory C:\Users\ASUS\Documents\NetBeansProjects\rp12_ia1718\src\main\resources

--- compiler:3.11.0:compile (default-compile) @ rp12_ia1718 ---
Changes detected - recompiling the module! :source
- Compiling 5 source files with javac [debug target 23] to target\classes

--- exec:3.1.0:exec (default-cli) @ rp12_ia1718 ---
User melakukan login
User melakukan logout
Buyer melakukan login
Buyer melakukan logout
Seller menggunakan produk : nasi goreng
Admin melakukan login
Admin melakukan logout
- Admin mengelola user

BUILD SUCCESS
-----
Total time: 1.497 s
Finished at: 2025-10-25T14:46:28+07:00
-----
```