

LAPORAN HASIL PRAKTIKUM

JOBSHEET 4 RELASI CLASS

PEMROGRAMAN BERBASIS OBJEK



Disusun Oleh :

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TI-2E / 25

D-IV TEKNIK INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

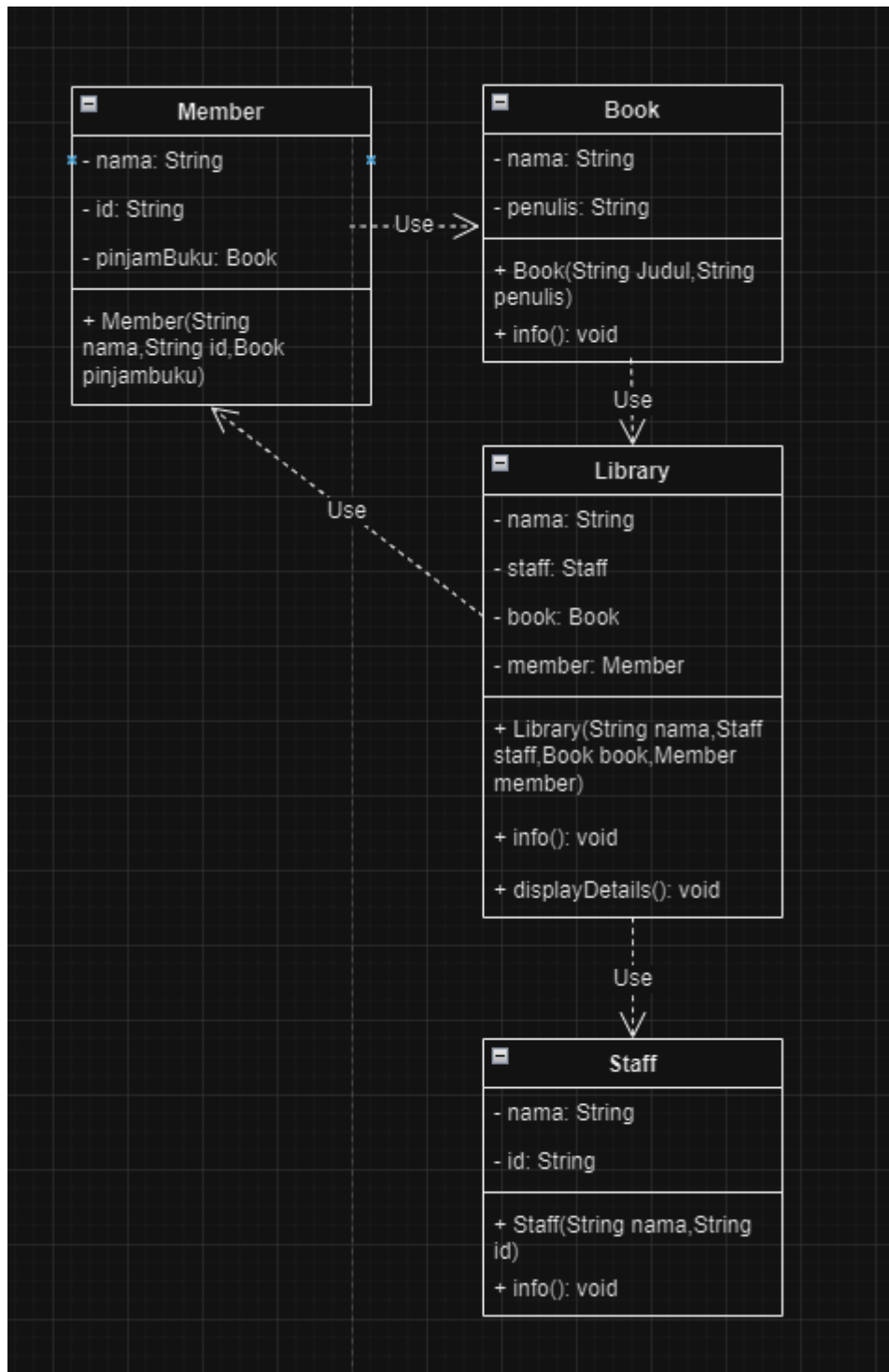
POLITEKNIK NEGERI MALANG

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IV. Tugas

Buatlah sebuah studi kasus, rancang dengan class diagram, kemudian implementasikan ke dalam program! Studi kasus harus mewakili relasi class dari percobaan-percobaan yang telah dilakukan pada materi ini, setidaknya melibatkan minimal 4 class (class yang berisi main tidak dihitung).

Studi kasus peminjaman perpustakaan



Book.java

```
public class Book {
    private String judul;
    private String penulis;

    public Book(String judul, String penulis) {
        this.judul = judul;
        this.penulis = penulis;
    }

    Tabnine | Edit | Test | Explain | Document | Ask
    public String info() {
        return "Book [judul: " + judul + ", penulis: " + penulis + "]";
    }
}
```

Staff.java

```
public class Staff {
    private String nama;
    private String id;

    public Staff(String nama, String id) {
        this.nama = nama;
        this.id = id;
    }

    Tabnine | Edit | Test | Explain | Document | Ask
    public String info() {
        return "Staff [Name: " + nama + ", ID: " + id + "]";
    }
}
```

Member.java

```
public class Member {
    private String nama;
    private String id;
    private Book pinjamBuku;

    public Member(String nama, String id, Book pinjamBuku) {
        this.nama = nama;
        this.id = id;
        this.pinjamBuku = pinjamBuku;
    }

    Tabnine | Edit | Test | Explain | Document | Ask
    public String info() {
        return "Member [nama: " + nama + ", ID: " + id + ", Borrowed Book: " + pinjamBuku.info() + "]";
    }
}
```

Library.java

```
public class Library {  
    private String name;  
    private Staff staff;  
    private Book book;  
    private Member member;  
  
    public Library(String name, Staff staff, Book book, Member member) {  
        this.name = name;  
        this.staff = staff;  
        this.book = book;  
        this.member = member;  
    }  
  
    public String info() {  
        return "Library: " + name;  
    }  
  
    public void displayDetails() {  
        System.out.println(info());  
        System.out.println(staff.info());  
        System.out.println(book.info());  
        System.out.println(member.info());  
    }  
}
```

Main.java

```
public class MainL {  
    Run | Debug | Tabnine | Edit | Test | Fix | Explain | Document | Ask  
    public static void main(String[] args) {  
        Book book1 = new Book(judul:"The Great Gatsby", penulis:"F. Scott Fitzgerald");  
  
        Member member1 = new Member(nama:"Alice", id:"M001", book1);  
  
        Staff staff = new Staff(nama:"John", id:"S001");  
  
        Library library = new Library(name:"Central Library", staff,book1,member1);  
  
        library.displayDetails();  
    }  
}
```

Output

```
Library: Central Library  
Staff [Name: John, ID: S001]  
Book [judul: The Great Gatsby, penulis: F. Scott Fitzgerald]  
Member [nama: Alice, ID: M001, Borrowed Book: Book [judul: The Great Gatsby, penulis: F. Scott Fitzgerald]]
```