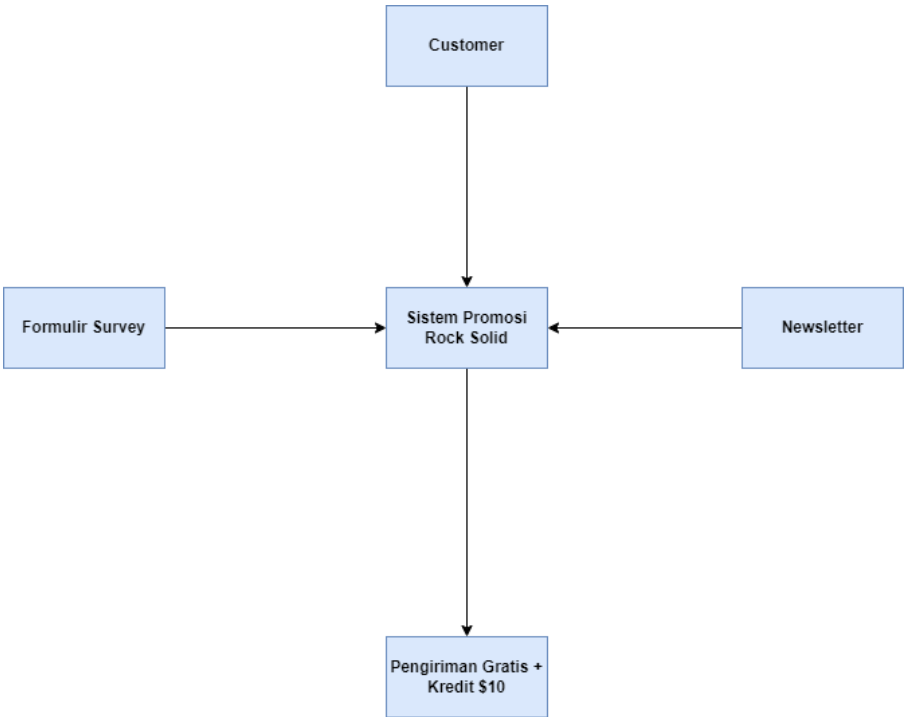|	
Nama	**: Shafira Aulia Balqis**
NIM	**: 12030123140365**
Mata Kuliah	**: Analisis dan Desain Sistem**
Kelas	**: C/Akuntansi**
Dosen Pengampu	**: Dr. Totok Dewayanto, SE., M.Si., Akt.**

Book of Shelly Cashman Series, Eleventh Edition "Systems Analysis and Design"

Chapter 5 "Data and Process Modelling"

Case in Point 5.2: Rock Solid Outfitters (PART 1). **Halaman 171**

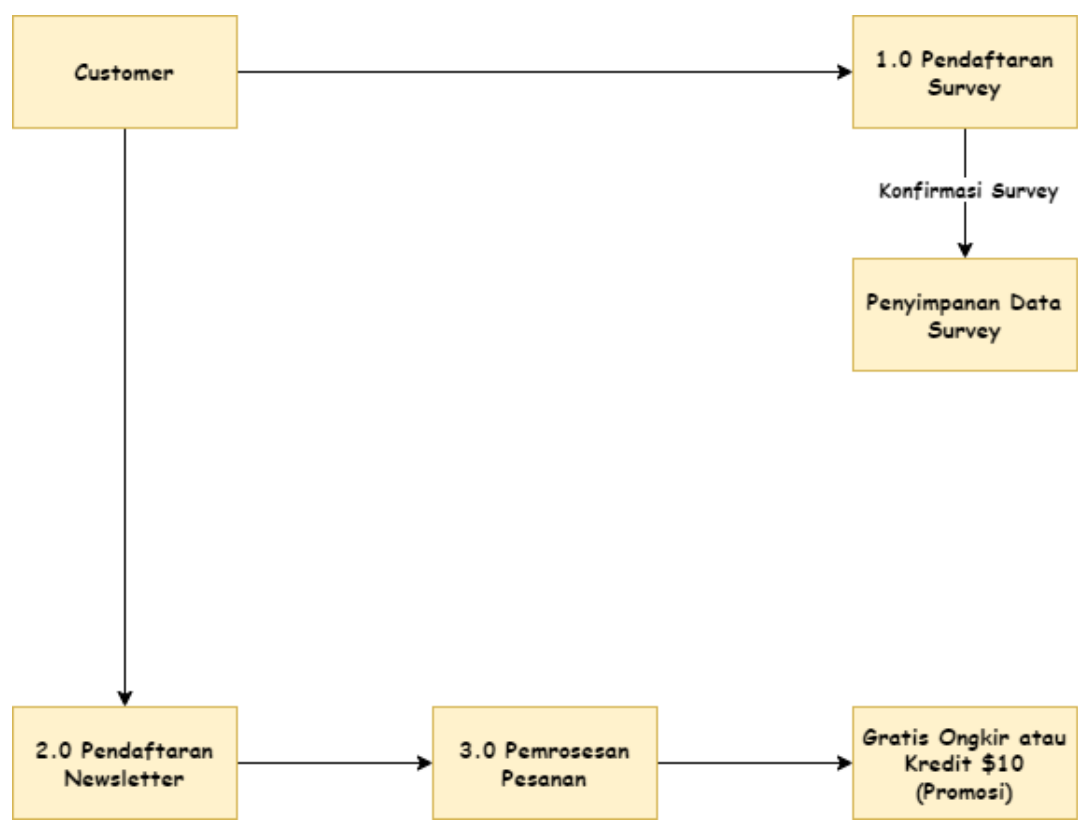CASE IN POINT 5.2: ROCK SOLID OUTFITTERS (PART 1)

Leah Jones is the IT manager at Rock Solid Outfitters, a medium-sized supplier of outdoor climbing and camping gear. Steve Allen, the marketing director, has asked Leah to develop a special web-based promotion. As Steve described it to Leah, Rock Solid will provide free shipping for any customer who either completes an online survey form or signs up for the Rock Solid online newsletter. Additionally, if a customer completes the survey and signs up for the newsletter, Rock Solid will provide a $10 merchandise credit for orders of $100 or more. Leah has asked you to develop a decision table that will reflect the promotional rules that a programmer will use. She wants you to show all possibilities, and then to simplify the results to eliminate any combinations that would be unrealistic or redundant.

Hasil analisis diagram berbantukan draw.io, ERDPlus, dan kode mermaid:
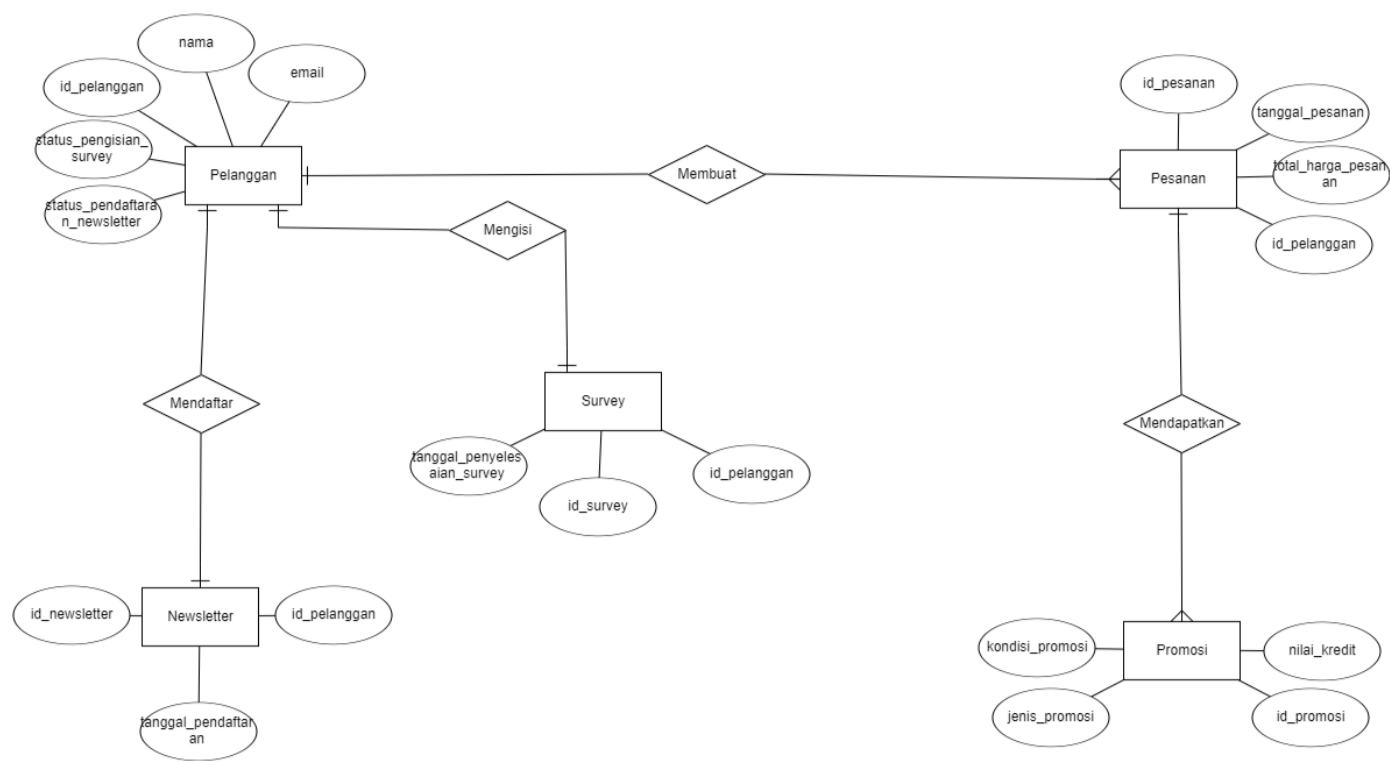
a. **DFD (aplikasi draw.io)**
   1. **DFD Level 0**

2. DFD Level 1

```
┌──────────────┐                                    ┌──────────────┐
│   Customer   │───────────────────────────────────▶│ 1.0 Pendaftaran │
│              │                                    │    Survey     │
└──────────────┘                                    └──────────────┘
       │                                                    │
       │                                            Konfirmasi Survey
       │                                                    │
       │                                                    ▼
       │                                            ┌──────────────┐
       │                                            │ Penyimpanan Data │
       │                                            │    Survey     │
       │                                            └──────────────┘
       │
       ▼
┌──────────────┐      ┌──────────────┐      ┌──────────────┐
│ 2.0 Pendaftaran │──▶│ 3.0 Pemrosesan │──▶│ Gratis Ongkir atau │
│   Newsletter  │      │    Pesanan    │      │   Kredit $10   │
│              │      │              │      │   (Promosi)   │
└──────────────┘      └──────────────┘      └──────────────┘
```

3. DFD Level 2

```
              ┌──────────────┐
              │   Customer   │
              └──────────────┘
                     │
            Informasi Survey & Newsletter
                     │
                     ▼
       ┌────────────────────────────────┐
       │ 3.1 Verifikasi Survey & Newsletter │
       └────────────────────────────────┘
                     │
              Status Verifikasi
                     │
                     ▼
         ┌──────────────────────┐
         │ 3.2 Cek Kelayakan Promosi │
         └──────────────────────┘
                     │
              Kelayakan Promosi
                     │
                     ▼
        ┌────────────────────────┐
        │ 3.3 Pengaplikasian Promosi │
        └────────────────────────┘
                     │
           Total Harga Setelah Promosi
                     │
                     ▼
      ┌────────────────────────────┐
      │ Total Harga Setelah Promosi │
      └────────────────────────────┘
```
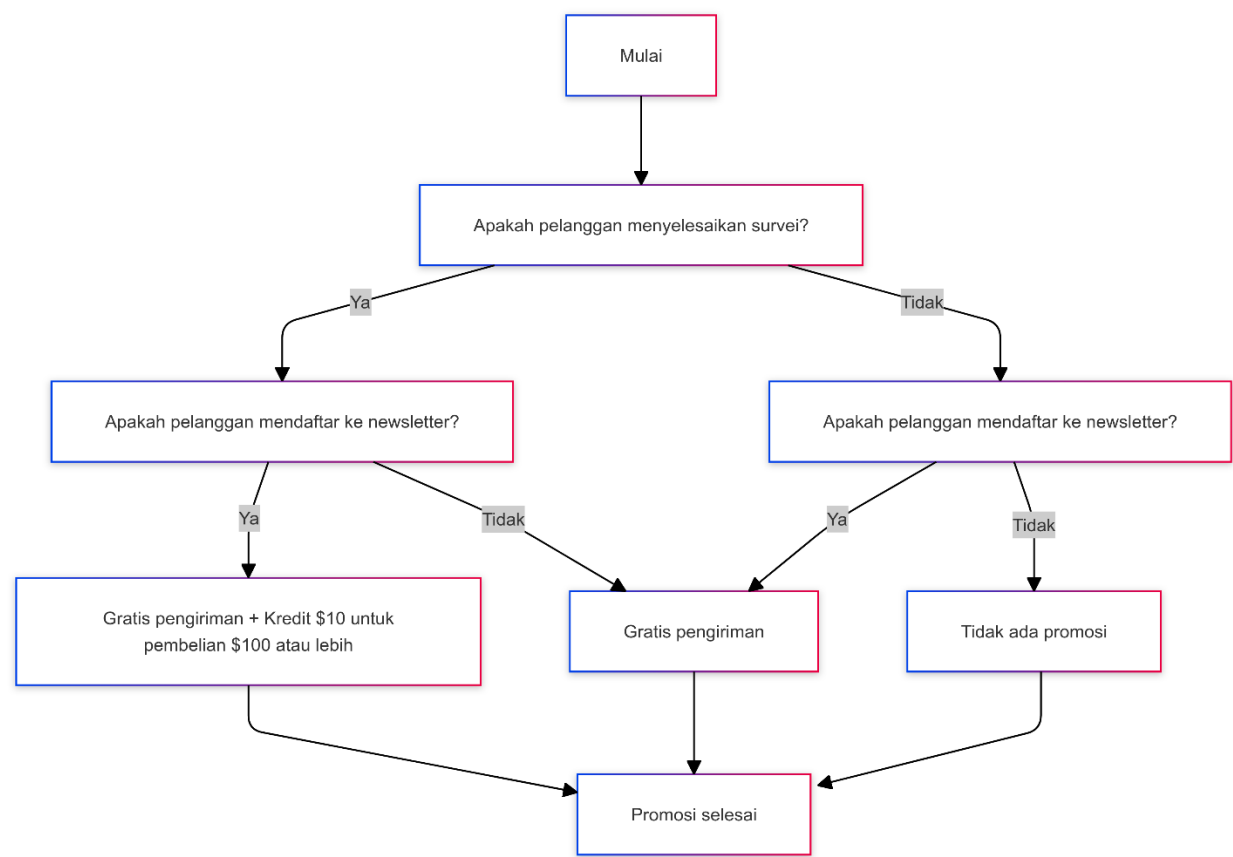
b. ERD (aplikasi ERDPlus)

c. UML Diagram (menggunakan kode mermaid)
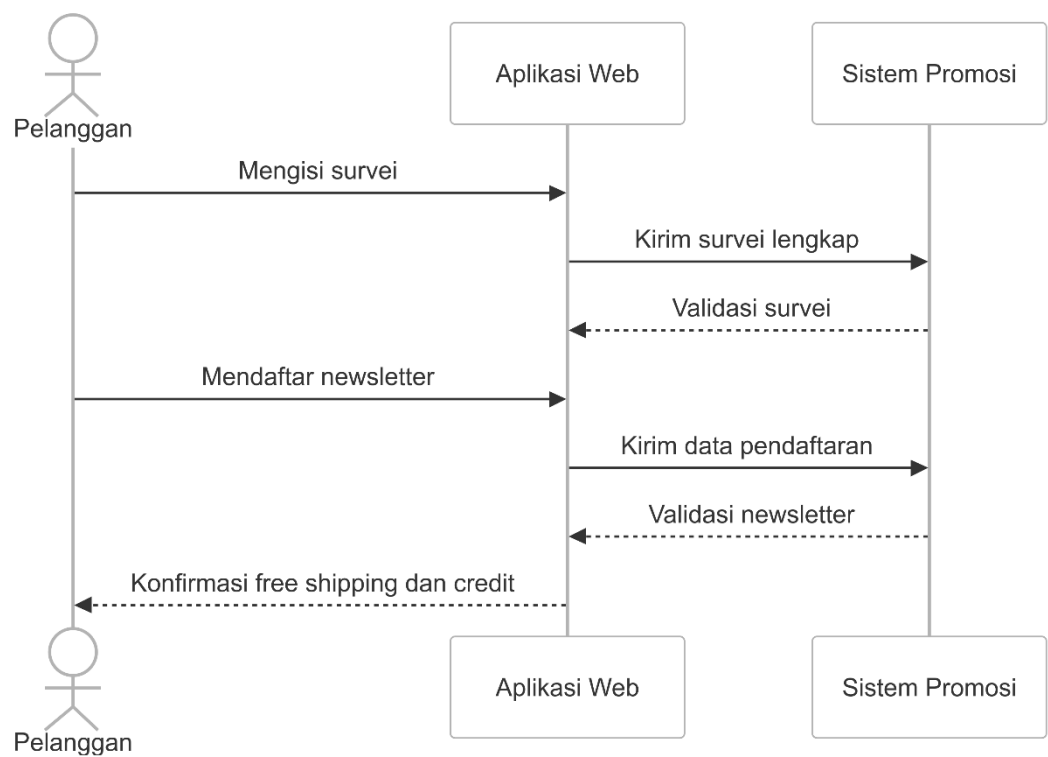   **1. Use Case Diagram**

2. Activity Diagram

3. Class Diagram

Pelanggan

+id: String
+nama: String
+email: String
+alamat: String

+isiSurvei() : : void
+daftarNewsletter() : : void

melakukan

Transaksi

+id: String
+totalOrder: Double
+freeShipping: Boolean
+merchandiseCredit: Double

+prosesOrder() : : void

menerima

terkait

Promosi

+nama: String
+deskripsi: String

+aktifkanFreeShipping() : : void
+aktifkanMerchandiseCredit() : : void
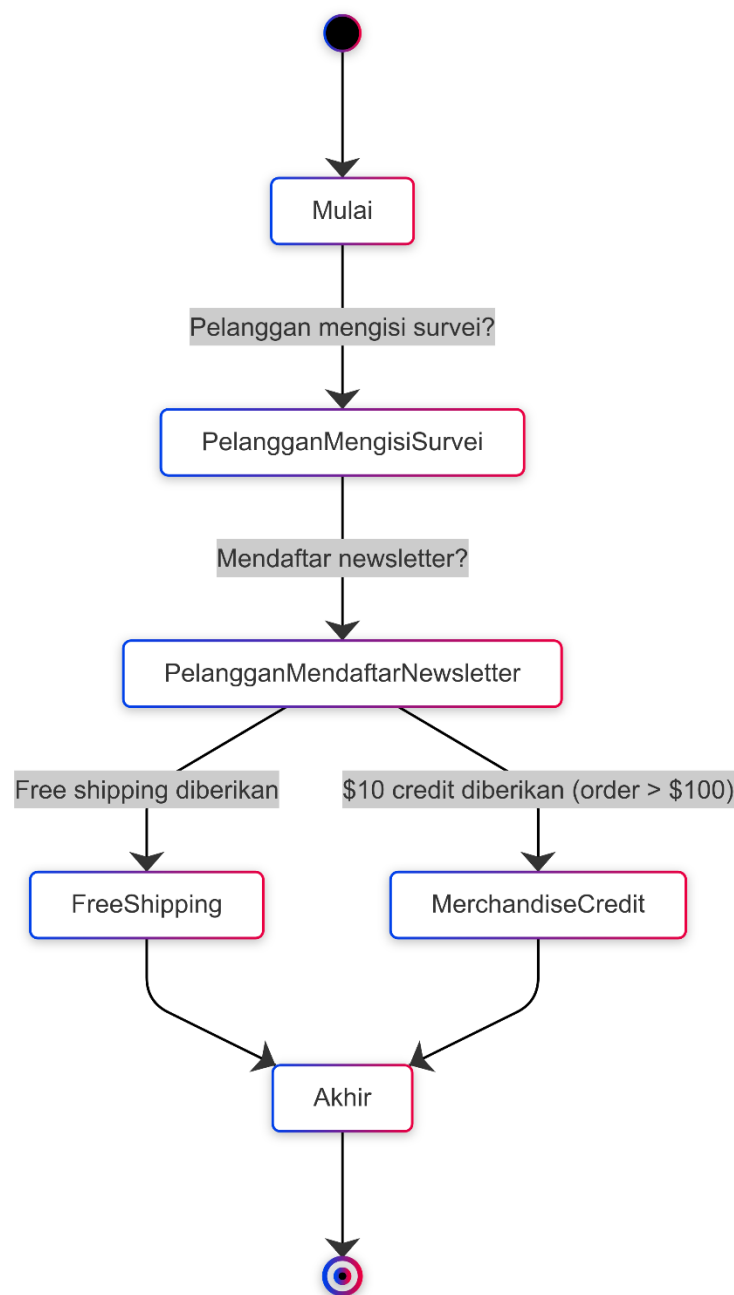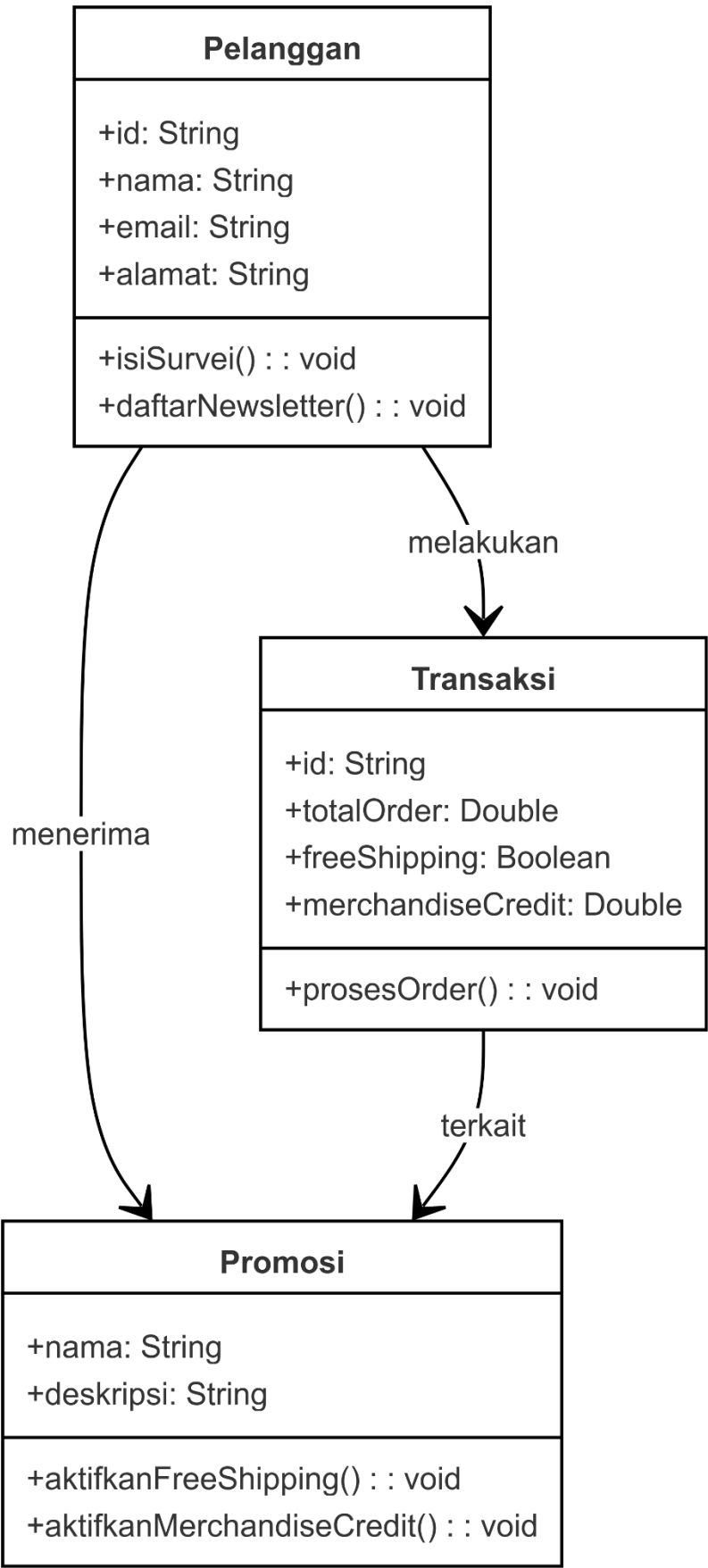
4. Sequence Diagram

5. State Diagram