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LATIHAN

- Buat sebuah studi kasus dengan minimal 3 class yang saling berasosiasi.
- Buat minimal 1 atribut bertipe ArrayList of objects
- Tentukan atribut dan method pada masing-masing class
- Gambarkan class diagramnya.

- **Study Case**

In the car service system, there are three main classes: mechanic, service, and car. Each car can have many services recorded in serviceHistory, which is a list of services that have been performed on the car. Each service contains information about the date of service, the mechanic who performed the service, and a description of the service. Mechanics have attributes like ID and name, and each service is associated with one mechanic who performed the service. When a car is serviced, the mechanic who performed the service is identified.

- **Class Descriptions**

1. Class mechanic

- Attribute :
 - id (String)
 - name (String)
- Method :
 - getId() = Get the mechanic's ID.
 - setId(String id) = Set the mechanic's ID.
 - getName() = Get the mechanic's name.
 - setName(String name) = Set the mechanic's name.
 - getInfo() = returns a string containing the information of the mechanic.

2. Class service

- Attribute :
 - date (LocalDate)
 - mechanic (mechanic)
 - description (String)
- Method :

- getDate() = Get the service date.
- setDate(LocalDate date) = Set the service date.
- getMechanic() = Get the mechanic.
- setMechanic(mechanic mechanic) = Set the mechanic.
- getDescription() = Get the service description.
- setDescription(String description) = Set the service description.
- getInfo() = returns a string with the details of the service, including the information of the mechanic.

3. Class car

- Attribute :
 - numberPlate (String)
 - owner (String)
 - serviceHistory (ArrayList<service>)
- Method :
 - getNumberPlate() = Get the car's number plate.
 - setNumberPlate(String numberPlate) = Set the car's number plate.
 - getOwner() = Get the car's owner.
 - setOwner(String owner) = Set the car's owner.
 - getInfo() = returns a string containing the details of the car and its service history.
 - addService(LocalDate date, mechanic mechanic, String description) = Adds a new service to the car's service history.

- Class Diagram

