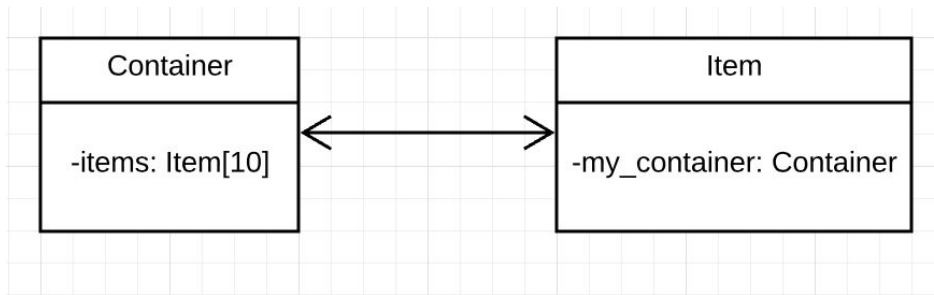


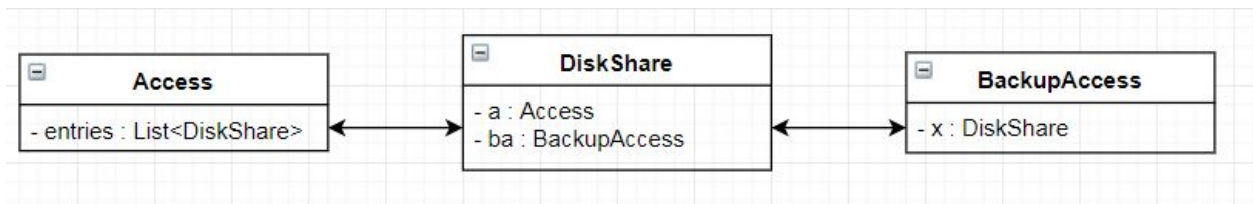
ESOF 322 HW 1

Group member: Shengnan Zhou, Kyle Rathman

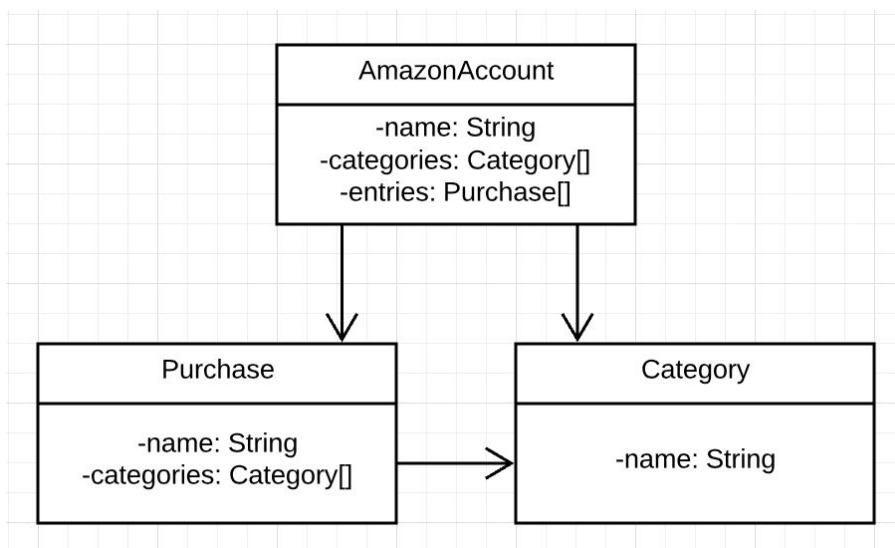
PartA_1)



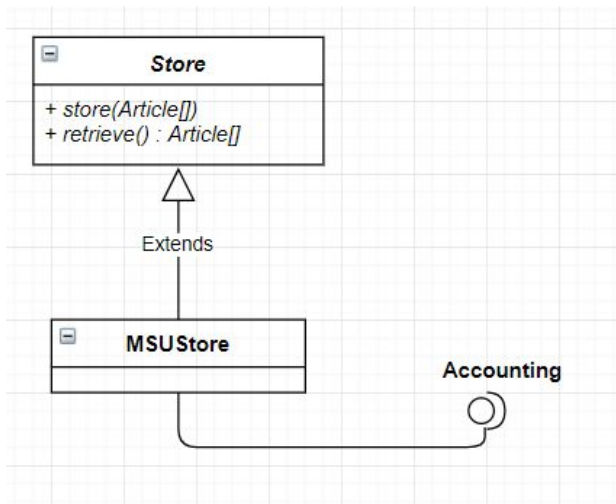
PartA_2)



PartA_3)



PartA_4)



PartB)

```
public class Company{
    public String name;
    public Address headquarters;
    public Vehicle[] vehicles;
    public Person[] people;
    public VehicleRentalService = new VehicleRentalService();
}
```

```
public class Truck extends Vehicle{
    public UnlimitedNatural weight;
}
```

```
public class Car extends Vehicle{
    public CarKind kind;
    public UnlimitedNatural noSeats;
}
```

```
public class Motorbike extends Vehicle{
    public MbKind kind;
    public UnlimitedNatural cylinderCap;
}
```

```
public abstract class Vehicle implements Rentable{
    public UnlimitedNatural power;
    public String manufacturer;
    public String regNo;
}
```

```

        public void rent(){ ... }
    }

    public interface Rentable{
        public void rent();
    }

    public class abstract Person{
        public String name;
        public String email;
        public Address address;
    }

    public class Address{
        public String street;
        public String postalCode;
        public String city;
    }

    public abstract class Service{
        public Customer customer;
    }

    public class VehicleRentalService extends Service{
        public Vehicle vehicle;
        public void offerCar(){ ... }
        public void offerMotorbike(){ ... }
        public void offerTruck(){ ... }
    }

    public class BankAccount{
        public UnlimitedNatural number;
        public String depositor;
        public String bank;
    }

    public class Customer extends Person{
        public BankAccount = new BankAccount();
    }

    public class Employee extends Person{ }

    public class Subcontractor extends Employee extends Customer{ }

```