

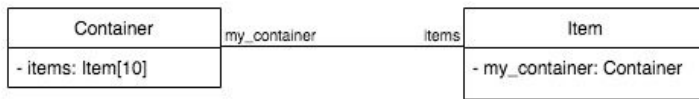
## Homework #1

Michael Utt and Forest Edwards

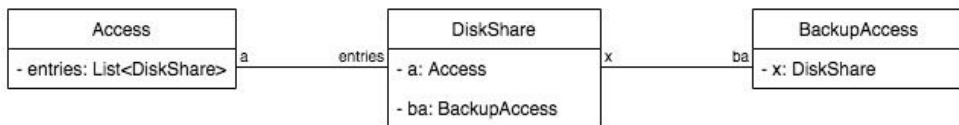
ESOF 322

### Part A

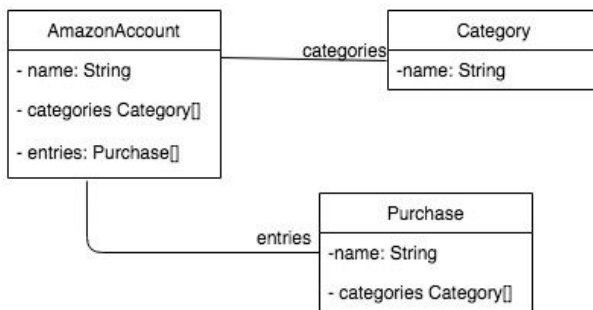
1



2



3



4



### Part B

```
public class Company {
    public string name;
    public Address headquarters;
    public Truck[] truck;
    public Car[] car;
    public Motorbike[] motorbike;
    public VehicleRentalService[] service;
    public Customer[] customer;
    public Employee[] employee;
```

```

}
public interface IRentable {
    ...
}
public abstract class Vehicle implements IRentable {
    ...
}
public class Truck extends Vehicle {
    public UnlimitedNatural weight;
    public UnlimitedNatural power;
    public String manufacturer;
    public String regNo;
}
public class Car extends Vehicle {
    public CarKind kind;
    public UnlimitedNatural noSeats;
    public UnlimitedNatural power;
    public String manufacturer;
    public String regNo;
}
public class Motorcycle extends Vehicle {
    public MbKind kind;
    public UnlimitedNatural cylinderCap;
    public UnlimitedNatural power;
    public String manufacturer;
    public String regNo;
}
Public abstract class Service {
    public Customer customer;
}
public class VehicleRentalService extends Service {
    public Vehicle vehicle;
    public void offerCar() { ... }
    public void offerMotorbike() { ... }
    public void offerTruct() { ... }
}
Public abstract class Person {
    Public String name;
    Public String email;
}

```

```
        Public String address;
    }
    Public class Address {
        Public String street;
        Public String postalCode;
        Public String city;
    }
    Public class Employee extends Person {
        ...
    }
    Public class Customer extends Person {
        Public BankAccount bankAccount;
    }
    Public class Subcontractor extends Employee, Customer {
        ...
    }
    Public Class BankAccount {
        Public UnlimitedNatural number;
        Public String depositor;
        Public String bank;
    }
```