ESOF 322: Software Engineering I **DUE Date: September 03, 2020**

Instructions:

- Do all exercises
- Clearly print your name in the first page of your assignment
- No hand-written answers allowed
- Absolutely no late assignments
- Your assignment should be turned in to D2L

Exercises Part A (15 pts)

For each of the following (pseudo) code snippets provide the UML **class** diagram.

1. (**2pts**)

```
public class Container {
        private Item [10] items;
}
public class Item {
        private Container my_container;
}
```

2. (**3pts**)

```
public class Access {
        private List<DiskShare> entries;
}
public class BackupAccess {
        private DiskShare x;
}
public class DiskShare {
        private Access a;
        private BackupAccess ba;
}
```

3. **(5pts)**

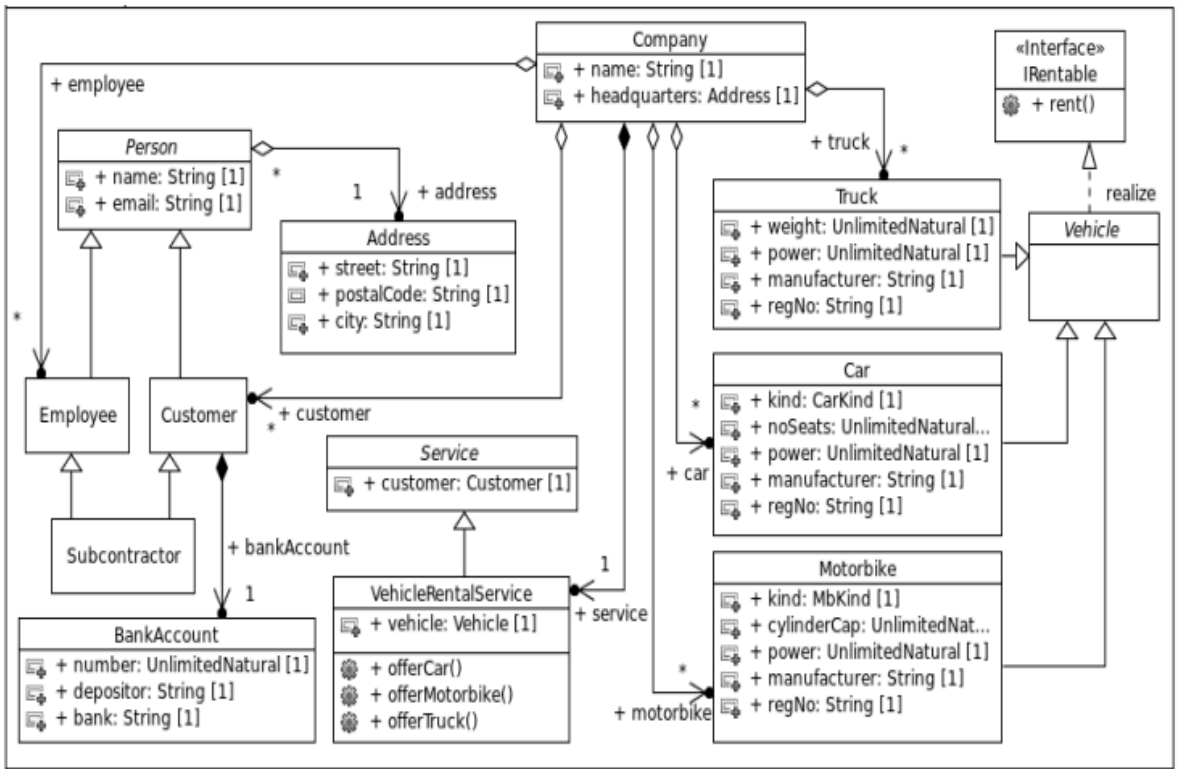
```
public class AmazonAccount{
        private string name;
        private Category[] categories;
        private Purchase[] entries;
}
public class Category {
        private string name;
}
public class Purchase{
        private string name;
        private Category[] categories;
}
```

4. **public** abstract class Store { (**5pts**)

```
        public abstract void store(Article[] articles);
        public abstract Article[] retrieve();
}
public interface Accounting {
    …
}
public class MSUStore extends Store implements Accounting{
        public void store(Article[] articles) { Book b = new Book(); // other code …. }
        public Article[] retrieve() { … }
}
```

Exerciss Part B (15 pts)

Write **pseudo code** to describe the following UML class diagram:



Note: Different UML tools may have slight variations in notation. In this diagram, you may ignore the small filled circle at the end of arrow heads. You may also ignore the small icons next to attributes and methods.