



CS544 EA

Hibernate

Association: ManyToMany

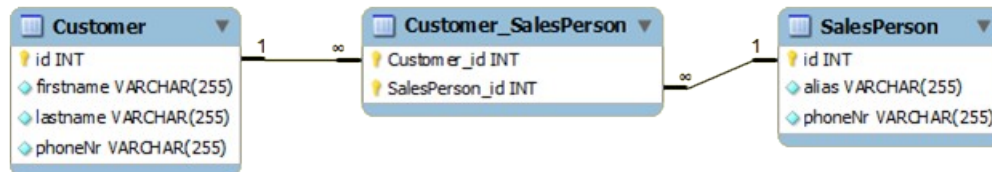
Uni Directional ManyToMany

- **@ManyToMany** associations can only be implemented with a JoinTable

```
@Entity
public class Customer {
    @Id
    @GeneratedValue
    private Long id;
    private String firstName;
    private String lastName;
    @ManyToMany
    private List<SalesPerson> salesPeople
        = new ArrayList<>();
    ...
}
```

```
@Entity
public class SalesPerson {
    @Id
    @GeneratedValue
    private Long id;
    private String alias;
    private String phoneNr;
    ...
}
```

Optionally add @JoinTable
to specify name of table
and / or column names



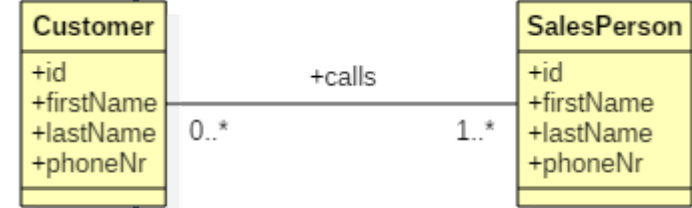
Bi-Directional ManyToMany

- **Choose** which side specifies **mappedBy**
 - Business may find one side more important (owner)

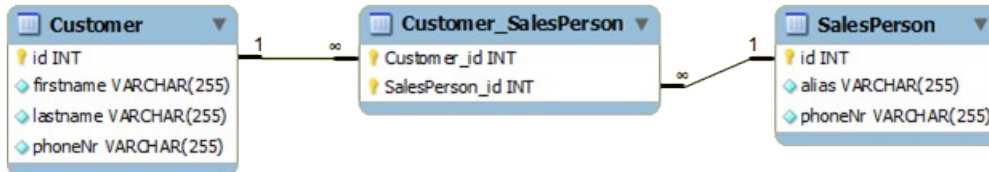
```
@Entity
public class Customer {
    @Id
    @GeneratedValue
    private Long id;
    private String firstName;
    private String lastName;
    @ManyToMany(mappedBy="customers")
    private List<SalesPerson> salesPeople
        = new ArrayList<>();

    ...
}
```

```
@Entity
public class SalesPerson {
    @Id
    @GeneratedValue
    private Long id;
    private String alias;
    private String phoneNr;
    @ManyToMany
    private List<Customer> customers
        = new ArrayList<>();
}
```

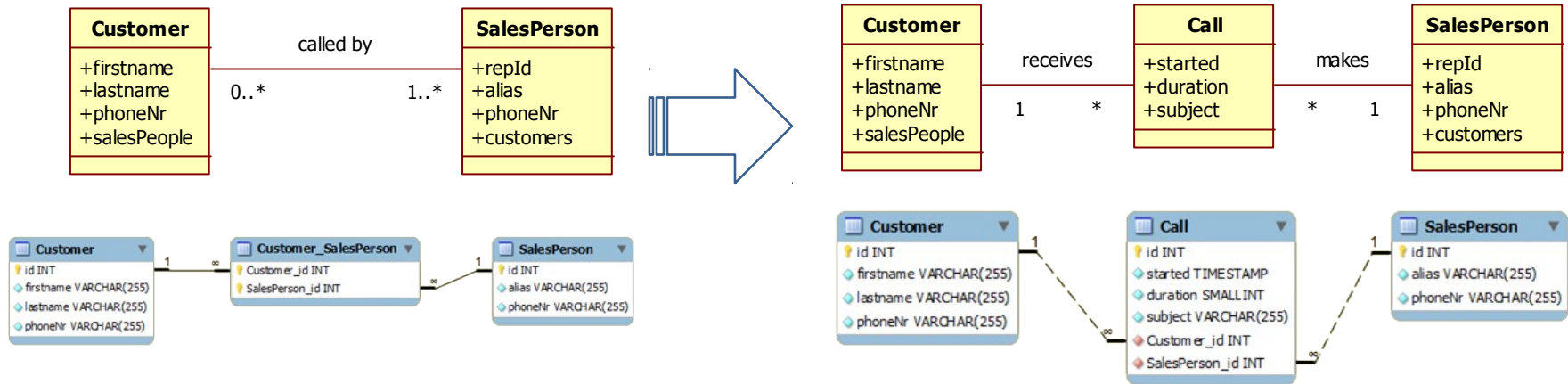


Both specify @ManyToMany
The owning side can also
specify @JoinTable to give names



Reconsider

- During Domain Analysis **consider changing** ManyToMany



- ManyToMany are often interesting connections
 - Maybe you want to keep data on how / what connected
 - Turn JoinTable into an entity