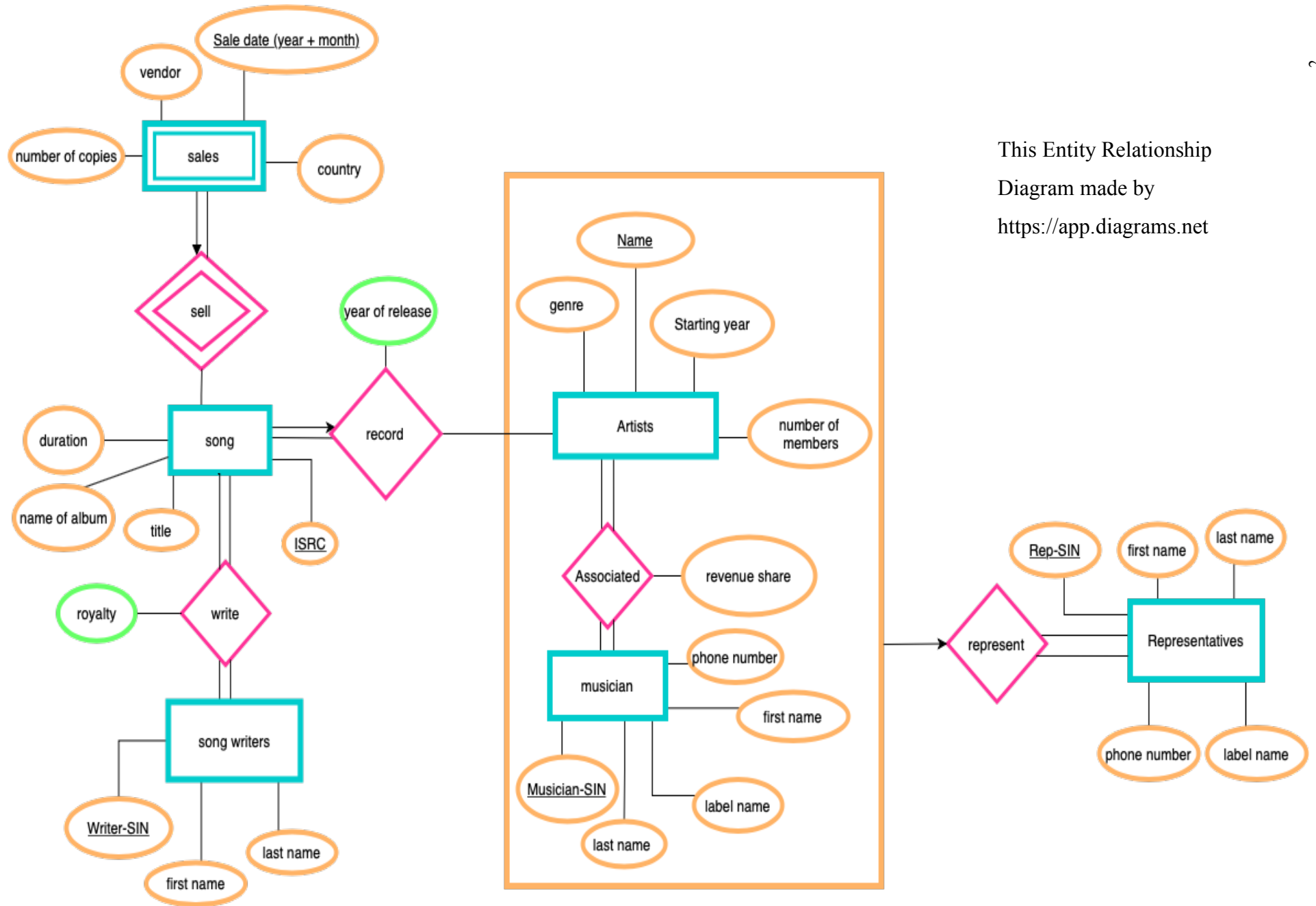


CMPT 354 Assignment 1

Junchen Li

301385486

2021/6/5



This Entity Relationship
Diagram made by
<https://app.diagrams.net>

2.

a)



A PK	B PK
John	Toronto
Alice	Moscow
Zhang	Buenos Aires
Farah	Nairobi

B can be associated with at most one A

Every A must R by at least one B (total parti)

A can be associated with at most one B

- All the entities in A are participate in R.
- There are entities from B that do not participate in R (Kuala Lumpur)
- Every entity in A can be associated with at most one entity in B
- Every entity in B can be associated with at most one entity in A

b)



A PK	B PK
John	Toronto
Alice	Moscow
Zhang	Buenos Aires
Farah	Kuala Lumpur
John	Nairobi

Every b must R by at least one a

B only can be associated with one A

Every A must R by at least one B

- All the entities in A are participate in R.
- All the entities in B are participate in R.
- Some entities from A participate in more than one relationship (John)
- Every entity in B can be associated with at most one entity in A

c)



A PK	B PK
John	Toronto
Alice	Moscow
Zhang	Buenos Aires
Zhang	Kuala Lumpur
Alice	Nairobi
John	Toronto

Every B must R by at least one A

A can be associated with any number of B

(No constraint relation)

- There are entities from A that do not participate in R (Farah)
- All the entities in B are participate in R.
- Some entities from A participate in more than one relationship (John, Alice, Zhang)
- Some entities from B participate in more than one relationship (Toronto)