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ID: 14927

Programme: BS (SE)

Section: B

Data Base

Answer

Candidate Key:-

Candidate Key

is a set of attributes that uniquely identify tuples in a table.

Candidate Key is a super key with no repeated key to

super attributes. The primary key should be selected from the

candidate keys. Every table must

have at least a single candidate key. A table can have multiple

candidate keys but only a single primary key

Properties of Candidate Key:-

- It must contain unique values
- Candidate key may have multiple attributes

Example:

in the given table Stud
ID Cell are Candidate Key
which helps use to identify
the Student record in the table

Candidate Key

ID	Name	Semester	Department	Cell
1	Sania	1	CS	0333342
2	Romana	1	CS	033353...
3	Ali	3	CS	03156127
4	Ahmad	3	CS	03455168

Question No 1

Part No 2

Answer:

Data Redundancy \Rightarrow

Data redundancy is the repetition or superfluity of data. Data redundancy is a common issue in computer data storage and database systems. Data redundancy in ~~table~~ definition. Data redundancy in database definition. Data redundancy in database means that some data fields are repeated in the database.

Data Integrity \Rightarrow

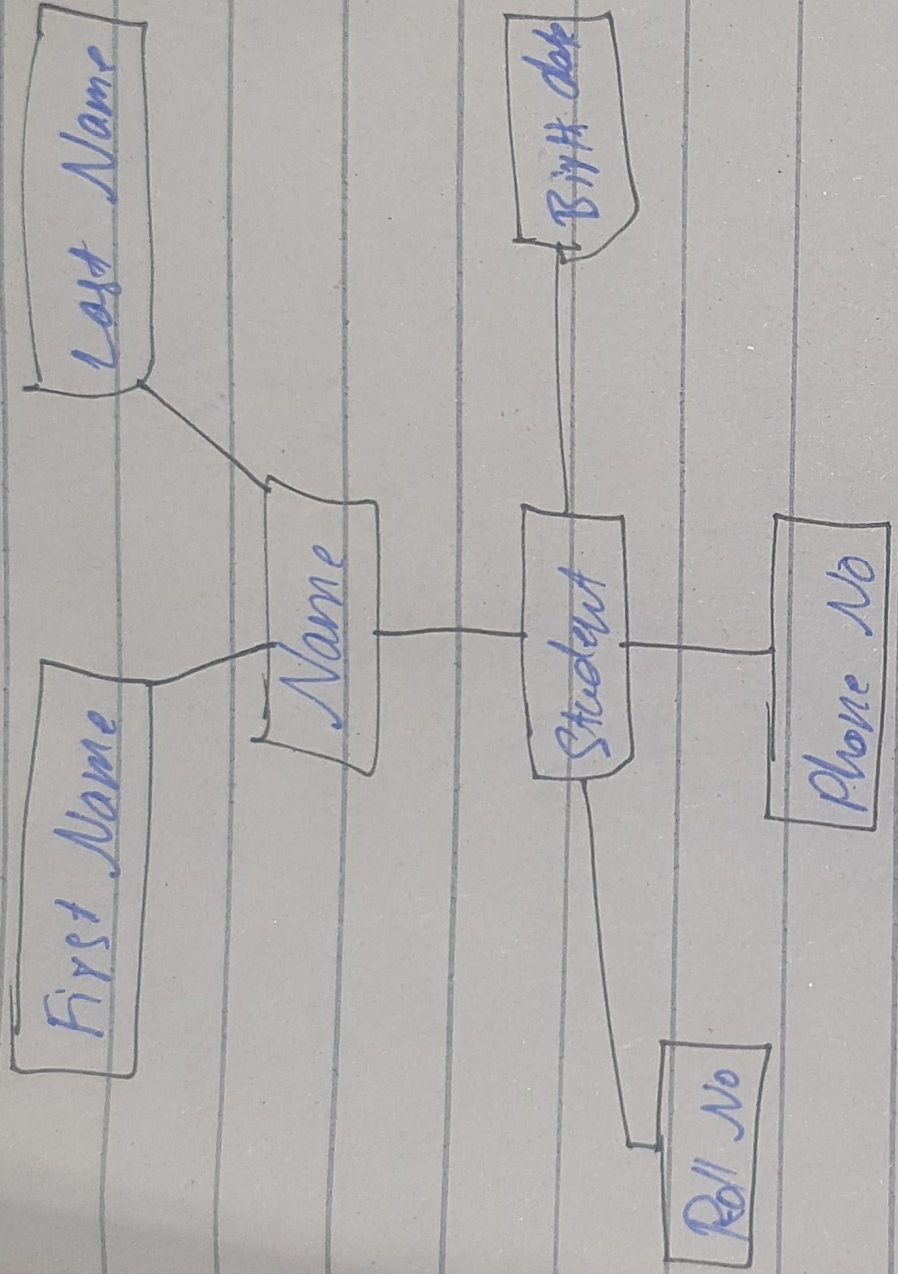
Data integrity is the maintenance of the assurance of the accuracy and consistency of data over its entire life cycle and is a critical aspect to the design implementation and usage of any system which

Question No 1

Part No 3

Answer:

Solution :-)



The multivalued Composite attribute is represented as in the above Table we have taken a student Name id and Section it is an example of multivalued.

Question No 1

Part No 4

Answer:

Low Maintenance DataBase:

Developers of data base are busy in maintenance to avoid errors bugs defensive coding automated test to design the data base with extensive constraints.

Maintenance Task =

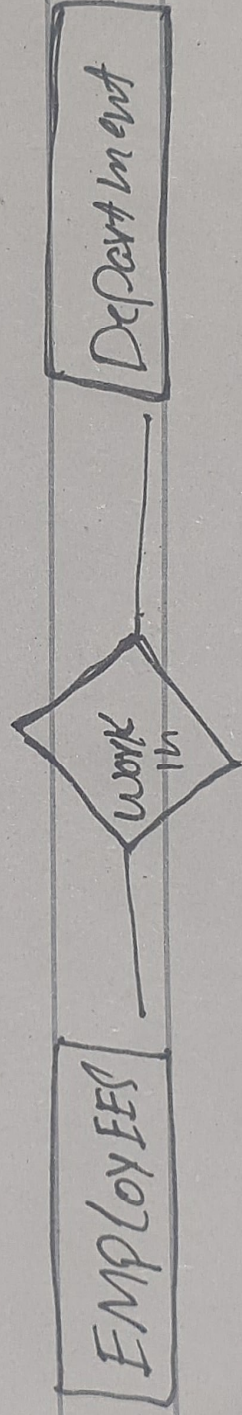
It can cost more to maintain as compared to software application developers may be forced to spend considerable time on maintenance tasks such as:

- fixing bugs and developing the fixes.
- Changing the functionality because the requirements have changed.
- Cleaning up the data.

Answer:

Mandatory one :-

Relationship exists zero or one instance of entity A can be associated with zero or one instance of entity B, and zero or one instance of entity B can be associated with the zero or one instance of entity A.



Mandatory Many:

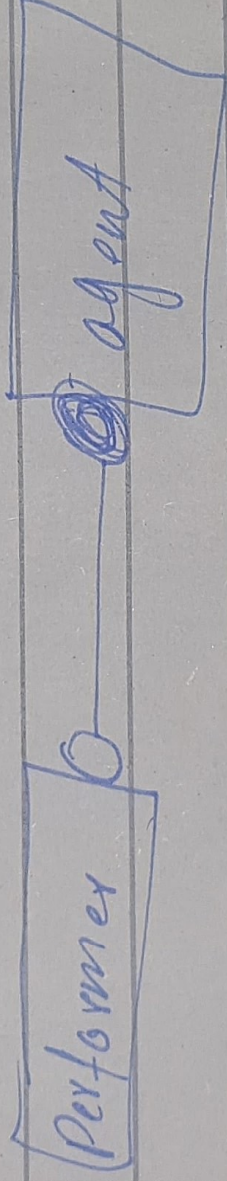
in Relationship database design a one to many (1:N) relationship exists when for one instance of entity A, there exists zero, one or many

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Optional one: =)

A member of

Staff does not have to be placed
in a department but all department
must have at least one member
of Staff.



Part No 06

Answer:

A multivalued attribute can have more than one value at a time for an attribute.

For Example

The Skill of Surgeon is a multivalued attribute since a Surgeon can have more than one skill. Another common example is the address field which can have multiple values like Zip code, Street address, Store etc.

Answer:

You set up a database company art base that builds a product for art galleries. The core of the products is a database with a schema that captures all the information that galleries need to maintain.

- Galleries keep information about artists their name (which are unique) birth place, age and style of art.

- For each prices of network the artist the year it was made its unique fills its type of arts (eg painting, lithograph, sculpture, photograph) and its price must be store.

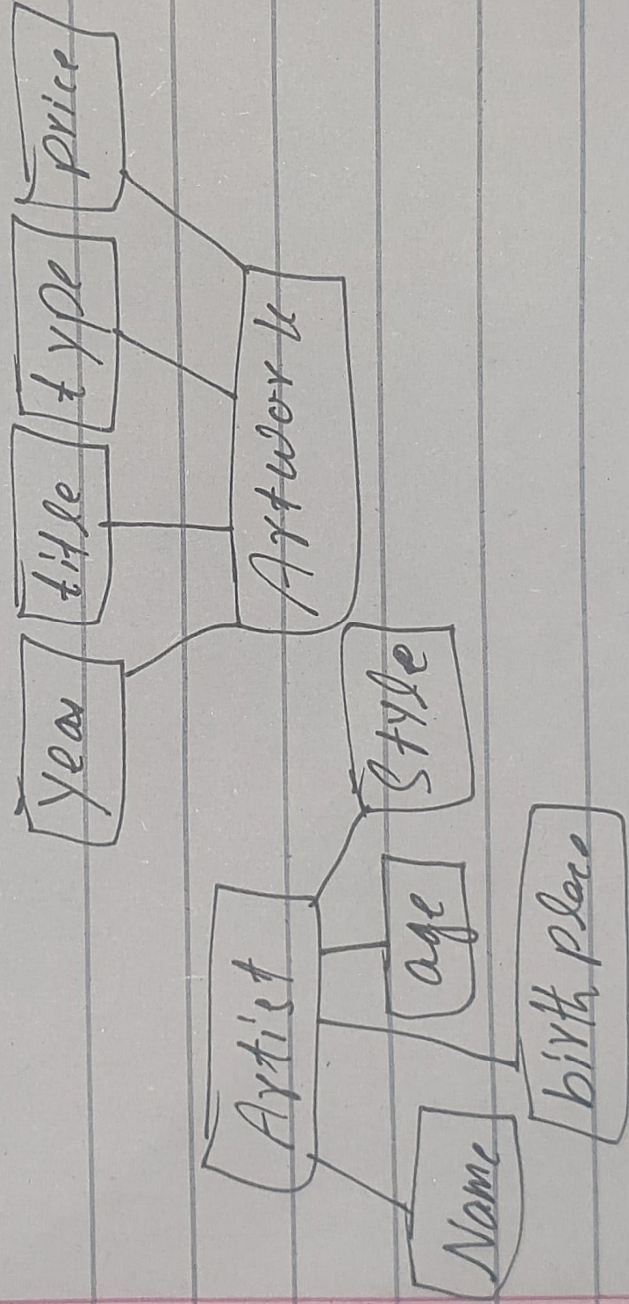
Year

title

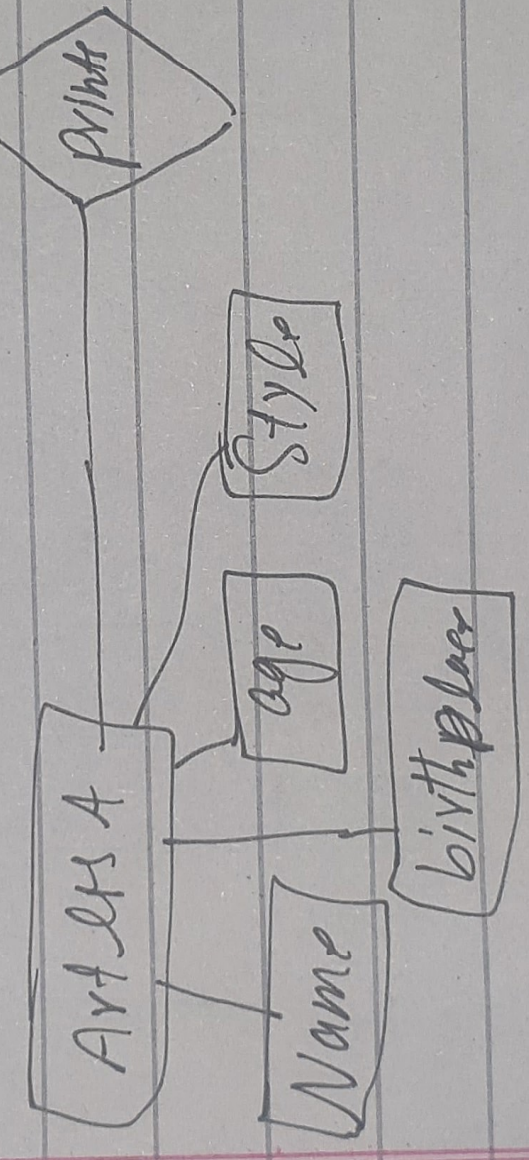
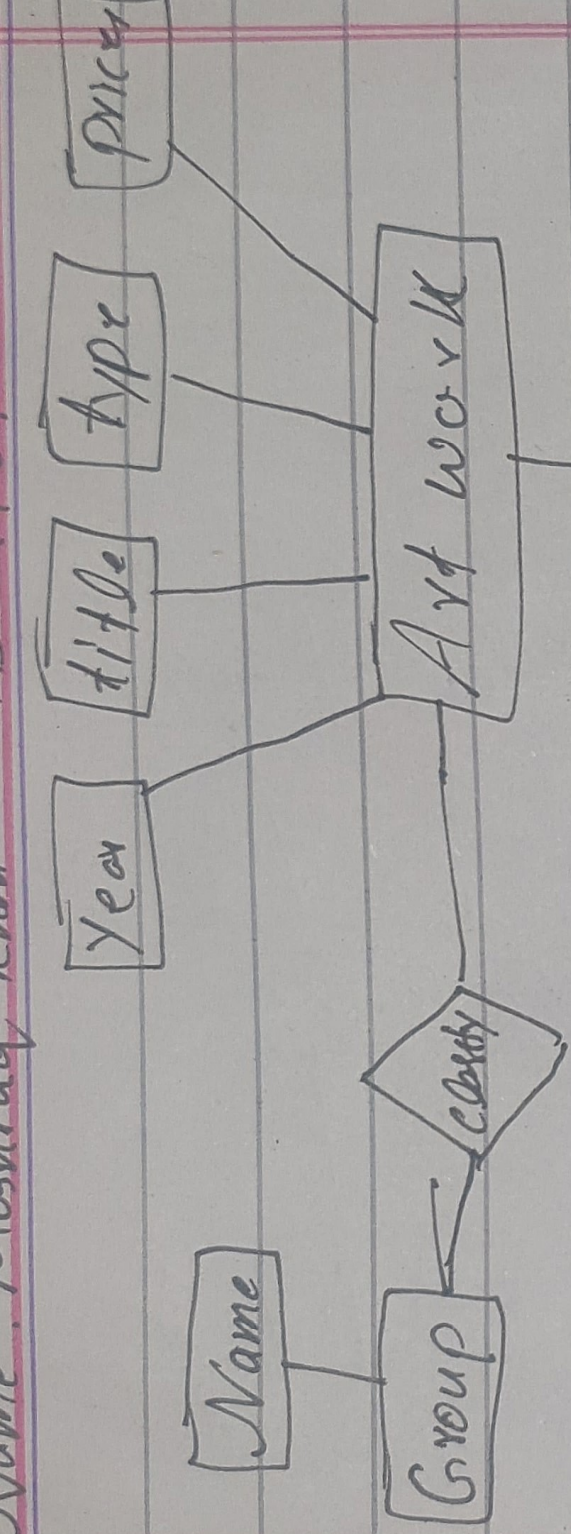
type

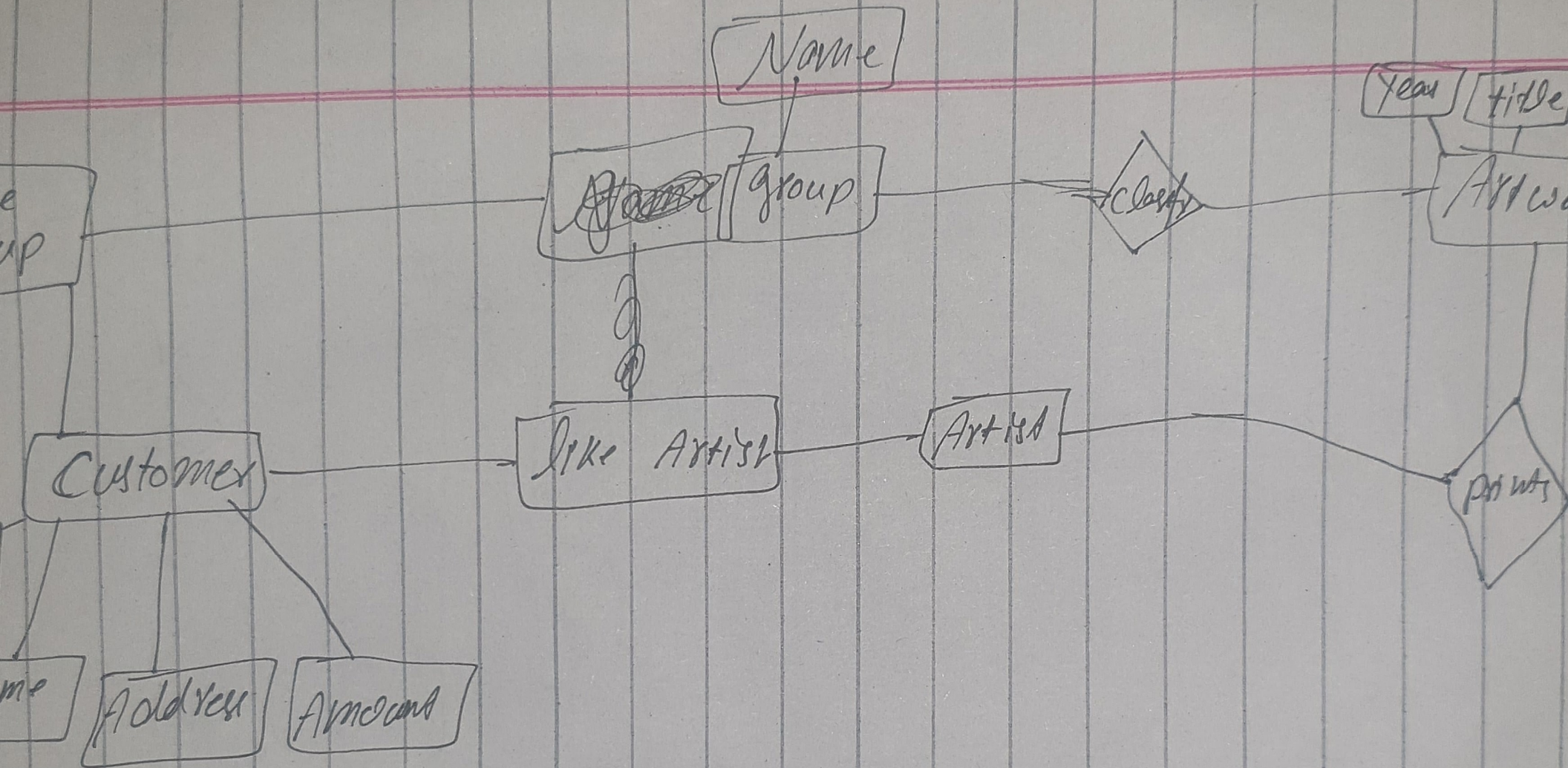
price

• Price of artworks are
into group of various kind for
example portraits still lifes work
by Picasso or works of the
19th century or given prices may
belong to more than one group
• Each group is identified by a
name like these 'just given that descriptive
the group



• Finally galleries keep information
about each person's gallery keep that
person's unique name address total
amount of dollars spent in the





ANSWERS:

MAPPING PROCESS

- Create table for each entity set
- Add all its attributes to table of field
- Add the primary key of identifying entity set.
- Declare all foreign key constraints

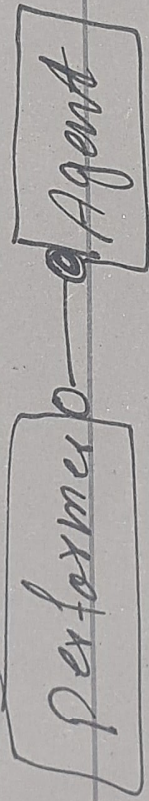
Students		
Student ID	Std name	address
1	Ali	Mardan
2	Dialar	Suwal

Course	
course name	SE4
BS-SE	

Seat Name	Seat Position	Class Name	Section
CC 44	5	BS (SE)	A
SE 56	10	BS (SE)	B

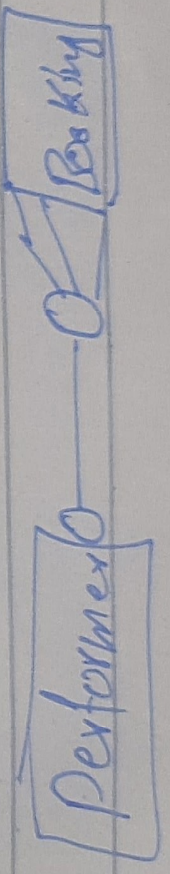
Optional one:

A member of Staff does not have to be placed in department but all departments must have at least one member of Staff



Optional many:

A Performer might have one or more booking a performer might be associated with a performer



involve a Performer as indicated by the hollow circle. A Performer might decline to accept any bookings. This is acceptable as it is optional for a Performer to have a booking (shown by the hollow circles).

