PASS TASK 4.1 REPORT

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SUB TASK 4.1.1

SOLUTION

Step 1

Repeating groups

CustId	CustName	TourID	TourDesc	TourDate	StaffID	StaffName	Rating
1040	Sam Wilson	M304	Bako National	22/4/2018	121	Rahim	Meal 5, Staff 7
		M312	Mount Santubong	13/5/2018	143	Yap	Meal 8, Staff 9
1132	Nurul Huda Rahmat	M323	Biking Around Kuching	31/3/2018	204	James	Meal 4, Staff 8
		M312	Mount Santubong	13/5/2018	143	Yap	Meal 8, Staff 9

Step 2

Tour Agency Table

CustId	CustName	TourID	TourDesc	TourDate	StaffID	StaffName	RatingM	RatingS
1040	Sam Wilson	M304	Bako National	22/4/2018	121	Rahim	5	7
1040	Sam Wilson	M312	Mount Santubong	13/5/2018	143	Yap	8	9
1132	Nurul Huda Rahmat	M323	Biking Around Kuching	31/3/2018	204	James	4	8
1132	Nurul Huda Rahmat	M312	Mount Santubong	13/5/2018	143	Yap	8	9

COMMENTS/FINDINGS

a. There are repeating groups in the attributes TourID, TourDesc, TourDate, StaffID, StaffName and Rating.

b. To remove repeating groups which are in the attributes TourID, TourDesc, TourDate, StaffID, StaffName and Rating. The primary ID should be CustID, TourID and TourDate as it is unique. So, it has functional dependencies.

The reason is because this helps to make it easier to search up particular TourID, TourDesc, TourDate, StaffID, StaffName and Rating. If not, when they are clumped together, it makes it harder to search in the database.

SUB TASK 4.1.2

SOLUTION

Step 1

CustId	CustName	TourID	TourDesc	TourDate	StaffID	StaffName	RatingM	RatingS
1040	Sam Wilson	M304	Bako National	22/4/2018	121	Rahim	5	7
1040	Sam Wilson	M312	Mount Santubong	13/5/2018	143	Yap	8	9
1132	Nurul Huda Rahmat	M323	Biking Around Kuching	31/3/2018	204	James	4	8
1132	Nurul Huda Rahmat	M312	Mount Santubong	13/5/2018	143	Yap	8	9

Step 2

Tour Agency table

CustId	TourID	TourDate	RatingM	RatingS
1040	M304	22/4/2018	5	7
1040	M312	13/5/2018	8	9
1132	M323	31/3/2018	4	8
1132	M312	13/5/2018	8	9

Tour Table

TourID	TourDate	StaffID	StaffName
M304	22/4/2018	121	Rahim
M312	13/5/2018	143	Yap
M323	31/3/2018	204	James

Tour Description Table

TourID	TourDesc
M304	Bako National
M312	Mount Santubong
M323	Biking Around Kuching
M312	Mount Santubong

Customer Table

CustId	CustName
1040	Sam Wilson
1132	Nurul Huda Rahmat

COMMENTS/FINDINGS

CustID, TourID and TourDate is the primary key. There are partial dependencies at first. It is necessary to create three table in order to achieve functional dependencies. CustName is dependant on CustID and TourDesc, StaffID, and StaffName are dependant on TourID AND TourDate. Besides, TourDesc is dependant on TourID

SUB TASK 4.1.3

SOLUTION

Step1

Tour Table

TourID	TourDate	StaffID	StaffName
M304	22/4/2018	121	Rahim
M312	13/5/2018	143	Yap
M323	31/3/2018	204	James

There is transitive dependencies here. StaffName depends on StaffID that is not a primary key.

Step 2

Tour Agency table

CustId	TourID	TourDate	RatingM	RatingS
1040	M304	22/4/2018	5	7
1040	M312	13/5/2018	8	9
1132	M323	31/3/2018	4	8
1132	M312	13/5/2018	8	9

Customer Table

CustId	CustName
1040	Sam Wilson
1132	Nurul Huda Rahmat

Tour Table

TourID	TourDate	StaffID
M304	22/4/2018	121
M312	13/5/2018	143
M323	31/3/2018	204

Staff Table

StaffID	StaffName
121	Rahim
143	Yap
204	James

Tour Description Table

TourID	TourDesc
M304	Bako National
M312	Mount Santubong
M323	Biking Around Kuching
M312	Mount Santubong

COMMENTS/FINDINGS

First, we have to see which attributes have transitive dependencies. An attribute that do not necessarily need the primary key to uniquely identify it. These are StaffID and StaffName in the tour table.