

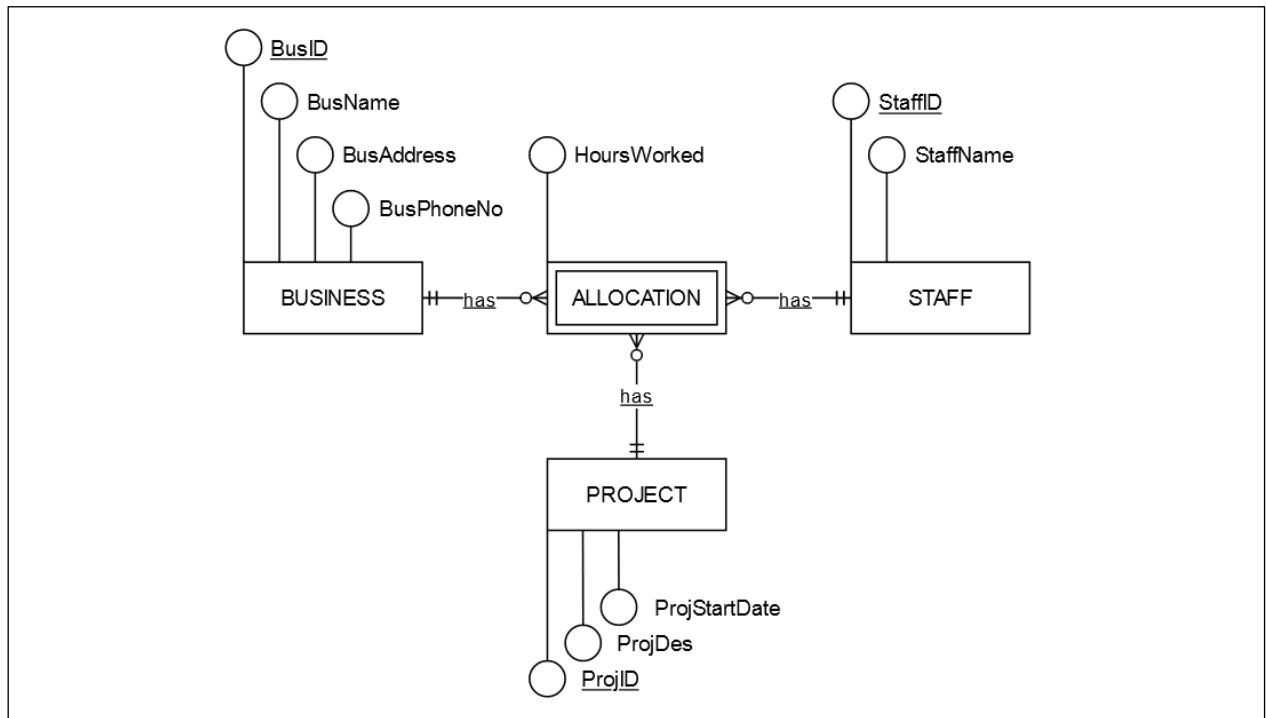
INF10002 Database Analysis and Design

Distinction task submission

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Narrative 1 ERD



Narrative 1 Relational Schema

BUSINESS (BusID, BusName, BusAddress, BusPhoneNo)

PRIMARY KEY (BusID)

PROJECT (ProjID, ProjDes, ProjStartDate)

PRIMARY KEY (ProjID)

STAFF (StaffID, StaffName)

PRIMARY KEY (StaffID)

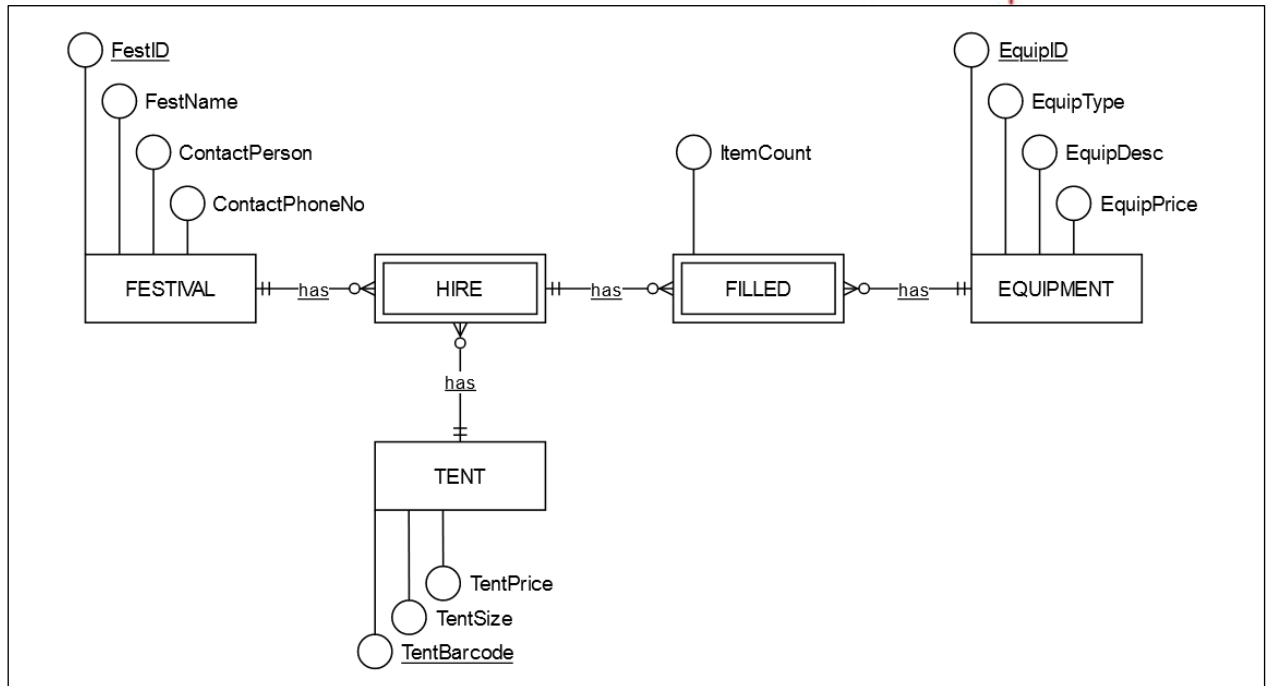
ALLOCATION (HoursWorked, BusID, StaffID, ProjID)

PRIMARY KEY (BusID, StaffID, ProjID)

FOREIGN KEY (BusID) REFERENCES BUSINESS

FOREIGN KEY (StaffID) REFERENCES STAFF

FOREIGN KEY (ProjID) REFERENCES PROJECT



Narrative 2 Relational Schema

FESTIVAL (FestID, FestName, ContactPerson, ContactPhoneNo)

PRIMARY KEY (FestID)

TENT (TentBarcode, TentSize, TentPrice)

PRIMARY KEY (TentBarcode)

EQUIPMENT (EquipType, EquipID, EquipDesc, EquipPrice)

PRIMARY KEY (EquipID)

HIRE (FestID, TentBarcode)

PRIMARY KEY (FestID, TentBarcode)

FOREIGN KEY (FestID) REFERENCES FESTIVAL

FOREIGN KEY (TentBarcode) REFERENCES TENT

FILLED (ItemCount, FestID, TentBarcode, EquipID)

PRIMARY KEY (FestID, TentBarcode, EquipID)

FOREIGN KEY (FestID) REFERENCES HIRE

FOREIGN KEY (TentBarcode) REFERENCES HIRE

FOREIGN KEY (EquipID) REFERENCES EQUIPMENT

Part 4: Queries

Q1: People query

Person Id	Name	Gender	State	Donation
1000	Chris Koutros	M	NT	110
1001	Jo McClean	F	ACT	63
1002	Alessia Galifi	F	SA	49
1003	Katy Cleece	F	QLD	281
1004	Debbie Cowley	F	ACT	281
1005	Rhona Cowburn	F	WA	0
1006	Beth Meehan	F	NT	51
1007	Matthew Parr	M	ACT	284
1008	Jared Coyle	M	ACT	73
1009	Joanne Sharples	F	TAS	121

Q2: Donation

Field:	Donation
Table:	People
Total:	Sum
Sort:	
Show:	<input checked="" type="checkbox"/>
Criteria:	
or:	

SumOfDonation
348624

Q3: Gender

Field:	Gender	Gender	Member
Table:	People	People	People
Total:	Group By	Count	Group By
Sort:			
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:			"Y"
or:			

Gender	CountOfGender
F	494
I	4
M	385

Q4: Fastest query

Field:	"Event"	"Minutes"
Table:	Results	Results
Total:	Group By	Min
Sort:	Ascending	
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		
or:		

"Event"	MinOf"Minutes"
1	14
2	29
3	71
4	110
5	12
6	24
7	36
8	49
9	10
10	17
11	27
12	41
13	8
14	16
15	24
16	32
17	10
18	21
19	30
20	40
21	12
22	24
23	37
24	48

Q5: Better than average query

Field:	Person Id	Name	Gender	Minutes
Table:	People	People	People	Results
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:				<(SELECT AVG([Minutes]) FROM Results where Results.Event =2)
or:				

Person Id	Name	Gender	Minutes
1002	Alessia Galifi	F	18
1003	Katy Cleece	F	17
1003	Katy Cleece	F	18
1003	Katy Cleece	F	28
1006	Beth Meehan	F	34
1008	Jared Coyle	M	23
1008	Jared Coyle	M	27
1008	Jared Coyle	M	34
1009	Joanne Sharples	F	22
1013	Sophie Poredos	F	39

Q6: No results query

Field:	Person Id	Name	Gender	Result Id
Table:	People	People	People	Results
Sort:				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:				Is Null
or:				

Join Properties
?
X

Left Table Name
People

Right Table Name
Results

Left Column Name
[Person Id]

Right Column Name
[Person]

☐ 1: Only include rows where the joined fields from both tables are equal.

☒ 2: Include ALL records from 'People' and only those records from 'Results' where the joined fields are equal.

☐ 3: Include ALL records from 'Results' and only those records from 'People' where the joined fields are equal.

OK
Cancel
New

Person Id	Name	Gender
2763	Belinda Totino	F
2764	Melissa Butcher	F
2765	Dave Pullen	M
2766	Dean Goulding	M
2767	Melinda Chin	F
2768	Jessica Billings	F
2769	Jolene Mc Allister	F
2770	Mark Mc Crysta	M
2771	Leanne Allman	F
2772	Sorgey Kollstam	M

Q7: X Category query

Field:	X Category	Description	Person Id
Table:	XCategory	XCategory	People
Total:	Group By	Group By	Count
Sort:			
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:			
or:			

X Category	Description	CountOfPerson Id
A	Overachiever	449
B	High acheiver	482
C	Good	427
D	Average	450

Q8: Insert your data and event 25

Person Id	Name	Gender	State	Donation	Minutes	Event Id
8117	Luong Trac Duc	M	NSW	0	51	25
2807	Jack Flynn	M	SA	143	89	25
2808	Johnny Gould	M	NSW	500	78	25
2809	Kevin Moore	M	TAS	300	134	25
2810	Olivia Korts	F	VIC	255	56	25

Part 5: Visualisations

Q1: Member category viz



The screenshot shows the Tableau interface for creating a visualization. The 'Rows' shelf contains the 'Member' field. The 'Columns' shelf contains the 'Gender' field. The 'Values' shelf contains the 'Count of Person Id' field. The 'Legend' shelf is empty.

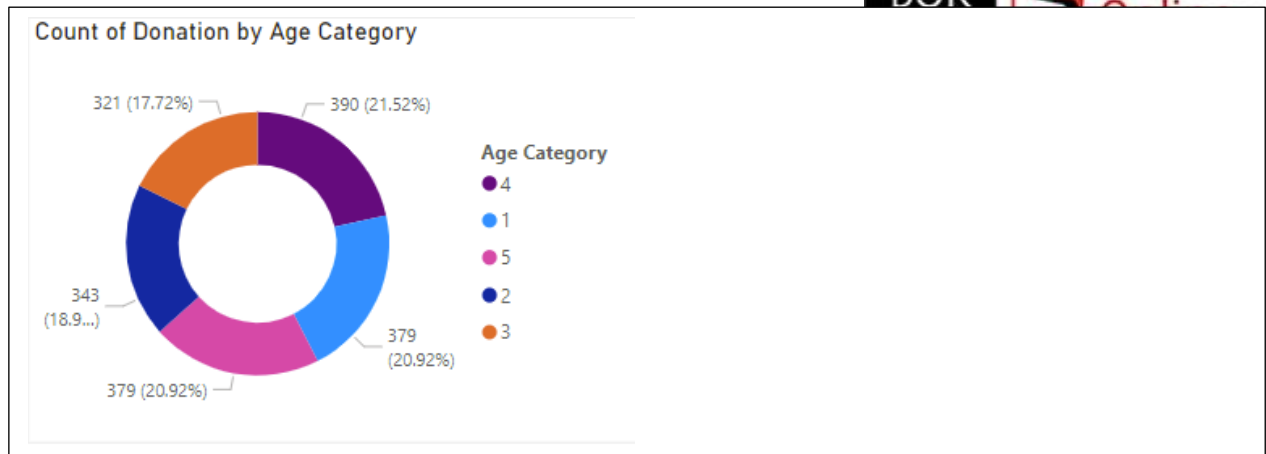
Total number of people by member value by gender value

Member	F	I	M	Total
N	505	6	415	926
Y	495	4	387	886
Total	1000	10	802	1812

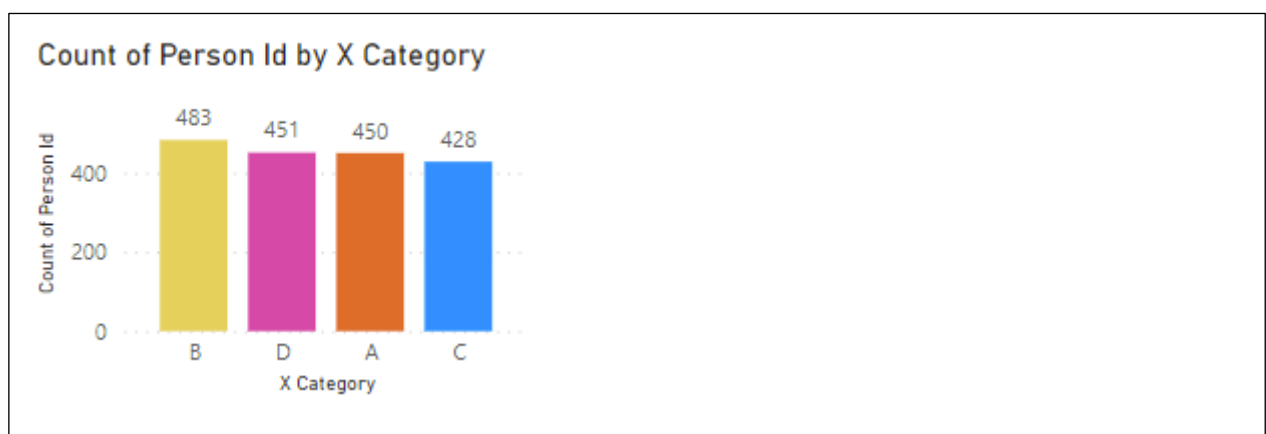
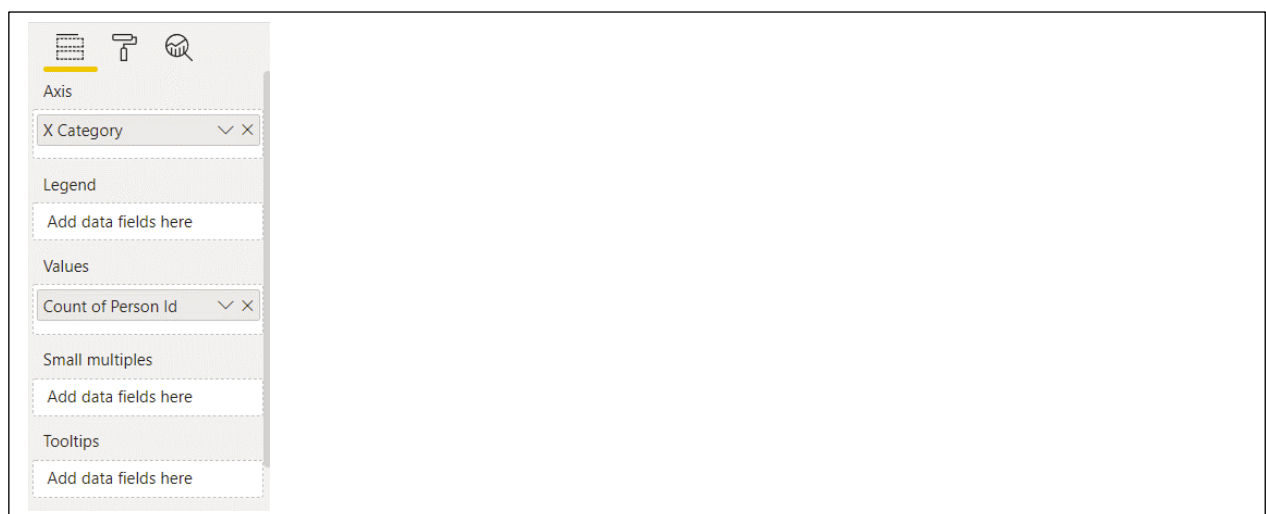
Q2: Age category viz



The screenshot shows the Tableau interface for creating a visualization. The 'Legend' shelf contains the 'Age Category' field. The 'Details' shelf contains the text 'Add data fields here'. The 'Values' shelf contains the 'Count of Donation' field. The 'Tooltips' shelf contains the text 'Add data fields here'.



Q3: X category viz



Q4: Event viz

Axis

Event Type

▼

×

Legend

Add data fields here

Values

Event Distance

▼

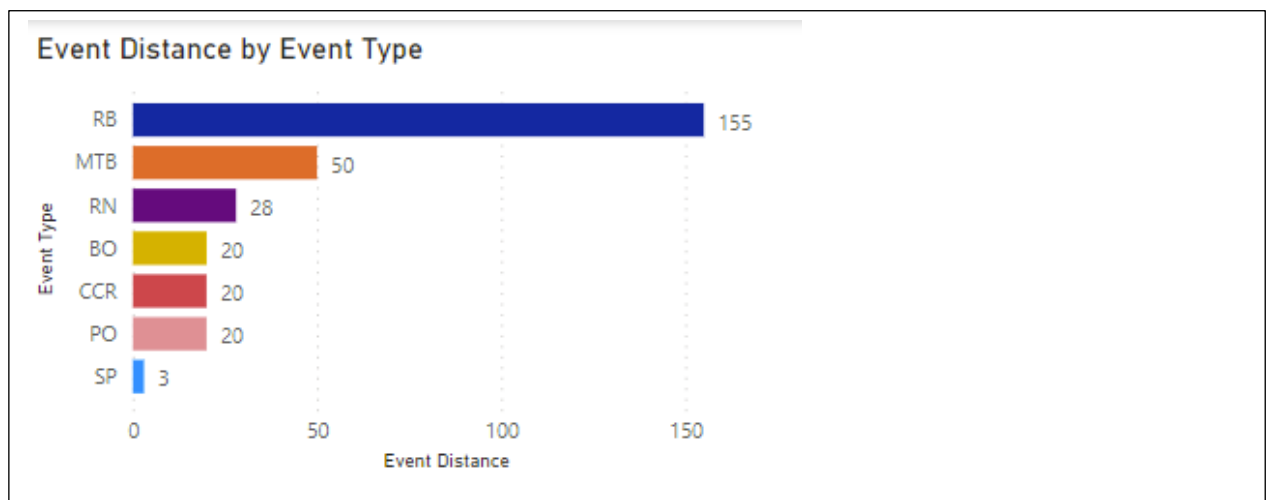
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Small multiples

Add data fields here

Tooltips

Add data fields here



Q5: Event 25 viz

Event Id
is 25

Filter type ⓘ
Advanced filtering

▼

Show items when the value
is

▼

25

☒ And ☐ Or

▼

Apply filter

Legend

State

▼

×

Details

Event Id

▼

×

Values

Count of Person Id

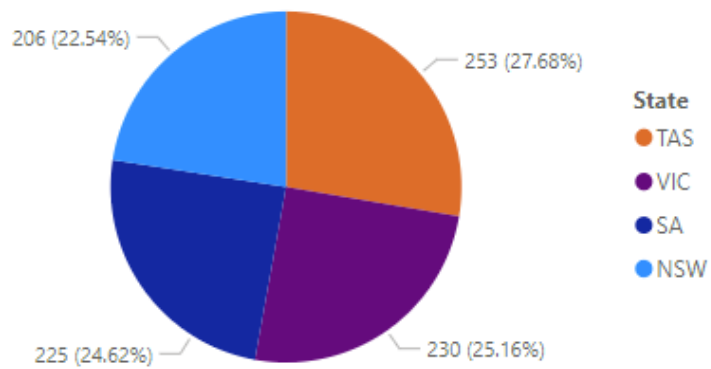
▼

×

Tooltips

Add data fields here

Count of Person Id by State and Event Id

**Q6: Extra viz 1**

Count of Donation by State



Q7: Extra viz 2

