

## **CS 5012: Foundations of Computer Science**

## **Final Exam Appendicies**

Appendix Packet- When you are done, return this page to the Instructor. Appendix A: Darien Knight's Car Repair

Vehicles(<u>VID</u>: varchar(3), Make: varchar(25), Model: varchar(25), ID: varchar(3)) People(<u>ID</u>: varchar(3), Name: varchar(25), City: varchar(50),

State: varchar(2)) Mechanics(EmpID: varchar(4), ID: varchar(3))

Parts(<u>PID</u>: int(3), PartName: varchar(25), Shelf: int(1), Price: double(7)) Repairs(<u>RID</u>: varchar(4), MechID: varchar(4), VIN: varchar(3), Hours:

int(2)) Repair\_Parts(RID: varchar(4), PID: int(3))

Vehicles			
VIN	Make	Model	ID
G78	Honda	Civic	Su5
H98	Pontiac	GrandAm	Su5
H56	VW	Beetle	Bu2
T45	Plymoth	Voyager	Jo2

People			
ID	Name	City	State
Su5	Suchet	Hickory	NC
Sm3	Smith	Raleigh	NC
Bu2	Butler	Chapel Hill	NC
Jo2	Jones	Charlotte	NC
Wi9	Williams	Fayetteville	NC

Mechanics	
MechID	ID
M_98	Bu2
M_56	Wi9
M_23	Sm3

Parts			
PID	PartName	Shelf	Price
901	Battery	4	80
902	Alternator	4	100
903	Brakes	2	150
904	Fan Belt	1	20

Repairs			
RID	MechID	VIN	Hours
R_14	M_98	G78	3
R_34	M_98	H56	3
R_22	M_23	T45	2
R_66	M_56	G78	1

Repair_Parts	
RID	PID
R_14	902
R_14	903
R_34	901
R_22	902
R_66	904
R_66	901

## Appendix B: The ArtHouse Ticket System

You have been hired to build a new ticketing system for a local concert venue (featuring local bands, poetry recitals, and etc.) Up until now they have been using those rolls of raffle tickets you could buy from Staples. Time to bring them into the 21<sup>st</sup> century. You can and should use basic common sense to add the appropriate fields to each table.



- Users create an account with the system with their email address, also providing their name, address, and multiple phone numbers. They then can purchase tickets online.
- Tickets should have a unique bar code on each one, representing the ticket number.
- Tickets have a set face value per ticket.
- Tickets are only good for one show at the ArtHouse.
- Artists can perform multiple shows in one night and/or over several nights. Therefore, a show has to be identified by a date and a time.
- Artists are identified by their stage name and genre.
- Artists charge a fee for each show they perform at the ArtHouse.
- Tickets can be bought online and printed out at home (barcode and all).
- Tickets are scanned as the person enters the theater. Any attempt at reentry with the same ticket should be identified and stopped.
- Users can look up on the online system what shows they have attended and how much they paid for the tickets.
- Shows are often sponsored by a local radio station or other group.