

ated?

more than 2 deliveries as well as a count of the number of deliveries

of deliveries greater than 2

ers who made more than 2 deliveries

Section II (15 points): Develop entity relationship diagrams to depict the structure of the tables, given the following business rules. Do not include attributes but do include cardinalities in your diagrams [Questions next page]

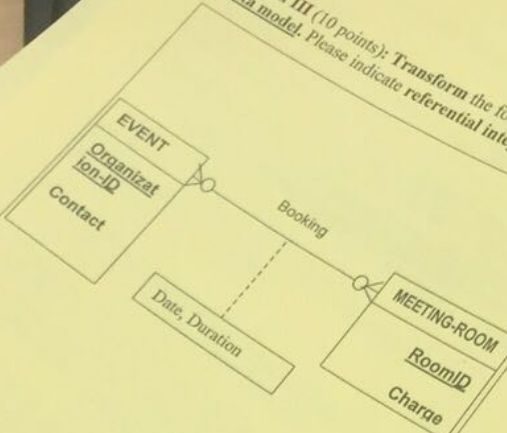
1. Resort massage (9 points)

- a. a guest may receive different massages during her stay in the resort;
- b. a type of massage may be given to many guests;
- c. a guest receives massage by a massage therapist;
- d. a massage therapist is trained to give different types of massages to many guests;
- e. the resort needs to record the date, time, brief description of each massage (do NOT include attributes; the information in this rule is ONLY to help you to determine the structure of the ERD).
- f. Construct the ERD based on the above information, for short-term scenario (such as one or two weeks).

2. Dinner at a restaurant (6 points)

Each dinner is based on a single entree, but each entree can be served at many dinners.
A guest can attend only one dinner, and each dinner can be attended by many guests.
Each dinner can invite many guests, and each guest can be invited to many dinners.

Section III (10 points): Transform the following entity-relationship diagram (ERD) into the corresponding data model. Please indicate referential integrity (PK-FK relationships)



Section IV (25 points): CLOSELY EXAMINE the data in the following table, prepare:
 (1) a functional dependency diagram (FDD); indicate full, partial, and transitive FDs;
 (2) the tables for second normal form (2NF); and
 (3) the tables for third normal form (3NF). **【PLEASE indicate referential integrity (PK-FK pair with arrow)】**
 Make sure that you include table names (you make those names) in all of your diagrams. Primary keys should be underlined and foreign keys should have dashed underlines.

SemstCode	TicketNum	CourseNum	SemstDesc	ProfCode	CourseTitle	ProfName
2137	10010	ACCT220	Fall2013	rs	Intro to Financial Acct	Stone
2137	10020	ACCT230	Fall2013	cj	Intro to Managerial Acct	Jeppson
2137	10030	ACCT350	Fall2013	ew	Intermediate Acct I	Weiss
2143	10040	ACCT351	Fall2013	rk	Intermediate Acct II	Kiani
2143	10010	ACCT220	Spring2014	cj	Intro to Financial Acct	Jeppson
2143	10020	ACCT230	Spring2014	rs	Intro to Managerial Acct	Stone
2143	10030	ACCT230	Spring2014	cj	Intro to Managerial Acct	Jeppson

FDD:

SCode	TkNum	CrsNum	SDesc	PrCode	CrsTitle	PName
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relational

2NF (after resolving partial dependency):

3NF (after resolving transitive dependency; ALL resulted relations must be depicted):

Customer
1-800-SCA