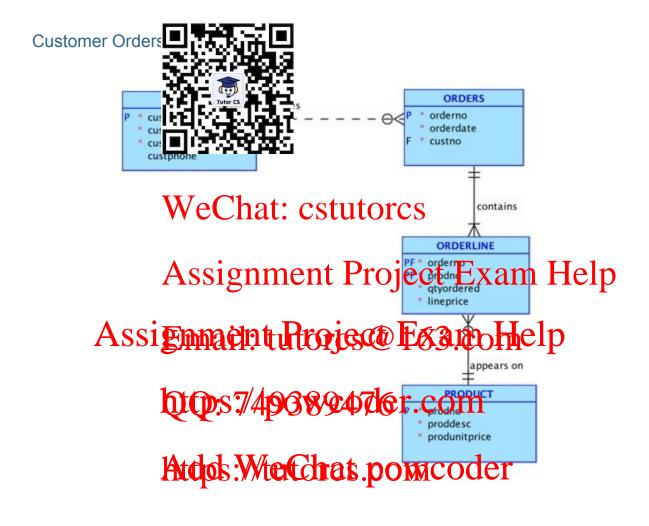
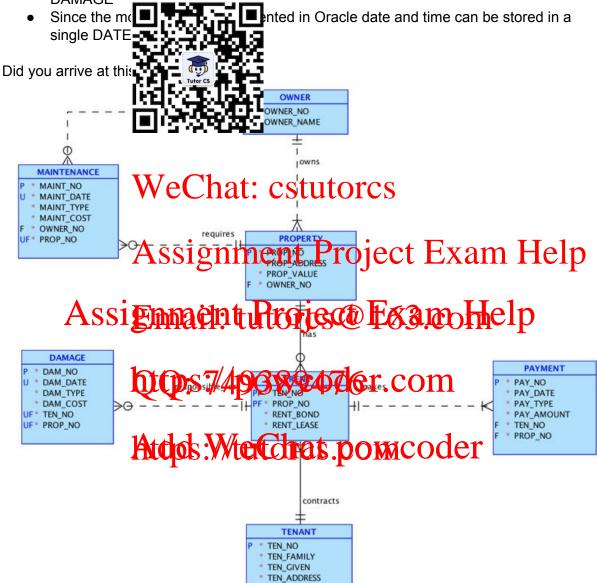
## Logical Model框原城岛城岛 CS编程辅导



### Rental System 程序代写代做 CS编程辅导

Note:

Surrogate keys of MAINT\_NO and DAM\_NO added to MAINTENANCE and **DAMAGE** Since the mo



Remember that every model you create via top down design must have the final entities checked to ensure they are in 3NF with no insert, update or delete anomalies. If you apply this to MAINTENANCE you will see:

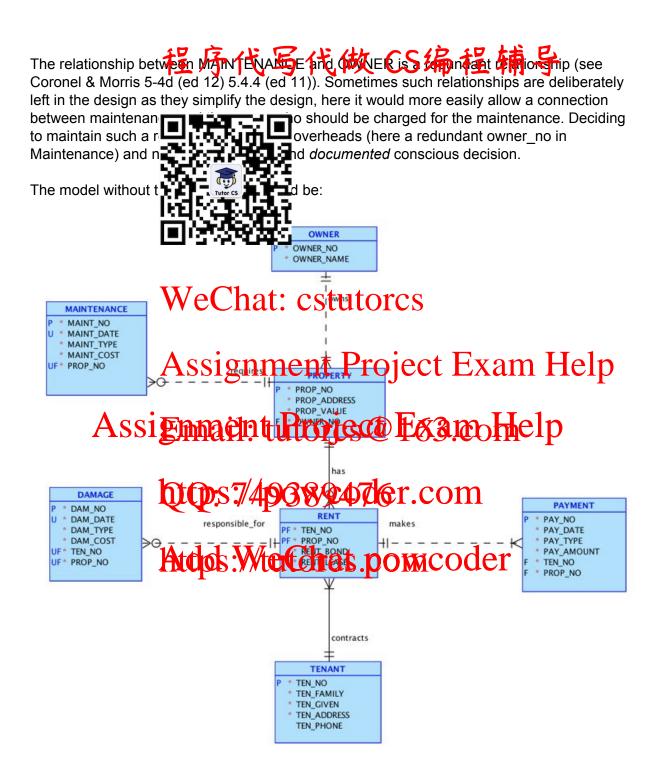
TEN\_PHONE

MAINTENANCE (<u>maint\_no</u>, maint\_date, maint\_type, maint\_cost, owner\_no, prop\_no) prop no -> owner no is a transitive dependency so this entity is not in 3NF

The 3NF form would be:

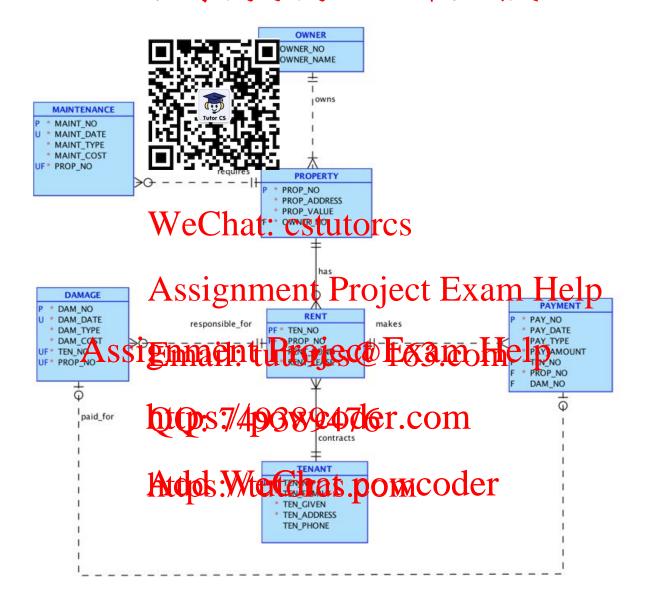
MAINTENANCE (<u>maint\_no</u>, maint\_date, maint\_type, maint\_cost, prop\_no)

PROPERTY (prop no, owner no)



This model can be improved by connecting DAMAGE and PAYMENT - in this way you will be able to connect a given payment with a given act of damage. Here we will assume a business rule that says a damage if billed to a tenant must be paid in full in one payment.

### An improved model 程底序y所品 编数 CS编程辅导

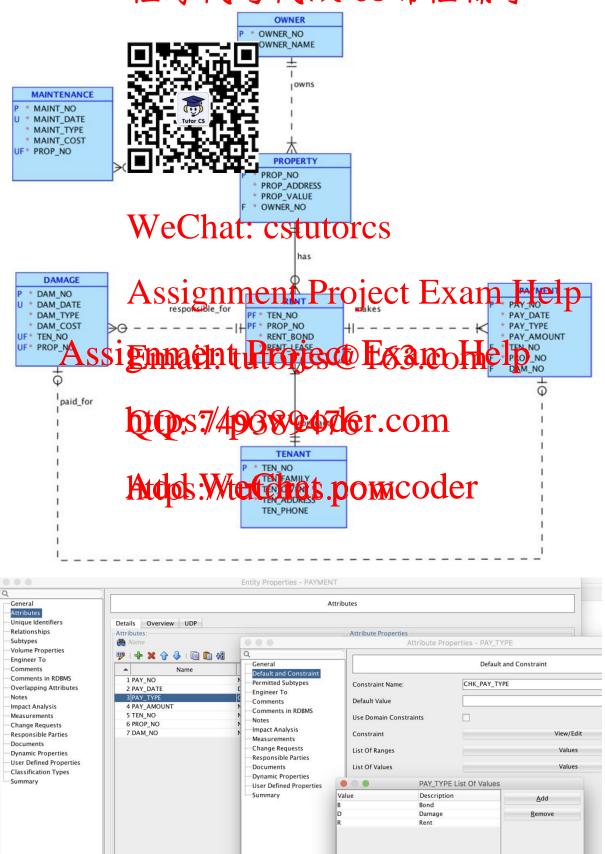


Part of the case study indicates that the payment type must be recorded as Rent, Bond or Damage. This should be enforced in one of two ways:

- by adding a CONSTRAINT (see Alexandria on how to add such a constraint), or
- by using a LOOKUP table.

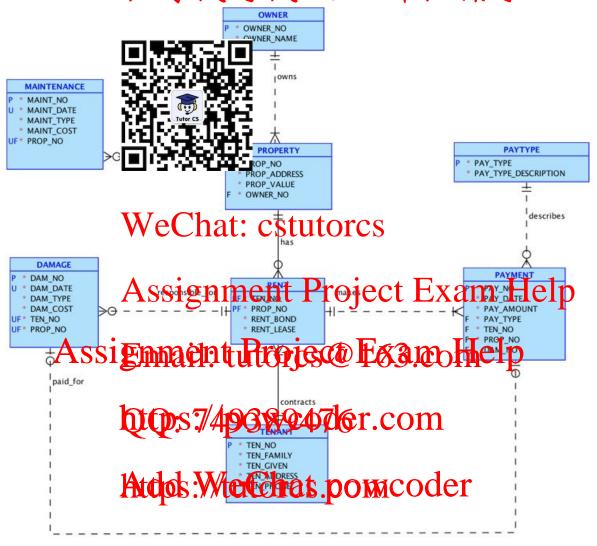
A constraint becomes part of the database structure, if the user wishes to add a new option, say 'F' for future rent payments then the structure must be altered. On the other hand if a lookup table is used all that needs to happen is a new row needs to be added to the lookup table with the appropriate values.

# Controlling pay\_type yie a CONSTRAIS (CHK\_BAY\_TYPE) 编程辅导





# Controlling pay\_type via 是OKUP TOLE (PAYTYPE) S编程辅导





The schema files for both approaches are provided as part of this solution.

Attoos: Wtettoras.poimcoder

To capture the full run of your schema file you must insert a SPOOL and ECHO on command at the top of your file, and a SPOOL OFF and ECHO off at the end of your script.

#### For example - added to the top of your script:

- -- Capture run of script in file called rental-run.txt set echo on SPOOL rental-run.txt
- -- Database Teaching Team
- -- Logical Rental Model Schema script file
- -- Schema file includes example constraint to control pay\_type
- -- Added drop commands for sequences here add drop sequence commands, sql developer does not add these

..... the SQL Developer Generated Script goes here ......
set echo off
SPOOL off

Please check the sample solution schema files to see this in action.