

Unit 7

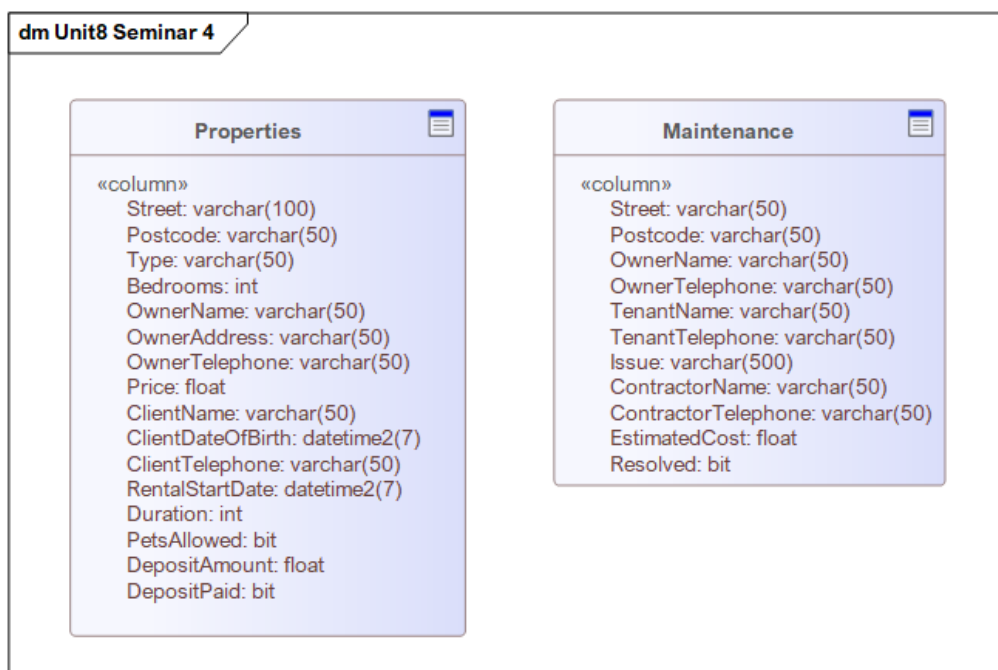
Normalisation in Practice

In this week's formative exercise, students were tasked to normalise a set of data table to third normal form (3NF).

Normalisation Method

First, I considered the provided table structure:

Properties and Maintenance Tables



Next, I populated each existing table structure with a few lines of sample data to get a feel for how the data might look before attempting to normalise through each phase:

Properties Table

Street	Postcode	Type	Bedrooms	Owner name	Owner address
9 Carrot Gold	MINE9C	House	12	Andy Browning	32 Carrot Gold, 4 Leamington Way, Saroha
22 Western Avenue	RB 95 TT	House	3	Andy Browning	32 Carrot Gold, 4 Leamington Way, Saroha

<i>Owner telephone</i>	<i>Price</i>	<i>Client name</i>	<i>Client date of birth</i>	<i>Client telephone</i>	<i>Rental start date</i>
555-918-0033	£450 000.00	Lionel	24 Aug. 1965	555-900-0022	14 Jun. 2021
555-918-0033	£525 000.00	Violette	16 Feb. 1992	555-900-0011	01 Jul. 2021

<i>Duration</i>	<i>Pets allowed</i>	<i>Deposit Amount</i>	<i>Deposit Paid</i>
12 months	No	£2000	Yes
6 months	Yes	£3000	No

Maintenance Table

<i>Street</i>	<i>Postcode</i>	<i>Owner Name</i>	<i>Owner Telephone</i>	<i>Tenant Name</i>	<i>Tenant Telephone</i>
9 Carrot Gold	MINE9C	Andy Browning	555-918-0033	Lionel	555-900-0022
22 Western Avenue	RB 95 TT	Andy Browning	555-918-0033	Violette	555-900-0011
9 Carrot Gold	MINE9C	Andy Browning	555-918-0033	Lionel	555-900-0022

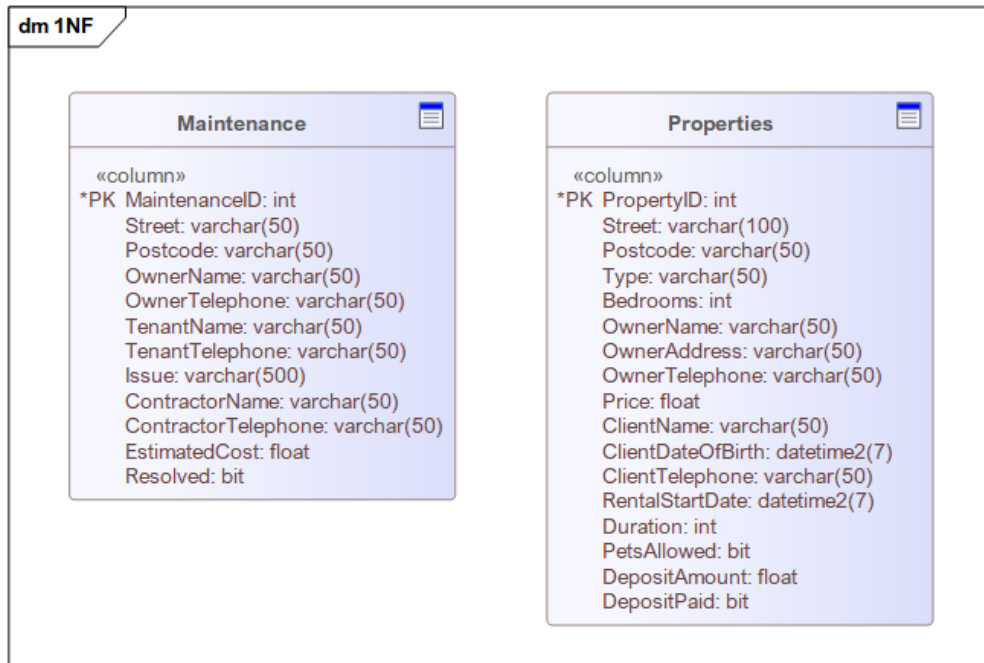
<i>Issue</i>	<i>Contractor name</i>	<i>Contractor telephone</i>	<i>Estimated cost</i>	<i>Resolved</i>
Leaking Roof	Roofs-R-Us	555-100-1212	£600	Yes
Gas stove not working	Gas Busters	555-123-4554	£50	Yes
Gas stove not working	Gas Busters	555-123-4554	£75	No

First Normal Form (1NF)

Looking at the sample table data (and imaging other possible sample data sets), I note

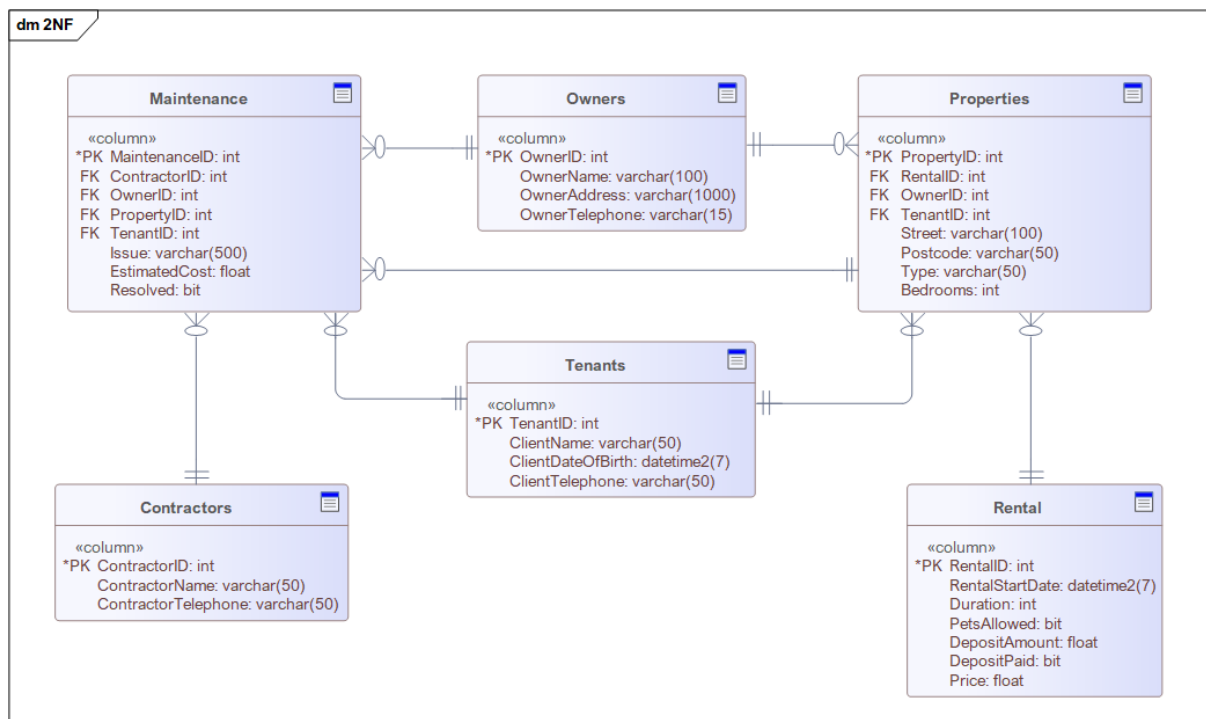
- Each column contains single values

Therefore, beyond adding primary keys, no further action is required.



Second Normal Form (2NF)

Address functional dependencies.



Third Normal Form (3NF)

Address transitive dependencies.

