

Methodology - Monitoring and Tuning the Operational System, Chapter 19



Sample Database

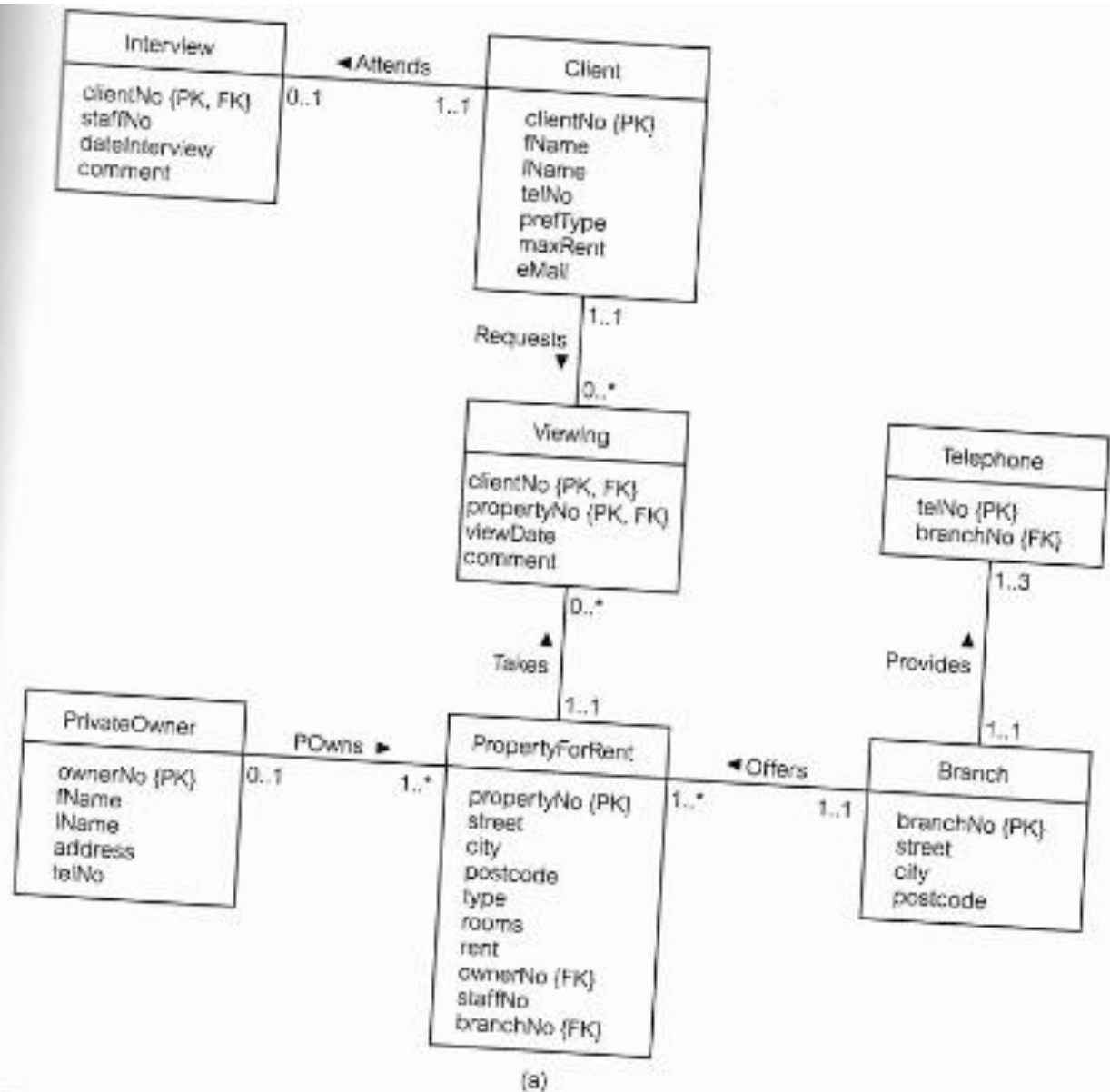


Figure 19.1(a) Sample relation diagram.

Sample Database

Figure 19.1(b)
Sample relations.

Branch

branchNo	street	city	postcode
B005	22 Deer Rd	London	SW1 4EH
B007	16 Argyll St	Aberdeen	AB2 3SU
B003	163 Main St	Glasgow	G11 9QX
B004	32 Manse Rd	Bristol	BS99 1NZ
B002	56 Clover Dr	London	NW10 6EU

Telephone

telNo	branchNo
0207-886-1212	B005
0207-886-1300	B005
0207-886-4100	B005
01224-67125	B007
0141-339-2178	B003
0141-339-4439	B003
0117-916-1170	B004
0208-963-1030	B002

PropertyForRent

propertyNo	street	city	postcode	type	rooms	rent	ownerNo	staffNo	branchNo
PA14	16 Holhead	Aberdeen	AB7 5SU	House	6	650	CO46	SA9	B007
PL94	6 Argyll St	London	NW2	Flat	4	400	CO87	SL41	B005
PG4	6 Lawrence St	Glasgow	G11 9QX	Flat	3	350	CO40		B003
PG36	2 Manor Rd	Glasgow	G32 4QX	Flat	3	375	CO93	SG37	B003
PG21	18 Dale Rd	Glasgow	G12	House	5	600	CO87	SG37	B003
PG16	5 Nuvar Dr	Glasgow	G12 9AX	Flat	4	450	CO93	SG14	B003

Client

clientNo	fName	iName	telNo	prefType	maxRent	eMail
CR76	John	Kay	0207-774-5632	Flat	425	john.kay@gmail.com
CR56	Aline	Stewart	0141-848-1825	Flat	350	astewart@hotmail.com
CR74	Mike	Ritchie	01475-392178	House	750	mritchie01@yahoo.co.uk
CR62	Mary	Tregear	01224-196720	Flat	600	mzryt@hotmail.co.uk

Interview

clientNo	staffNo	dateInterview	comment
CR56	SG37	11-Apr-07	current lease ends in June
CR62	SA9	7-Mar-07	needs property urgently

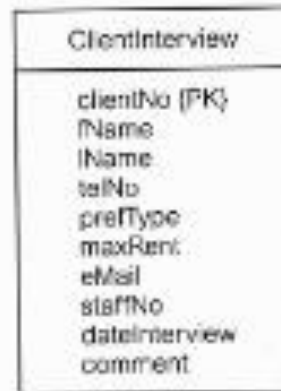
PrivateOwner

ownerNo	fName	iName	address	telNo
CO46	Joe	Kengh	2 Fergus Dr, Aberdeen AB2 7SX	01224-861212
CO87	Carol	Ferrel	6 Achray St, Glasgow G32 9DX	0141-357-7419
CO40	Tina	Murphy	63 Well St, Glasgow G42	0141-943-1728
CO93	Tony	Shaw	12 Park Pl, Glasgow G4 0QR	0141-225-7025

Viewing

clientNo	propertyNo	viewDate	comment
CR56	PA14	24-May-08	too small
CR76	PG4	20-Apr-08	too remote
CR56	PG4	26-May-08	
CR62	PA14	14-May-08	
CR56	PG36	28-Apr-08	no dining room

Denormalized Relation



(a)

ClientInterview

clientNo	fName	iName	telNo	prefType	maxRent	eMail	staffNo	dateInterview	comment
CR76	John	Kay	0207-774-5632	Flat	425	john.kay@gmail.com			
CR56	Aline	Stewart	0141-848-1825	Flat	350	astewart@nocmail.com	SG37	11-Apr-07	current lease ends in June
CR74	Mike	Ritchie	01475-392178	House	750	mritchie01@yahoo.co.uk			
CR62	Mary	Tregear	01224-196720	Flat	600	maryt@hotmail.co.uk	SA9	7-Mar-07	needs property urgently

(b)

Figure 19.2 Combined Client and Interview: (a) revised extract from the relation diagram; (b) combined relation.

Denormalized Relation

PropertyForRent

propertyNo	street	city	postcode	type	rooms	rent	ownerNo	IName	staffNo	branchNo
EA14	16 Halhead	Aberdeen	AB7 5SU	House	6	650	CO46	Keogh	SA9	B007
PL94	6 Argyll St	London	NW2	Flat	4	400	CO87	Farrel	SL41	B005
PG4	6 Lawrence St	Glasgow	G11 9QX	Flat	3	350	CO40	Murphy		B003
PG36	2 Manor Rd	Glasgow	G32 4QX	Flat	3	375	CO93	Shaw	SG37	B003
PG21	18 Dale Rd	Glasgow	G12	House	5	600	CO87	Farrel	SG37	B003
PG16	5 Novar Dr	Glasgow	G12 9AX	Flat	4	450	CO93	Shaw	SG14	B003

Figure 19.3 Revised PropertyForRent relation with duplicated IName attribute from the PrivateOwner relation.

Denormalizatio

- ▶ Quotes from

<http://highscalability.com/blog/2008/7/16/the-mother-of-all-database-normalization-debates-on-coding-h.html>