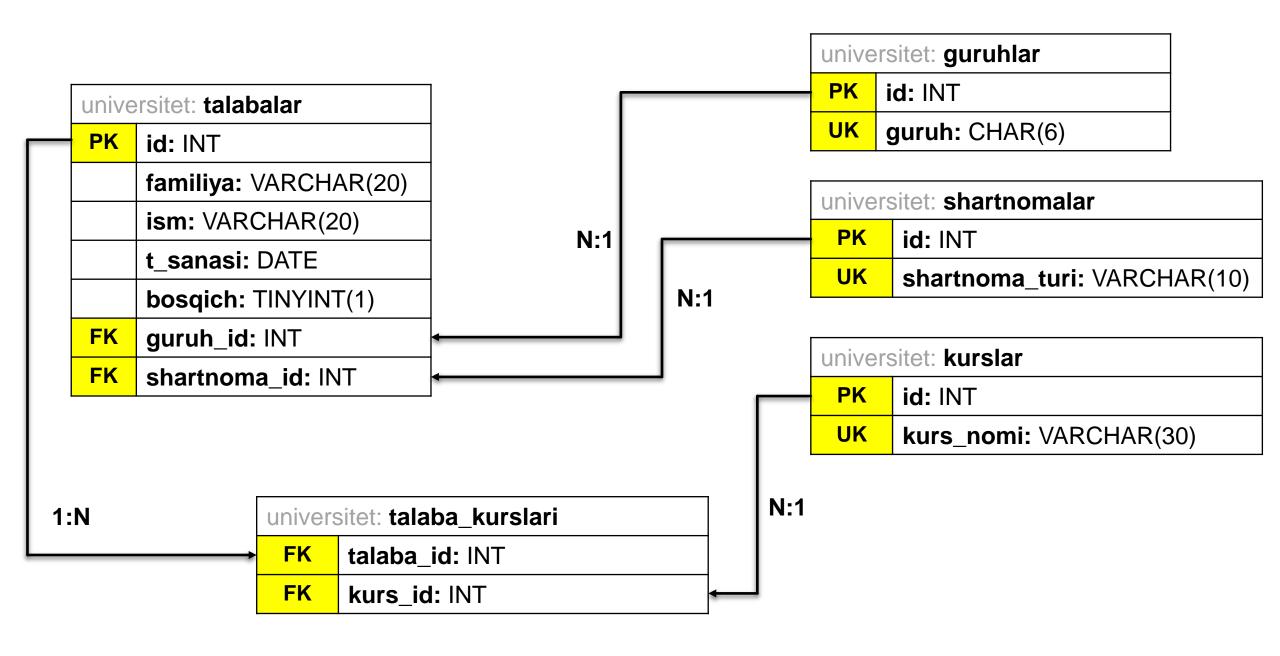
12. PRIMARY KEY (PK), FOREIGN KEY (FK), UNIQUE (UK)

Jadvallarni toʻgʻri dizayn qilish-2 (SXEMA), asosiy kalit, tashqi kalit va yagonalik

ass. Baltayev Rustambek

Umumiy bog'lanishlar sxemasi



Jadvallarni bog'lashdan maqsad ma'lumotlarni kiritishdagi xatolikni oldini olishdir

PK		talabala	r		FK	REFERENCES	PK	UK
id	familiya	ism	t_sanasi	bosqich	guruh_id		1	<u> </u>
5	Bekchanov	Asadbek	1997-03-29	4	8		id	guruh
34	Kamolova	Shohista	1999-02-13	3	7	N:1	1	911-21
2	Xabibullayev	Abrorbek	2000-08-04	3	1		2	911-23
1	Ismoilov	Abdulla	1998-02-24	2	10		3	912-21
26	Abdullayeva	Nilufar	1999-06-03	4	9		4	921-21
41	Tajiyeva	Umida	1999-10-25	3	7		5	931-23
39	Raximberganov	Temurbek	2001-10-05	3	3		6	932-20
43	Oʻrinov	Xalilla	2000-01-10	3	3		7	951-21
31	Norimbetov	Roʻzimboy	2002-07-10	4	6		8	961-20
8	Sotliqov	Dastonbek	2004-08-22	2	10		9	971-20
9	Kuchkarov	Dilshodbek	1999-06-11	3	1		10	971-22
29	Abdullayeva	Orzigul	2002-09-07	1	5			
37	Nurullayev	Temur	2002-09-25	4	8			
12	Samandarov	Egamberdi	2000-12-03	3	1			
10	Artikov	Doniyor	2001-05-28	3	4			

guruhlar

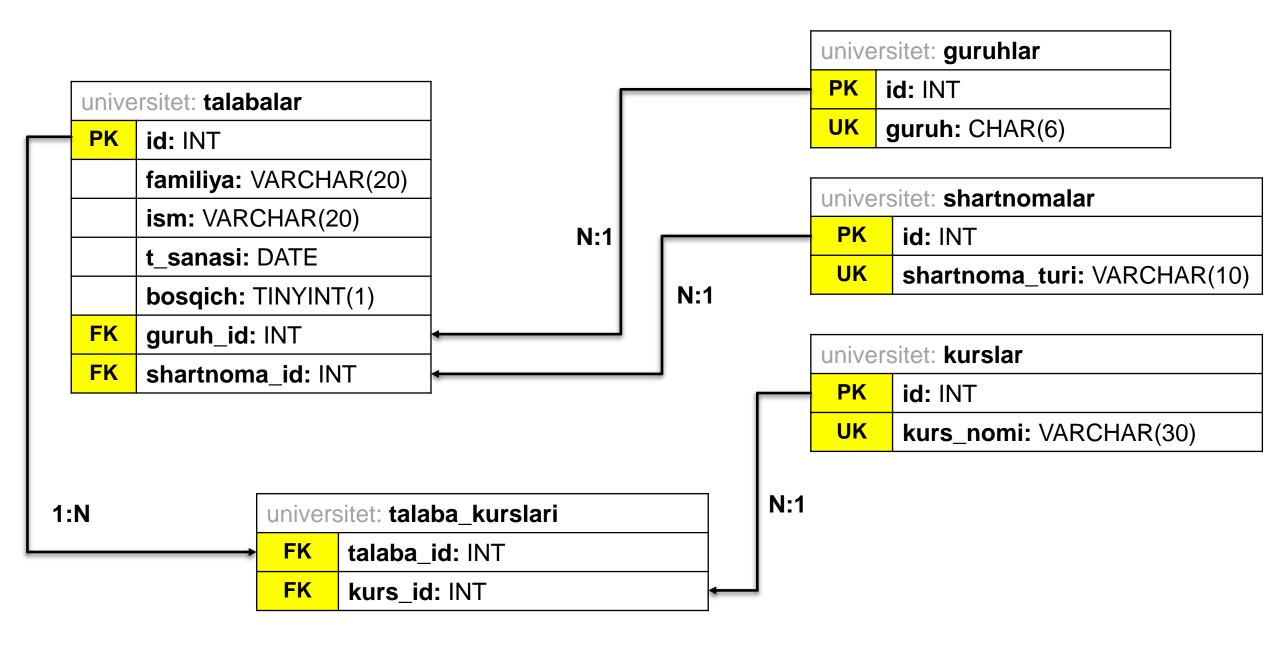
Jadvallarni bog'lashdan maqsad ma'lumotlarni kiritishdagi xatolikni oldini olishdir

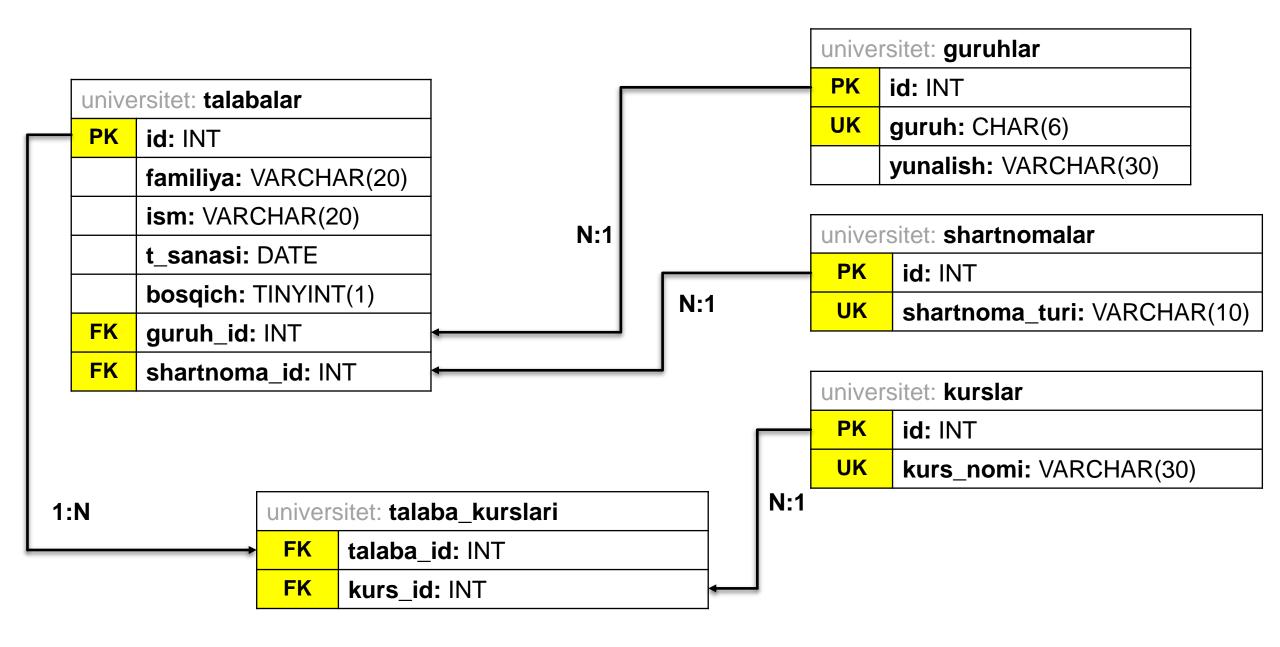
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id	familiya	ism	t_sanasi	bosqich	guruh_id		1	1
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34	Kamolova	Shohista	1999-02-13	3	7	N:1	1	911-21
2	Xabibullayev	Abrorbek	2000-08-04	3	1		2	911-23
1	Ismoilov	Abdulla	1998-02-24	2	10		3	912-21
26	Abdullayeva	Nilufar	1999-06-03	4	9		4	921-21
41	Tajiyeva	Umida	1999-10-25	3	7		5	931-23
39	Raximberganov	Temurbek	2001-10-05	3	3		6	932-20
43	Oʻrinov	Xalilla	2000-01-10	3	3		7	951-21
31	Norimbetov	Roʻzimboy	2002-07-10	4	6		8	961-20
8	Sotliqov	Dastonbek	2004-08-22	2	10		9	971-20
9	Kuchkarov	Dilshodbek	1999-06-11	3	1		10	971-22
29	Abdullayeva	Orzigul	2002-09-07	1	5			
37	Nurullayev	Temur	2002-09-25	4	8			
12	Samandarov	Egamberdi	2000-12-03	3	1			
10	Artikov	Doniyor	2001-05-28	3	4			
25	Qurbaniyazov		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1	15	•		

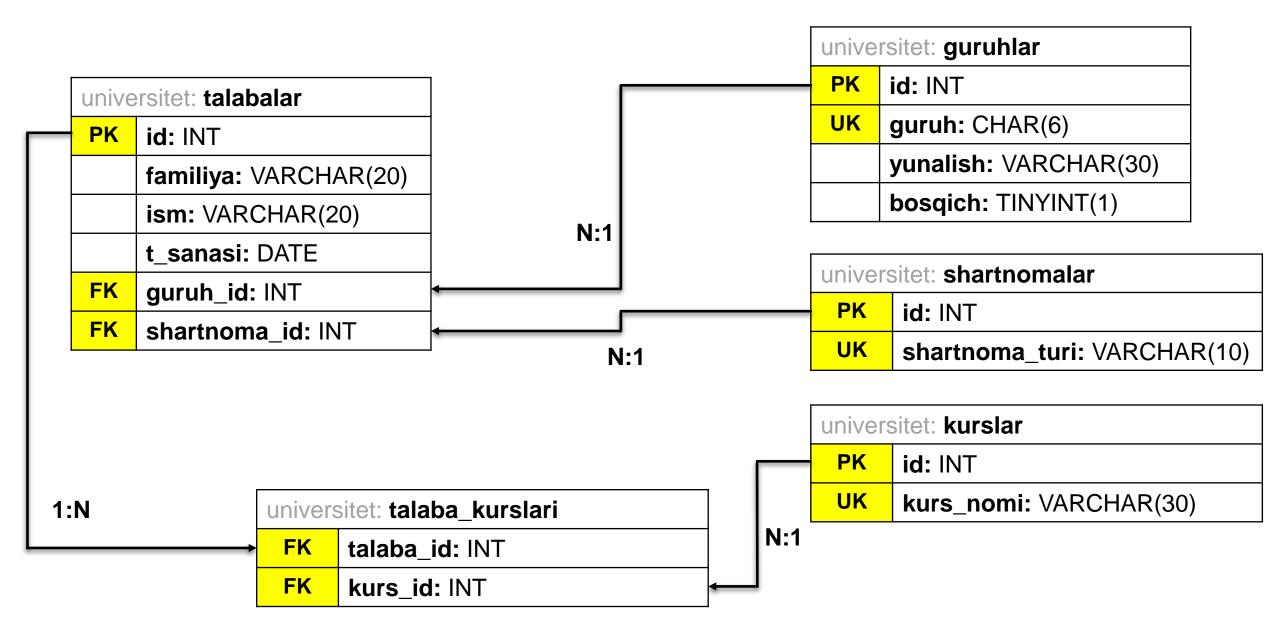
guruhlar

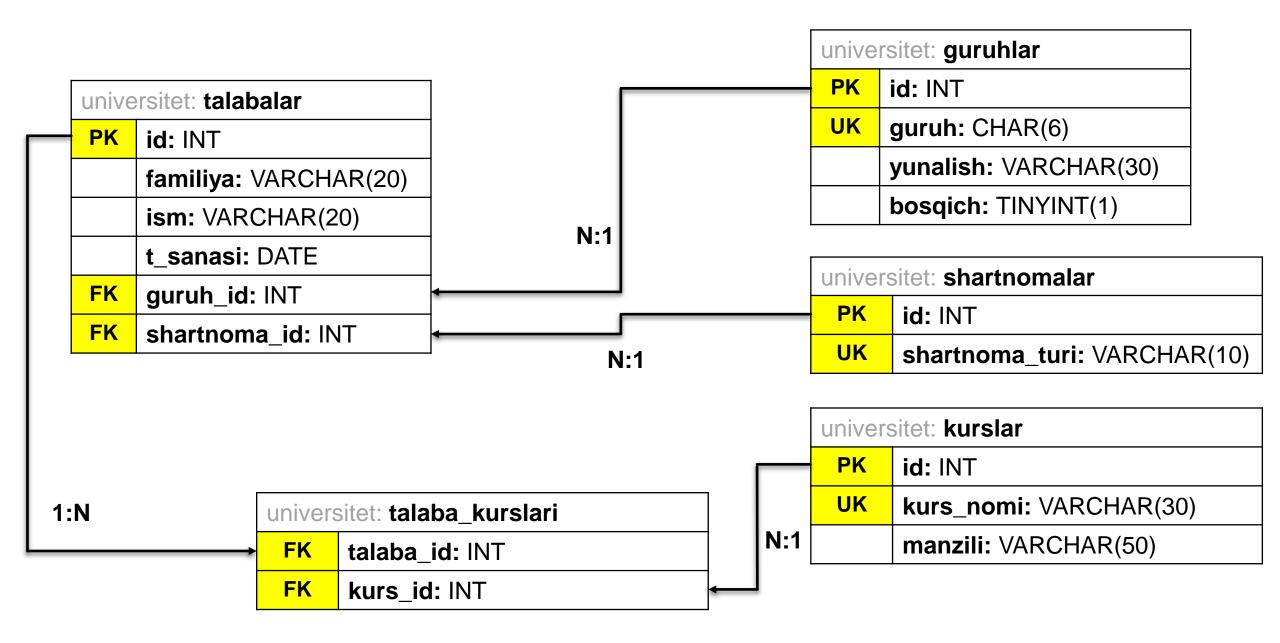
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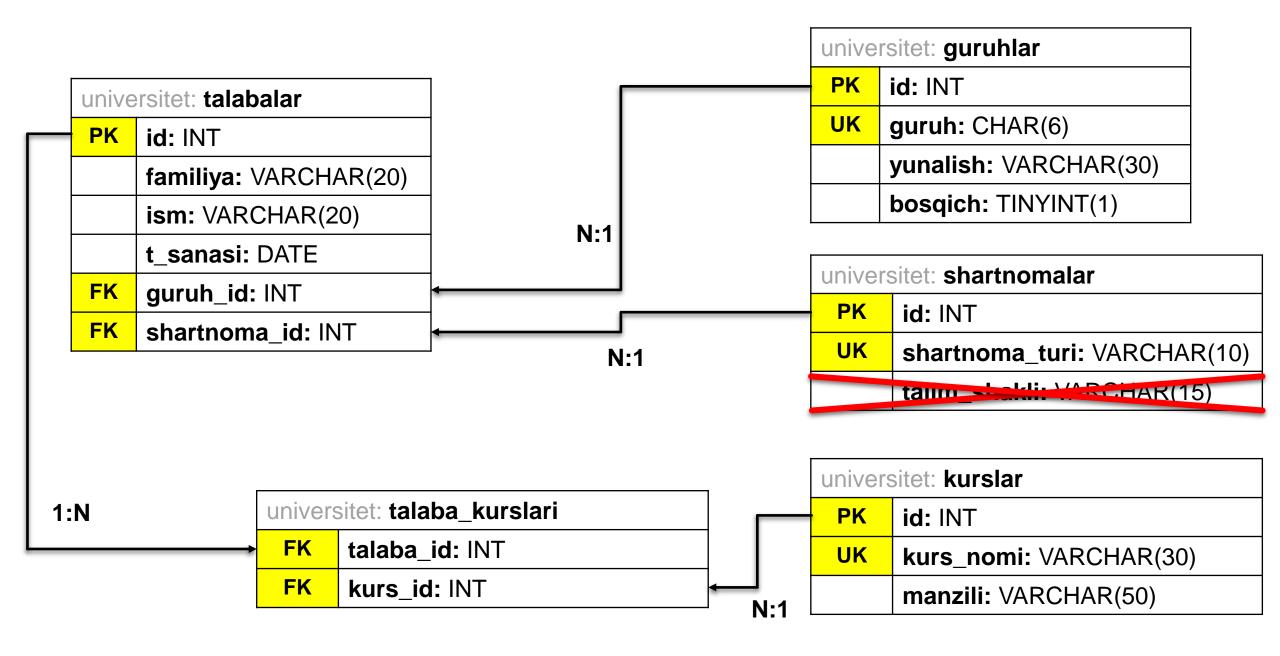
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2	Xabibullayev	Abrorbek	2000-08-04	3	1
1	Ismoilov	Abdulla	1998-02-24	2	10
26	Abdullayeva	Nilufar	1999-06-03	4	9
41	Tajiyeva	Umida	1999-10-25	3	7
39	Raximberganov	Temurbek	2001-10-05	3	3
43	Oʻrinov	Xalilla	2000-01-10	3	3
31	Norimbetov	Roʻzimboy	2002-07-10	4	6
8	Sotliqov	Dastonbek	2004-08-22	2	10
9	Kuchkarov	Dilshodbek	1999-06-11	3	1
29	Abdullayeva	Orzigul	2002-09-07	1	5
37	Nurullayev	Temur	2002-09-25	4	8
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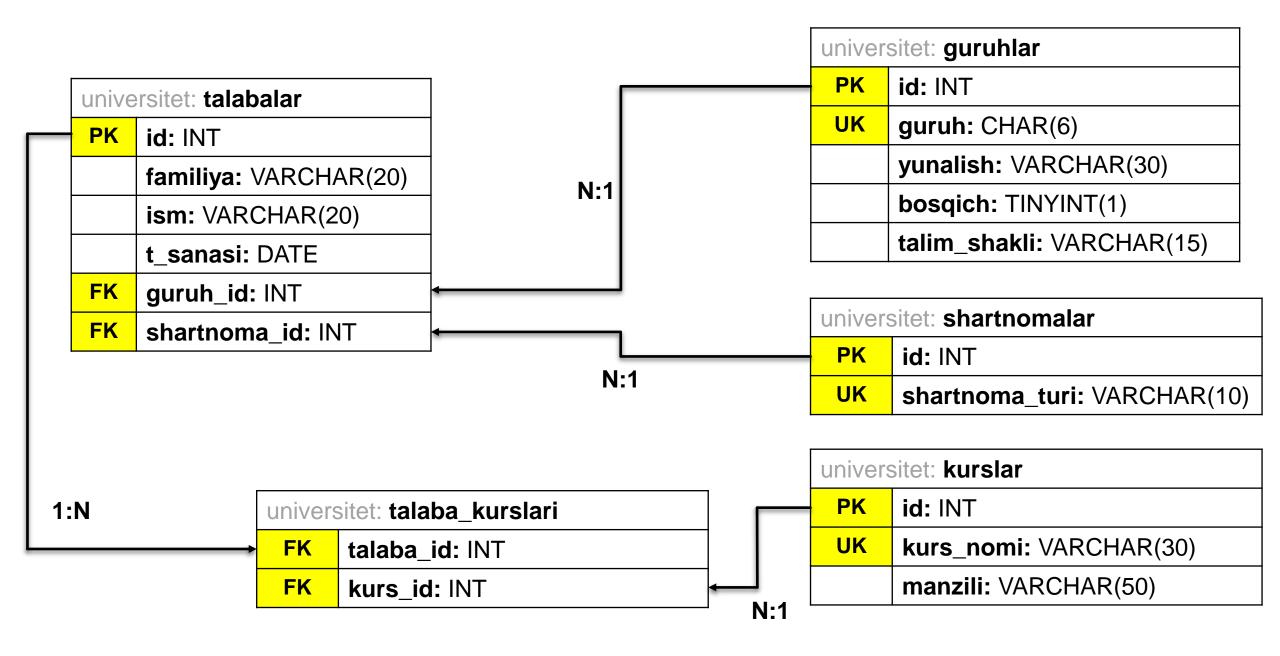












talabalar va guruhlar jadvallarini bog'lash

N:1

PK		talabala	r		FK
id	familiya	ism	t_sanasi	bosqich	guruh_id
5	Bekchanov	Asadbek	1997-03-29	4	8
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2	Xabibullayev	Abrorbek	2000-08-04	3	1
1	Ismoilov	Abdulla	1998-02-24	2	10
26	Abdullayeva	Nilufar	1999-06-03	4	9
41	Tajiyeva	Umida	1999-10-25	3	7
39	Raximberganov	Temurbek	2001-10-05	3	3
43	Oʻrinov	Xalilla	2000-01-10	3	3
31	Norimbetov	Roʻzimboy	2002-07-10	4	6
8	Sotliqov	Dastonbek	2004-08-22	2	10
9	Kuchkarov	Dilshodbek	1999-06-11	3	1
29	Abdullayeva	Orzigul	2002-09-07	1	5
37	Nurullayev	Temur	2002-09-25	4	8
12	Samandarov	Egamberdi	2000-12-03	3	1
10	Artikov	Doniyor	2001-05-28	3	4
25	Qurbaniyazov	Nazarbek	2003-03-30	1	2

PK	UK
1	
id	guruh
1	911-21
2	911-23
3	912-21
4	921-21
5	931-23
6	932-20
7	951-21
8	961-20
9	971-20

971-22

10

guruhlar

talabalar va guruhlar jadvallarini bog'lash

PK		talabala	r		FK
id	familiya	ism	t_sanasi	bosqich	guruh_id
5	Bekchanov	Asadbek	1997-03-29	4	8
34	Kamolova	Shohista	1999-02-13	3	7
2	Xabibullayev	Abrorbek	2000-08-04	3	1
1	Ismoilov	Abdulla	1998-02-24	2	10
26	Abdullayeva	Nilufar	1999-06-03	4	9
41	Tajiyeva	Umida	1999-10-25	3	7
39	Raximberganov	Temurbek	2001-10-05	3	3
43	Oʻrinov	Xalilla	2000-01-10	3	3
31	Norimbetov	Roʻzimboy	2002-07-10	4	6
8	Sotliqov	Dastonbek	2004-08-22	2	10
9	Kuchkarov	Dilshodbek	1999-06-11	3	1
29	Abdullayeva	Orzigul	2002-09-07	1	5
37	Nurullayev	Temur	2002-09-25	4	8
12	Samandarov	Egamberdi	2000-12-03	3	1
10	Artikov	Doniyor	2001-05-28	3	4
25	Qurbaniyazov	Nazarbek	2003-03-30	1	2

PK	UK	guruhlar		
id	guruh	yunalish	bosqich	talim_shakli
1	911-21	Kompyuter injiniring	3	Kunduzgi
2	911-23	Kompyuter injiniring	1	Kunduzgi
3	912-21	Kompyuter injiniring	3	Kunduzgi
4	921-21	Axborot- kommunikatsiyalar sohasida kasb ta'limi	3	Kunduzgi
5	931-23	Telekommunikatsiya 1 texnologiyalari		Kunduzgi
6	932-20	Telekommunikatsiya texnologiyalari 4		Kunduzgi
7	951-21	Axborot xavfsizligi 3 Ki		Kunduzgi
8	961-20	Kompyuter injiniring 4		Sirtqi
9	971-20	Telekommunikatsiya texnologiyalari	4	Sirtqi
10	971-22	Kompyuter injiniring	2	Sirtqi

guruhlar jadvalini ham jadvallarga ajratamiz

PK	UK 1	guruhlar		
id	guruh	yunalish	bosqich	talim_shakli
1	911-21	Kompyuter injiniring	Kompyuter injiniring 3	
2	911-23	Kompyuter injiniring	Kompyuter injiniring 1	
3	912-21	Kompyuter injiniring 3 Kund		Kunduzgi
4	921-21	Axborot- kommunikatsiyalar sohasida kasb ta'limi	3	Kunduzgi
5	931-23	Telekommunikatsiya 1 texnologiyalari		Kunduzgi
6	932-20	Telekommunikatsiya texnologiyalari	4	Kunduzgi
7	951-21	Axborot xavfsizligi 3		Kunduzgi
8	961-20	Kompyuter injiniring 4		Sirtqi
9	971-20	Telekommunikatsiya texnologiyalari	4	Sirtqi
10	971-22	Kompyuter injiniring	2	Sirtqi

guruhlar jadvalini ham jadvallarga ajratamiz

PK UK

	1
id	guruh
1	911-21
2	911-23
3	912-21
4	921-21
5	931-23
6	932-20
7	951-21
8	961-20
9	971-20
10	971-22

guruhlar

PK

_1		
id	yunalish_nomi	
1	Kompyuter injiniring	
2	Kompyuter injiniring	
3	Kompyuter injiniring	
4	Axborot-kommunikatsiyalar sohasida kasb ta'limi	
5	Telekommunikatsiya texnologiyalari	
6	Telekommunikatsiya texnologiyalari	
7	Axborot xavfsizligi	
8	Kompyuter injiniring	
9	Telekommunikatsiya texnologiyalari	
10	Kompyuter injiniring	

yunalishlar

PK

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9	4
10	2

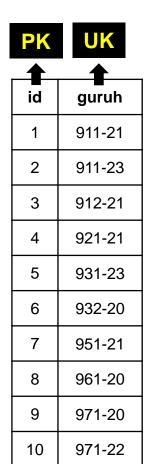
bosqichlar

PK

talim_shakli	
Kunduzgi	
Sirtqi	
Sirtqi	
Sirtqi	

talim_shakllari

Jadvallarga kalit beramiz



PK	UK ↑
id	yunalish_nomi
1	Kompyuter injiniring
2	Axborot-kommunikatsiyalar sohasida kasb ta'limi
3	Telekommunikatsiya texnologiyalari
4	Axborot xavfsizligi
5	Dasturiy injiniring
6	Pochta aloqasi texnologiyasi

yuna	lish	lar

PK	UK
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4	4
5	5

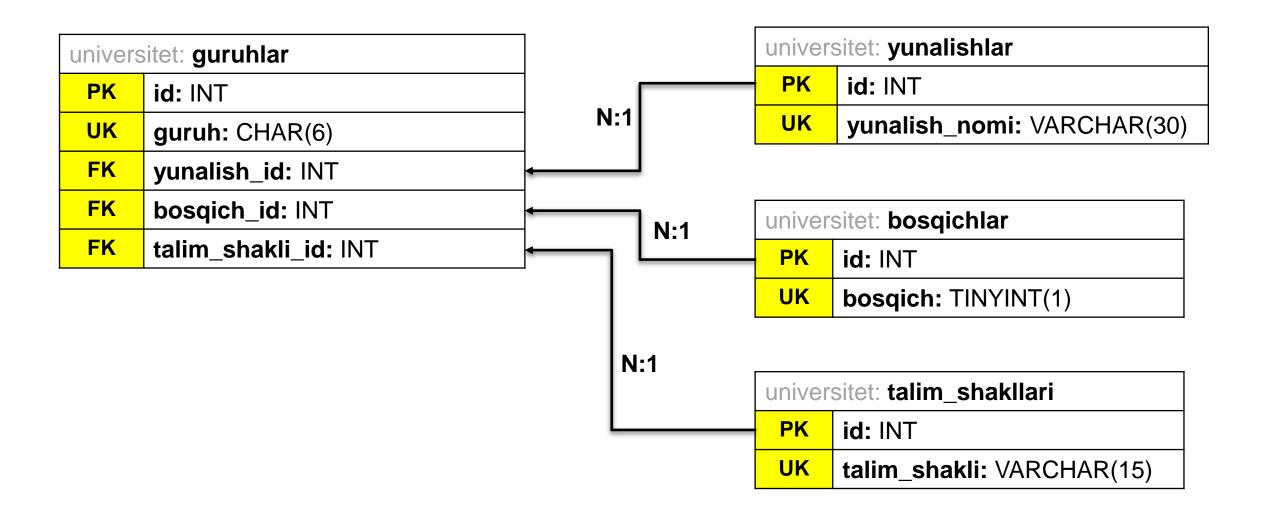
bosqichlar



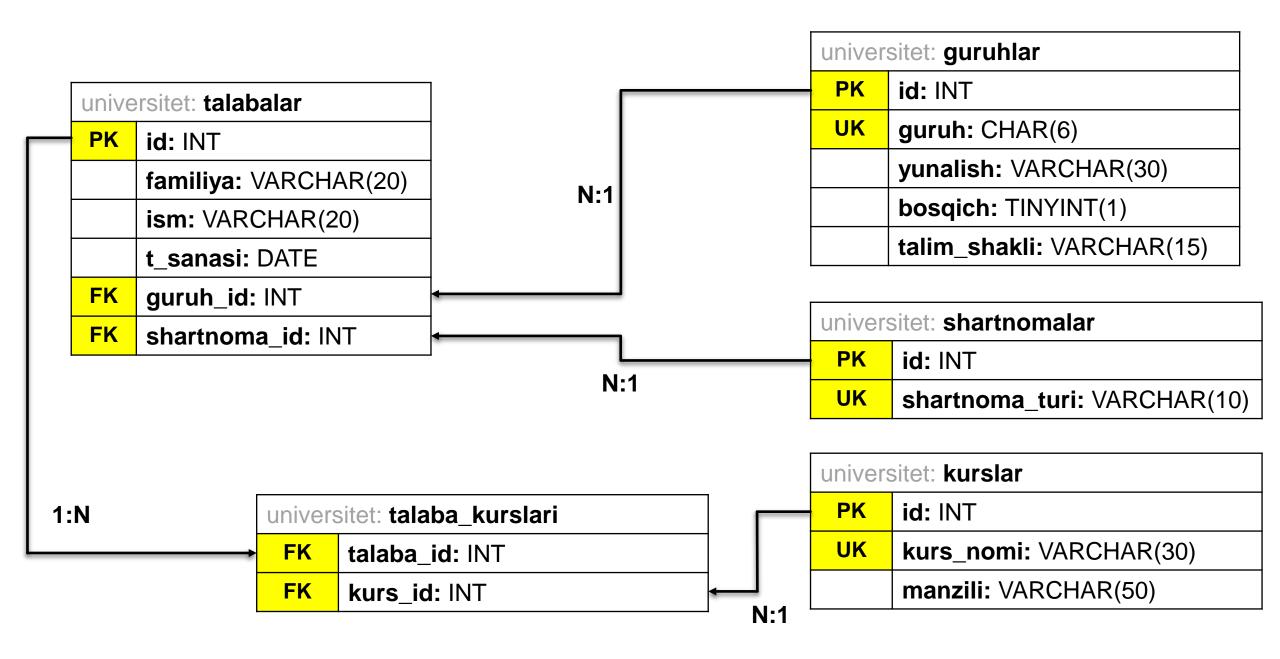
talim_shakllari

guruhlar

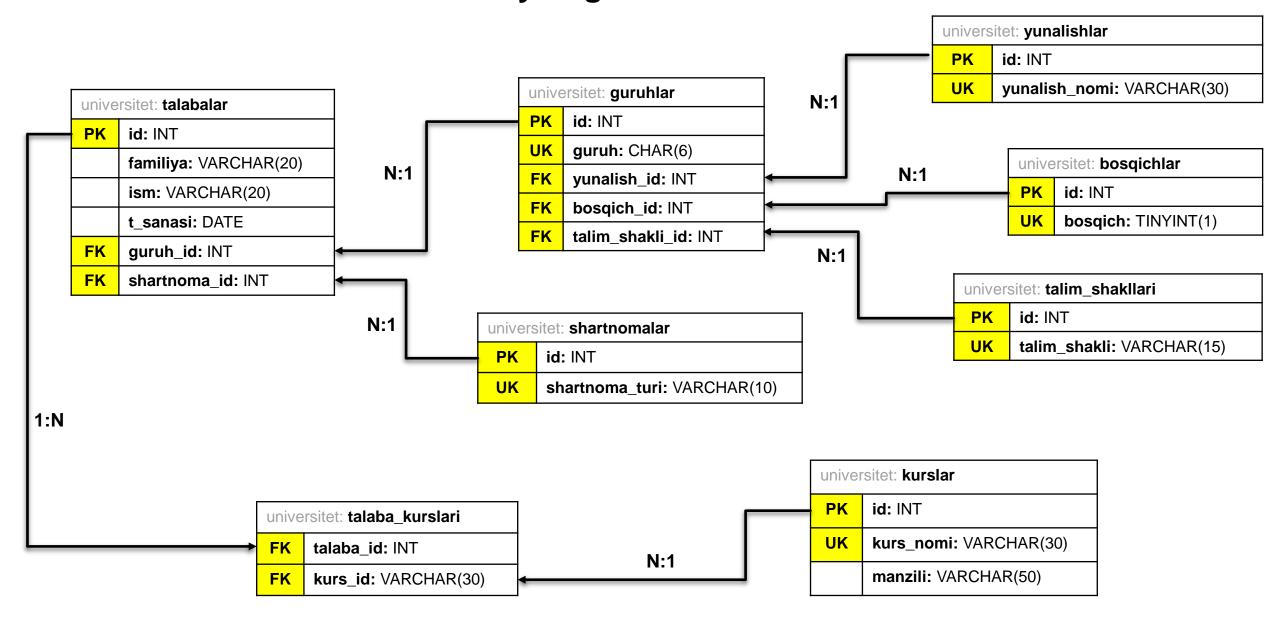
guruhlar jadvalidan ajratilgan jadvallarni birlashtiramiz



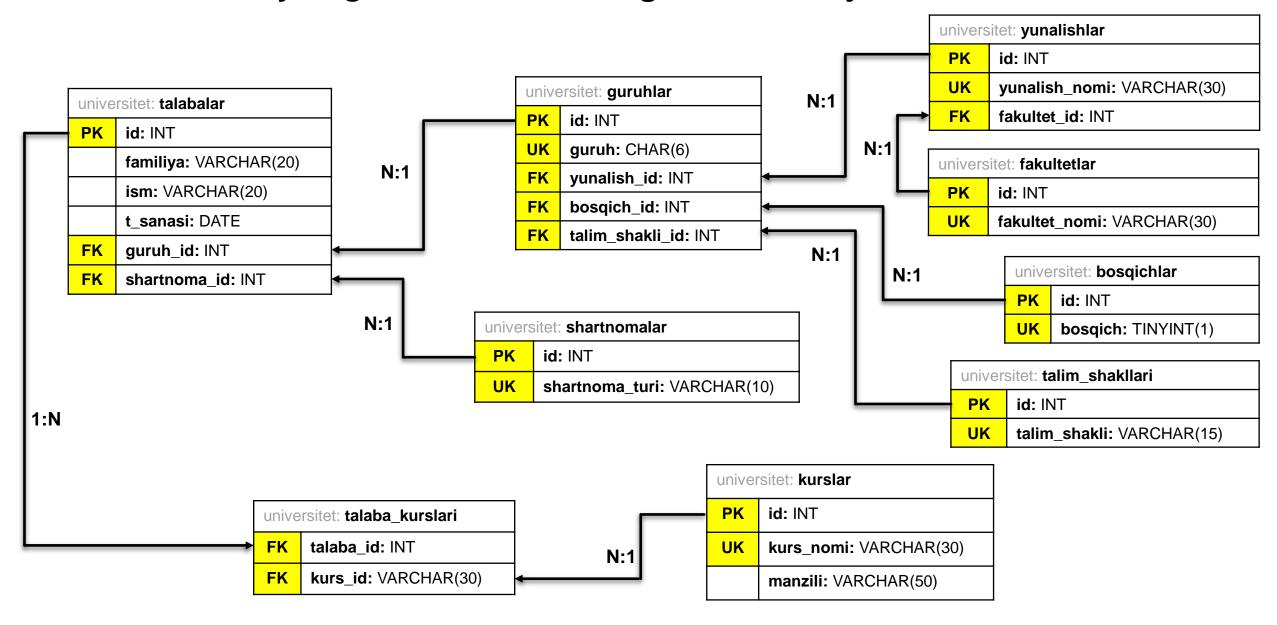
Umumiy bog'lanishlar sxemasi



Umumiy bog'lanishlar sxemasi



Umumiy bog'lanishlar sxemasiga fakultetlar jadvalini kiritamiz



Umumiy bog'lanishlar sxemasiga imtiyozlar jadvalini kiritamiz

