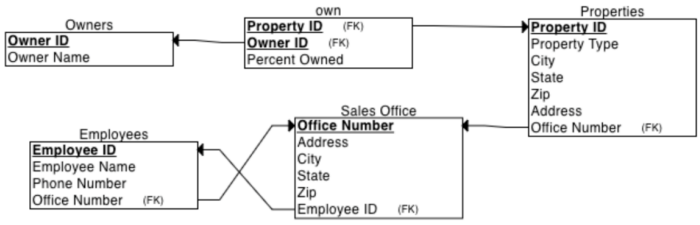
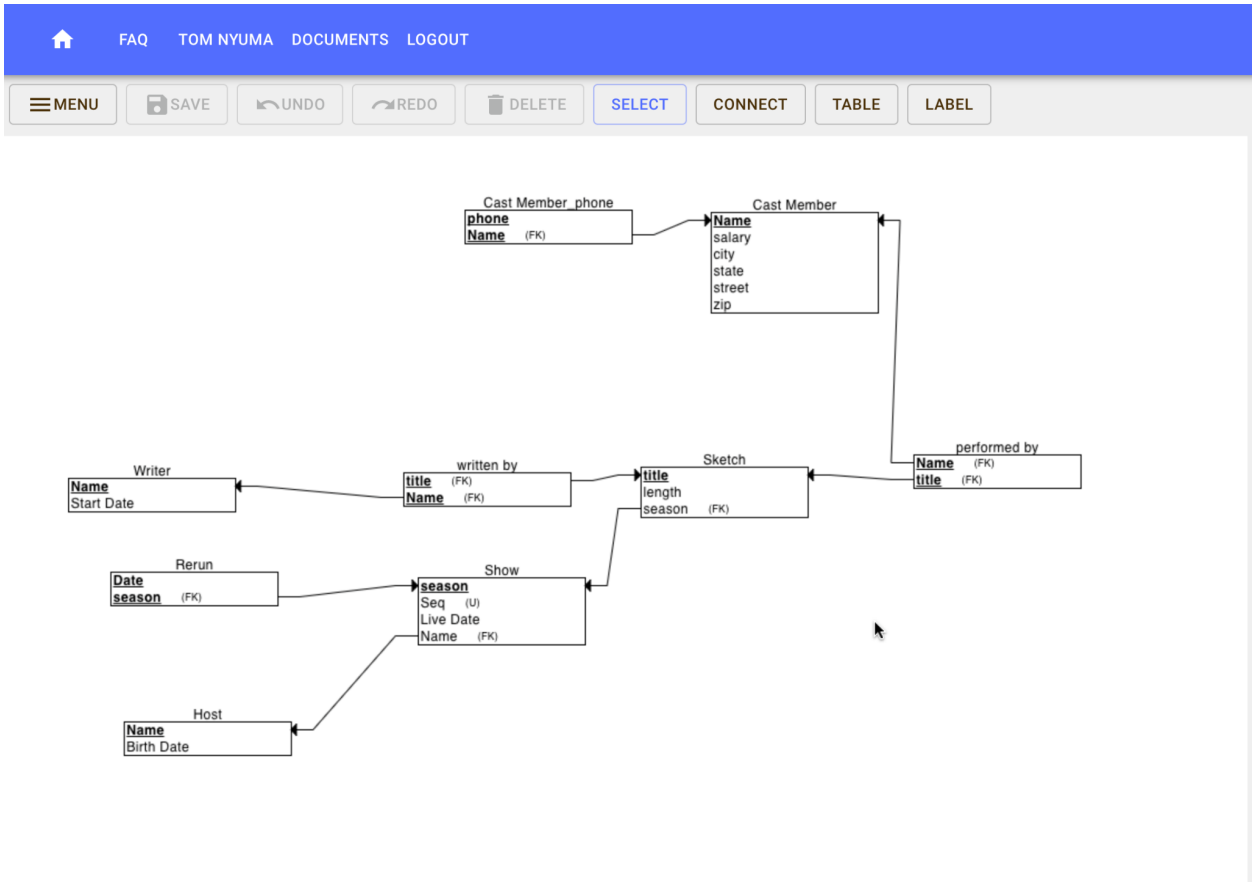
FAQ TOM NYUMA DOCUMENTS LOGOUT

MENU SAVE UNDO REDO DELETE SELECT CONNECT TABLE LABEL




FAQ
TOM NYUMA
DOCUMENTS
LOGOUT
MENU
SAVE
UNDO
REDO
DELETE
SELECT
CONNECT
TABLE
LABEL
Cast Member_phone
phone
Name (FK)
Cast Member
Name
salary
city
state
street
zip
performed by
Name (FK)
title (FK)
Writer
Name
Start Date
written by
title (FK)
Name (FK)
Sketch
title
length
season (FK)
Rerun
Date
season (FK)
Show
season
Seq (U)
Live Date
Name (FK)
Host
Name
Birth Date

Problem 3: (10 pts) **Label** all primary and foreign keys in the database to below. Suppose each of the following operations is applied to the database. Discuss *all* integrity constraints (key, entity, domain, referential) violated by each operation, if any.

STUDENT Primary

Name	Student_number	Class	Major
Smith	17	1	CS
Brown	8	2	CS

COURSE primary

Course_name	Course_number	Credit_hours	Department
Intro to Computer Science	CS1310	4	CS
Data Structures	CS3320	4	CS
Discrete Mathematics	MATH2410	3	MATH
Database	CS3380	3	CS

SECTION Foreign

Section_identifier	Course_number	Semester	Year	Instructor
85	MATH2410	Fall	07	King
92	CS1310	Fall	07	Anderson
102	CS3320	Spring	08	Knuth
112	MATH2410	Fall	08	Chang
119	CS1310	Fall	08	Anderson
135	CS3380	Fall	08	Stone

Primary also course fall 20 smiths

GRADE_REPORT Foreign

Student_number	Section_identifier	Grade
17	112	B
17	119	C
8	85	A
8	92	A
8	102	B
8	135	A

PREREQUISITE Primary

Course_number	Prerequisite_number
CS3380	CS3320
CS3380	MATH2410
CS3320	CS1310

foreign

(a) Insert < 150, 'CS162', 'Fall', 2020, 'Smith' > into SECTION

✓ can do

assuming year has no domain constraint

(b) Delete < 17, 112, 'B' > from GRADE_REPORT.

✓ can do

(c) Insert < 'CS3380', 'CS3320'> into PREREQUISITE.

X Duplicate

(foreign, primary)

tuple which can't work

(d) Modify the Course_number of the SECTION tuple with Section_identifier 85 to 'MATH2444'.

~~Ca~~ can't do, changing a foreign key isn't good DB design and would require change to multiple tables