

School Newspaper

Group 3 Project Part 2

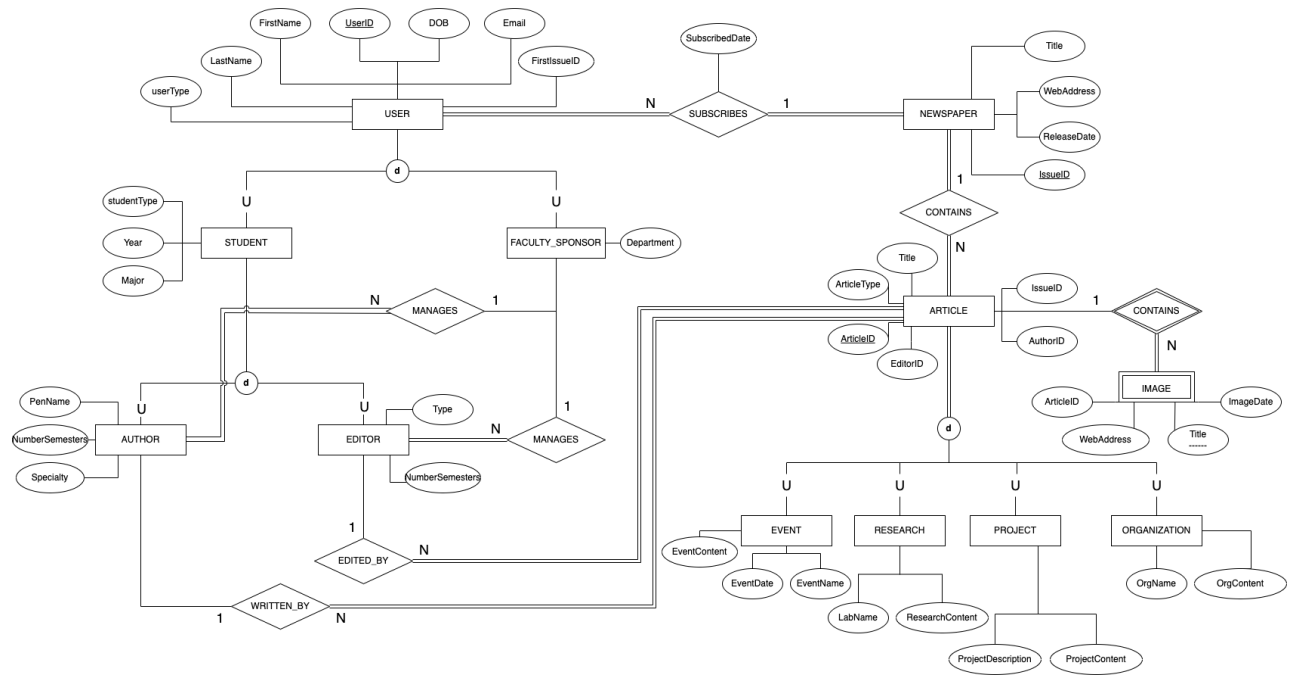
Team Contribution:

Troy Curtsinger – 25%, Nathan Williams – 25%

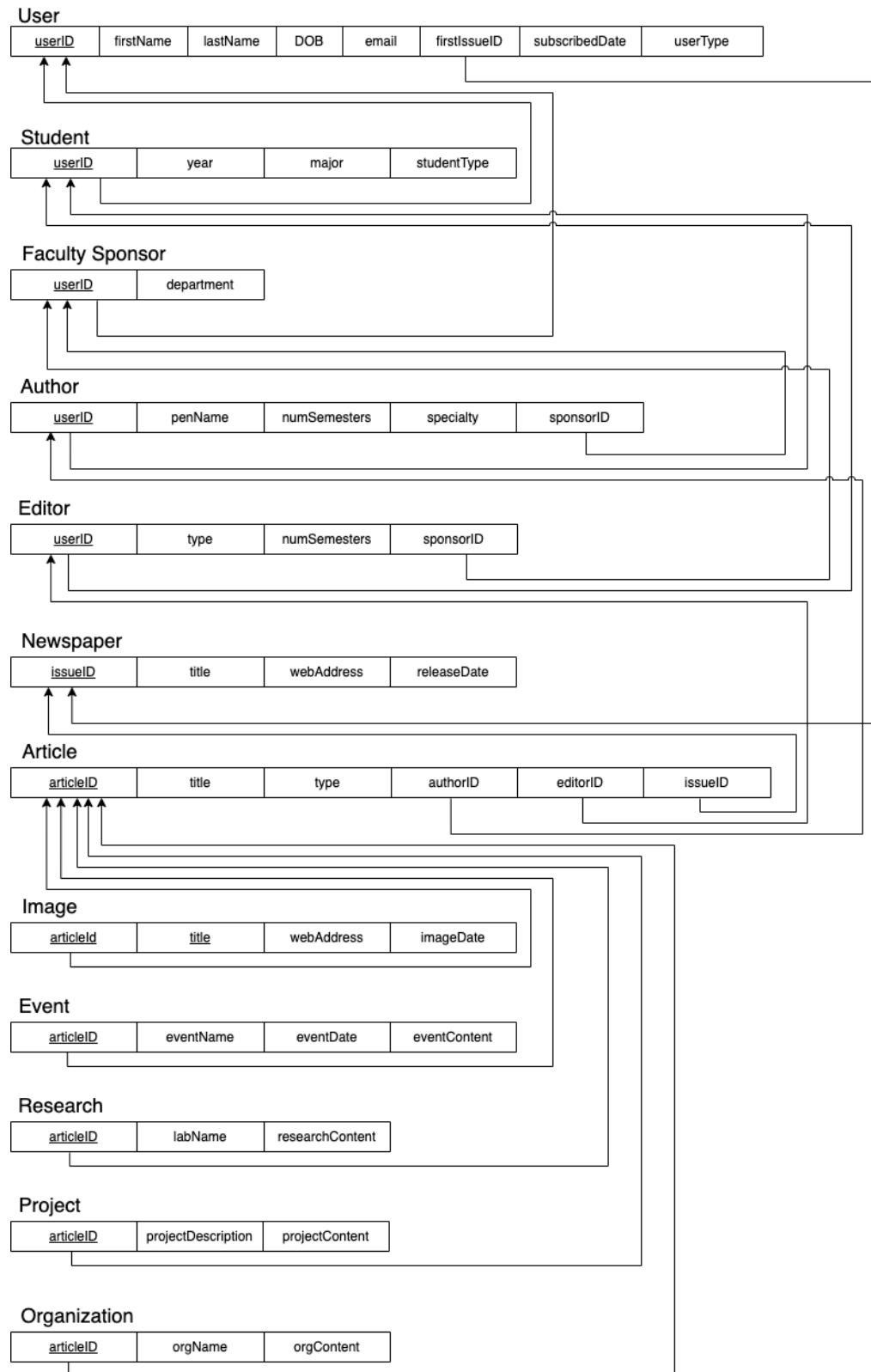
Ryan Dimaranan – 25%, Reeve Mathews – 25%

May 2, 2022

ER Diagram



Schema Diagram



Data Dictionary

				Attributes			
Table	Table Description	Primary Key	SuperKey	Attribute	Data Type	Domain	Foreign Key
Users	A person who has an account with our newspaper	userID	(userID, firstName, lastName, DOB, email, firstIssueID, subscribedDate, userType)	userID	INTEGER	An eight digit number	firstIssue
				firstName	VARCHAR	Any string	
				lastName	VARCHAR	Any string	
				DOB	DATE	Any date starting from 01/01/1900	
				email	VARCHAR	Any string ending in " @utdallas.edu "	
				firstIssueID	INTEGER	An eight digit number	
				subscribedDate	DATE	Any date	
				userType	VARCHAR	Student, FacultySponsor, Other	
Student	A student from the Erik Jonsson School (Child of User)	userID	(userID, year, major, studentType)	userID	INTEGER	An eight digit number	userID
				year	VARCHAR	either "Freshman", "Sophomore", "Junior", "Senior"	
				major	VARCHAR	Major of study at the Erik Jonsson School	
				studentType	VARCHAR	Author, Editor, Other	
FacultySponsor	A Professor from the Erik Jonsson School (child of User)	userID	(userID, department)	userID	INTEGER	An eight digit number	userID
				department	VARCHAR	Name of a Department at the School	
Author	A student user who writes articles for the newspaper (Child of Student)	userID	(userID, penName, numSemesters, specialty, sponsorID)	userID	INTEGER	An eight digit number	userID, sponsorID
				penName	VARCHAR	Any string	
				numSemesters	INTEGER	Any number	
				specialty	VARCHAR	Either "Event", "Research",	

						"Project" or "Organization"	
				sponsorID	INTEGER	An eight digit number	
Editor	A student user who edits articles for the newspaper (Child of Student)	userID	(userID, type, sumSemesters, sponsorID)	userID	INTEGER	An eight digit number	userID, sponsorID
				type	VARCHAR	Either "Section Editor" or "Sub-editor"	
				numSemesters	INTEGER	Any number	
				sponsorID	INTEGER	An eight digit number	
Newspaper	An issue of the newspaper represented by the database	issueID	(issueID, title, webAddress, releaseDate)	issueID	INTEGER	Any 8 digit #	
				title	VARCHAR	Any string	
				webAddress	VARCHAR	Any string	
				releaseDate	DATE	Any date	
Image	Images used in articles stored for presentation(Weak entity)	title, articleID	(title, articleID, webAddress, imageDate)	title	VARCHAR	Any string	ArticleID
				articleID	INTEGER	Any 8 digit #	
				webAddress	VARCHAR	Any string	
				imageDate	DATE	Any date	
Article	A written article that is included in the newspaper	articleID	(title, issueID, articleID, editorID, type, authorID)	title	VARCHAR	Any string	issueID, authorID, editorID
				issueID	INTEGER	Any 8 digit number	
				articleID	INTEGER	Any 8 digit number	
				editorID	INTEGER	Any 8 digit number	
				type	VARCHAR	'Event', 'Research', 'Project', 'Organization'	
				authorID	INTEGER	Any 8 digit number	
Event	an article that describes an event hosted by a department for students. (child of article)	articleID	(articleID, eventName, eventDate, eventContent)	articleID	INTEGER	Any 8 digit number	articleID
				eventName	VARCHAR	Any string	
				eventDate	DATE	Any date	
				eventContent	LONGTEXT	Any text	

Research	An article about a research activity hosted by a group (child of article)	articleID	(articleID, labName, researchContent)	articleID	INTEGER	Any 8 digit number	articleID
				labName	VARCHAR	Any string	
				researchContent	LONGTEXT	Any text	
Project	An article that explains an ongoing projects (child of article)	articleID	(articleID, projectDescription, projectContent)	articleID	INTEGER	Any 8 digit number	articleID
				projectDescription	VARCHAR	Any string	
				projectContent	LONGTEXT	Any text	
Organization	An article about an organization (child of article)	articleID	(articleID, orgName, orgContent)	articleID	INTEGER	Any 8 digit number	articleID
				orgName	VARCHAR	Any string	
				orgContent	LONGTEXT	Any text	

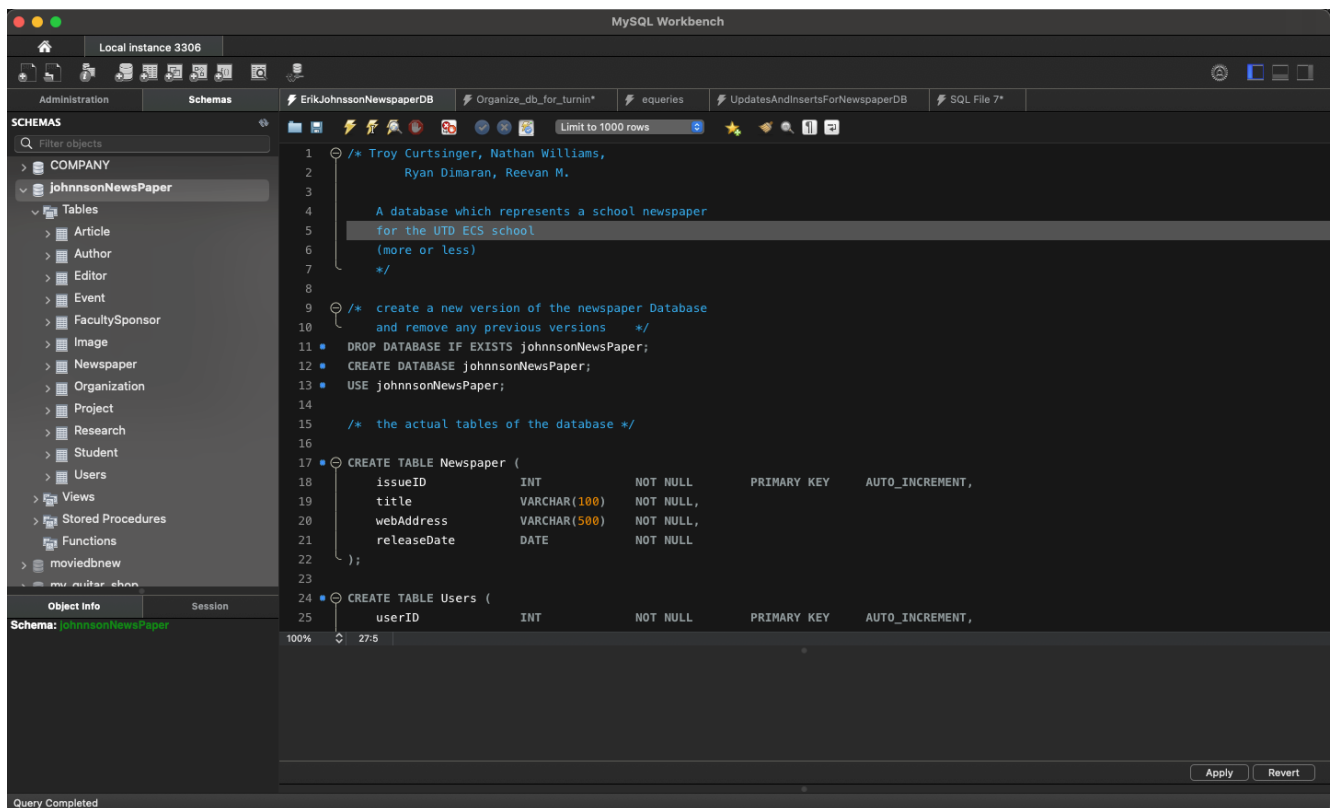
Implementation Log

TABLE_ SCHEMA	TABLE_ NAME	TABLE_ TYPE	COLUMN_ NAME	ORDINAL_ POSITION	DATA_ TYPE	KEY_ FLAG	Row_ Counts	CREATE_ TIME	UPDATE_ TIME
johnnsonne wspaper	Article	BASE TABLE	articleID	1	int	PRI	60	4/26/22 13:28	
johnnsonne wspaper	Article	BASE TABLE	issueID	2	int		60	4/26/22 13:28	
johnnsonne wspaper	Article	BASE TABLE	title	3	varchar		60	4/26/22 13:28	
johnnsonne wspaper	Article	BASE TABLE	type	4	varchar		60	4/26/22 13:28	
johnnsonne wspaper	Article	BASE TABLE	editorID	5	int		60	4/26/22 13:28	
johnnsonne wspaper	Article	BASE TABLE	authorID	6	int		60	4/26/22 13:28	
johnnsonne wspaper	Author	BASE TABLE	userID	1	int	PRI	5	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Author	BASE TABLE	penName	2	varchar		5	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Author	BASE TABLE	numSemester s	3	int		5	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Author	BASE TABLE	specialty	4	varchar		5	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Author	BASE TABLE	sponsorID	5	int		5	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Editor	BASE TABLE	userID	1	int	PRI	4	4/26/22 13:28	5/2/22 9:44
johnnsonne wspaper	Editor	BASE TABLE	type	2	varchar		4	4/26/22 13:28	5/2/22 9:44
johnnsonne wspaper	Editor	BASE TABLE	numSemester s	3	int		4	4/26/22 13:28	5/2/22 9:44
johnnsonne wspaper	Editor	BASE TABLE	SponsorID	4	int		4	4/26/22 13:28	5/2/22 9:44
johnnsonne wspaper	Event	BASE TABLE	articleID	1	int	PRI	13	4/26/22 13:28	
johnnsonne wspaper	Event	BASE TABLE	eventName	2	varchar		13	4/26/22 13:28	
johnnsonne wspaper	Event	BASE TABLE	eventDate	3	date		13	4/26/22 13:28	
johnnsonne wspaper	Event	BASE TABLE	eventContent	4	longtext		13	4/26/22 13:28	
johnnsonne wspaper	FacultySpons or	BASE TABLE	userID	1	int	PRI	2	4/26/22 13:28	5/1/22 21:35
johnnsonne wspaper	FacultySpons or	BASE TABLE	department	2	varchar		2	4/26/22 13:28	5/1/22 21:35
johnnsonne wspaper	Image	BASE TABLE	title	1	varchar	PRI	50	4/26/22 13:28	
johnnsonne wspaper	Image	BASE TABLE	articleID	2	int	PRI	50	4/26/22 13:28	
johnnsonne wspaper	Image	BASE TABLE	webAddress	3	varchar		50	4/26/22 13:28	
johnnsonne wspaper	Image	BASE TABLE	imageDate	4	date		50	4/26/22 13:28	
johnnsonne wspaper	Newspaper	BASE TABLE	issueID	1	int	PRI	5	4/26/22 13:28	

johnnsonne wspaper	Newspaper	BASE TABLE	title	2	varchar		5	4/26/22 13:28	
johnnsonne wspaper	Newspaper	BASE TABLE	webAddress	3	varchar		5	4/26/22 13:28	
johnnsonne wspaper	Newspaper	BASE TABLE	releaseDate	4	date		5	4/26/22 13:28	
johnnsonne wspaper	Organization	BASE TABLE	articleID	1	int	PRI	14	4/26/22 13:28	
johnnsonne wspaper	Organization	BASE TABLE	orgName	2	varchar		14	4/26/22 13:28	
johnnsonne wspaper	Organization	BASE TABLE	orgContent	3	longtext		14	4/26/22 13:28	
johnnsonne wspaper	Project	BASE TABLE	articleID	1	int	PRI	18	4/26/22 13:28	
johnnsonne wspaper	Project	BASE TABLE	projectDescri ption	2	varchar		18	4/26/22 13:28	
johnnsonne wspaper	Project	BASE TABLE	projectConte nt	3	longtext		18	4/26/22 13:28	
johnnsonne wspaper	Research	BASE TABLE	articleID	1	int	PRI	15	4/26/22 13:28	
johnnsonne wspaper	Research	BASE TABLE	labName	2	varchar		15	4/26/22 13:28	
johnnsonne wspaper	Research	BASE TABLE	researchCont ent	3	longtext		15	4/26/22 13:28	
johnnsonne wspaper	Student	BASE TABLE	userID	1	int	PRI	674	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Student	BASE TABLE	year	2	varchar		674	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Student	BASE TABLE	major	3	varchar		674	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Student	BASE TABLE	studentType	4	varchar		674	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	userID	1	int	PRI	1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	firstName	2	varchar		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	lastName	3	varchar		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	DOB	4	date		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	email	5	varchar		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	firstIssueID	6	int		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	subscribedDa te	7	date		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	Users	BASE TABLE	userType	8	varchar		1000	4/26/22 13:28	5/2/22 16:12
johnnsonne wspaper	authorinfo	VIEW	penName	1	varchar				
johnnsonne wspaper	authorinfo	VIEW	firstName	2	varchar				
johnnsonne wspaper	authorinfo	VIEW	lastName	3	varchar				
johnnsonne wspaper	authorinfo	VIEW	year	4	varchar				

johnnsonne wspaper	authorinfo	VIEW	major	5	varchar				
johnnsonne wspaper	authorinfo	VIEW	numSemester s	6	int				
johnnsonne wspaper	authorinfo	VIEW	specialty	7	varchar				
johnnsonne wspaper	editorinfo	VIEW	firstName	1	varchar				
johnnsonne wspaper	editorinfo	VIEW	lastName	2	varchar				
johnnsonne wspaper	editorinfo	VIEW	year	3	varchar				
johnnsonne wspaper	editorinfo	VIEW	major	4	varchar				
johnnsonne wspaper	editorinfo	VIEW	type	5	varchar				
johnnsonne wspaper	editorinfo	VIEW	numSemester s	6	int				
johnnsonne wspaper	newspaperst atistics	VIEW	IssuesToDate	1	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	ArticlesToDat e	2	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	ImagesToDat e	3	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	EventsToDate	4	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	ResearchToD ate	5	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	ProjectsToDat e	6	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	TotalUsers	7	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	TotalStudents	8	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	TotalFaculty	9	bigint				
johnnsonne wspaper	newspaperst atistics	VIEW	TotalOther	10	bigint				
johnnsonne wspaper	studentinfo	VIEW	firstName	1	varchar				
johnnsonne wspaper	studentinfo	VIEW	lastName	2	varchar				
johnnsonne wspaper	studentinfo	VIEW	subscribedDa te	3	date				
johnnsonne wspaper	studentinfo	VIEW	year	4	varchar				
johnnsonne wspaper	studentinfo	VIEW	major	5	varchar				

Tool Work Area



SQL Support Statements

Create:

```
CREATE TABLE Users (
    userID          INT          NOT NULL          PRIMARY KEY          AUTO_INCREMENT,
    firstName       VARCHAR(100) NOT NULL,
    lastName        VARCHAR(100) NOT NULL,
    DOB             DATE,
    email           VARCHAR(100),
    firstIssueID    INT          NOT NULL,
    subscribedDate  DATE         NOT NULL,
    userType        VARCHAR(50)  NOT NULL,

    FOREIGN KEY (firstIssueID)
        REFERENCES Newspaper(issueID)
);
```

userID	firstName	lastName	DOB	email	firstIssueID	subscribedDate	userType
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Select:

```
SELECT * FROM Users;
```

userID	firstName	lastName	DOB	email	firstIssueID	subscribedDate	userType
1	Pegeen	Salmond	2003-06-25	psalmond0@pen.io	3	2021-05-22	FacultySponsor
2	Dulcy	Skoate	1982-10-08	dskoate1@google.de	1	2021-06-05	Other
3	Antony	Marking	1992-09-30	amarking2@moonfruit.com	1	2022-01-19	FacultySponsor
4	Mitchell	Blanche	2001-04-25	mblanche3@edublogs.org	3	2021-04-27	Other
5	Koenraad	Bauer	2000-04-12	kbauer4@wikia.com	3	2021-04-06	Student
6	Genvieve	Windrus	1988-09-21	gwindrus5@independent.co.uk	2	2022-02-22	Student
7	Amalita	Jaggli	1973-11-24	ajaggli6@naver.com	1	2021-12-18	Other
8	Trina	Antalfy	1976-07-24	tantalfy7@spotify.com	3	2021-05-06	Student
9	Roseann	Couttes	1986-07-31	rcouttes8@chicagotribune.com	3	2021-11-19	Student
10	Maurizio	Wakeley	1992-04-03	mwakeley9@ed.gov	5	2022-02-08	Student
11	Emlyn	MacNoc	1976-05-28	emacnockatera@nairn.gov.au	4	2021-11-16	Student

Insert:

```
INSERT INTO Users (userID, firstName, lastName, DOB, email, firstIssueID, subscribedDate, userType)
VALUES (1001, 'John', 'Doe', '2002-04-27', 'johnDoe@email.com', 4, '2022-04-27', 'Student');
```

userID	firstName	lastName	DOB	email	firstIssueID	subscribedDate	userType
1001	John	Doe	2002-04-27	johnDoe@email.com	4	2022-04-27	Student
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Delete:

```
DELETE FROM Users WHERE userID = 1001;
```

User Table

userID	firstName	lastName	DOB	email	firstIssueID	subscribedDate	userType
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Student Table: Cascade Delete

userID	year	major	studentType
NULL	NULL	NULL	NULL



Update:

userID	year	major	studentType	
1001	NULL	NULL	NULL	
NULL	NULL	NULL	NULL	

```
UPDATE Student SET year = 'Junior', major = 'Computer Science', studentType = 'Author'
WHERE userID = 1001;
```

userID	year	major	studentType	
1001	Junior	Computer Science	Author	
NULL	NULL	NULL	NULL	

Drop:

Result Grid			Filter Rows: <input type="text"/>
	articleID	orgName	orgContent
*	NULL	NULL	NULL

```
DROP TABLE ORGANIZATION;
```

Error Code: 1146. Table 'johnsonnewspaper.organization' doesn't exist

*After referencing the table in a query after it was dropped.

Data Generation

Newspaper: 5 entries

We plan to begin our newspaper at the start of the year (2020). We will distribute a new issue every month for a total of 5 issues for the month of May.

[illegible]

Articles: 60 entries

Each newspaper will have a total of 12 articles per issue. This brings the total issues to 60 for May 2022.

articleID	issueID	title	type	editorID	authorID	
1	5	Some People Excel At PROGRAMMING And S...	Event	15	9	
2	5	Your Key To Success: PROGRAMMING	Project	13	8	
3	5	PROGRAMMING: An Incredibly Easy Method T...	Research	12	9	
4	3	Fast-Track Your PROGRAMMING	Research	13	8	
5	1	The Untapped Gold Mine Of PROGRAMMING...	Project	14	8	
6	5	What Alberto Savoia Can Teach You About PRO...	Research	14	10	
7	4	How We Improved Our PROGRAMMING In On...	Organization	15	10	
8	3	How To Quit PROGRAMMING In 5 Days	Research	15	8	
9	5	Take The Stress Out Of PROGRAMMING	Project	12	11	
10	3	Got Stuck? Try These Tips To Streamline Your...	Project	14	8	
11	2	Believe In Your PROGRAMMING Skills But Nev...	Project	14	11	
12	2	Want More Money? Start PROGRAMMING	Event	12	11	
13	5	Who Else Wants To Know The Mystery Behind...	Research	15	10	
14	1	You Can Thank Us Later - 3 Reasons To Stop T...	Project	12	9	
15	1	Find Out How I Cured My PROGRAMMING In 2...	Organization	13	11	

Images: 50 entries

We estimate 50 images since most articles will have a picture, but some will not.

title	articleID	webAddress	imageDate	
apple	30	https://chicagotribune.com/justo/pellentesque/vi...	2021-11-04	
application	20	http://ebay.co.uk/convallis/duis/consequat/dui.xml	2022-02-24	
architecture	23	https://china.com.cn/venenatis/tristique/fusce.aspx	2021-09-25	
bird	51	http://engadget.com/in/consequat/ut/nulla/sed/a...	2021-11-14	
childhood	7	http://devhub.com/cum/sociis/natoque/penatibu...	2021-10-11	
department	56	http://forbes.com/ut/blandit/non.json	2021-07-30	
depth	18	https://deviantart.com/sapien/a/libero/nam/dui/pr...	2021-01-26	
disk	22	https://tinypic.com/mi/nulla/ac/enim/in/tempor/tu...	2021-04-06	
elevator	16	http://toplist.cz/ligula/suspendisse/ornare/conse...	2021-05-10	
emotion	20	https://cocolog-nifty.com/ipsum/primis/in/faucibu...	2021-06-11	
engineering	4	https://reuters.com/eieifend/luctus/ultrices/eu.js	2021-10-09	
entertainm...	45	https://samsung.com/vestibulum/rutrum/rutrum/...	2021-05-20	
family	28	http://lhg.com/in/lectus.jsp	2021-01-10	
finding	30	https://bigcartel.com/volutpat/dui/maecenas/tristi...	2021-08-26	
gene	20	http://who.int/ac/ebortis.json	2021-05-06	

Events, Research, Project, Organization: Between 13 and 18 entries each

These tables will make up a total of 60 entries between the 4 of them. The total should match the article table's 60 entries since each article should come from 1 of the 4 tables in this list.

Events - 13

articleID	eventName	eventDate	eventContent	
1	ShoNuf Reasons	2021-12-29	bibendum imperdiet nullam orci pede venenatis...	
12	Lively Event Group	2021-02-11	ultrices posuere cubilia curae duis faucibus acc...	
16	Spring Specacular Entertainment	2021-08-26	magnis dis parturient montes nascetur ridiculus...	
20	Organization Functions	2021-05-05	a nibh in quis justo maecenas rhoncus aliquam l...	
21	Satori Services	2021-09-23	enim lorem ipsum dolor sit amet consectetur a...	
26	Conference Big Eventualities	2021-06-13	duis bibendum felis sed interdum venenatis turp...	
29	Lucky Surge Inc	2021-04-26	molestie sed justo pellentesque viverra pede ac...	
34	Millinario Organization	2021-05-11	diam cras pellentesque volutpat dui maecenas t...	
41	Strategic Connection	2021-07-30	leo odio condimentum id luctus nec molestie se...	
47	Beyond Touch	2022-01-11	malesuada in imperdiet et commodo vulputate j...	
49	Reason Specacular Logic	2021-09-29	sollicitudin vitae consectetur eget rutrum at lor...	
50	Organically Organization	2021-01-23	molestie nibh in lectus pellentesque at nulla sus...	
54	Checklist Events	2021-09-05	in leo maecenas pulvinar lobortis est phasellus...	
NULL	NULL	NULL	NULL	

Research - 15

articleID	labName	researchContent	
3	integrated lab	nec molestie sed justo pellentesque viverra ped...	
4	parallel computing	nullam molestie nibh in lectus pellentesque at n...	
6	virtual reality lab	sagittis nam congue risus semper porta volutpat...	
8	interactive lab	mus vivamus vestibulum sagittis sapien cum so...	
13	responsive programming lab	felis eu sapien cursus vestibulum proin eu mi nu...	
18	synchronized mechanics lab	nulla ultrices aliquet maecenas leo odio condim...	
19	balanced dynamics	nunc vestibulum ante ipsum primis in faucibus o...	
24	interface research lab	integer ac neque dui bibendum morbi non qua...	
31	meta-level laboratory	sit amet justo morbi ut odio cras mi pede males...	
33	optimized programming	tellus nisi eu orci mauris lacinia sapien quis liber...	
56	active mechanics lab	ridiculus mus etiam vel augue vestibulum rutru...	
57	parameterized coding lab	elit proin interdum mauris non ligula pellentesqu...	
58	conceptual engineering	in ante vestibulum ante ipsum primis in faucibus...	
59	scalable software engineer...	leo maecenas pulvinar lobortis est phasellus sit...	
60	multimedia lab	nec nisi volutpat eleifend donec ut dolor morbi v...	

Project - 18

articleID	projectDescription	projectContent	
2	Techloop	ligula vehicula consequat morbi a ipsum integer...	
5	Zentech	felis sed lacus morbi sem mauris laoreet ut rhon...	
9	Programming Scale	eleifend pede libero quis orci nullam molestie ni...	
10	Tech Yard	convallis morbi odio odio elementum eu interd...	
11	Tech Port	donec pharetra magna vestibulum aliquet ultrice...	
14	Tech Atlas	sem dui aliquam convallis nunc proin at turpis...	
22	Programming Gear	tincidunt nulla mollis molestie lorem quisque ut...	
28	Programming Method	a nibh in quis justo maecenas rhoncus aliquam l...	
30	The Programming Connection	pede lobortis ligula sit amet eleifend pede libero...	
35	Coprogramming	rutrum neque aenean auctor gravida sem praes...	
37	Goprogramming	lobortis ligula sit amet eleifend pede libero quis...	
39	Programming Saga	justo maecenas rhoncus aliquam lacus morbi q...	
42	Programming Signal	morbi vel lectus in quam fringilla rhoncus mauris...	
43	Techica	mauris lacinia sapien quis libero nullam sit amet...	
46	Programming Vibe	pede lobortis ligula sit amet eleifend pede libero...	

Organization - 14

articleID	orgName	orgContent	
7	Engineering Gate	dis parturient montes nascetur ridiculus mus eti...	
15	Engineering Authority	sapien quis libero nullam sit amet turpis element...	
17	Red Engi Co	ligula vehicula consequat morbi a ipsum integer...	
23	RiverCity Engineering	nunc donec quis orci eget orci vehicula condime...	
25	Kudos Engineering	lacus morbi quis tortor id nulla ultrices aliquet m...	
27	Code Hunter	mauris non ligula pellentesque ultrices phasellu...	
32	TopSecret Coder	in imperdiet et commodo vulputate justo in blan...	
36	Sundial Programming	ante vel ipsum praesent blandit lacinia erat vesti...	
38	BlackBear Engineering	vestibulum ante ipsum primis in faucibus orci lu...	
40	NewStar	elementum ligula vehicula consequat morbi a ip...	
44	MiddleEast Engineering	sit amet diam in magna bibendum imperdiet null...	
45	CompSci Co	condimentum curabitur in libero ut massa volutp...	
51	Forum Engineering	pulvinar lobortis est phasellus sit amet erat nulla...	
55	Ranger Engineering	nulla integer pede justo lacinia eget tincidunt eg...	
NULL	NULL	NULL	

Users: 1000 entries

There are roughly 8000 students in the Eric Jonsson school. We estimate that 1000 users will join our newspaper in the first year. This includes students, faculty and other individuals.

userID	firstName	lastName	DOB	email	firstIssueID	subscribedDate	userType
1	Pegeen	Salmond	2003-06-25	psalmond0@pen.io	3	2021-05-22	FacultySponsor
2	Dulcy	Skoate	1982-10-08	dskoate1@google.de	1	2021-06-05	Other
3	Antony	Marking	1992-09-30	amarking2@moonfruit.com	1	2022-01-19	FacultySponsor
4	Mitchell	Blanche	2001-04-25	mblanche3@edublogs.org	3	2021-04-27	Other
5	Koenraad	Bauer	2000-04-12	kbauer4@wikia.com	3	2021-04-06	Student
6	Genvieve	Windrus	1988-09-21	gwindrus5@independent.co.uk	2	2022-02-22	Student
7	Amalita	Jaggli	1973-11-24	ajaggli6@naver.com	1	2021-12-18	Other
8	Trina	Antalfy	1976-07-24	tantalfy7@spotify.com	3	2021-05-06	Student
9	Roseann	Couttes	1986-07-31	rcouttes8@chicagotribune.com	3	2021-11-19	Student
10	Maurizio	Wakeley	1992-04-03	mwakeley9@ed.gov	5	2022-02-08	Student
11	Emlyn	MacNock...	1976-05-28	emacnockatera@oaic.gov.au	4	2021-11-16	Student
12	Neal	Flack	1977-04-13	nflackb@unesco.org	1	2021-12-19	Student
13	Korella	Green	1974-12-18	kgreenc@tripod.com	2	2021-06-10	Student
14	Wilmar	Edser	1995-08-09	wedserd@tumblr.com	3	2021-01-15	Student
15	Adora	Glowach	1970-01-16	aglowache@cam.ac.uk	3	2022-04-15	Student

Student: 674 entries

We estimate that almost 700 students will join our newspaper in the first year. We understand that adoption will take time, so we expect this table to grow as the paper matures.

userID	year	major	studentType	
5	Freshman	Computer Science	Other	
6	Sophmore	Engineering	Other	
8	Junior	Computer Science	Author	
9	Sophmore	Engineering	Author	
10	Junior	Software Engineering	Author	
11	Freshman	Engineering	Author	
12	Senior	Computer Science	Editor	
13	Senior	Engineering	Editor	
14	Senior	Software Engineering	Editor	
15	Senior	Engineering	Editor	
16	Freshman	Computer Science	Other	
17	Sophmore	Engineering	Other	
18	Junior	Computer Science	Other	
19	Senior	Engineering	Other	
20	Freshman	Computer Science	Other	

Faculty Sponsor: 2 entries

Faculty Sponsors offer support to authors and editors. Since they are not involved with administration or writing, we feel that 2 sponsors for the first year is sufficient.

[illegible]

Authors: 4 entries

We expect 4 authors to be enough for the planned workload. However, if we need to add more authors, our database is set up to handle the task by flipping a student's status to 'author' in the student's table.

[illegible]

Editors: 4 entries

We chose 4 editors to work with the 4 authors. This way there should be one editor available to review one author's work at any one time. Again, if we need to increase the editors this can be done by changing a student's status to 'editor' from the editor's table.

[illegible]

Example Queries

1. Largest Population

```
SELECT COUNT(*) AS Current_Registered_Users FROM Users
```

	Current_Registered_Users	
▶	1000	

2. Key Entity

```
SELECT u.userID,u.userType,s.studentType,u.firstName,u.lastName,u.email,s.year,s.major,a.penName,a.specialty
FROM Users AS u
INNER JOIN Student AS s ON u.userID = s.userID
INNER JOIN Author AS a ON u.userID = a.userID

UNION ALL

SELECT u.userID,u.userType,s.studentType,u.firstName,u.lastName,u.email,s.year,s.major,NULL AS penName,e.type
FROM Users AS u
INNER JOIN Student AS s ON u.userID = s.userID
INNER JOIN Editor AS e ON u.userID = e.userID
```

userID	userType	studentTy...	firstName	lastName	email	year	major	penName	specialty
8	Student	Author	Trina	Antalfy	tantalfy7@spotify.com	Junior	Computer Science	Blue	Programming
9	Student	Author	Roseann	Couttes	rcouttes8@chicagotribune.com	Sophmore	Engineering	Red	Engineering
10	Student	Author	Maurizio	Wakeley	mwakeley9@ed.gov	Junior	Software Engineering	Yellow	Machine Learning
11	Student	Author	Emlyn	MacNockater	emacnockatera@oaic.gov.au	Freshman	Engineering	Orange	Engineering Research
12	Student	Editor	Neal	Flack	nflackb@unesco.org	Senior	Computer Science	NULL	Proofreader
13	Student	Editor	Korella	Green	kgreenc@tripod.com	Senior	Engineering	NULL	Substantive
14	Student	Editor	Wilmar	Edser	wedserd@tumblr.com	Senior	Software Engineering	NULL	Proofreader
15	Student	Editor	Adora	Glowach	aglowache@cam.ac.uk	Senior	Engineering	NULL	Substantive

3. Join Operation

```
SELECT
    s.studentType,
    u.firstName,
    u.lastName,
    a.penName,
    s.year,
    s.major,
    a.specialty,
    CONCAT(u2.firstName,' ',u2.lastName) AS facultySponsorName,
    f.department
FROM Users AS u
INNER JOIN Student AS s ON u.userID = s.userID
INNER JOIN Author AS a ON u.userID = a.userID
INNER JOIN FacultySponsor AS f ON a.sponsorID = f.userID
INNER JOIN Users AS u2 ON f.userID = u2.userID;
```

studentType	firstName	lastName	penName	year	major	specialty	facultySponsorName	department
Author	Trina	Antalfy	Blue	Junior	Computer Science	Programming	Pegeen Salmond	Computer Science
Author	Roseann	Couttes	Red	Sophmore	Engineering	Engineering	Antony Marking	Engineering
Author	Maurizio	Wakeley	Yellow	Junior	Software Engineering	Machine Learning	Pegeen Salmond	Computer Science
Author	Emlyn	MacNockater	Orange	Freshman	Engineering	Engineering Research	Antony Marking	Engineering

4. Aggregate Function

```
SELECT
    COUNT(userID) AS numNewUsers,
    title,
    (SELECT COUNT(userID) FROM newspaper n2 JOIN users ON users.firstIssueID = n2.issueID WHERE n2.issueID <= n1.issueID) as totalUsers
FROM
    newspaper n1
    JOIN
    users ON firstIssueID = issueID
GROUP BY issueID;
```

	numNewUsers	title	totalUsers
▶	187	January Edition	187
	173	February Edition	360
	203	March Edition	563
	234	April Edition	797
	203	May Edition	1000

5. Sorted by Date

```
SELECT a.title, a.type, n.releaseDate
FROM Article AS a
INNER JOIN Newspaper AS n ON a.issueID = n.issueID
ORDER BY releaseDate ASC;
```

title	type	releaseDate
5 Ways To Get Through To Your PROGRAMMING	Project	2022-01-01
22 Tips To Start Building A ENGINEERING You Always Wanted	Organization	2022-01-01
Never Suffer From ENGINEERING Again	Organization	2022-01-01
How To Make Your ENGINEERING Look Amazing In 5 Days	Project	2022-01-01
No More Mistakes With ENGINEERING	Research	2022-01-01
Read This Controversial Article And Find Out More About ENGINEERING	Research	2022-01-01
ENGINEERING Smackdown!	Research	2022-01-01
Believe In Your PROGRAMMING Skills But Never Stop Improving	Project	2022-02-01
Want More Money? Start PROGRAMMING	Event	2022-02-01
There's Big Money In PROGRAMMING	Event	2022-02-01
5 Problems Everyone Has With PROGRAMMING – How To Solved Them	Event	2022-02-01

