CS157A Database Project
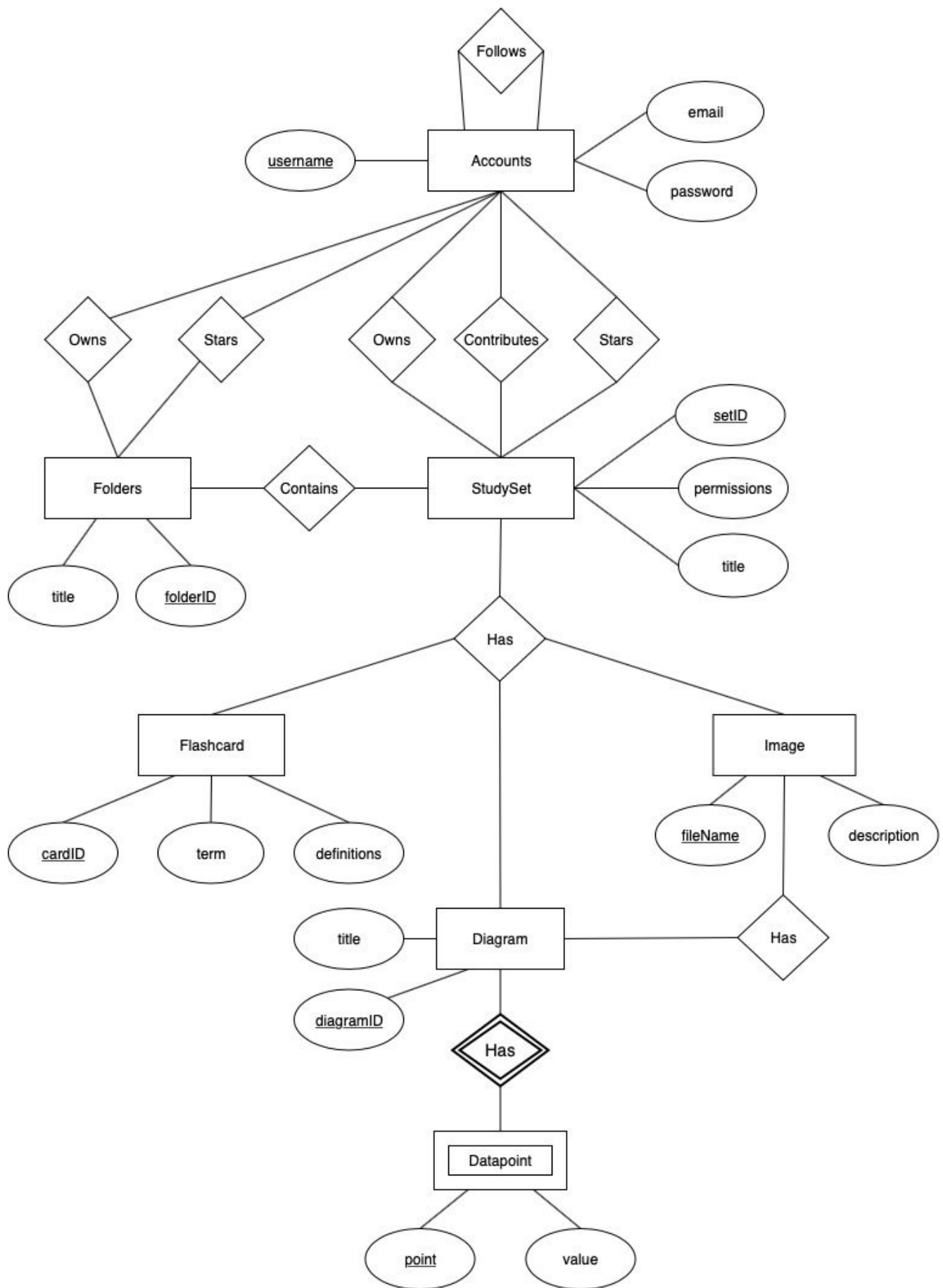
A Web Application for Study Materials

Project Design

Team 29

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E/R Diagram Breakdown

- Accounts represents user accounts which are identified by username and have attributes for email and password.
- Follows is a relationship matching accounts to itself. An account can follow other accounts to see their study sets.
- Owns is a relationship matching accounts to study set, representing the study set that each account owns. An account can own multiple study sets.
- Contributes is relationship similar to Owns. It represents study sets that a user has contributed to, but doesn't necessarily own. Multiple accounts can contribute to multiple StudySets.
- Stars is a relationship similar to Contributes and Owns between Accounts and StudySets. It represents what study sets a user has stared in order to keep track of.
- StudySet is an entity that represents study sets. Each studySet has Flashcards, Images, and/or Diagrams.
- Folders is an entity that represents folders. Each folder contains StudySets and is identified by folderID.
- Owns is a relationship mapping Accounts to Folders. An Account can own multiple folders.
- Stars is a relationship similar to owns between Folders and Accounts. It represents what Folders a user has stared in order to keep track of.
- Contains is a relationship mapping StudySets to Folders. It represents a StudySets that are associated with Folders.
- Flashcard is an entity with a term and definitions, the two sides of a flashcard, identified by the cardID.
- Image is an entity that simply represents an image that a user can upload to be contained in a study set identified with its fileName and has a description.
- Diagram is an entity that is identified by diagramID. It has an image and can have multiple Datapoints.
- Datapoint is a weak entity that represents points places on the diagram. It is associated with a particular diagram and identified through its point and has a value.

Entity **Accounts**

username	email	password
android>apple	facts@gmail.com	root
first	test@gmail.com	root
second	test@gmail.com	root
sjsu	sjsu@gmail.com	root
sjsu1	sjsu@gmail.com	root
sjsu10	sjsu@gmail.com	root
sjsu11	sjsu@gmail.com	root
sjsu2	sjsu@gmail.com	root
sjsu3	sjsu@gmail.com	root
sjsu4	sjsu@gmail.com	root
sjsu5	sjsu@gmail.com	root
sjsu6	sjsu@gmail.com	root
sjsu7	sjsu@gmail.com	root
sjsu8	sjsu@gmail.com	root
sjsu9	sjsu@gmail.com	root
NULL	NULL	NULL

Entity **Flashcards**

cardID	terms	definitions
1	testing	to prove/disprove a guess through experiements
2	computer science	the study of computers
100	testing	to prove/disprove a guess through experiements
101	testing	to prove/disprove a guess through experiements
102	testing	to prove/disprove a guess through experiements
104	testing	to prove/disprove a guess through experiements
200	computer science	the study of computers
300	testing	to prove/disprove a guess through experiements
301	testing	to prove/disprove a guess through experiements
303	testing	to prove/disprove a guess through experiements
400	testing	to prove/disprove a guess through experiements
401	testing	to prove/disprove a guess through experiements
403	testing	to prove/disprove a guess through experiements
500	computer science	the study of computers
501	computer science	the study of computers
503	computer science	the study of computers
4763...	yeeted	past tense of yeet
NULL	NULL	NULL

Entity **Folders**

title	folderID
first folder	1
second folder	2
first folder	4
second folder	5
first folder	6
second folder	9
first folder	10
second folder	11
first folder	60
second folder	90
first folder	100
second folder	110
Physics	44678
Physics	44679
Physics	446710
Physics	446712
Physics	4467100
Physics	4467120
NULL	NULL

Entity **StudySets**

setID	permissions	title
1	admin	First study set
2	user	Biology Study set
3	user	Physics Study set
100	user	test
101	user	test
102	user	test
103	user	test
104	user	test
105	user	test
106	user	test
107	user	test
108	user	test
109	user	test
110	user	test
111	user	test
112	user	test
113	user	test
NULL	NULL	NULL

Entity **Image**

fileName	description
PNG_10	Image of Nuetron Star
PNG_11	Image of black hole
PNG_100	Image of Blue Star
PNG_20	Image of Red Star
PNG_60	Image of White Dwarf
PNG_400	Image of Orange Dwarf
PNG_800	Image of Lightyear Diagram
JPG_170	Compiler Image
JPG_18	E/R diagram Image
JPG_19	CRC cards Image
JPG_20	HTTP Image
JPG_486	Error Image
JPG_509	IV Image
JPG_123	Stethoscope Image
JPG_145	X- Ray Image
JPG_168	Retina Image

Entity **Datapoint**

point	diagramID	val
1	1	10
2	12	20
3	13	30
4	14	40
5	15	60
6	16	200
7	17	400
8	110	600
9	120	800
10	130	1000
11	140	1200
12	150	47
13	1000	48
14	1061	49
15	1062	25
16	1063	25

Entity **Diagram**

diagramID	title
1	Neturon Star
12	Black Hole
13	Blue star
14	Red Star
15	White dwarf
16	Orange star
17	Lightyear diagram
110	Compiler design
120	E/R diagram
130	CRC cards
140	HTTP Request
150	Error codes
1000	IV Drip
1061	Stethoscope
1062	X-Ray diagram
1063	Retina Scans