

CS157A Database Project

A Web Application for Study Materials

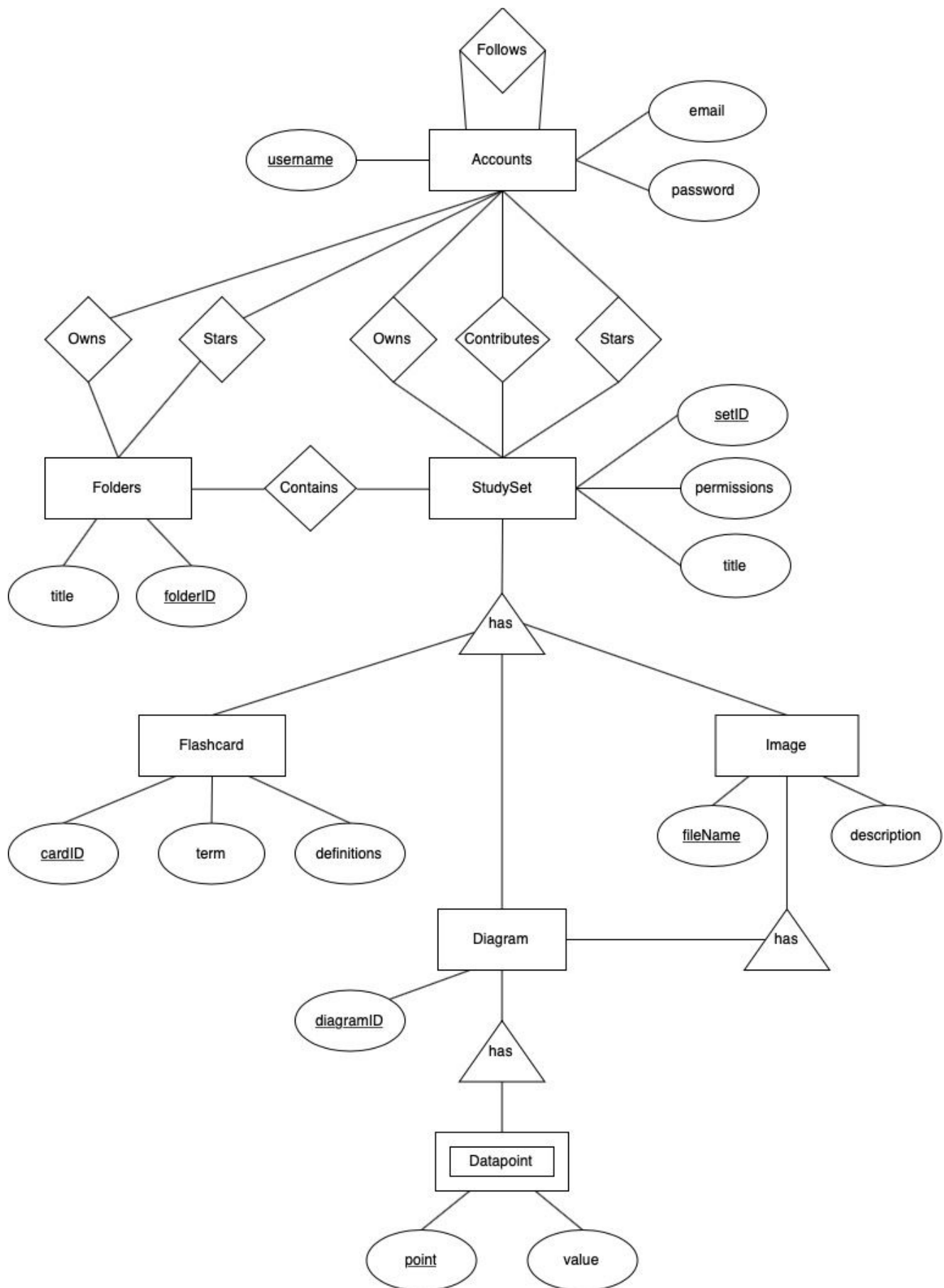
Project Design

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 starred 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 starred 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.

Database Model Data

<i>Relationship StudySet -has- Flashcard, Image, Diagram</i>			
setID	cardID	fileName	diagramID
100	501		
100		786	
100		282	
100			853
100	524		
100			642
100	258		
100		252	
100			842
100	352		
110		244	
110	111		
110		555	
111	253		
111	987		

<i>Relationship</i> Folders -contains- StudySets	
folderID	setID
111	
100	284
100	434
101	363
101	524
100	434
100	258
382	929
382	283
382	352
929	482
929	111
929	292
929	253
929	987

Relationship Accounts -owns- StudySets

username	setID
abc123	373
abc100	284
abc100	434
xyz101	363
xyz101	524
xyz101	434
xyz101	258
goo382	929
goo382	283
goo382	352
goo382	482
goo382	111
goo382	292
hello	253
hello	987