

Wordingo Database Design

CS157A - Team 37
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1. Entities:

- User
 - A user will be registered with the site and be able to browse, but more importantly, post definitions. A user could update or delete their own definitions
 - Attributes: username, email, password
- Word
 - A word will be created when a user attempts to create a definition for a non-existent word. Each word will have a number of associated definitions
 - Attributes: Name, Syllables, Phonetic Spelling
- Definition
 - A user-defined string of text which will be associated with a word. Each definition will be ranked according to its number of upvotes.
 - Attributes: uniqueID, # of upvotes, # of downvotes, text, date posted
- Admin
 - A class of user which has the authority to create word categories, delete users, and delete other users definitions.
 - Attributes: adminToken
- Category
 - A category is an Admin defined class of words. Each category will have one or more words associated.
 - Attributes: Name

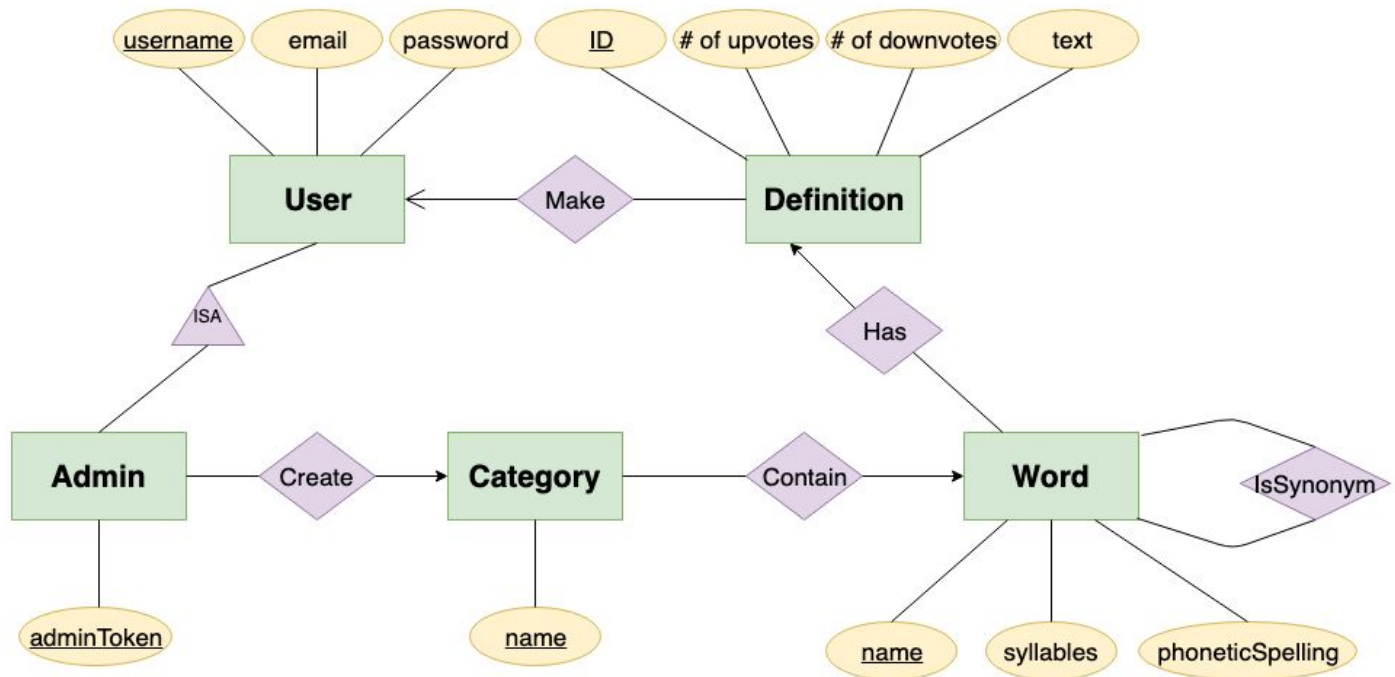
2. Relationships:

- User makes Definition
 - User makes a new definition with a string of text and posted date.
- Word has Definitions
 - Each word could have multiple definitions posted by different users.
- Category has Words
 - Each category posted by admins will contain multiple words.
- Admin creates Category
 - Each admin will post multiple categories.
- Word is related to Word
 - each word could be related to many other words.

3. Database Schema:

1. Users(username: String, email: String, password: String)
2. Admins(adminToken: String)
3. Words(name: String, syllables: String, phoneticSpelling: String)
4. Categories(name: String)
5. Definitions(ID: String, # of upvotes: int, # of downvotes: int, text: String)
6. MadeDefinition(user: String, word: String)
7. HasDefinition(word: String, definition: String)
8. ContainsWord(category: String, word: String)
9. IsSynonym(word: String, word: String)
10. CreateCategory(admin: String, category: String)

4. Entity-Relationship Model



5. Tables:

Table: User

username	email	password
Denise Ellis	denise_ellis@example.com	Ellis95)*
Lawrence Dunn	lawrence-85@example.com	Dunn85*{
Kathryn Arnold	kathryn-96@example.com	Arnold96~+
Ashley Cook	ashley-cook@example.com	Cook95+
Carolyn Ruiz	carolyn.ruiz@example.com	Ruiz98_@
Janice Hicks	janice_hicks@example.com	Hicks85#@
David Ramos	david-ramos@example.com	Ramos98)_
Michelle Gardner	michelle_85@example.com	Gardner85+}
Alan Dunn	alandunn@example.com	Dunn90=)
Sean Dixon	sean-dixon@example.com	Dixon94(#
Nicholas Hicks	nicholas-84@example.com	Hicks84^=
Douglas Day	douglas.day@example.com	Day87@
Laura Ross	laura-ross@example.com	Ross91^@
Patricia Reed	patricia_97@example.com	Reed97{#
Xiaohan Sun	xiaohan-sun@example.com	sunxiaohan0401
Alexis Huerta	al-hue24@example.com	Huerta24?
Andrew Wilson	an-wils25@example.com	Wilson25*

Table: Admin

Name	AdminToken
Alexis Huerta	8aD012Fa
Xiaohan Sun	0Ad85aDg
Andrew Wilson	2a907DH8

Amy Sun	4a89D7hs
Damian Page	fvO0vef7
Alicia Liu	hf0jnn9E
Mike Wu	9fvhS7fm
Ashley Chau	hfhiuh8H
Adam Sousa	fbyebtD7
Joshua Uy	vbhedb7S
Mohan Liu	cbhue9fw
Arora Le	cbheb74S
Brandon Tapia	fh7sD09i
Wei Sun	vfuh8DSu
Vivian Wu	vbe8jknD

Table: Word

Name	Syllables	Phonetic Spelling
Computer	com·put·er	/kəm ¹ pyʊdər/
DOS	DOS	/dôs/
Tweet	tweet	/twēt/
Browser	brows·er	/ ¹ brouzər/
Thunderbolt	thun·der·bolt	/ ¹ THəndər ₁ bōlt/
Neurology	neu·rol·o·gy	/n(y)ʊ ¹ räləjē/
Feline	fe·line	/ ¹ fē ₁ līn/
Cicada	ci·ca·da	/sə ¹ kädə,sə ¹ kädə/
Transcendental	tran·scen·den·tal	/ ₁ tran ₁ sen ¹ den(t)l/
Scrutinize	scru·ti·nize	/ ¹ skrʊtn ₁ īz/

Analyze	an·a·lyze	/ ¹ anl ₁ īz/
Champion	cham·pi·on	/ ¹ CHampēən/
Caterwaul	cat·er·waul	/ ¹ kadər ₁ wôl/
Indescribable	in·de·scrib·a·ble	/ ₁ ində ¹ skrībəb(ə)l/
Prototype	pro·to·type	/ ¹ prōdə ₁ tīp/
syllable	syl·la·ble	/ ¹ siləb(ə)l/

Table: Category

Name
Animals
Hardware Concepts
Cardiatric surgical procedures
Public Relations
Philosophical Concepts
20th Century Electronics
Pseudoscience Concepts
North American Slang
Wordingo Glossary
Kaiju
Delicious Snacks
Fencing Terminology
Cryptology
Atlantic Ocean Fish Species
Greek Historical Periods

Table: Definition

ID	# of upvotes	# of downvotes	text
IEtIDWjU	345	245	an electronic device for storing and processing data, typically in binary form, according to instructions given to it in a variable program.
TAhjDEWt	456	45	disk operating system, an operating system originally developed for IBM personal computers.
cyYPLh5E	5642	645	a post made on the social media application Twitter.
4Dg8redA	30	49	the chirp of a small or young bird.
JV6m3XOa	57	68	a program with a graphical user interface for displaying HTML files, used to navigate the World Wide Web.
BjRpZ9zK	24	4	a high-speed I/O interface that was developed by Intel and was introduced by Apple in 2011
Ld8m2vH4	23	13	a flash of lightning with a simultaneous crash of thunder
sN0sTVAD	64	34	the branch of medicine or biology

			that deals with the anatomy, functions, and organic disorders of nerves and the nervous system.
Rb9Uw7B0	4	0	a cat or other member of the cat family.
TKnc0iah	13	5	a large homopterous insect with long transparent wings, occurring chiefly in warm countries. The male cicada makes a loud shrill droning noise by vibrating two membranes on its abdomen.
SQTuVgJn	423	13	relating to a spiritual or nonphysical realm.
DYECz9op	72	91	examine or inspect closely and thoroughly.
gAd5xexO	8230	4862	examine methodically and in detail the constitution or structure of (something, especially information), typically for purposes of explanation and interpretation.

M5KU0rHp	656	107	a person who has defeated or surpassed all rivals in a competition, especially in sports
cyYPLh5E	65	25	a person who fights or argues for a cause or on behalf of someone else.
6hV10G9e	45	68	a shrill howling or wailing noise.
1TgfmCDz	19	31	too unusual, extreme, or indefinite to be adequately described.
8Hgs5Ez1	456	34	a first, typical or preliminary model of something, especially a machine, from which other forms are developed or copied.

Table: MadeDefinition

Username	Definition ID	Date Posted
Denise Ellis	IEtIDWjU	10/12/2021
Lawrence Dunn	TAhjDEWt	03/04/1999
Kathryn Arnold	cyYPLh5E	12/09/2019
Ashley Cook	4Dg8redA	07/11/2006
Carolyn Ruiz	JV6m3XOa	09/01/2017
Janice Hicks	BjRpZ9zK	04/07/2018

David Ramos	Ld8m2vH4	08/22/2019
Michelle Gardner	sN0sTVAD	10/22/2019
Alan Dunn	Rb9Uw7B0	06/09/2019
Sean Dixon	TKnc0iah	12/15/2019
Nicholas Hicks	SQTuVgJn	01/02/2020
Douglas Day	DYECz9op	05/02/2017
Laura Ross	6hV10G9e	09/24/2016
Patricia Reed	1TgfmCDz	12/23/2017
Xiaohan Sun	8Hgs5Ez1	04/01/2017

Table: HasDefinition

Word Name	Definition ID
Computer	IEtIDWjU
DOS	TAhjDEWt
Tweet	cyYPLh5E
Tweet	4Dg8redA
Browser	JV6m3XOa
Thunderbolt	BjRpZ9zK
Thunderbolt	Ld8m2vH4
Neurology	sN0sTVAD
Feline	Rb9Uw7B0
Cicada	TKnc0iah
Transcendental	SQTuVgJn
Scrutinize	DYECz9op
Analyze	gAd5xexO

Champion	M5KU0rHp
Champion	cyYPLh5E
Caterwaul	6hV10G9e
Indescribable	1TgfmCDz
Prototype	8Hgs5Ez1

Table: IsSynonym

Word Name	Word Name
Dog	Canine
Analyze	Scrutinize
Programmer	Coder
Scrawl	Scribble
Jump	Leap
Round	Circular
Safe	Strongbox
Enthusiastic	Excited
Rust	Corrode
Positive	Constructive
Aperture	Opening
Wealth	Cash
Colossal	Gigantic
Fast	Swift
Space	Expanse

Table: Creates Category

User/Admin Username	Category Name
Alexis Huerta	Animals
Xiaohan Sun	Hardware Concepts
Andrew Wilson	Cardiatric surgical procedures
Amy Sun	Public Relations
Damian Page	Philosophical Concepts
Alicia Liu	20th Century Electronics
Mike Wu	Pseudoscience Concepts
Ashley Chau	North American Slang
Adam Sousa	Wordingo Glossary
Joshua Uy	Kaiju
Mohan Liu	Delicious Snacks
Arora Le	Fencing Terminology
Brandon Tapia	Cryptology
Wei Sun	Atlantic Ocean Fish Species
Vivian Liu	Greek Historical Periods

Table: ContainsWord

Category Name	Word Name
Animals	Dingo
Hardware Concepts	Clock Speed
Cardiatric surgical procedures	Triple Bypass
Public Relations	Press Release
Philosophical Concepts	Eternal Recurrence
20th Century Electronics	Commodore 64

Pseudoscience Concepts	Cryptid
North American Slang	Dawg
Wordingo Glossary	Category
Kaiju	Godzilla
Delicious Snacks	Swedish Fish
Fencing Terminology	Ballestra
Cryptology	Key
Atlantic Ocean Fish Species	King Mackerel
Greek Historical Periods	Hellenistic Period

5. ScreenShots of tables in mysql

```
+-----+
| Tables_in_cs157aproject |
+-----+
| Admins                    |
| Categories                |
| ContainsWord              |
| CreateCategory            |
| Definition                |
| HasDefinition              |
| IsSynonym                 |
| MadeDefinition            |
| User                      |
| Words                     |
+-----+
10 rows in set (0.01 sec)
```

```
mysql> select * from Words;
+-----+-----+-----+
| name          | syllables      | phoneticSpelling |
+-----+-----+-----+
| Analyze       | an·a·lyze      | /'anl,iz/        |
| Browser       | brows.er       | /'brouzər/       |
| Caterwaul     | cat·er·waul    | /'kadər,wôl/     |
| Champion      | cham·pi·on     | /'CHampēən/      |
| Cicada        | ci.ca.da       | /sə'kādə,sə'kādə/|
| Computer      | com.put.er     | /kəm'pyōdər/     |
| DOS           | DOS            | /dôz/            |
| Feline        | fe.line        | /'fē,līn/        |
| Indescribable | in·de·scrib·a·ble | /,ində'skrībəb(ə)l/|
| Neurology     | neu'rol'o'gy   | /n(y)ōō'räləjē/  |
| Prototype     | pro·to·type    | /'prōdə,tīp/     |
| Scrutinize    | scru'tiu'nize  | /'skrōōtn,iz/    |
| syllable      | syl·la·ble     | /'siləb(ə)l/     |
| Thunderbolt   | thun.der.bolt  | /'THəndər,bôlt/  |
| transcendental | tran.scen.den.tal | /,tran,sen'den(t)l/|
| Tweet         | tweet          | /twēt/           |
+-----+-----+-----+
16 rows in set (0.00 sec)
```

```
mysql> select * from IsSynonym;
```

+-----+-----+	
word1	word2
+-----+-----+	
Analyze	Scrutinize
Aperture	Opening
Colossal	Gigantic
Dog	Canine
Enthusiastic	Excited
Fast	Swift
Jump	Leap
Positive	Constructive
Programmer	Code
Round	Circular
Rust	Corrode
Safe	Strongbox
Scrawl	Scribble
Space	Expanse
Wealth	Cash
+-----+-----+	

```
15 rows in set (0.00 sec)
```

```
mysql> select * from HasDefinition;
```

word	DefinitionID
Computer	IEtIDWjU
DOS	TAhjDEWt
Tweet	cyYPLh5E
Tweet	4Dg8redA
Browser	JV6m3X0a
Thunderbolt	BjRpZ9zK
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Champion	M5KU0rHp
Champion	cyYPLh5E
Caterwaul	6hV10G9e
Indescribable	1TgfmCDz
Prototype	8Hgs5Ez1

18 rows in set (0.00 sec)


```
mysql> select * from CreateCategory;
```

admin	category
Adam Sousa	Wordingo Glossary
Alexis Huerta	Animal
Alicia Liu	20th Century Electronics
Amy Sun	Public Relations
Andrew Wilson	Cardiatric surgical procedures
Arora Le	Fencing Terminology
Ashley Chau	North American Slang
Brandon Tapia	Cryptology
Damian Page	Philosophical Concepts
Joshua Uy	Kaiju
Mike Wu	Pseudoscience Concepts
Mohan Liu	Delicious Snacks
Vivian Liu	Greek Historical Periods
Wei Sun	Atlantic Ocean Fish Species
Xiaohan Sun	Hardware Concepts

15 rows in set (0.00 sec)

```
mysql> select * from Categories;
+-----+
| name                |
+-----+
| 20th Century Electronics |
| Animals              |
| Atlantic Ocean Fish Species |
| Cardiatric surgical procedures |
| Cryptology           |
| Delicious Snacks     |
| Fencing Terminology |
| Greek Historical Periods |
| Hardware Concepts    |
| Kaiju                |
| North American Slang |
| Philosophical Concepts |
| Pseudoscience Concepts |
| Puclic Relations     |
| Wordingo Glossary    |
+-----+
15 rows in set (0.00 sec)
```

```
mysql> select * from MadeDefinition;
```

Username	DefinitionID	DatePosted
Denise Ellis	IEtIDWjU	10/12/2021
Lawrence Dunn	TAhjDEWt	03/04/1999
Kathryn Arnold	cyYPLh5E	12/09/2019
Ashley Cook	4Dg8redA	07/11/2006
Carolyn Ruiz	JV6m3X0a	09/01/2017
Janice Hicks	BjRpZ9zK	04/07/2018
David Ramos	Ld8m2vH4	08/22/2019
Michelle Gardner	sN0sTVAD	10/22/2019
Alan Dunn	Rb9Uw7B0	06/09/2019
Sean Dixon	TKnc0iah	12/15/2019
Nicholas Hicks	SQTuVgJn	01/02/2020
Douglas Day	DYECz9op	05/02/2017
Laura Ross	6hV10G9e	09/24/2016
Patricia Reed	1TgfmCDz	12/23/2017
Xiaohan Sun	8Hgs5Ez1	04/01/2017

15 rows in set (0.00 sec)

```
mysql> select *from Definition;
+-----+-----+-----+-----+
| ID      | upvotes | downvotes | text |
+-----+-----+-----+-----+
| 1TgfmCDz | 19 | 31 | too unusual, extreme, or indefinite to be adequately described. |
| 4Dg8redA | 30 | 49 | the chirp of a small or young bird. |
| 6hV10G9e | 45 | 68 | a shrill howling or wailing noise. |
| 8Hgs5Ez1 | 456 | 34 | a first, typical or preliminary model of something, especially a machine, from which other forms are developed or copied. |
| BjRpZ9zK | 24 | 4 | a high-speed I/O interface that was developed by Intel and was introduced by Apple in 2011 |
| cyYPLh5E | 5642 | 645 | a post made on the social media application Twitter. |
| DYEcz9op | 72 | 91 | examine or inspect closely and thoroughly. |
| gAd5xex0 | 8230 | 4862 | examine methodically and in detail the constitution or structure of (something, especially information), typically for purposes of explanation and interpretation. |
| IEtIDWjU | 345 | 245 | an electronic device for storing and processing data, typically in binary form, according to instructions given to it in a variable program. |
| JV6m3X0a | 57 | 68 | a program with a graphical user interface for displaying HTML files, used to navigate the World Wide Web. |
| Ld8m2vH4 | 23 | 13 | a flash of lightning with a simultaneous crash of thunder |
| MSKU0rHp | 656 | 107 | a person who has defeated or surpassed all rivals in a competition, especially in sports |
| Rb9Uw7B0 | 4 | 0 | a cat or other member of the cat family. |
| sN0sTVAD | 64 | 34 | the branch of medicine or biology |
| SQTuVgJn | 423 | 13 | relating to a spiritual or nonphysical realm. |
| TAhjDEWt | 456 | 45 | disk operating system, an operating system originally developed for IBM personal computers |
| TKnc0iah | 13 | 5 | a large homopterous insect with long transparent wings, occurring chiefly in warm countries. The male cicada makes a loud shrill droning noise by vibrating two membranes on its abdomen. |
+-----+-----+-----+-----+
17 rows in set (0.00 sec)
```

```
mysql> select *from ContainsWord;
```

category	word
20th Century Electronics	Commodore 64
Animal	Dingo
Atlantic Ocean Fish Species	King Mackerel
Cardiatric surgical procedures	Triple Bypass
Cryptology	Key
Delicious Snacks	Swedish Fish
Fencing Terminology	Ballestra
Greek Historical Periods	Hellenistic Period
Hardware Concepts	Clock Speed
Kaiju	Godzilla
North American Slang	Dawg
Philosophical Concepts	Eternal Recurrence
Pseudoscience Concepts	Cryptid
Public Relations	Press Release
Wordingo Glossary	Category

```
15 rows in set (0.01 sec)
```



```
mysql> select * from Admins;
```

```
+-----+-----+
| Name           | AdminToken |
+-----+-----+
| Xiaohan Sun    | 0Ad85aDg   |
| Andrew Wilson  | 2a907DH8   |
| Amy Sun        | 4a89D7hs   |
| Alexis Huerta  | 8aD012Fa   |
| Mke Wu         | 9fvhs7fm   |
| Arora Le       | cbheb74s   |
| Mohan Liu      | cbhue9fw   |
| Wei Sun        | cfuh8DSu   |
| Ashley Chau    | cnjdkiw9   |
| Brandon Tapia  | fh7sD09i   |
| Damian Page    | fv00vef7   |
| Alicia Liu     | hf0jnn9E   |
| Alexis Page    | neubg9ev   |
| Vivian Wu      | vbe8jknD   |
| Joshua Uy      | vndjb8sc   |
+-----+-----+
15 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> select * from User;
```

username	email	password
Alexis Huerta	al-hue24@example.com	Huerta24?
Andrew Wilson	an-wils25@example.com	Wilson25*
Ashley Cook	ashley-cook@example.com	Cook05+
Carolyn Ruiz	carolyn.ruiz@example.com	Ruiz98_@
David Ramos	david-ramos@example.com	Ramos98)_
Denise Ellis	Denise_ellise@exmaple.com	Ellis95)*
Douglas Day	douglas.day@example.com	Day87@
Janice Hicks	janice_hicks@exmaple.com	Hicks85#@
Kathryn Arnold	kathryn-96@example.com	Arnold96~+
Lawrence Dunn	lawrence-85@example.com	Dunn85*{
Michelle Gardner	michelle_85@example.com	Gardner85+)
Nicholas Hicks	nicholas-84@example.com	Hicks84^=
Patricia Reed	patricia_97@example.com	Reed97{#
Sean Dixon	sean-dixon@example.com	Dixon94(#
Xiaohan Sun	xiaohan-sun@example.com	sunxiaohan0401

```
15 rows in set (0.00 sec)
```