

Diagram Documentation

capstone_project

users

Questions

Is it suggested to use UUID as a way to index information (see "Pets" model, "internal_uuid" attribute)?
Can I skip the implementation of location services for a user in this project? I am thinking of using USPS's API for address validation.

U.S. Address Validation APIs:

<https://www.usps.com/business/web-tools-apis/address-information-api.htm>

<https://www.smarty.com/articles/using-usps-apis-in-python>

<https://www.loqate.com/>

Field	Description	Type	Default	Other
id	bigserial, then text next	serial		PK
first_name		varchar(35)		
last_name		varchar(35)		
email	-- https://www.rfc-editor.org/errata/eid1690 ; publicly viewable if is_lister	varchar(320)		
phone	client-side: nullable only if "is_lister = False"	varchar(13)		NULLABLE
encrypted_password	Unknown datatype	text		
is_admin	or combine "is_admin" and "is_moderator" to "is_elevated" and to char(1) and make it nullable	boolean		
is_moderator	https://www.postgresql.org/message-id/11576.1041629241%40sss.fr	boolean		
is_lister		boolean		
is_public	if this can be viewed publicly and searchable	boolean		
description	1000 character description	varchar(1000)		
social_links	JSON type for social media & others	json		NULLABLE
custom_css	stretch, maybe a custom background and theme	json		NULLABLE
address_line_1	client-side: nullable only if "is_lister = False"	text		NULLABLE
address_line_2	client-side: nullable only if "is_lister = False"	text		NULLABLE
address_city		text		
address_state		text		
address_line_zip	Canucks have alpha characters in their Zip Code: https://kb.bullseyelocations.com/postal-code-formats	varchar(20)		NULLABLE

Field	Description	Type	Default	Other
address_country	automatically parse out hyphens	text		

pet_database

Index all large city users & pet adoption organizations
only for is_lister; JOIN between pets and users. this is INDEXed

Field	Description	Type	Default	Other
pointer	bigserial then text next	serial		PK
agency_user_id	FK to users.id	int		FK
pet_id	FK to pets.id	int		FK

pets

Field	Description	Type	Default	Other
id	generate a random one to be publicly viewable	uuid		PK
internal_uuid	NOT NULL DEFAULT	uuid		
pet_name	first 8 positions: user_id? 36^8 => 2.8E12 organizations (overkill) next 4 positions: something, maybe next 4 positions: something, maybe color or breed next 12 positions: pet_identifier => 36^12 = 4.7E18 pets/organization (overkill) maybe break it into 6,1,1-2,1,1,1-1,1,1,1-1,1,1,1-4,8 contain information about the pet in the UUID. this can make searching easier i.e., what if I just substring a portion of the UUID and then do string matching? generator function? increment from 0 to z; then increment the next lots of attributes:	varchar(35)		
description		varchar(1500)		
photo_uploaded	do processing to rename the image	varchar(???)		
publish_time	GMT	timestamp		
gender	T (1) for male, F (0) for female	boolean		
sterilized	spayed/neutered	boolean		
estimated_age		smallint		
age_certainty	T (1) for exact, F (0) for estimate	boolean		

Field	Description	Type	Default	Other
age_units	T (1) for years, F (0) for months	boolean		
weight		smallint		
weight_units	T (1) for kg, F (0) for lb	boolean		
pet_classification	"pet_type" publicly: cat, dog, bird, fish, anything longer than 10 char?	varchar(10)		
coat	cat: felidae family, dog: canidae family, birds: aves class, boned fish: actinopterygii, axolotl/frogs: amphibia only appears if cat/dog	text(10)		NULLABLE
breed_unknown	only appears if cat/dog	boolean		NULLABLE
breed_primary	only appears if breed_unknown = True	text(50)		NULLABLE
breed_secondary	only appears if breed_unknown = True	text(50)		NULLABLE
breed_mixed	only appears if breed_unknown = True	text(50)		NULLABLE
color_primary	maybe FK this or integrate it into the UUID	???		FK
color_secondary		???		NULLABLE
color_tertiary		???		NULLABLE
house_trained	category only appears if searching cat/dog/bird; default False	boolean		
declawed	category only appears if searching cat/dog during search, default False	boolean		NULLABLE
special_needs	Null = Unavailable; T,F, self-explanatory	boolean		NULLABLE
medical_records_uptodate	Null = Unavailable; T,F, self-explanatory	boolean		NULLABLE
environment_children		boolean		NULLABLE
environment_dogs		boolean		NULLABLE
environment_cats		boolean		NULLABLE

breeds

look-up table for quick matching

Field	Description	Type	Default	Other
id				

colors

look-up table for quick matching

Field	Description	Type	Default	Other
id				

city

chatlog relation: a stretch but for users to communicate with another. also a means for the system to communicate with users

complaints relation: a stretch but a system to forward any complaints, i.e. animal abuse or unfit for habitation to relevant law enforcement agencies or animal advocacy agencies

accessible to moderator and admin

location-side

potentially use an API for validation?

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<https://www.loqate.com/>

Field	Description	Type	Default	Other
id	consider TEXT	bigserial		PK
county_name		varchar(100)		
zipcode_id	FK	bigint		FK

zipcode

Field	Description	Type	Default	Other
id	consider TEXT	bigserial		PK
zipcode	Canucks have alpha characters in their Zip Code: https://kb.bullseyelocations.com/postal-code-formats	varchar(20)		
state_id	FK	int		FK

state

Field	Description	Type	Default	Other
id		serial		PK
state_name		varchar(100)		
country_id	FK	smallint		FK

country

Field	Description	Type	Default	Other
id		smallserial		PK
country_name		varchar(100)		
currency_code	potentially, if going international & a way to support this service	varchar(20)		