Database Schema Documentation

Weight Estimator using Image

accounts_profile

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
display_name	User display name	VARCHAR(120), blank	
created_at	Creation timestamp	DateTimeField, auto	
user_id	Reference to user	OneToOne	FK → auth_user

auth_user

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
username	Username	VARCHAR(150), unique	
password	Hashed password	VARCHAR(128)	
first_name	First name	VARCHAR(150)	
last_name	Last name	VARCHAR(150)	
email	Email address	VARCHAR(254)	
is_staff	Staff status	Boolean	
is_active	Active status	Boolean	
is_superuser	Superuser status	Boolean	
date_joined	Join timestamp	DateTimeField	
last_login	Last login timestamp	DateTimeField, nullable	

media_store_uploadedimage

Column	Description	Constraints	PK / FK
id	UUID primary key	UUIDField, editable=False	PK
image	Image file path	ImageField	
original_filename	Original filename	VARCHAR(255), blank	
size_bytes	File size in bytes	PositiveIntegerField	
mime_type	MIME type	VARCHAR(64), blank	
created_at	Creation timestamp	DateTimeField, auto	
uploaded_by_id	Uploading user	ForeignKey	FK → auth_user

estimation_sessions_estimationsession

Column	Description	Constraints	PK / FK
id	UUID primary key	UUIDField, editable=False	PK
object_label	Identified object label	VARCHAR(200), blank	
object_summary	Object summary	TextField, blank	
object_json	Object metadata JSON	JSONField	
status	Session status	VARCHAR(32), choices	
created_at	Creation timestamp	DateTimeField, auto	
updated_at	Last update timestamp	DateTimeField, auto	
image_id	Reference to uploaded image	ForeignKey	FK → media_store_uploadedimage
user_id	Session owner	ForeignKey	FK → auth_user

estimation_sessions_question

Column	Description	Constraints	PK / FK
id	UUID primary key	UUIDField, editable=False	PK
order	Display order	PositiveIntegerField	
text	Question text	TextField	
answer_type	Type (text, number, boolean, select)	VARCHAR(16), choices	
unit	Unit of measurement	VARCHAR(32), blank	
options	Options for select type	JSONField	
required	Whether required	BooleanField	
session_id	Parent session	ForeignKey	FK → estimation_sessions_estimationse

estimation_sessions_answer

Column	Description	Constraints	PK / FK
id	UUID primary key	UUIDField, editable=False	PK
value_text	Text answer	TextField, blank	
value_number	Numeric answer	FloatField, nullable	
value_boolean	Boolean answer	BooleanField, nullable	
value_json	Structured answer	JSONField	
created_at	Creation timestamp	DateTimeField, auto	
session_id	Parent session	ForeignKey	FK → estimation_sessions_estimationse
question_id	Related question	ForeignKey	FK → estimation_sessions_question

estimates_weightestimate

Column	Description	Constraints	PK / FK
id	UUID primary key	UUIDField, editable=False	PK
value_grams	Estimated weight (g)	FloatField	
min_grams	Min weight (g)	FloatField	
max_grams	Max weight (g)	FloatField	
confidence	Confidence score	FloatField, default 0.3	
unit_display	Display unit	VARCHAR(16), default 'g'	
rationale	Estimation rationale	TextField, blank	
raw_json	Raw model output	JSONField	
category	food/package/pet/person/general	VARCHAR(20), choices	
category_metadata	Category-specific data	JSONField	
created_at	Creation timestamp	DateTimeField, auto	
session_id	Parent session	OneToOne	FK → estimation_sessions_estimationse

estimates_foodnutrition

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
name	Food name	VARCHAR(100), unique	
aliases	Alternative names	JSONField	
calories_per_100g	Calories per 100g	FloatField	
protein_per_100g	Protein per 100g	FloatField	
carbs_per_100g	Carbs per 100g	FloatField	
fat_per_100g	Fat per 100g	FloatField	
fiber_per_100g	Fiber per 100g	FloatField	
food_category	fruit, vegetable, meat, etc.	VARCHAR(50), blank	
created_at	Creation timestamp	DateTimeField, auto	

estimates_foodestimate

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
estimated_calories	Estimated calories	FloatField	
estimated_protein	Estimated protein	FloatField	
estimated_carbs	Estimated carbs	FloatField	
estimated_fat	Estimated fat	FloatField	
estimated_fiber	Estimated fiber	FloatField	

is_cooked	Cooked or raw	BooleanField	
portion_status	whole, partial, etc.	VARCHAR(50), blank	
created_at	Creation timestamp	DateTimeField, auto	
estimate_id	Parent weight estimate	OneToOne	FK → estimates_weightestimate
food_reference_id	Matched food reference	ForeignKey, nullable	FK → estimates_foodnutrition

estimates_shippingcarrier

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
name	Carrier name	VARCHAR(100)	
service_type	Ground, Express, etc.	VARCHAR(50)	
base_rate	Base shipping rate	Decimal(10,2)	
rate_per_kg	Rate per kg	Decimal(10,2)	
max_weight_kg	Max weight (kg)	FloatField	
volumetric_divisor	Volumetric weight divisor	IntegerField, default 5000	
is_international	International service	BooleanField	
is_active	Active flag	BooleanField	
created_at	Creation timestamp	DateTimeField, auto	

estimates_packageestimate

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
length_cm	Length (cm)	FloatField, nullable	
width_cm	Width (cm)	FloatField, nullable	
height_cm	Height (cm)	FloatField, nullable	
volumetric_weight_g	Volumetric weight (g)	FloatField, nullable	
chargeable_weight_g	Chargeable weight (g)	FloatField	
estimated_shipping_costs	Carrier costs	JSONField	
is_fragile	Fragile flag	BooleanField	
destination_type	domestic, international	VARCHAR(20), blank	
created_at	Creation timestamp	DateTimeField, auto	
estimate_id	Parent weight estimate	OneToOne	FK → estimates_weightestimate

estimates_breedreference

Column	Description	Constraints	PK / FK

id	Auto-increment primary key	BigAutoField	PK
species	dog, cat, rabbit, etc.	VARCHAR(50)	
breed	Breed name	VARCHAR(100)	
aliases	Alternative breed names	JSONField	
puppy_min_kg	Puppy min weight (kg)	FloatField, nullable	
puppy_max_kg	Puppy max weight (kg)	FloatField, nullable	
adult_min_kg	Adult min weight (kg)	FloatField	
adult_max_kg	Adult max weight (kg)	FloatField	
senior_min_kg	Senior min weight (kg)	FloatField, nullable	
senior_max_kg	Senior max weight (kg)	FloatField, nullable	
underweight_threshold	Underweight threshold	FloatField, default 0.85	
overweight_threshold	Overweight threshold	FloatField, default 1.15	
description	Breed description	TextField, blank	
created_at	Creation timestamp	DateTimeField, auto	

estimates_petestimate

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
species	Pet species	VARCHAR(50)	
breed	Breed name	VARCHAR(100), blank	
age_category	puppy, adult, senior	VARCHAR(20), blank	
gender	Gender	VARCHAR(10), blank	
is_neutered	Neutered status	BooleanField, nullable	
health_status	underweight, healthy, overweight	VARCHAR(20), blank	
ideal_weight_min	Ideal min weight (kg)	FloatField, nullable	
ideal_weight_max	Ideal max weight (kg)	FloatField, nullable	
weight_recommendation	Recommendation text	TextField, blank	
created_at	Creation timestamp	DateTimeField, auto	
estimate_id	Parent weight estimate	OneToOne	FK → estimates_weightestimate
breed_reference_id	Matched breed reference	ForeignKey, nullable	FK → estimates_breedreference

estimates_bmicategory

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
name	Category name	VARCHAR(20), unique	
min_bmi	Min BMI	FloatField	

max_bmi	Max BMI	FloatField	
description	Category description	TextField	
recommendation	Health recommendation	TextField	
color_code	Display color	VARCHAR(20), blank	
created_at	Creation timestamp	DateTimeField, auto	

estimates_bodycompositionestimate

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
height_cm	Height (cm)	FloatField	
age	Age (years)	IntegerField, nullable	
gender	Gender	VARCHAR(20), blank	
activity_level	Activity level	VARCHAR(50), blank	
bmi	Calculated BMI	FloatField	
bmi_category	BMI category name	VARCHAR(20)	
ideal_weight_min_kg	Ideal min weight (kg)	FloatField	
ideal_weight_max_kg	Ideal max weight (kg)	FloatField	
body_fat_estimate	Body fat %	FloatField, nullable	
lean_mass_estimate	Lean mass (kg)	FloatField, nullable	
health_recommendation	Recommendation text	TextField, blank	
created_at	Creation timestamp	DateTimeField, auto	
estimate_id	Parent weight estimate	OneToOne	FK → estimates_weightestimate
bmi_category_ref_id	BMI category reference	ForeignKey, nullable	FK → estimates_bmicategory

estimates_weightfeedback

Column	Description	Constraints	PK / FK
id	Auto-increment primary key	BigAutoField	PK
actual_weight_grams	Actual weight (g)	FloatField	
accuracy_rating	1-5 star rating	IntegerField, nullable	
user_notes	User notes	TextField, blank	
helpful	Helpful flag	BooleanField	
error_grams	Absolute error (g)	FloatField, nullable	
error_percentage	Error %	FloatField, nullable	
created_at	Creation timestamp	DateTimeField, auto	
estimate_id	Parent weight estimate	OneToOne	FK → estimates_weightestimate