Dokumentacija za bazu podataka „Spiza”

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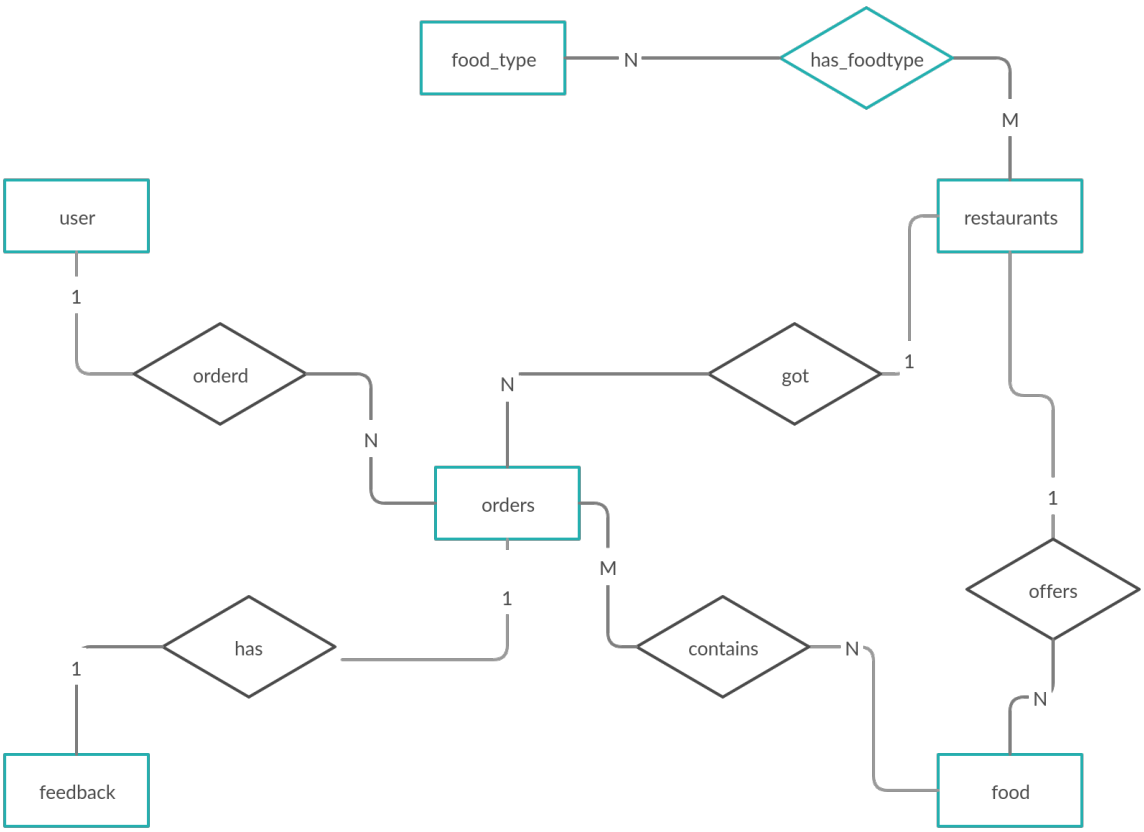
Sadržaj

1 Modeliranje

Za potrebe aplikacije uočili smo da nam je potrebno čuvati podatke o korisnicima, restoranima, nerudžbama, hrani koju restorani imaju u ponudi i povratnoj informaciji korisnika o kvaliteti. Koristimo MySQL bazu podataka. Za svakog korisnika imamo sljedeće podatke koje pamtimo: id_user, username, password_hash, email, registration_sequence, has_registered. Navedeni podaci potrebni su nam za registraciju korisnika te *log in* korisnika, primarni ključ predstavlja **id_user**. Svaki restoran ima sljedeće podatke: id_restaurant, password_hash, email, registration_sequence, has_registered, name, address, description. Navedeni podati potrebni su za registraciju novih restorana, *log in* postojećih restorana te prikaza opisa restorana, primarni ključ je **id_restaurant**. Potrebno je pohranit i podatke o jelima: id_food, name, description, waiting_time, price. Također pohranjujemo *feedback* korisnika za svaku narudžbu.

2 Relacijski model baze

Prikazan je relacijski model naše baze, boldano su označeni primarni ključevi tablica, podcrtani su strani ključevi u tablicama.



Vezu 1:N *ordered* rješavamo tako da u tablicu orders stavimo ključ *user*-a kao strani ključ. Analogno rješavamo veze 1:N *offers* i *got*. Veza *has* je tipa 1:1 pa ubacujemo ju u orders tablicu kao atribut, a veze tipa N:M realiziramo kao posebne tablice sa primarnim ključem iz pripadajućih tablica.

Slijedi prikaz relacijskog modela:

USERS (**id_user**, username, password_hash, email, registration_sequence, has_registered)

RESTAURANTS (**id_restaurant**, username, password_hash, email, registration_sequence, has_registered, name, address, description)

FOOD (**id_food**, name, description, waiting_time, price, id_restaurant)

FOOD_TYPE (**id_foodType**, name)

ORDERS (**id_order**, id_user, id_restaurant, note, feedback, rating, thumbs_up, thumbs_down)

CONTAINS (**id_order**, **id_food**)

HAS_FOODTYPE (**id_foodType**, **id_restaurant**)

3 Implementacija modela

Pomoću sljedećih naredbi kreiramo bazu.

```
CREATE TABLE IF NOT EXISTS spiza_users(
id_user int NOT NULL PRIMARY KEY AUTO_INCREMENT,
username varchar(50) NOT NULL,
password_hash varchar(255) NOT NULL,
email varchar(50) NOT NULL,
registration_sequence varchar(20) NOT NULL,
has_registered int)

CREATE TABLE IF NOT EXISTS spiza_restaurants (
id_restaurant NOT NULL PRIMARY KEY AUTO_INCREMENT,
username varchar(50) NOT NULL,
password_hash varchar(255) NOT NULL,
email varchar(50) NOT NULL,
registration_sequence varchar(20) NOT NULL,
has_registered int,
name varchar(50) NOT NULL,
address varchar(80) NOT NULL,
description varchar(50) NOT NULL
)

CREATE TABLE IF NOT EXISTS spiza_food (
id_food int NOT NULL PRIMARY KEY AUTO_INCREMENT,
name varchar(50) NOT NULL,
description varchar(50) NOT NULL,
waiting_time int NOT NULL,
price decimal(6,2) NOT NULL,
id_restaurant int NOT NULL,
FOREIGN KEY (id_restaurant) REFERENCES spiza_restaurants(id_restaurant) )

CREATE TABLE IF NOT EXISTS spiza_food_type ( id_foodType int NOT NULL
PRIMARY KEY AUTO_INCREMENT,
name varchar(30) NOT NULL
)

CREATE TABLE IF NOT EXISTS spiza_orders (
id_order int NOT NULL PRIMARY KEY AUTO_INCREMENT,
id_user int NOT NULL,
id_restaurant int NOT NULL,
note varchar(50),
feedback varchar(100),
rating float,
```

```
thumbs_up int,
thumbs_down int,
FOREIGN KEY (id_restaurant) REFERENCES spiza_restaurants(id_restaurant),
FOREIGN KEY (id_user) REFERENCES spiza_users(id_user)
)

CREATE TABLE IF NOT EXISTS spiza_contains(
id_order int NOT NULL PRIMARY KEY,
id_food int NOT NULL PRIMARY KEY,
FOREIGN KEY (id_order) REFERENCES spiza_orders(id_order),
FOREIGN KEY (id_food) REFERENCES spiza_food(id_food)
)

CREATE TABLE IF NOT EXISTS spiza_has_food_type (
id_foodType int NOT NULL PRIMARY KEY,
id_restaurant int NOT NULL PRIMARY KEY,
FOREIGN KEY (id_restaurant) REFERENCES spiza_restaurants(id_restaurant),
FOREIGN KEY (id_foodType) REFERENCES spiza_food_type(id_foodType)
)
```