

Osobní kalendář (udalosti, notifikace, sdilení)

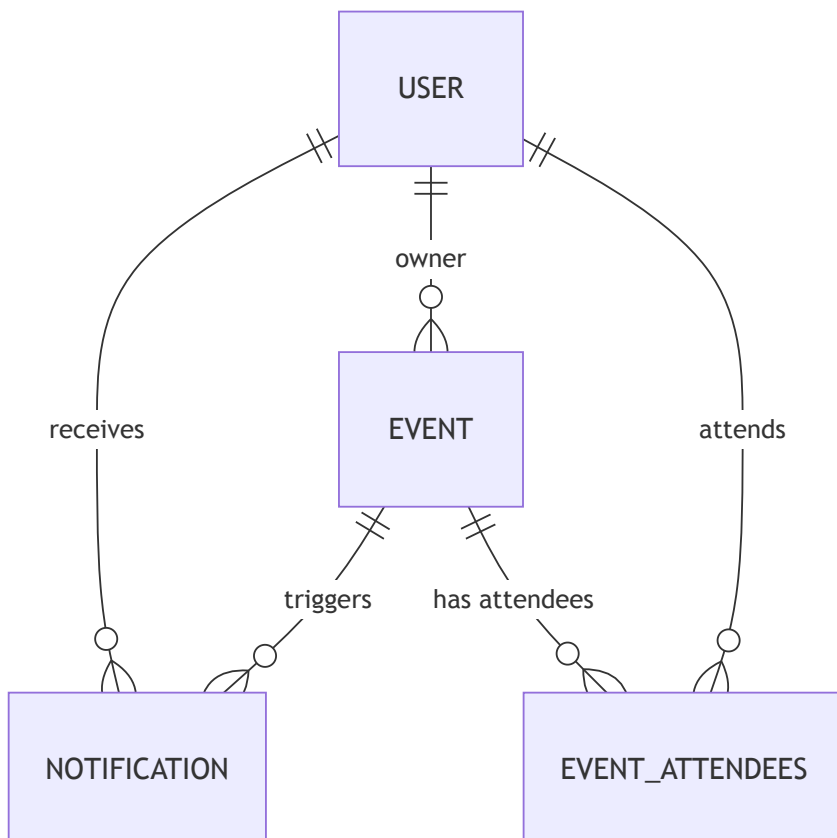
Funkční požadavky

- Uživatelé se mohou registrovat a přihlašovat.
- Uživatelé mohou dělat CRUD operace.
- Události mohou být sdílené s ostatními uživateli.
- Podpora pro opakující se události.
- Uživatelé mohou přijímat/odmítnout pozvánky na události.
- Notifikace pro připomenutí událostí a pozvánek.
- Možnost nastavit status události: potvrzeno, tentativní, zrušeno.

Objekty

- Event
- User
- Notification
- Event attendees

Diagram



SQL tables

```
CREATE TABLE events (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  title VARCHAR(255) NOT NULL,  
  description TEXT,  
  start_time DATETIME NOT NULL,  
  end_time DATETIME NOT NULL,  
  all_day BOOLEAN DEFAULT FALSE,  
  location VARCHAR(255),  
  is_recurring BOOLEAN DEFAULT FALSE,  
  recurrence_rule VARCHAR(255),  
  recurrence_end DATE,  
  owner_id INT NOT NULL,  
  visibility ENUM('private', 'public', 'shared') DEFAULT 'private',  
  reminder_time DATETIME,  
  color VARCHAR(7),  
  status ENUM('confirmed', 'tentative', 'cancelled') DEFAULT 'confirmed',  
  created_at DATETIME DEFAULT CURRENT_TIMESTAMP,  
  updated_at DATETIME DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,  
  FOREIGN KEY (owner_id) REFERENCES users(id)  
);  
  
CREATE TABLE event_attendees (  
  event_id INT NOT NULL,  
  user_id INT NOT NULL,  
  status ENUM('accepted', 'declined', 'tentative', 'invited') DEFAULT 'invited',  
  role ENUM('owner', 'participant') DEFAULT 'participant',  
  PRIMARY KEY (event_id, user_id),  
  FOREIGN KEY (event_id) REFERENCES events(id) ON DELETE CASCADE,  
  FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE  
);  
  
CREATE TABLE users (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  username VARCHAR(50) NOT NULL UNIQUE,  
  email VARCHAR(100) NOT NULL UNIQUE,  
  password_hash VARCHAR(255) NOT NULL,  
  full_name VARCHAR(100),  
  created_at DATETIME DEFAULT CURRENT_TIMESTAMP,  
  updated_at DATETIME DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP  
);  
  
CREATE TABLE notifications (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  user_id INT NOT NULL,  
  event_id INT, -- optional if notification is event-related  
  type ENUM('event_invite', 'event_update', 'reminder', 'custom') NOT NULL,  
  message TEXT NOT NULL,
```

```
is_read BOOLEAN DEFAULT FALSE,  
notify_at DATETIME,  
created_at DATETIME DEFAULT CURRENT_TIMESTAMP,  
updated_at DATETIME DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP,  
FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE,  
FOREIGN KEY (event_id) REFERENCES events(id) ON DELETE CASCADE  
);
```