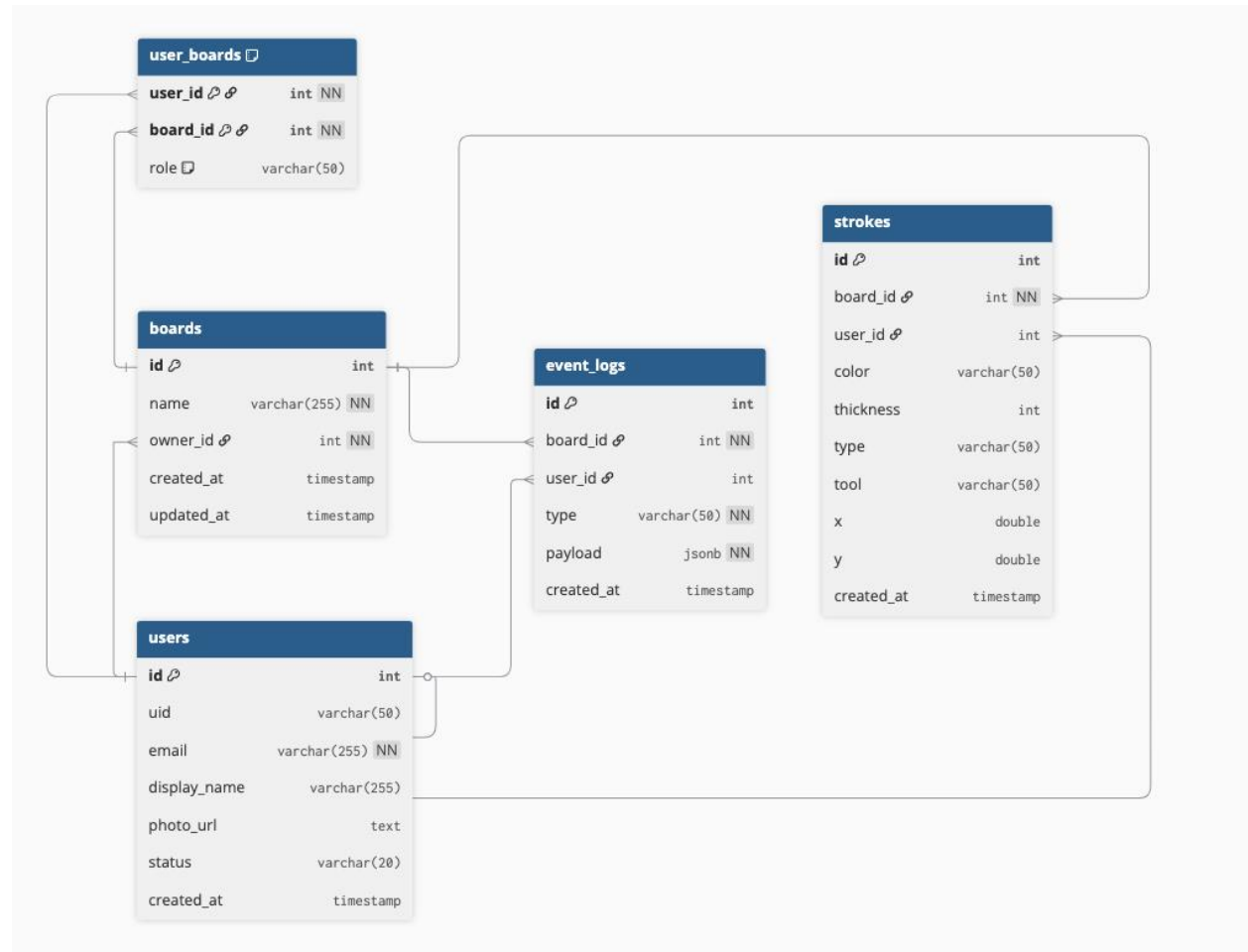


# DATABASE SCHEMA



```

-- User table
CREATE TABLE users (
id SERIAL PRIMARY KEY,
uid VARCHAR(50),
email VARCHAR(255) UNIQUE NOT NULL,
display_name VARCHAR(255),
photo_url TEXT,
status VARCHAR(20),
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

-- Board table
CREATE TABLE boards (
id SERIAL PRIMARY KEY,
name VARCHAR(255) NOT NULL,
owner_id VARCHAR(50) NOT NULL,
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
updated_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
CONSTRAINT fk_board_owner FOREIGN KEY (owner_id) REFERENCES users(id) ON DELETE CASCADE
);

-- UserBoard relation (many-to-many between users and boards)
CREATE TABLE user_boards (
user_id VARCHAR(50) NOT NULL,
board_id VARCHAR(50) NOT NULL,
role VARCHAR(50) DEFAULT 'editor',
PRIMARY KEY (user_id, board_id),
CONSTRAINT fk_userboard_user FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE CASCADE,
CONSTRAINT fk_userboard_board FOREIGN KEY (board_id) REFERENCES boards(id) ON DELETE CASCADE
);

-- Stroke table (drawing actions)
CREATE TABLE strokes (
id SERIAL PRIMARY KEY,
board_id VARCHAR(50) NOT NULL,
user_id VARCHAR(50) NOT NULL,
color VARCHAR(50),
thickness INT,
type VARCHAR(50), -- 'start', 'draw', 'end'
tool VARCHAR(50), -- 'pen', 'eraser', 'hand'
x FLOAT,
y FLOAT,
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
CONSTRAINT fk_stroke_board FOREIGN KEY (board_id) REFERENCES boards(id) ON DELETE CASCADE,
CONSTRAINT fk_stroke_user FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE SET NULL
);

-- EventLog table (for undo/redo and auditing)

CREATE TABLE event_logs (
id SERIAL PRIMARY KEY,
board_id VARCHAR(50) NOT NULL,
user_id VARCHAR(50),
type VARCHAR(50) NOT NULL, -- draw, erase, undo, redo, cursor_move, etc.

```

```
payload JSONB NOT NULL,  
created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
CONSTRAINT fk_eventlog_board FOREIGN KEY (board_id) REFERENCES boards(id) ON DELETE CASCADE,  
CONSTRAINT fk_eventlog_user FOREIGN KEY (user_id) REFERENCES users(id) ON DELETE SET NULL  
);
```