Proyek Akhir SBD

MOOD MORI

Kelompok 4

Anggota Kelompok

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Apa itu MOOD MORI?

MOOD MORI adalah platform social-based emotion log yang membantu pengguna mencatat dan membagikan perjalanan emosional mereka. Aplikasi ini menggabungkan personal mood tracking dengan fitur sosial untuk membangun lingkungan yang mendukung kesehatan emosional.

🌈 MOOD MORI

Share Your Emotional Journey, Connect with Others

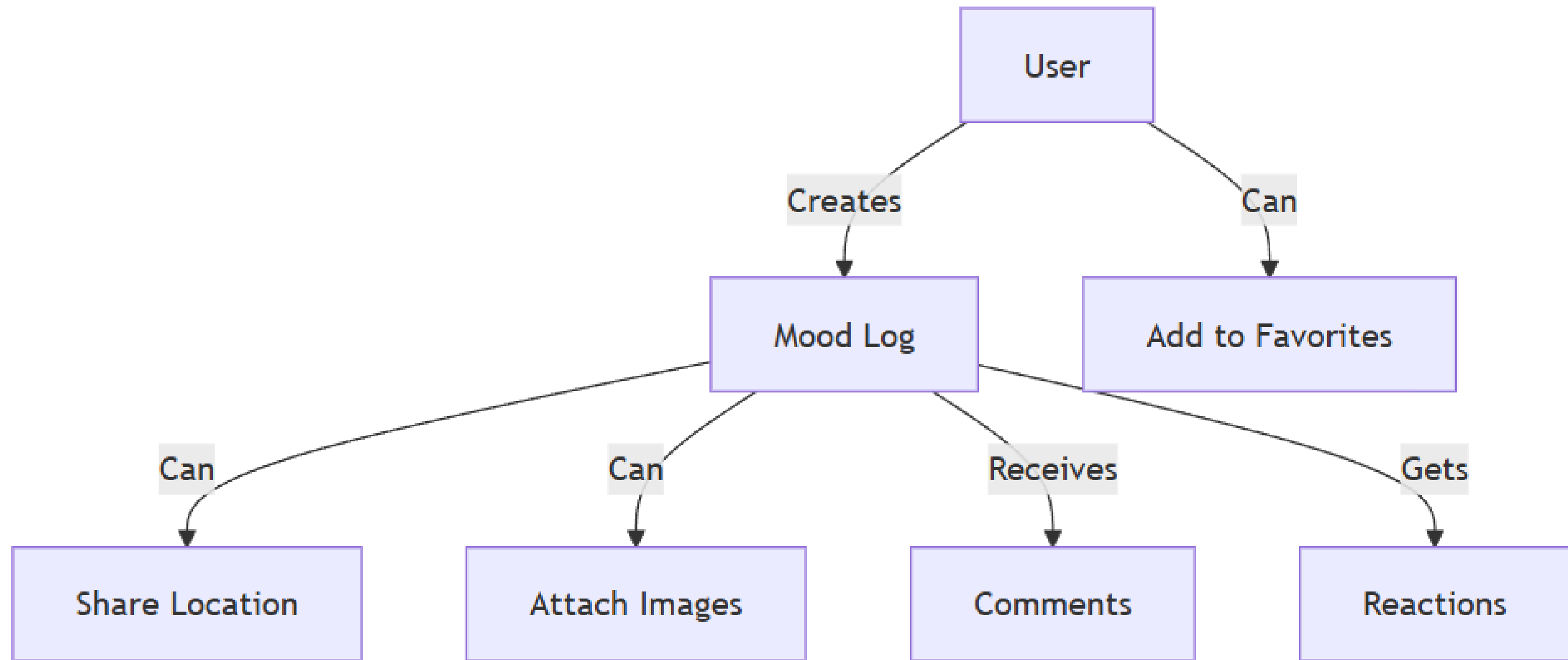# Key Features

Core Features

- **Emotion Logging**: Melacak dan memonitor keadaan emosional anda
- **Rich Dashboard**: Representasi visual dari mood patterns
- **Secure Auth**: Protected routes dan session management

Chat System

- Chat pribadi dengan image sharing
- Dukungan group chat
- Berbagi lokasi secara langsung (real-time)

Social Features

Project Structure

```
├── backend/
│   ├── src/
│   │   ├── controllers/   # Request handlers
│   │   ├── repositories/   # Database queries
│   │   ├── routes/   # API routes
│   │   ├── utils/   # Helper functions
│   │   └── database/   # Database connection
│   └── index.js   # Entry point
└── frontend/
    ├── src/
    │   ├── api/   # API configurations
    │   ├── components/   # Reusable UI components
    │   ├── pages/   # Application views
    │   └── assets/   # Static resources
    └── index.html
```

# Development Workflow
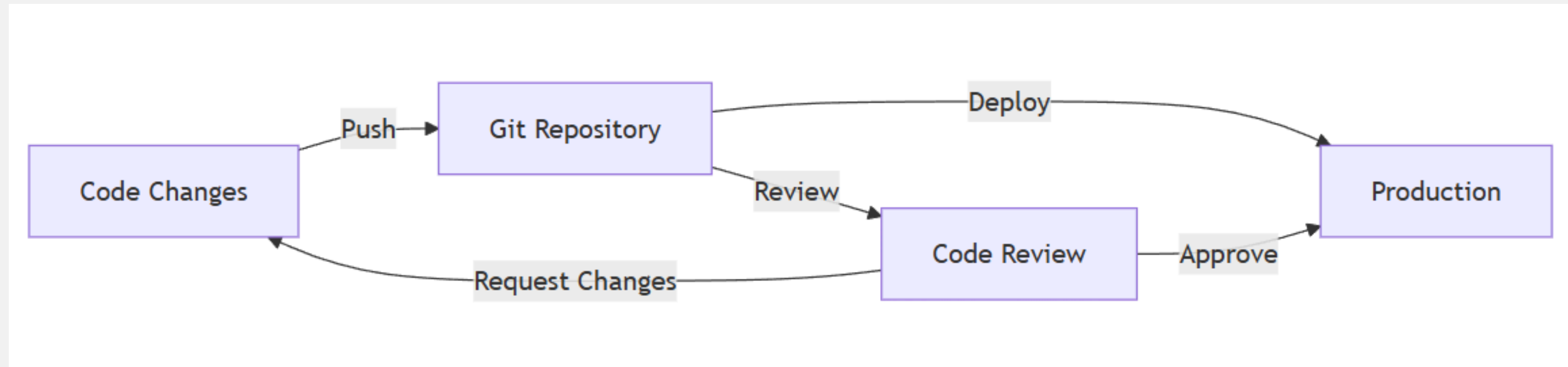
# Database Architecture

## Entity Relationship Diagram
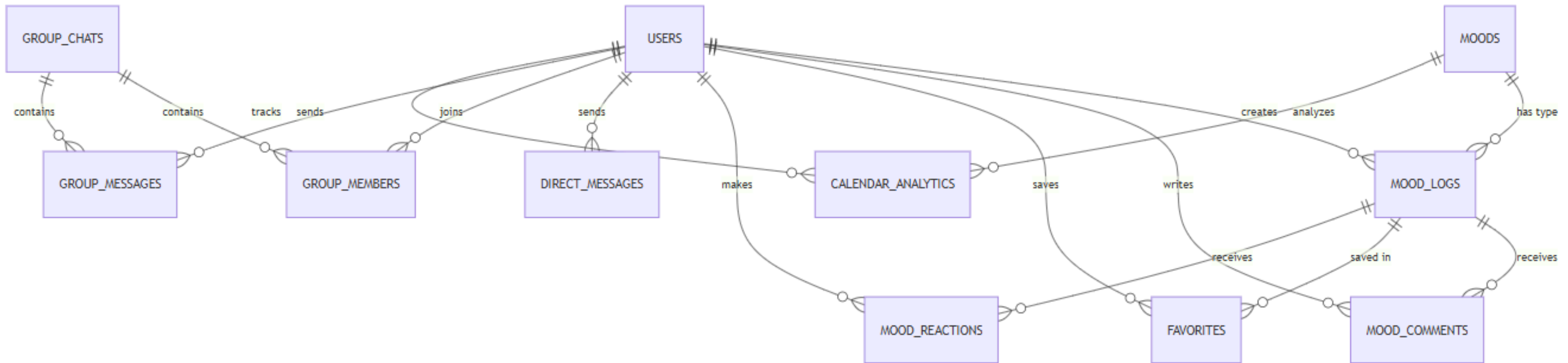
# Core Entities

## Users

```sql
CREATE TABLE users (
    id SERIAL PRIMARY KEY,
    username VARCHAR(50) UNIQUE NOT NULL,
    email VARCHAR(100) UNIQUE NOT NULL,
    password_hash TEXT NOT NULL,
    profile_picture TEXT,
    location TEXT,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Moods

```sql
CREATE TABLE moods (
    id SERIAL PRIMARY KEY,
    mood_name VARCHAR(30) UNIQUE NOT NULL,
    icon TEXT,
    color VARCHAR(10)
);
```

Mood Logs

```sql
CREATE TABLE mood_logs (
    id SERIAL PRIMARY KEY,
    user_id INTEGER REFERENCES users(id),
    mood_id INTEGER REFERENCES moods(id),
    note TEXT,
    location TEXT,
    image_url TEXT,
    is_public BOOLEAN DEFAULT FALSE,
    log_date DATE DEFAULT CURRENT_DATE,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Pilihan mood dengan representasi visualnya

Mood Name	Icon	Color
HAPPY	😊	#FFD700
SAD	🥺	#6495ED
ANGRY	😡	#FF4500
AFRAID	😨	#9370DB
NEUTRAL	😐	#A9A9A9
MANIC	😆	#FF1493
DEPRESSED	😔	#4682B4
FURIOUS	😡	#DC143C
TERRIFIED	😱	#800080
CALM	😌	#20B2AA

Social Features

Mood Comments

```sql
CREATE TABLE mood_comments (
    id SERIAL PRIMARY KEY,
    mood_log_id INTEGER REFERENCES mood_logs(id),
    user_id INTEGER REFERENCES users(id),
    content TEXT NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Favorites

```sql
CREATE TABLE favorites (
    id SERIAL PRIMARY KEY,
    user_id INTEGER REFERENCES users(id),
    mood_log_id INTEGER REFERENCES mood_logs(id),
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Mood Reactions

```sql
CREATE TABLE mood_reactions (
    id SERIAL PRIMARY KEY,
    mood_log_id INTEGER REFERENCES mood_logs(id),
    user_id INTEGER REFERENCES users(id),
    is_like BOOLEAN NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Chat System

Direct Messages

```sql
CREATE TABLE direct_messages (
    id SERIAL PRIMARY KEY,
    sender_id INTEGER REFERENCES users(id),
    recipient_id INTEGER REFERENCES users(id),
    content TEXT NOT NULL,
    location TEXT,
    is_read BOOLEAN DEFAULT FALSE,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Group Chats

```sql
CREATE TABLE group_chats (
    id SERIAL PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    creator_id INTEGER REFERENCES users(id),
    description TEXT,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Group Members

```sql
CREATE TABLE group_members (
    id SERIAL PRIMARY KEY,
    group_id INTEGER REFERENCES group_chats(id),
    user_id INTEGER REFERENCES users(id),
    joined_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Group Messages

```sql
CREATE TABLE group_messages (
    id SERIAL PRIMARY KEY,
    group_id INTEGER REFERENCES group_chats(id),
    sender_id INTEGER REFERENCES users(id),
    content TEXT NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Analytics

Calendar Analytics

```sql
CREATE TABLE calendar_analytics (
    id SERIAL PRIMARY KEY,
    user_id INTEGER REFERENCES users(id),
    mood_id INTEGER REFERENCES moods(id),
    mood_date DATE,
    mood_count INTEGER DEFAULT 1
);
```

UML

users
id 🔑	SERIAL
username	varchar(50) NN
email	varchar(100) NN
password_hash	text NN
profile_picture	text
location	text
created_at	timestamp

moods
id 🔑	SERIAL
mood_name	varchar(30) NN
icon	text
color	varchar(10)

mood_logs
id 🔑	SERIAL
user_id	int
mood_id	int
note	text
location	text
image_url	text
is_public	boolean
log_date	date
created_at	timestamp

mood_comments
id 🔑	SERIAL
mood_log_id	int
user_id	int
content	text NN
created_at	timestamp

mood_reactions
id 🔑	SERIAL
mood_log_id	int
user_id	int
is_like	boolean NN
created_at	timestamp

favorites
id 🔑	SERIAL
user_id	int
mood_log_id	int
created_at	timestamp

group_chats
id 🔑	SERIAL
name	varchar(100) NN
creator_id	int
description	text
created_at	timestamp

direct_messages
id 🔑	SERIAL
sender_id	int
recipient_id	int
content	text NN
location	text
is_read	boolean
image_url	text
message_type	varchar(20)
created_at	timestamp

group_messages
id 🔑	SERIAL
group_id	int
sender_id	int
content	text NN
image_url	text
message_type	varchar(20)
created_at	timestamp

group_members
id 🔑	SERIAL
group_id	int
user_id	int
joined_at	timestamp

calendar_analytics
id 🔑	SERIAL
user_id	int
mood_id	int
mood_date	date
mood_count	int

dbdiagram.io

Database Optimization

**Database ini dioptimalkan dengan indeks
pada kolom yang sering diakses**

- Mood logs: user_id, mood_id, is_public, log_date
- Reactions: mood_log_id, user_id
- Messages: sender_id, recipient_id
- Group messages: group_id
- Favorites: user_id, mood_log_id
- Comments: mood_log_id, user_id
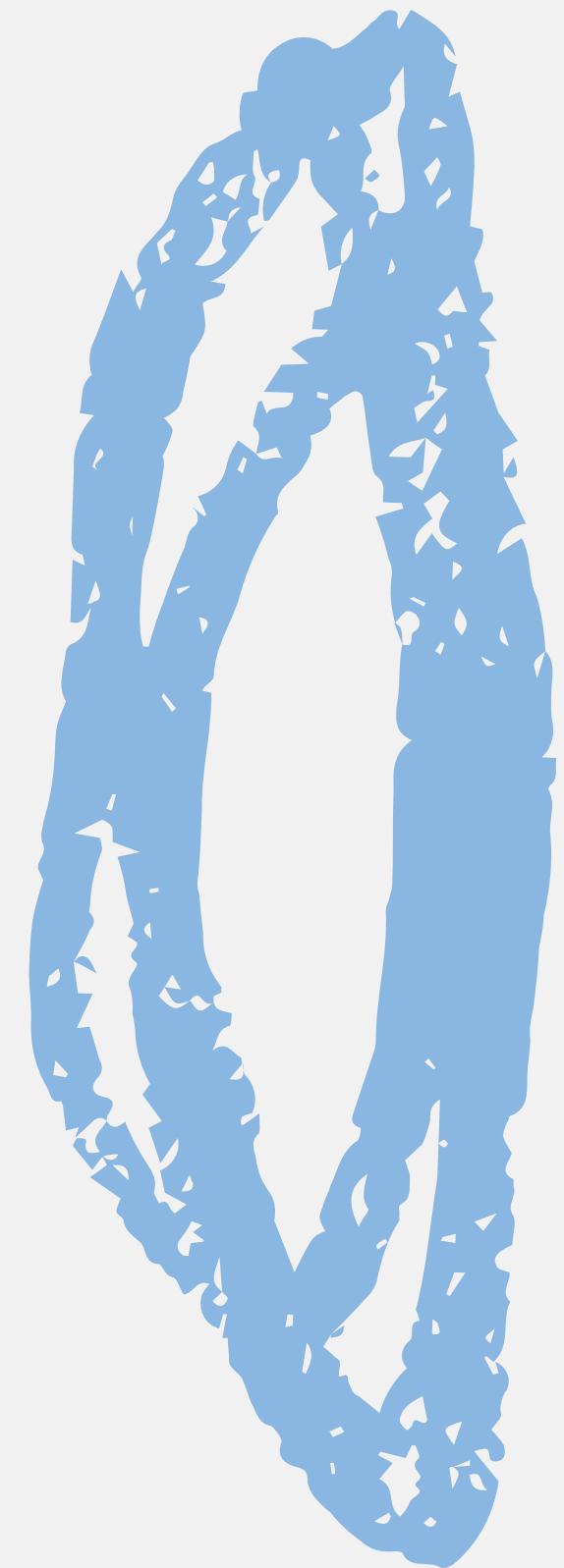
Application Features
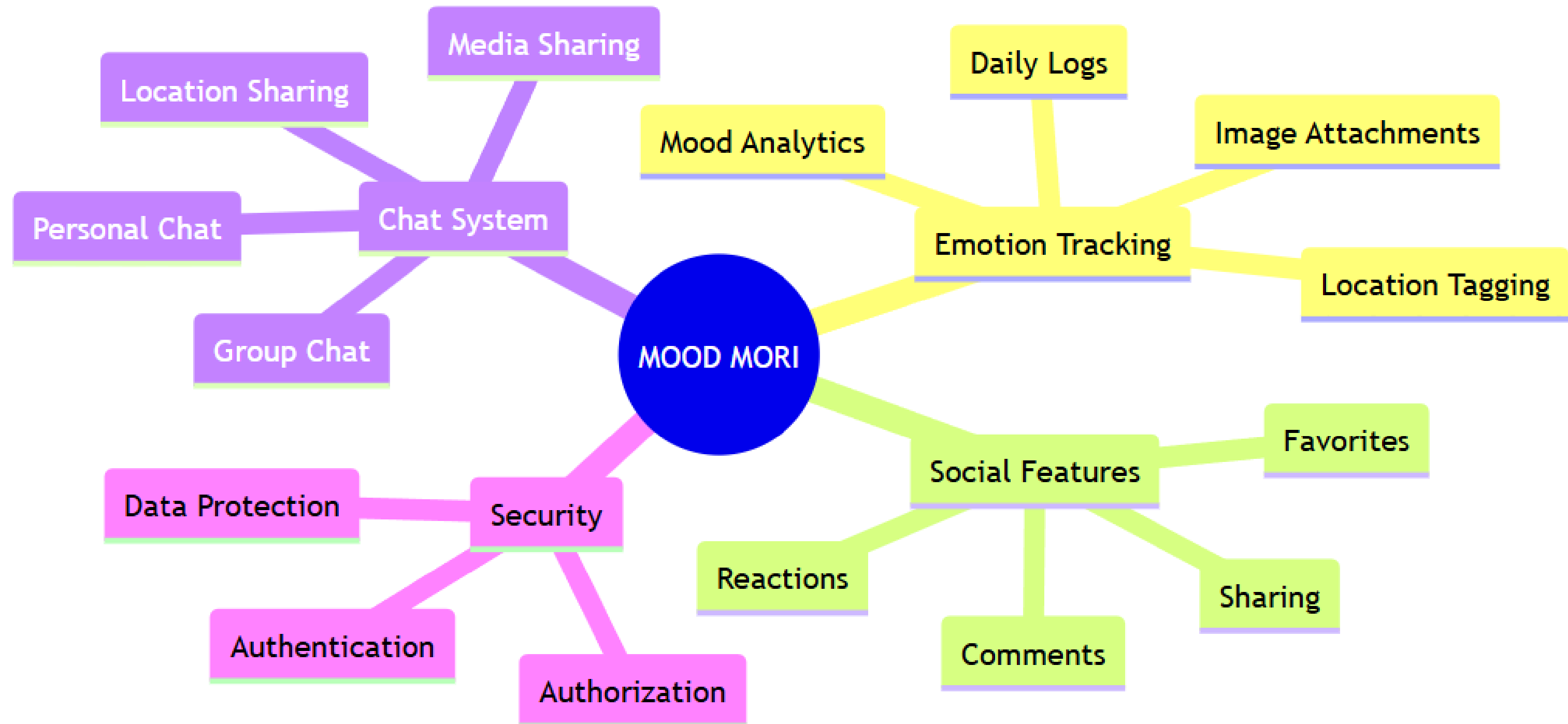
Features Overview

Emotion Logging

- Membuat dan melacak daily mood entries
- Menambahkan konteks dan catatan pada mood logs
- Melihat history dari pola mood
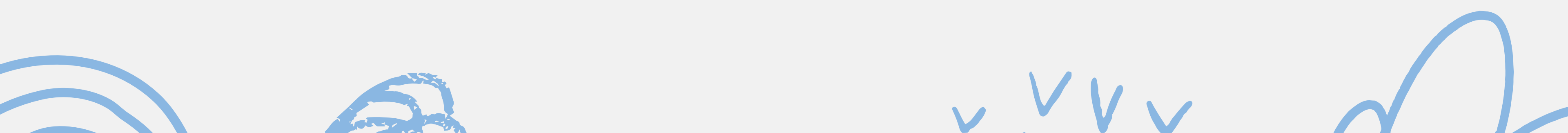- Menambahkan gambar ke mood entries

Social Features

- Membuat dan bergabung grup
- Menambahkan postingan ke favorites
- Memberi comment pada mood logs
- Kustomisasi user profile

Chat System

- Message pribadi dan grup secara real-time
- Image sharing dalam chat
- Fitur berbagi lokasi
- Pengelolaan group chat

Security Features

- Autentikasi yang aman
- Rute terlindungi
- Manajemen sesi
- Validasi upload file

Terima Kasih!