Subscription Management API Documentation

Base URL: `http://localhost:3000/api/v1`

Authentication

The API uses JWT (JSON Web Token) for authentication. Access tokens are valid for 24 hours, and refres

Authentication Endpoints

Register New User

```http
POST /auth/register
```

Request Body:

```json
{
    "name": "John Doe",
    "email": "john@example.com",
    "password": "password123"
}
```

Response (201 Created):

```json

```json
{
    "access_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...",

    "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...",

    "expires_in": 1640995200
}
```

Login

```http
POST /auth/login
```

Request Body:

```json
{
    "email": "john@example.com",

    "password": "password123"
}
```

Response (200 OK):

```json
{
    "access_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...",

    "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...",

    "expires_in": 1640995200
```

```
}
```

Users

User Endpoints

Get All Users

```http
GET /users
```

Response (200 OK):

```json
[
  {
    "id": 1,
    "created_at": "2024-01-01T00:00:00Z",
    "updated_at": "2024-01-01T00:00:00Z",
    "name": "John Doe",
    "email": "john@example.com",
    "subscriptions": [...]
  }
]
```

Get User by ID

```http
GET /users/:id
```

Response (200 OK):

```json
{
    "id": 1,
    "created_at": "2024-01-01T00:00:00Z",
    "updated_at": "2024-01-01T00:00:00Z",
    "name": "John Doe",
    "email": "john@example.com",
    "subscriptions": [...]
}
```

Create User

```http
POST /users
```

Request Body:

```json
{
    "name": "John Doe",
```

```json
  "email": "john@example.com",

  "password": "password123"

}
```


Response (201 Created):

```json
{

  "id": 1,

  "created_at": "2024-01-01T00:00:00Z",

  "updated_at": "2024-01-01T00:00:00Z",

  "name": "John Doe",

  "email": "john@example.com"

}
```


Update User

```http
PUT /users/:id
```


Request Body:

```json
{

  "name": "John Updated",

  "email": "john.updated@example.com"
```

}
```

Response (200 OK):

```json
{

    "id": 1,

    "created_at": "2024-01-01T00:00:00Z",

    "updated_at": "2024-01-01T00:00:00Z",

    "name": "John Updated",

    "email": "john.updated@example.com"

}
```

Delete User

```http
DELETE /users/:id
```

Response (200 OK):

```json
{

    "message": "User deleted successfully"

}
```

Subscription Plans

Plan Endpoints

Get All Plans
```http
GET /plans
```

Response (200 OK):
```json
{
  "success": true,
  "data": [
    {
      "id": 1,
      "created_at": "2024-01-01T00:00:00Z",
      "updated_at": "2024-01-01T00:00:00Z",
      "name": "Premium Plan",
      "description": "Premium features included",
      "price": 29.99,
      "duration": 30
    }
  ]
}
```

Get Plan by ID

```http
GET /plans/:id
```

Response (200 OK):

```json
{
  "success": true,
  "data": {
    "id": 1,
    "created_at": "2024-01-01T00:00:00Z",
    "updated_at": "2024-01-01T00:00:00Z",
    "name": "Premium Plan",
    "description": "Premium features included",
    "price": 29.99,
    "duration": 30
  }
}
```

Create Plan

```http
POST /plans
```

Request Body:

```json
{
    "name": "Premium Plan",
    "description": "Premium features included",
    "price": 29.99,
    "duration": 30
}
```

Response (201 Created):

```json
{
    "success": true,
    "data": {
        "id": 1,
        "created_at": "2024-01-01T00:00:00Z",
        "updated_at": "2024-01-01T00:00:00Z",
        "name": "Premium Plan",
        "description": "Premium features included",
        "price": 29.99,
        "duration": 30
    }
}
```

Subscriptions

Subscription Endpoints

Get All Subscriptions

```http
GET /subscriptions
```

Response (200 OK):

```json
{
  "status": "success",
  "data": [
    {
      "id": 1,
      "created_at": "2024-01-01T00:00:00Z",
      "updated_at": "2024-01-01T00:00:00Z",
      "user_id": 1,
      "plan_id": 1,
      "status": "active",
      "start_date": "2024-01-01T00:00:00Z",
      "expires_at": "2024-02-01T00:00:00Z",
      "active": true
    }
```

]

}
```

#### Get User's Subscriptions

```http
GET /subscriptions/user/:userId
```

Response (200 OK):
```json
[
    {
        "id": 1,
        "created_at": "2024-01-01T00:00:00Z",
        "updated_at": "2024-01-01T00:00:00Z",
        "user_id": 1,
        "plan_id": 1,
        "status": "active",
        "start_date": "2024-01-01T00:00:00Z",
        "expires_at": "2024-02-01T00:00:00Z",
        "active": true
    }
]
```

Subscribe User to Plan

```http
POST /subscriptions/subscribe
```

Request Body:

```json
{
    "user_id": 1,
    "plan_id": 1
}
```

Response (201 Created):

```json
{
    "success": true,
    "data": {
        "id": 1,
        "created_at": "2024-01-01T00:00:00Z",
        "updated_at": "2024-01-01T00:00:00Z",
        "user_id": 1,
        "plan_id": 1,
        "status": "active",
        "start_date": "2024-01-01T00:00:00Z",
        "expires_at": "2024-02-01T00:00:00Z",
```

```
      "active": true

    }

}
```

Get Subscription Statistics

```http
GET /subscriptions/stats
```

Response (200 OK):

```json
{

    "status": "success",

    "data": {

        "total_subscriptions": 100,

        "total_amount": 2999.00,

        "monthly_spending": 2999.00

    }

}
```

Error Responses

The API uses standard HTTP status codes and returns errors in the following format:

```json
{

  "error": "Error message description"

}
```

Common status codes:

- 400: Bad Request

- 401: Unauthorized

- 404: Not Found

- 409: Conflict

- 500: Internal Server Error

Rate Limiting

Currently, there are no rate limits implemented on the API endpoints.

Data Models

User
```json
{

  "id": "uint",

  "created_at": "timestamp",

  "updated_at": "timestamp",

  "deleted_at": "timestamp",
```

```json
    "name": "string",

    "email": "string",

    "password": "string (hashed)",

    "subscriptions": "Subscription[]"

}
```

Plan

```json
{

    "id": "uint",

    "created_at": "timestamp",

    "updated_at": "timestamp",

    "deleted_at": "timestamp",

    "name": "string",

    "description": "string",

    "price": "float64",

    "duration": "int"

}
```

Subscription

```json
{

    "id": "uint",

    "created_at": "timestamp",
```

```
    "updated_at": "timestamp",

    "deleted_at": "timestamp",

    "user_id": "uint",

    "plan_id": "uint",

    "status": "string",

    "start_date": "timestamp",

    "expires_at": "timestamp",

    "active": "boolean"
}
```