

<http://localhost:8000/>[Explore](#)

Blockchain-Integrated Charity Platform API ^{v1}

[Base URL: localhost:8000/api]

<http://localhost:8000/swagger/schema/?format=openapi>

Overview

A comprehensive blockchain-integrated charity platform API that enables charity registration, campaign management, donation processing, and fund allocation with full blockchain transparency on Sepolia testnet.

Key Features

- **Charity Management:** Register and manage charitable organizations
- **Campaign System:** Create and manage fundraising campaigns
- **Donation Processing:** Handle USD and ETH donations with blockchain recording
- **Fund Allocation:** Allocate funds to campaign events with blockchain transactions
- **User Management:** Role-based authentication (Donor, Charity Manager, Admin)
- **Blockchain Integration:** Full Sepolia testnet integration with smart contracts

Authentication

The API uses JWT-based authentication with role-based access control:

- **DONOR:** Can make donations and view campaigns
- **CHARITY_MANAGER:** Can create campaigns and allocate funds
- **ADMIN:** Full system access and event approval

Blockchain Integration

- **Network:** Sepolia Testnet
- **Explorer:** <https://sepolia.etherscan.io>
- **Contract:** Deployed smart contract for all operations
- **Transactions:** All operations recorded on blockchain

Quick Start

1. **Authentication:** Login with email/password or wallet
2. **Create Charity:** Register charitable organization
3. **Create Campaign:** Set up fundraising campaign
4. **Make Donations:** Process donations with blockchain recording
5. **Allocate Funds:** Distribute funds to events

API Endpoints

Authentication

- **POST** `/api/auth/login/` - User login
- **POST** `/api/auth/logout/` - User logout
- **POST** `/api/auth/refresh/` - Token refresh
- **POST** `/api/auth/wallet-login/` - Wallet authentication

Charities

- **GET** `/api/charities/` - List charities
- **POST** `/api/charities/` - Create charity (with blockchain registration)
- **GET** `/api/charities/{id}/` - Get charity details
- **PUT** `/api/charities/{id}/` - Update charity

Campaigns

- **GET** `/api/campaigns/` - List campaigns
- **POST** `/api/campaigns/` - Create campaign (with blockchain registration)
- **GET** `/api/campaigns/{id}/` - Get campaign details
- **POST** `/api/campaigns/{id}/donate/` - Make donation (with blockchain transaction)
- **POST** `/api/campaigns/{id}/allocate_funds/` - Allocate funds to events
- **GET** `/api/campaigns/{id}/utilization/` - Get fund utilization stats

Transactions

- **GET** `/api/campaigns/all_transactions/` - Get all blockchain transactions



Environment Variables

```
BLOCKCHAIN_RPC_URL=https://sepolia.infura.io/v3/YOUR_PROJECT_ID
CONTRACT_ADDRESS=0x...
ADMIN_WALLET_ADDRESS=0x...
ADMIN_WALLET_PRIVATE_KEY=0x...
```



Testing

Use the interactive Swagger UI to test all endpoints. Ensure you have:

- Valid authentication tokens
- Proper role permissions
- Blockchain configuration set up



Support

For technical support or questions, contact: mithilapanagoda@gmail.com

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Schemes

HTTP

Django mithila@hyperglade.io

Django Logout

Authorize



Filter by tag

campaign-events



GET

/campaign-events/

campaign-events_list



POST

/campaign-events/

campaign-events_create



GET

/campaign-events/{id}/

campaign-events_read



PUT

/campaign-events/{id}/

campaign-events_update



PATCH

/campaign-events/{id}/

campaign-events_partial_update



DELETE

/campaign-events/{id}/

campaign-events_delete



campaigns



GET

/campaigns/

campaigns_list



POST

/campaigns/

campaigns_create



GET

/campaigns/{id}/

campaigns_read



PUT

/campaigns/{id}/

campaigns_update



PATCH

/campaigns/{id}/

campaigns_partial_update



DELETE

/campaigns/{id}/

campaigns_delete



POST

/campaigns/{id}/allocate_funds/

campaigns_allocate_funds



POST

/campaigns/{id}/donate/

campaigns_donate



GET

/campaigns/{id}/donations/

campaigns_donations



GET	/campaigns/{id}/events/	campaigns_events	▼	🔒
GET	/campaigns/{id}/statistics/	campaigns_statistics	▼	🔒
GET	/campaigns/{id}/utilization/	campaigns_utilization	▼	🔒
GET	/campaigns/all_transactions/	campaigns_all_transactions	▼	🔒

charities

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GET	/charities/	charities_list	▼	🔒
POST	/charities/	charities_create	▼	🔒
GET	/charities/{id}/	charities_read	▼	🔒
PUT	/charities/{id}/	charities_update	▼	🔒
PATCH	/charities/{id}/	charities_partial_update	▼	🔒
DELETE	/charities/{id}/	charities_delete	▼	🔒
GET	/charities/{id}/campaigns/	charities_campaigns	▼	🔒
GET	/charities/{id}/donations/	charities_donations	▼	🔒
GET	/charities/{id}/statistics/	charities_statistics	▼	🔒

donations

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GET	/donations/	donations_list	▼	🔒
POST	/donations/	donations_create	▼	🔒
GET	/donations/{id}/	donations_read	▼	🔒
PUT	/donations/{id}/	donations_update	▼	🔒

PATCH

/donations/{id}/

donations_partial_update

▼

🔒

DELETE

/donations/{id}/

donations_delete

▼

🔒

GET

/donations/my_statistics/

donations_my_statistics

▼

🔒

tokens

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GET

/tokens/

tokens_list

▼

🔒

POST

/tokens/

tokens_create

▼

🔒

GET

/tokens/{id}/

tokens_read

▼

🔒

PUT

/tokens/{id}/

tokens_update

▼

🔒

PATCH

/tokens/{id}/

tokens_partial_update

▼

🔒

DELETE

/tokens/{id}/

tokens_delete

▼

🔒

GET

/tokens/{id}/statistics/

tokens_statistics

▼

🔒

GET

/tokens/{id}/transactions/

tokens_transactions

▼

🔒

transactions

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GET

/transactions/

transactions_list

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POST

/transactions/

transactions_create

▼

🔒

GET

/transactions/{id}/

transactions_read

▼

🔒

PUT

/transactions/{id}/

transactions_update

▼

🔒

PATCH

/transactions/{id}/

transactions_partial_update

▼

🔒

DELETE

/transactions/{id}/

transactions_delete

▼

🔒

GET	/transactions/by_address/	transactions_by_address	▼	🔒
GET	/transactions/statistics/	transactions_statistics	▼	🔒

User^

GET	/users/	users_list	▼	🔒
GET	/users/{id}/	users_read	▼	🔒
POST	/users/login/	users_login	▼	🔒
GET	/users/me/	users_me	▼	🔒
POST	/users/wallet-login/	users_wallet_login	▼	🔒

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