



# Crypto Trading Simulator API

This REST API provides access to coins, orders and historical market data. All responses are returned as JSON.

Base URL: <http://localhost:3000>

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## Coins

### GET /coins

Returns a list of all supported coins.

#### Status Codes

- **200 OK** – Coins returned successfully

#### Response Example

```
[
  { "id": "btc", "symbol": "BTC", "name": "Bitcoin" },
  { "id": "eth", "symbol": "ETH", "name": "Ethereum" }
]
```

### GET /coins/:id

Returns details for a single coin including related orders.

#### URL Parameters

- `id` Coin ID (example: btc)

#### Status Codes

- **200 OK** – Coin found
- **404 Not Found** – Coin does not exist

#### Success Response

```
{
  "id": "btc",
  "symbol": "BTC",
  "name": "Bitcoin",
  "orders": []
}
```

## Error Response

```
{ "error": "Coin not found" }
```



## Orders

### GET /orders

Returns all current orders.

#### Status Codes

- **200 OK**

#### Response Example

```
[
  {
    "id": "123456",
    "coinId": "btc",
    "type": "buy",
    "price": 90000,
    "amount": 0.1,
    "status": "open"
  }
]
```

### GET /orders/:id

Returns a single order including its related coin.

#### Status Codes

- **200 OK**
- **404 Not Found** – Order does not exist

#### Error Example

```
{ "error": "Order not found" }
```

## POST /orders

Creates a new order.

### Request Body

```
{
  "coinId": "btc",
  "type": "buy",
  "price": 90000,
  "amount": 0.1
}
```

### Status Codes

- **201 Created** – Order created
- **400 Bad Request** – Invalid input

### Error Example

```
{ "error": "Invalid order data" }
```

## Market History

### GET /history?interval=1m|5m

Returns candlestick market data from Binance.

### Status Codes

- **200 OK**
- **500 Server Error** – Binance API unavailable

### Error Example

```
{ "error": "Failed to fetch history" }
```

**Authentication:** None (local educational use only)