OpenAPI Specification (OAS)

//YAML code

openapi: 3.0.0

info:

title: ATM Transactions API

description: API for performing ATM transactions such as balance inquiry, cash withdrawal, deposit, and transaction history.

version: 1.0.0

servers:

- url: https://api.bankname.com/v1/atm

description: Production server

paths:

/balance:

get:

summary: Check account balance

description: Retrieve the account balance for a specified account.

parameters:

- name: accountNumber

in: query

description: The account number to check the balance.

required: true

schema:

type: string

responses:

'200':

description: Successful response

content:

application/json:

schema:

type: object

properties:

accountNumber:

type: string

balance:

type: number

currency:

type: string

'401':

description: Unauthorized - Invalid or missing API key

'404':

description: Account not found

/withdraw:

post:

summary: Withdraw cash

description: Perform a cash withdrawal from an account.

requestBody:

required: true

content:

application/json:

schema:

type: object

properties:

accountNumber:

type: string

amount:

type: number

currency:

type: string

responses:

'200':

description: Successful withdrawal

content:

application/json:

schema:

type: object

properties:

transactionId:

type: string

accountNumber:

type: string

withdrawnAmount:

type: number

remainingBalance:

type: number

currency:

type: string

'400':

description: Bad request - Insufficient funds or invalid amount

'401':

description: Unauthorized - Invalid or missing API key

/deposit:

post:

summary: Deposit cash or checks

description: Deposit cash or checks into an account.

requestBody:

required: true

content:

application/json:

schema:

type: object

properties:

accountNumber:

type: string

amount:

type: number

currency:

type: string

depositType:

type: string

enum: [cash, check]

responses:

'200':

description: Successful deposit

content:

application/json:

schema:

type: object

properties:

transactionId:

type: string

accountNumber:

type: string

depositedAmount:

type: number

currentBalance:

type: number

currency:

type: string

'400':

description: Bad request - Invalid deposit details

'401':

description: Unauthorized - Invalid or missing API key

/transactions:

get:

summary: Retrieve transaction history

description: Get the recent transaction history of an account.

parameters:

- name: accountNumber

in: query

description: The account number to fetch transactions for.

required: true

schema:

type: string

- name: limit

in: query

description: Number of recent transactions to retrieve (default: 10).

required: false

schema:

type: integer

responses:

'200':

description: Successful response

content:

application/json:

schema:

type: object

properties:

accountNumber:

type: string

transactions:

type: array

items:

type: object

properties:

transactionId:

type: string

type:

type: string

amount:

type: number

date:

type: string

format: date-time

currency:

type: string

'404':

description: Account not found

components:

securitySchemes:

BearerAuth:

type: http

scheme: bearer

security:

- BearerAuth: []

```

### Key Features:

- \*\*Base URL\*\*: Defined under `servers`.

- \*\*Authentication\*\*: Includes `BearerAuth` security scheme.

- \*\*Endpoints\*\*: `/balance`, `/withdraw`, `/deposit`, and `/transactions`.

- \*\*Response Codes\*\*: Defined with schemas and appropriate HTTP status codes.

Let me know if you need further customization!

Here’s a sample \*\*API documentation\*\* for an \*\*ATM Machine\*\* and its transactions, following standard API documentation practices, including an OpenAPI Specification (OAS)-based structure.

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# \*\*ATM Transactions API Documentation\*\*

## \*\*Overview\*\*

The ATM Transactions API enables integration with ATM machines for performing banking operations such as cash withdrawal, deposit, and balance inquiry. This API is secure, robust, and designed to handle real-time transactions.

### \*\*Base URL\*\*

`https://api.bankname.com/v1/atm`

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## \*\*Authentication\*\*

All API endpoints require authentication using an API key. Include the API key in the `Authorization` header.

\*\*Example:\*\*

```http

Authorization: Bearer <API\_KEY>

```

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## \*\*Endpoints\*\*

### \*\*1. Check Balance\*\*

Retrieve the account balance for a given account.

- \*\*Endpoint:\*\*

`GET /balance`

- \*\*Headers:\*\*

- `Authorization`: Bearer `<API\_KEY>`

- \*\*Query Parameters:\*\*

- `accountNumber` \*(required)\*: The account number for which the balance is requested.

- \*\*Response:\*\*

- \*\*200 OK\*\*:

```json

{

"accountNumber": "1234567890",

"balance": 2500.75,

"currency": "USD"

}

```

- \*\*401 Unauthorized\*\*: Invalid or missing API key.

- \*\*404 Not Found\*\*: Account not found.

---

### \*\*2. Withdraw Cash\*\*

Perform a cash withdrawal from an account.

- \*\*Endpoint:\*\*

`POST /withdraw`

- \*\*Headers:\*\*

- `Authorization`: Bearer `<API\_KEY>`

- \*\*Request Body:\*\*

```json

{

"accountNumber": "1234567890",

"amount": 500.00,

"currency": "USD"

}

```

- \*\*Response:\*\*

- \*\*200 OK\*\*:

```json

{

"transactionId": "txn\_987654321",

"accountNumber": "1234567890",

"withdrawnAmount": 500.00,

"remainingBalance": 2000.75,

"currency": "USD"

}

```

- \*\*400 Bad Request\*\*: Insufficient funds or invalid amount.

- \*\*401 Unauthorized\*\*: Invalid or missing API key.

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### \*\*3. Deposit Cash\*\*

Deposit cash or checks into an account.

- \*\*Endpoint:\*\*

`POST /deposit`

- \*\*Headers:\*\*

- `Authorization`: Bearer `<API\_KEY>`

- \*\*Request Body:\*\*

```json

{

"accountNumber": "1234567890",

"amount": 1000.00,

"currency": "USD",

"depositType": "cash"

}

```

- \*\*Response:\*\*

- \*\*200 OK\*\*:

```json

{

"transactionId": "txn\_123456789",

"accountNumber": "1234567890",

"depositedAmount": 1000.00,

"currentBalance": 3500.75,

"currency": "USD"

}

```

- \*\*400 Bad Request\*\*: Invalid deposit details.

- \*\*401 Unauthorized\*\*: Invalid or missing API key.

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### \*\*4. Transaction History\*\*

Retrieve the recent transaction history of an account.

- \*\*Endpoint:\*\*

`GET /transactions`

- \*\*Headers:\*\*

- `Authorization`: Bearer `<API\_KEY>`

- \*\*Query Parameters:\*\*

- `accountNumber` \*(required)\*: The account number for which the transaction history is requested.

- `limit` \*(optional)\*: Number of recent transactions to retrieve (default: 10).

- \*\*Response:\*\*

- \*\*200 OK\*\*:

```json

{

"accountNumber": "1234567890",

"transactions": [

{

"transactionId": "txn\_987654321",

"type": "withdrawal",

"amount": 500.00,

"date": "2024-11-01T12:30:00Z",

"currency": "USD"

},

{

"transactionId": "txn\_123456789",

"type": "deposit",

"amount": 1000.00,

"date": "2024-11-10T10:00:00Z",

"currency": "USD"

}

]

}

```

- \*\*404 Not Found\*\*: Account not found.

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## \*\*Error Codes\*\*

| \*\*Status Code\*\* | \*\*Description\*\* |

|------------------|------------------------------------------|

| 200 | Request was successful. |

| 400 | Bad request. Check input parameters. |

| 401 | Unauthorized. Invalid or missing API key.|

| 404 | Resource not found. |

| 500 | Internal server error. |

## \*\*Rate Limits\*\*

The API enforces the following rate limits:

- \*\*50 requests per minute\*\* per API key.

- Exceeding this limit will result in a `429 Too Many Requests` response.

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## \*\*Changelog\*\*

### \*\*Version 1.0.0\*\*

- Initial release with the following features:

- Balance inquiry

- Cash withdrawal

- Cash/Check deposit

- Transaction history

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Let me know if you need additional details or further formatting!