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# stellar-model

*Release 0.5.4*

**overcat**

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stellar-model is based on [pydantic](#), you can use it to parse the JSON returned by [Stellar Horizon](#) into Python models, through it, you can get a better development experience in the editor with things like code completion, type hints, and more.



## INSTALLING

You need to choose a suitable stellar-model version according to the Horizon version number you are using. Please check the list [here](#).

```
pip install stellar-model==0.5.4
```





## EXAMPLE

```
import requests
from stellar_model import AccountResponse

url = "https://horizon.stellar.org/accounts/
↳ GALAXYVOIDAOPZTDLHILAJQKCVFMD4IKLXLSZV5YH07VY74IWZILUTO"
raw_resp = requests.get(url).json()
parsed_resp = AccountResponse.model_validate(raw_resp)
print(f"Account Sequence: {parsed_resp.sequence}")
```

Of course you can use it with `stellar-sdk`.

```
from stellar_sdk import Server
from stellar_model import AccountResponse

server = Server("https://horizon.stellar.org")
account_id = "GALAXYVOIDAOPZTDLHILAJQKCVFMD4IKLXLSZV5YH07VY74IWZILUTO"
raw_resp = server.accounts().account_id(account_id).call()
parsed_resp = AccountResponse.model_validate(raw_resp)
print(f"Account Sequence: {parsed_resp.sequence}")
```



## DOCUMENTATION

stellar-model's documentation can be found at <https://stellar-model.readthedocs.io>



## API REFERENCE

### 4.1 Response Model

#### 4.1.1 AccountDataResponse

**class** stellar\_model.response.AccountDataResponse(\*, value: str, sponsor: str | None = None)

Represents single account data response.

Can be used for the following endpoint(s):

- GET /accounts/:account\_id/data/:key

See [Retrieve an Account's Data](#) on Stellar API Reference.

#### 4.1.2 AccountResponse

**class** stellar\_model.response.AccountResponse(\*, id: str, account\_id: str, sequence: int, sequence\_ledger: int | None = None, sequence\_time: datetime | None = None, subentry\_count: int, inflation\_destination: str | None = None, home\_domain: str | None = None, last\_modified\_ledger: int, last\_modified\_time: datetime | None = None, thresholds: AccountThresholds, flags: AccountFlags, balances: List[Balance], signers: List[Signer], data: Mapping[str, str], num\_sponsoring: int, num\_sponsored: int, sponsor: str | None = None, paging\_token: str, \_links: Links)

Represents single account response.

Can be used for the following endpoint(s):

- GET /accounts/:account\_id

See [Retrieve an Account](#) on Stellar API Reference.

### 4.1.3 AccountsResponse

**class** stellar\_model.response.AccountsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents accounts response.

Can be used for the following endpoint(s):

- GET /accounts

See [Accounts](#) on Stellar API Reference.

### 4.1.4 AssetsResponse

**class** stellar\_model.response.AssetsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents assets response.

Can be used for the following endpoint(s):

- GET /accounts

See [Assets](#) on Stellar API Reference.

### 4.1.5 ClaimableBalanceResponse

**class** stellar\_model.response.ClaimableBalanceResponse(\*, id: str, asset: str, amount: Decimal,  
sponsor: str | None = None,  
last\_modified\_ledger: int, last\_modified\_time:  
datetime | None = None, claimants:  
List[Claimant], flags:  
ClaimableBalanceFlags, paging\_token: str,  
\_links: Links)

Represents single claimable balance response.

Can be used for the following endpoint(s):

- GET /claimable\_balances/:claimable\_balance\_id

See [Claimable Balances](#) on Stellar API Reference.

### 4.1.6 ClaimableBalancesResponse

**class** stellar\_model.response.ClaimableBalancesResponse(\*, \_links: Links, \_embedded: Embedded)

Represents claimable balances response.

Can be used for the following endpoint(s):

- GET /claimable\_balances

See [Claimable Balances](#) on Stellar API Reference.

### 4.1.7 EffectsResponse

**class** stellar\_model.response.EffectsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents effects response.

Can be used for the following endpoint(s):

- GET /effects

See [Effects](#) on Stellar API Reference.

### 4.1.8 ErrorResponse

**class** stellar\_model.response.ErrorResponse(\*, type: str, title: str, status: int, detail: str | None = None, extras: Mapping[str, Any] | None = None)

Represents error response.

See [Error Response](#) on Stellar API Reference.

### 4.1.9 FeeStatsResponse

**class** stellar\_model.response.FeeStatsResponse(\*, last\_ledger: int, last\_ledger\_base\_fee: int, ledger\_capacity\_usage: Decimal, fee\_charged: FeeDistribution, max\_fee: FeeDistribution)

Represents fee stats response.

Can be used for the following endpoint(s):

- GET /fee\_stats

See [Fee Stats](#) on Stellar API Reference.

### 4.1.10 LedgerResponse

**class** stellar\_model.response.LedgerResponse(\*, id: str, paging\_token: str, hash: str, prev\_hash: str | None = None, sequence: int, successful\_transaction\_count: int, failed\_transaction\_count: int, operation\_count: int, tx\_set\_operation\_count: int, closed\_at: datetime, total\_coins: Decimal, fee\_pool: Decimal, base\_fee\_in\_stroops: int, base\_reserve\_in\_stroops: int, max\_tx\_set\_size: int, protocol\_version: int, header\_xdr: str, \_links: Links)

Represents single ledger response.

Can be used for the following endpoint(s):

- GET /ledger/:sequence\_id

See [Retrieve a Ledger](#) on Stellar API Reference.

### 4.1.11 LedgersResponse

**class** stellar\_model.response.LedgersResponse(\*, \_links: Links, \_embedded: Embedded)

Represents ledgers response.

Can be used for the following endpoint(s):

- GET /ledgers

See [Ledgers](#) on Stellar API Reference.

### 4.1.12 LiquidityPoolResponse

**class** stellar\_model.response.LiquidityPoolResponse(\*, id: str, paging\_token: str, fee\_bp: int, type: str, total\_trustlines: int, total\_shares: Decimal, reserves: List[LiquidityPoolAssetAmount], last\_modified\_ledger: int, last\_modified\_time: datetime | None = None, \_links: Links)

Represents single liquidity pool response.

Can be used for the following endpoint(s):

- GET /liquidity\_pools/:liquidity\_pool\_id

See [Retrieve a Liquidity Pool](#) on Stellar API Reference.

### 4.1.13 LiquidityPoolsResponse

**class** stellar\_model.response.LiquidityPoolsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents liquidity pools response.

Can be used for the following endpoint(s):

- GET /liquidity\_pools

See [Liquidity Pools](#) on Stellar API Reference.

### 4.1.14 OfferResponse

**class** stellar\_model.response.OfferResponse(\*, id: str, paging\_token: str, seller: str, selling: Asset, buying: Asset, amount: Decimal, price\_r: Price, price: Decimal, last\_modified\_ledger: int, last\_modified\_time: datetime | None = None, sponsor: str | None = None, \_links: Links)

Represents single offer response.

Can be used for the following endpoint(s):

- GET /offer/:offer\_id

See [Retrieve an Offer](#) on Stellar API Reference.



### 4.1.15 OffersResponse

**class** stellar\_model.response.**OffersResponse**(\* ,\_links: Links, \_embedded: Embedded)

Represents offers response.

Can be used for the following endpoint(s):

- GET /offers

See [Offers](#) on Stellar API Reference.

### 4.1.16 OperationResponse

**class** stellar\_model.response.**OperationResponse**(\* ,record: CreateAccountOperation | PaymentOperation | PathPaymentStrictReceiveOperation | ManageSellOfferOperation | CreatePassiveSellOfferOperation | SetOptionsOperation | ChangeTrustOperation | AllowTrustOperation | AccountMergeOperation | InflationOperation | ManageDataOperation | BumpSequenceOperation | ManageBuyOfferOperation | PathPaymentStrictSendOperation | CreateClaimableBalanceOperation | ClaimClaimableBalanceOperation | BeginSponsoringFutureReservesOperation | EndSponsoringFutureReservesOperation | RevokeSponsorshipOperation | ClawbackOperation | ClawbackClaimableBalanceOperation | SetTrustLineFlagsOperation | LiquidityPoolDepositOperation | LiquidityPoolWithdrawOperation | InvokeHostFunctionOperation | BumpFootprintExpirationOperation | RestoreFootprintOperation)

Represents single operation response.

Can be used for the following endpoint(s):

- GET /operations/:operation\_id

See [Operations](#) on Stellar API Reference.

### 4.1.17 OperationsResponse

**class** stellar\_model.response.**OperationsResponse**(\* ,\_links: Links, \_embedded: Embedded)

Represents operations response.

Can be used for the following endpoint(s):

- GET /operations

See [Operations](#) on Stellar API Reference.

### 4.1.18 PathsResponse

**class** stellar\_model.response.PathsResponse(\*, \_embedded: Embedded)

Represents paths response.

Can be used for the following endpoint(s):

- GET /paths/strict-receive
- GET /paths/strict-send

See [Paths](#) on Stellar API Reference.

### 4.1.19 PaymentsResponse

**class** stellar\_model.response.PaymentsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents payments response.

Can be used for the following endpoint(s):

- /payments{?cursor,limit,order,include\_failed}

### 4.1.20 RootResponse

**class** stellar\_model.response.RootResponse(\*, horizon\_version: str, core\_version: str,  
ingest\_latest\_ledger: int, history\_latest\_ledger: int,  
history\_latest\_ledger\_closed\_at: datetime,  
history\_elder\_ledger: int, core\_latest\_ledger: int,  
network\_passphrase: str, current\_protocol\_version: int,  
core\_supported\_protocol\_version: int, \_links: Links)

Represents root response.

Can be used for the following endpoint(s):

- GET /root

### 4.1.21 TradeAggregationsResponse

**class** stellar\_model.response.TradeAggregationsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents trade aggregations response.

Can be used for the following endpoint(s):

- GET /trade\_aggregations

See [Trade Aggregations](#) on Stellar API Reference.

### 4.1.22 TradesResponse

**class** stellar\_model.response.TradesResponse(\*, \_links: Links, \_embedded: Embedded)

Represents trades response.

Can be used for the following endpoint(s):

- GET /trades

See [Trades](#) on Stellar API Reference.

### 4.1.23 TransactionResponse

**class** stellar\_model.response.TransactionResponse(\*, id: str, paging\_token: str, successful: bool, hash: str, ledger: int, created\_at: datetime, source\_account: str, account\_muxed: str | None = None, account\_muxed\_id: int | None = None, source\_account\_sequence: int, fee\_account: str, fee\_account\_muxed: str | None = None, fee\_account\_muxed\_id: int | None = None, fee\_charged: int, max\_fee: int, operation\_count: int, envelope\_xdr: str, result\_xdr: str, result\_meta\_xdr: str, fee\_meta\_xdr: str, memo\_type: str, memo: str | None = None, memo\_bytes: bytes | None = None, signatures: List[str], valid\_after: datetime | None = None, valid\_before: datetime | None = None, preconditions: TransactionPreconditions | None = None, fee\_bump\_transaction: FeeBumpTransaction | None = None, inner\_transaction: InnerTransaction | None = None, \_links: Links)

Represents single transaction response.

Can be used for the following endpoint(s):

- GET /transactions/:transaction\_id
- POST /transactions

See [Transactions](#) on Stellar API Reference.

### 4.1.24 TransactionsResponse

**class** stellar\_model.response.TransactionsResponse(\*, \_links: Links, \_embedded: Embedded)

Represents transactions response.

Can be used for the following endpoint(s):

- GET /transactions

See [Transactions](#) on Stellar API Reference.



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