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# **stellar-model**

***Release 0.3.1b0***

**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==0.3.1b0
```





## EXAMPLE

```
import requests
from stellar_model import AccountResponse

url = "https://horizon.stellar.org/accounts/
↳ GALAXYVOIDAOPZTDLHILAJQKCVFMD4IKLXLSZV5YH07VY74IWZILUTO"
raw_resp = requests.get(url).json()
parsed_resp = AccountResponse.parse_obj(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.parse_obj(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)

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, subentry\_count: int, inflation\_destination: str = None, home\_domain: str = None, last\_modified\_ledger: int, last\_modified\_time: datetime.datetime = None, thresholds: stellar\_model.model.horizon.account.AccountThresholds, flags: stellar\_model.model.horizon.account.AccountFlags, balances: List[stellar\_model.model.horizon.account.Balance], signers: List[stellar\_model.model.horizon.account.Signer], data: Mapping[str, str], num\_sponsoring: int, num\_sponsored: int, sponsor: str = None, paging\_token: str, \_links: stellar\_model.model.horizon.account.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: stellar_model.response.page_model.Links,
                                              _embedded:
                                              stellar_model.response.accounts_response.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: stellar_model.response.page_model.Links,
                                              _embedded:
                                              stellar_model.response.assets_response.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.Decimal, sponsor: str = None,
                                                       last_modified_ledger: int, last_modified_time:
                                                       datetime.datetime = None, claimants:
                                                       List[stellar_model.model.horizon.claimable_balance.Claimant],
                                                       flags: stel-
                                                       lar_model.model.horizon.claimable_balance.ClaimableBalance
                                                       paging_token: str, _links: stel-
                                                       lar_model.model.horizon.claimable_balance.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:
                                                         stellar_model.response.page_model.Links,
                                                         _embedded: stel-
                                                         lar_model.response.claimable_balances_response.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: stellar_model.response.page_model.Links,
                                             _embedded:
                                             stellar_model.response.effects_response.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, extras:
                                           Mapping[str, Any] = 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.Decimal, fee_charged:
                                              stellar_model.model.horizon.fee_stats.FeeDistribution,
                                              max_fee:
                                              stellar_model.model.horizon.fee_stats.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, sequence: int, successful_transaction_count: int,
                                             failed_transaction_count: int, operation_count: int,
                                             tx_set_operation_count: int, closed_at: datetime.datetime,
                                             total_coins: decimal.Decimal, fee_pool: decimal.Decimal,
                                             base_fee_in_stroops: int, base_reserve_in_stroops: int,
                                             max_tx_set_size: int, protocol_version: int, header_xdr:
                                             str, _links: stellar_model.model.horizon.ledger.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: stellar_model.response.page_model.Links,
                                             _embedded:
                                             stellar_model.response.ledgers_response.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.Decimal, reserves:
                                                    List[stellar_model.model.horizon.liquidity_pool_asset_amount.LiquidityPoolAssetAmount],
                                                    last_modified_ledger: int, last_modified_time:
                                                    datetime.datetime = None, _links: stellar_model.model.horizon.liquidity_pool.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:
                                                    stellar_model.response.page_model.Links,
                                                    _embedded: stellar_model.response.liquidity_pools_response.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:
    stellar_model.model.horizon.asset.Asset, buying:
    stellar_model.model.horizon.asset.Asset, amount:
    decimal.Decimal, price_r:
    stellar_model.model.horizon.price.Price, price:
    decimal.Decimal, last_modified_ledger: int,
    last_modified_time: datetime.datetime = None, sponsor: str
    = None, _links: stellar_model.model.horizon.offer.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: stellar_model.response.page_model.Links,
    _embedded:
    stellar_model.response.offers_response.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:
    Union[stellar_model.model.horizon.operations.CreateAccountOperation,
    stel-
    lar_model.model.horizon.operations.PaymentOperation,
    stel-
    lar_model.model.horizon.operations.PathPaymentStrictReceiveOperation,
    stel-
    lar_model.model.horizon.operations.ManageSellOfferOperation,
    stel-
    lar_model.model.horizon.operations.CreatePassiveSellOfferOperation,
    stel-
    lar_model.model.horizon.operations.SetOptionsOperation,
    stel-
    lar_model.model.horizon.operations.ChangeTrustOperation,
    stel-
    lar_model.model.horizon.operations.AllowTrustOperation,
    stel-
    lar_model.model.horizon.operations.AccountMergeOperation,
    stel-
    lar_model.model.horizon.operations.InflationOperation,
    stel-
    lar_model.model.horizon.operations.ManageDataOperation,
    stel-
    lar_model.model.horizon.operations.BumpSequenceOperation,
    stel-
    lar_model.model.horizon.operations.ManageBuyOfferOperation,
    stel-
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    stel-
    lar_model.model.horizon.operations.RevokeSponsorshipOperation,
    stel-
    lar_model.model.horizon.operations.ClawbackOperation,
    stel-
    lar_model.model.horizon.operations.ClawbackClaimableBalanceOperatio
    stel-
    lar_model.model.horizon.operations.SetTrustLineFlagsOperation,
    stel-
    lar_model.model.horizon.operations.LiquidityPoolDepositOperation,
    stel-
    lar_model.model.horizon.operations.LiquidityPoolWithdrawOperation])
```

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: stellar_model.response.page_model.Links,
                                                _embedded: stellar_model.response.operations_response.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:
                                           stellar_model.response.paths_response.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: stellar_model.response.page_model.Links,
                                                _embedded:
                                           stellar_model.response.payments_response.Embedded)
```

Represents payments response.

Can be used for the following endpoint(s):

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

### 4.1.20 RootResponse

### 4.1.21 TradeAggregationsResponse

```
class stellar_model.response.TradeAggregationsResponse(*, _links:
                                                         stellar_model.response.page_model.Links,
                                                         _embedded: stellar_model.response.trade_aggregations_response.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: stellar_model.response.page_model.Links,
                                           _embedded:
                                           stellar_model.response.trades_response.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.datetime,
                                                source_account: str, account_muxed: str = None,
                                                account_muxed_id: int = None,
                                                source_account_sequence: int, fee_account: str,
                                                fee_account_muxed: str = None,
                                                fee_account_muxed_id: int = 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, memo_bytes: bytes = None, signatures:
                                                List[str], valid_after: datetime.datetime = None,
                                                valid_before: datetime.datetime = None,
                                                fee_bump_transaction: stel-
                                                lar_model.model.horizon.transaction.FeeBumpTransaction
                                                = None, inner_transaction: stel-
                                                lar_model.model.horizon.transaction.InnerTransaction
                                                = None, _links:
                                                stellar_model.model.horizon.transaction.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:
                                                  stellar_model.response.page_model.Links,
                                                  _embedded: stel-
                                                  lar_model.response.transactions_response.Embedded)
```

Represents transactions response.

Can be used for the following endpoint(s):

- GET /transactions

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



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