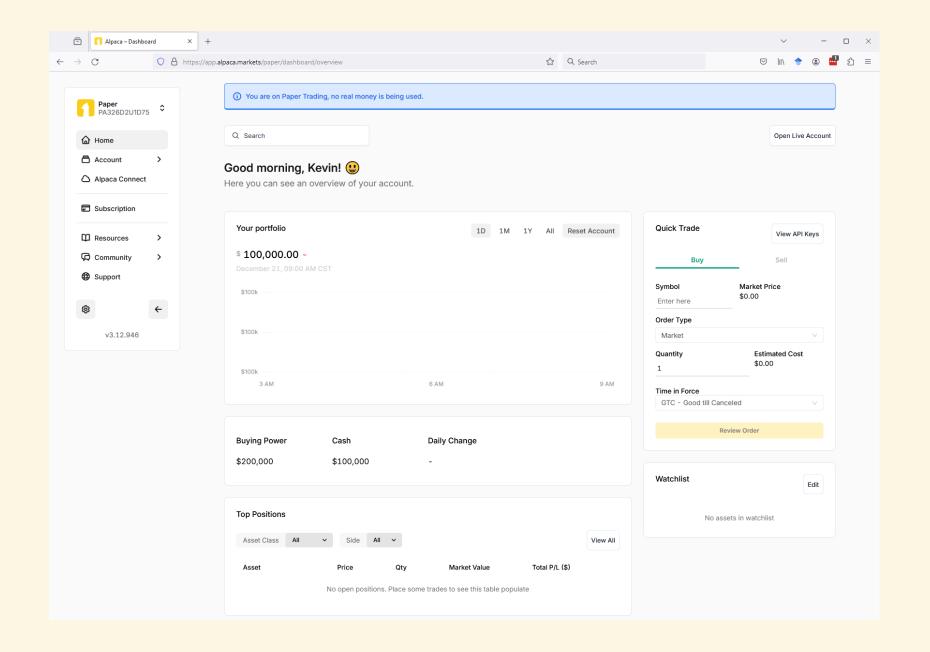
# TRADING AT ALPACA

KERRY BACK AND KEVIN CROTTY



#### **CREATE ALPACA ACCOUNT**

- After logging into Alpaca at https://alpaca.markets, you DO NOT need to enter name, address, etc. - that is only for real trading accounts.
- By clicking Home on the left toolbar, you should get to the screen on the following slide.
- Click on View API Keys, then Generate New Keys to see your key and your secret key. Copy and save them somewhere.



#### **INSTALL ALPACA-PY**

- The module alpaca-trade-api is deprecated. Install alpacapy instead.
- The docs are at https://docs.alpaca.markets/docs/gettingstarted-with-trading-api.

### **CONNECT TO ALPACA**

```
1 from alpaca.trading.client import TradingClient
2 from alpaca.trading.requests import MarketOrderRequest
3 from alpaca.trading.enums import OrderSide, TimeInForce
4
5 KEY = "your_key"
6 SECRET_KEY = "your_secret_key"
7
8 trading_client = TradingClient(KEY, SECRET_KEY, paper=True)
```

## **CHECK YOUR ACCOUNT**

```
1 account = trading_client.get_account()
 2 account
   'account blocked': False,
    'account_number': 'PA326D2U1D75',
    'accrued fees': '0',
    'buying_power': '194344.44',
    'cash': '96279.78',
    'created_at': datetime.datetime(2023, 12, 21, 14, 56, 37,
240661, tzinfo=datetime.timezone.utc),
    'crypto_status': <AccountStatus.ACTIVE: 'ACTIVE'>,
    'currency': 'USD',
    'daytrade count': 6,
    'daytrading_buying_power': '0',
    'equity': '100005.41',
```

#### CHECK BUYING POWER AND ACCOUNT BALANCE

```
1 print(f'Available buying power:\t${float(account.buying_power)}
2 print(f'Portfolio value:\t\t${float(account.portfolio_value):,
```

Available buying power: \$194,344.44 Portfolio value: \$100,005.41

# **ASSET INFORMATION**

```
1 asset_info = trading_client.get_asset('SPY')
2 asset info
  'asset class': <AssetClass.US EQUITY: 'us equity'>,
  'easy_to_borrow': True,
  'exchange': <AssetExchange.ARCA: 'ARCA'>,
  'fractionable': True,
  'id': UUID('b28f4066-5c6d-479b-a2af-85dc1a8f16fb'),
  'maintenance margin requirement': 30.0,
  'marginable': True,
  'min order size': None,
  'min_trade_increment': None,
  'name': 'SPDR S&P 500 ETF Trust',
  'price_increment': None,
  'shortable': True,
```

# **CURRENT QUOTES**

```
1 from alpaca.data import StockHistoricalDataClient
 2 from alpaca.data.requests import StockLatestQuoteRequest
 3 data client = StockHistoricalDataClient(KEY, SECRET KEY)
 4 params = StockLatestQuoteRequest(symbol_or_symbols=['SPY'])
 5 quotes = data_client.get_stock_latest_quote(params)
 6 quotes
{'SPY': { 'ask_exchange': 'V',
     'ask price': 469.6,
     'ask size': 1.0,
     'bid exchange': 'V',
     'bid price': 469.55,
     'bid size': 2.0,
     'conditions': ['R'],
     'symbol': 'SPY',
     'tape': 'B',
     'timestamp': datetime.datetime(2023, 12, 21, 17, 27, 45,
137877, tzinfo=datetime.timezone.utc)}}
```

# **BUY SPY**

```
1 order = MarketOrderRequest(
2     symbol="SPY",
3     qty=10,
4     side=OrderSide.BUY,
5     time_in_force=TimeInForce.DAY
6     )
7 _ = trading_client.submit_order(order)
```

# **SHORT AAPL**

```
1 order = MarketOrderRequest(
2     symbol="AAPL",
3     qty=5,
4     side=OrderSide.SELL,
5     time_in_force=TimeInForce.DAY
6     )
7 _ = trading_client.submit_order(order)
```

### **CHECK YOUR POSITIONS**

```
1 positions = trading_client.get_all_positions()
2 for p in positions:
3    print("{} shares of {}".format(p.qty, p.symbol))
-5 shares of AAPL
10 shares of SPY

1 account = trading_client.get_account()
2 print(f'Cash Balance: ${float(account.cash):,.2f}')
Cash Balance: $96,279.78
```