Database

MongoDB:

* BSON includes data types not available in JSON data (e.g., datetime, int, long, date, floating point, and decimal128, and byte array)
* Can do schema validation if desired
  + Should look if we can restrict elements to be certain values, i.e, CALL/PUT

Storage Plan:

* Historical ***Unusual Whales*** alerts (Retrieved from ***Unusual Whales*** website – analytics)
  + Parsed
* Incoming ***Unusual Whales*** alerts (Raw data copied from ***Unusual Whales*** website – alerts)
  + Parsed
* Rating data
  + Data created when opted to rate excel sheet

Implementation

Tables:

* historical (Retrieved from ***Unusual Whales*** website – analytics)
  + ticker - string
  + option\_type – CALL or PUT
  + alerted\_at
  + day\_of\_week – MONDAY, TUESDAY, WEDNESDAY, THURSDAY, or FRIDAY
  + time\_of\_day
  + expiry
  + days\_to\_exp
  + strike
  + underlying
  + diff
  + volume
  + open\_interest
  + vol\_oi
  + implied\_volatility
  + delta
  + gamma
  + vega
  + theta
  + rho
  + alert\_ask
  + highest\_ask
  + p\_l
  + time\_passed
* alerts (Raw data copied from ***Unusual Whales*** website – alerts)
  + ticker
  + option\_type – CALL or PUT
  + alerted\_at
  + day\_of\_week – MONDAY, TUESDAY, WEDNESDAY, THURSDAY, or FRIDAY
  + time\_of\_day
  + expiry
  + days\_to\_exp
  + strike
  + underlying
  + diff
  + volume
  + open\_interest
  + vol\_oi
  + implied\_volatility
  + delta
  + gamma
  + vega
  + theta
  + rho
  + alert\_ask
* ratings
  + tag
    - Day of Week, Time of Day, Days to Exp. Diff %, etc.
  + rating
    - Bad, Okay, Good, Best
  + value
    - datapoint or datarange
      * datapoint: Specific value
      * datarange: Array of { low: value, high: value }