PastWeatherInquiry

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class User_Interface_Historic:　　　　　　　　　View Source

This class is designed to allow a user to inquire into a mongodb database that contains histoical data from weather.gov. Methods in this class will allow a user to inquire about a particular date or range of dates and return historical weather.gov data from a mongodb database

User_Interface_Historic()　　　　　　　　　　View Source

def PastWeather(self):　　　　　　　　　　View Source

This method inquires into past weather information by submiting a particular date or range of dates.

def Single_Day_Inquiry(self, date, collection):　　　View Source

This method inquires into a given datebase for a single date and prints the total rainfall, snowfall , high temperature and low temperature recorded on that date from weather.gov

def Single_Day_Inquiry_Hourly(self, date, collection):　　　View Source

This method is passed a date that includes a specified hour and a database for a single date and hour and prints the total rainfall, snowfall , high temperature and low temperature recorded on that date from weather.gov

def Interval_Inquiry_Hourly(self, date, collection):　　　View Source

This method inquires into a given database for a range of two dates which include specified hours. It then prints the total snow fall and rainfall between the two dates (inclusive) as well as the High and low temperature across the two dates and times (inclusive). It should be passed the date and hour interval as well as the database the data is stored in. All data from weather.gov

def Interval_Inquiry(self, start_date, end_date, collection):　　　View Source

This method inquires into a given database for a range of two dates. It then prints the total snow fall and rainfall between the two dates (inclusive) as well as the High and low temperature across the two dates (inclusive). All data from weather.gov

def recodedate_num(self, date):   View Source

This method takes the name of a month and returns the numerical codification of the month

def recodedate_str(self, date):   View Source

This method takes a numerical month and returns the actual name of the month as a string

def time_convert(self, time, ampm):   View Source

This method converts times into the format stored in mongodb from weather.gov. It is passed the time to convert and whether the time is in AM or PM

def iterate_time(self, time):   View Source

This method is passed a time to increase by an hour. For instance 1 AM becomes 2 AM, 12 PM becomes 1 AM.

def Main(self):   View Source

Calling this method will allow the user to input a date or range of dates to return historic weather data from weather.gov. Jan 01 2021 - Jan 01 2022 format for a range, Jan 01 2021 format for an individual date. Additionally, there is a restriction that only data from Jun 12 2017 onward is available.