

TRAVELER_INFO					
Field Name	Data Type	Data Format	Field Size	Description	Example
first_name	string			Given Name	Sterling
last_name	string			Family Name	Archer
date_of_birth	datetime	YYYY-MM-DD	4 bytes	date of birth	1992-06-13
address	string			address of traveler	123 Fake St.
phone_number	string		10 digits	10 digit phone number	202-944-1776
email_address	string			email address	name@domain.com
known_traveler_number	string			TSA PreCheck Known Traveler Number	TT12337214
redress_number	string			DHS Redress Number	87882234
passport_number	string			US Passport Number	381723892
delta_rewards_number	string			Rewards Number for Delta	7567593847
american_rewards_number	string			Rewards Number for American	3GH9A0
united_rewards_number	string			Rewards Number for United	38927FJFJ23
southwest_rewards_number	string			Rewards Number for Southwest	RR14751284712
jetblue_rewards_number	string			Rewards Number for JetBlue	327321957GJ
spirit_rewards_number	string			Rewards Number for Spirit	G23Q9J
frontier_rewards_number	string			Rewards Number for Frontier	93GJ9383983
alaska_rewards_number	string			Rewards Number for Alaska	9328TJ2
on_no_fly_list	boolean		1 byte	whether or not traveler is on no fly list	FALSE

ITINERARY					
Field Name	Data Type	Data Format	Field Size	Description	Example
departure_airport	string	AAA		airport code of the layover	DFW
departure_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of departure	2021-04-23 13:05:00
destination_airport	string	AAA		airport code of the layover	DFW
arrival_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of arrival	2021-04-24 16:30:00
direct_or_no	Boolean		1 byte	if the flight is direct or not	FALSE
connecting_airport	string	AAA		airport code of the layover	DFW
connecting_arrival_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of layover arrival	2021-04-23 18:22:00
connecting_departure_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of layover departure	2021-04-24 19:00:00
layover_duration	time	hh:mm:ss	4 bytes	length of layover	00:48:00
checked_bags	integer	x	2 bytes	number of checked bags	2
carry_on_bags	integer	x	2 bytes	number of carry on bags	2
price_range	price_range	(x, y)	48 bytes	a range of prices the customer is okay with	(150, 400)
fare_type	string	snake_case		fare type as plain text	first_class
seat_number	string	{num}{letter}		seat number	15C

AMERICAN_FLIGHT					
Field Name	Data Type	Data Format	Field Size	Description	Example
flight_number	String			flight number	AA1703
seat_number	String	{num}{letter}		seat number	14B
rewards_account	String			the rewards account number	3GU8DF0
price_paid	float			price paid for ticket	608.42
departure_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of departure	2021-04-23 13:05:00
arrival_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of arrival	2021-04-24 16:30:00
direct_or_no	Boolean		1 byte	if the flight is direct or not	FALSE
connecting_airport	string	AAA		airport code of the layover	DFW
connecting_arrival_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of layover arrival	2021-04-23 18:22:00
connecting_departure_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of layover departure	2021-04-24 19:00:00
layover_duration	time	hh:mm:ss	4 bytes	length of layover	00:48:00

NEW_FLIGHT_INFO					
Field Name	Data Type	Data Format	Field Size	Description	Example
airline	String			Name of Airline	Delta
flight_number	String			flight number	DL742
seat_number	String	{num}{letter}		seat number	4F
departure_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of departure	2021-04-23 13:05:00
direct_or_no	Boolean		1 byte	if the flight is direct or not	TRUE
arrival_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of arrival	2021-04-24 16:30:00
connecting_airport	string	AAA		airport code of the layover	DFW
connecting_arrival_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of layover arrival	2021-04-23 18:22:00
connecting_departure_time	datetime	YYYY-MM-DD hh:mm:ss	4 bytes	date and time of layover departure	2021-04-24 19:00:00
layover_duration	time	hh:mm:ss	4 bytes	length of layover	00:48:00
total_price	float			price paid for ticket	389.11
price_difference_from_original	float			difference in American fare and new fare	219.31

Kayak  
Search API

requests

syncs

NEW\_FLIGHT\_INFO starts empty, so the  
initial sync always comes from itinerary

sends itinerary preferences  
as search parameters

returns new flight info

constructs

has