Problem 2: Twitter Conversational Bot

Flag to identify
incoming
message to rep

Tweet ID of the response
to which the current record
text is(Following Response)

	tweet_id	author_id	inbound	created_at	text	response_tweet_id	in_response_to_tweet_id
0	1	sprintcare	False	Tue Oct 31 22:10:47 +0000 2017	@115712 I understand. I would like to assist y...	2	3.0
1	2	115712	True	Tue Oct 31 22:11:45 +0000 2017	@sprintcare and how do you propose we do that	NaN	1.0
2	3	115712	True	Tue Oct 31 22:08:27 +0000 2017	@sprintcare I have sent several private messag...	1	4.0
3	4	sprintcare	False	Tue Oct 31 21:54:49 +0000 2017	@115712 Please send us a Private Message so th...	3	5.0
4	5	115712	True	Tue Oct 31 21:49:35 +0000 2017	@sprintcare I did.	4	6.0

Customer
Service
Agent ID /
Customer ID

Tweet Creation
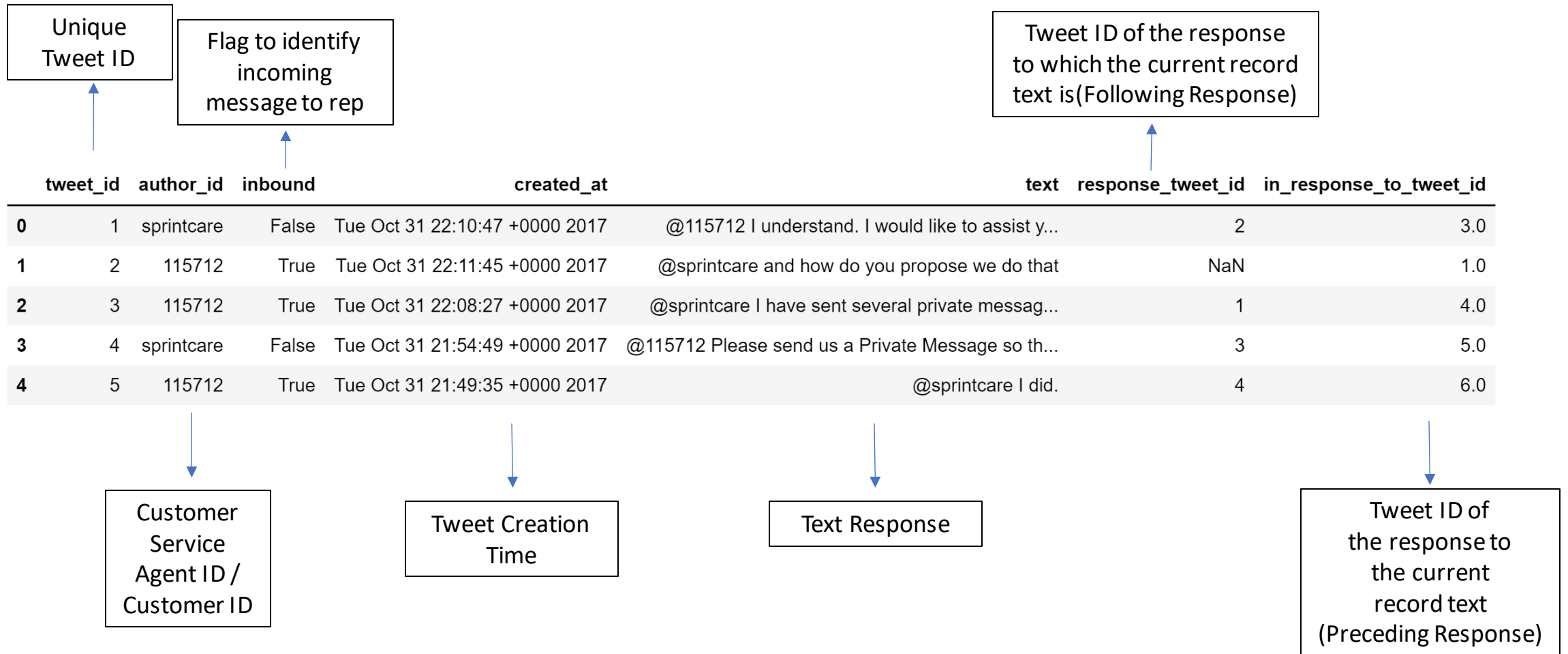Time

Text Response

Tweet ID of
the response to
the current
record text
(Preceding Response)

Twitter Agent Description

With 1.5MM total responses sent by Twitter agents and 1.27MM total responses received, following is a table showing agents classified into various businesses.

Business Name	Agents
Airline	AirAsia Support, Delta, AmericanAir, SouthwestAir, VirginAtlantic, AlaskaAir, VirginAmerica, JetBlue
Software	AdobeCare, YahooCare, SpotifyCare, AskeBay, DropBoxSupport, AzureSupport, GoDaddyHelp, asksalesforce, GooglePlayMusic, OfficeSupport, TwitterSupport, NortonSupport, SCsupport, AWSSupport, mediatemplehelp, AskTigogh, PandoraSupport, AmazonHelp
Super Market	Morrisons, Tesco, sainsburys, ArgosHelpers, AskTarget, Walmart, AldiUK
Transport	Nationalrailenq, AskLyft, UPSHelp, VirginTrains, GWRHelp, TfL, LondonMidland

*Additional business include Beauty, Education, Clothing, Electronics, Finance, Food, Gaming, Hotel and Rentals

Most Frequently Used Words By Customers

Agent	Responses Sent	Responses Received	Most Common Words Used By Customer				
			1st	**2nd**	**3rd**	**4th**	**5th**
Sprintcare	22,381	13,876	phone	store	bill	account	upgrade
ChipotleTweets	18,749	21,593	burrito	order	queso	bowl	chip
XboxSupport	24,557	28,083	update	account	live	buy	console
JetBlue	8,020	9,475	delay	seat	book	bag	cancel
AskPayPal	11,298	10,164	account	money	bank	card	hold