

## ALL FEATURES

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 103904 entries, 0 to 103903
Data columns (total 23 columns):
#   Column                                     Non-Null Count  Dtype
---  -
0   Gender                                     103904 non-null object
1   Customer Type                             103904 non-null object
2   Age                                         103904 non-null int64
3   Type of Travel                             103904 non-null object
4   Class                                       103904 non-null object
5   Flight Distance                             103904 non-null int64
6   Inflight wifi service                       103904 non-null int64
7   Departure/Arrival time convenient           103904 non-null int64
8   Ease of Online booking                     103904 non-null int64
9   Gate location                               103904 non-null int64
10  Food and drink                             103904 non-null int64
11  Online boarding                             103904 non-null int64
12  Seat comfort                               103904 non-null int64
13  Inflight entertainment                     103904 non-null int64
14  On-board service                           103904 non-null int64
15  Leg room service                           103904 non-null int64
16  Baggage handling                           103904 non-null int64
17  Checkin service                            103904 non-null int64
18  Inflight service                           103904 non-null int64
19  Cleanliness                                103904 non-null int64
20  Departure Delay in Minutes                 103904 non-null int64
21  Arrival Delay in Minutes                   103594 non-null float64
22  satisfaction                               103904 non-null object
dtypes: float64(1), int64(17), object(5)
memory usage: 18.2+ MB
```

## Selected Features

Weight	Feature
0.2723 ± 0.0039	Type of Travel
0.1278 ± 0.0026	Inflight wifi service
0.0435 ± 0.0011	Online boarding
0.0424 ± 0.0013	Seat comfort
0.0355 ± 0.0009	Checkin service
0.0294 ± 0.0014	Inflight service
0.0289 ± 0.0008	Baggage handling
0.0246 ± 0.0006	Cleanliness
0.0177 ± 0.0007	On-board service
0.0172 ± 0.0007	Class
0.0097 ± 0.0006	Leg room service
0.0095 ± 0.0004	Flight Distance
0.0087 ± 0.0004	Inflight entertainment
0.0082 ± 0.0003	Age
0.0062 ± 0.0007	Arrival Delay in Minutes
0.0058 ± 0.0003	Ease of Online booking
0.0044 ± 0.0004	Gate location
0.0033 ± 0.0002	Departure/Arrival time convenient
0.0027 ± 0.0002	Departure Delay in Minutes
0.0021 ± 0.0003	Food and drink
	... 2 more ...

```
# Selecting relevant features using the analysis performed above
```

```
features = ['Type of Travel', 'Inflight wifi service', 'Online boarding', 'Seat comfort', 'Flight Distance',  
            'Inflight entertainment', 'On-board service', 'Leg room service', 'Cleanliness', 'Checkin service',  
            'Inflight service', 'Baggage handling']  
target = ['satisfaction']
```