Customer Sentiment Analysis and Feedback Insights

In [2]:
```
#Import Libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
```

In [3]:
```
#Data Collection
df=pd.read_csv('purchase behaviou dataset.csv.zip',encoding='unicode_escape')
```

In [4]:
```
df.head()
```

Out[4]:

	LYLTY_CARD_NBR	LIFESTAGE	PREMIUM_CUSTOMER
0	1000	YOUNG SINGLES/COUPLES	Premium
1	1002	YOUNG SINGLES/COUPLES	Mainstream
2	1003	YOUNG FAMILIES	Budget
3	1004	OLDER SINGLES/COUPLES	Mainstream
4	1005	MIDAGE SINGLES/COUPLES	Mainstream

In [5]:
```
pd.isnull(df).sum()
```

Out[5]:
```
LYLTY_CARD_NBR      0
LIFESTAGE           0
PREMIUM_CUSTOMER    0
dtype: int64
```

In [6]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 72637 entries, 0 to 72636
Data columns (total 3 columns):
 #   Column            Non-Null Count  Dtype 
---  ------            --------------  ----- 
 0   LYLTY_CARD_NBR    72637 non-null  int64 
 1   LIFESTAGE         72637 non-null  object
 2   PREMIUM_CUSTOMER  72637 non-null  object
dtypes: int64(1), object(2)
memory usage: 1.7+ MB
```

In [7]:
```
df.describe()
```

Out[7]:

	LYLTY_CARD_NBR
count	7.263700e+04
mean	1.361859e+05
std	8.989293e+04
min	1.000000e+03
25%	6.620200e+04
50%	1.340400e+05
75%	2.033750e+05
max	2.373711e+06

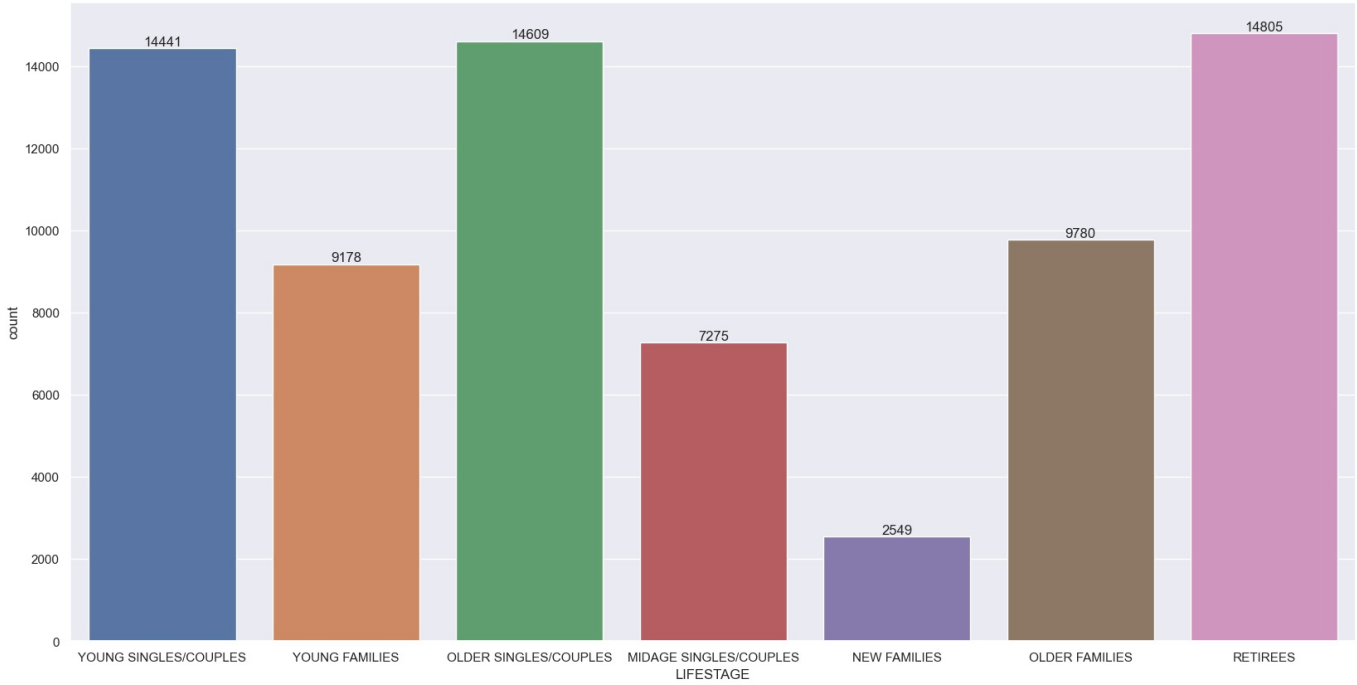
In [20]:
```
df.shape
```

Out[20]:
```
(72637, 3)
```

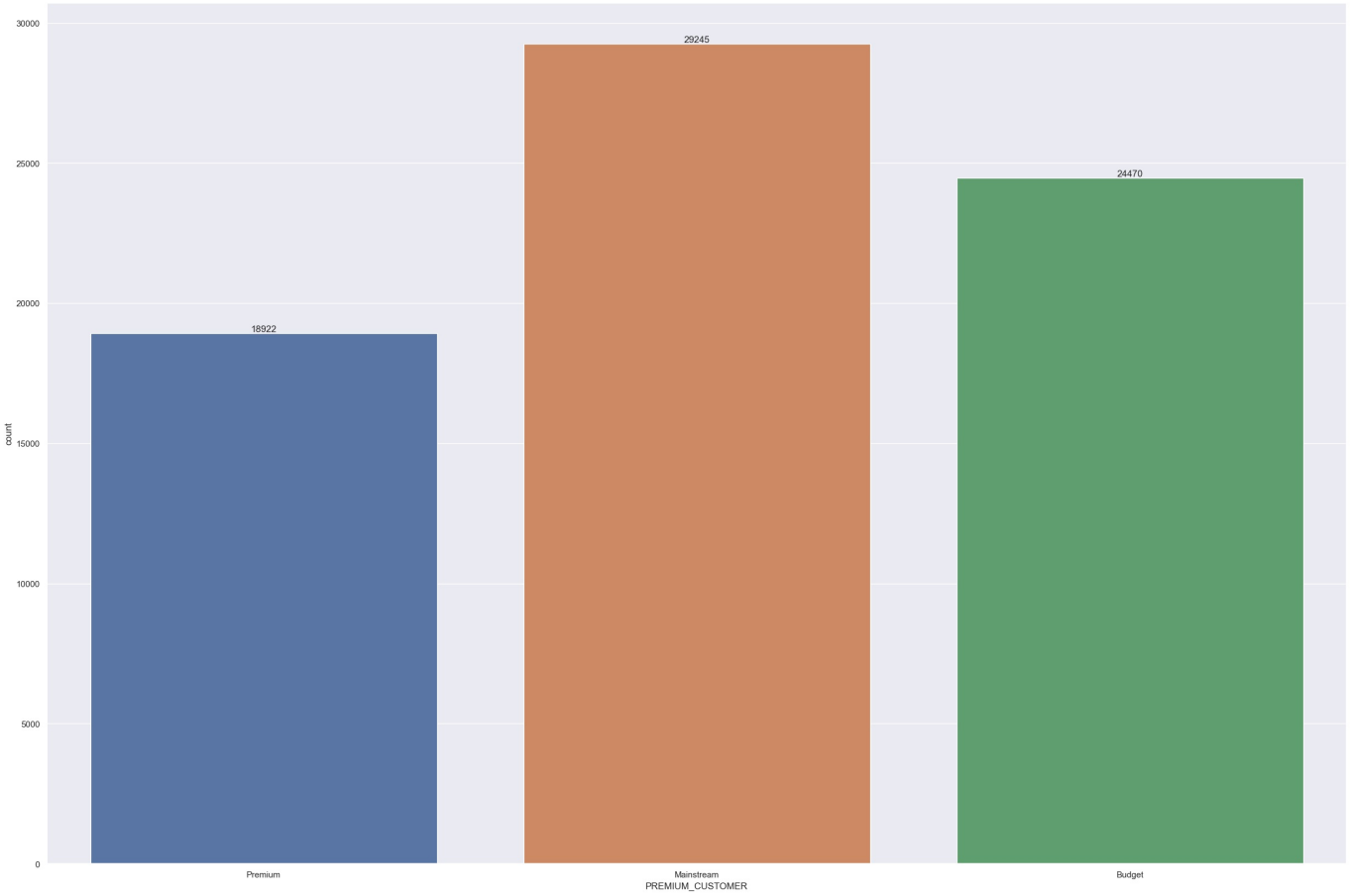
In [9]:
```
#Data Visualization
df.columns
```

Out[9]:
```
Index(['LYLTY_CARD_NBR', 'LIFESTAGE', 'PREMIUM_CUSTOMER'], dtype='object')
```

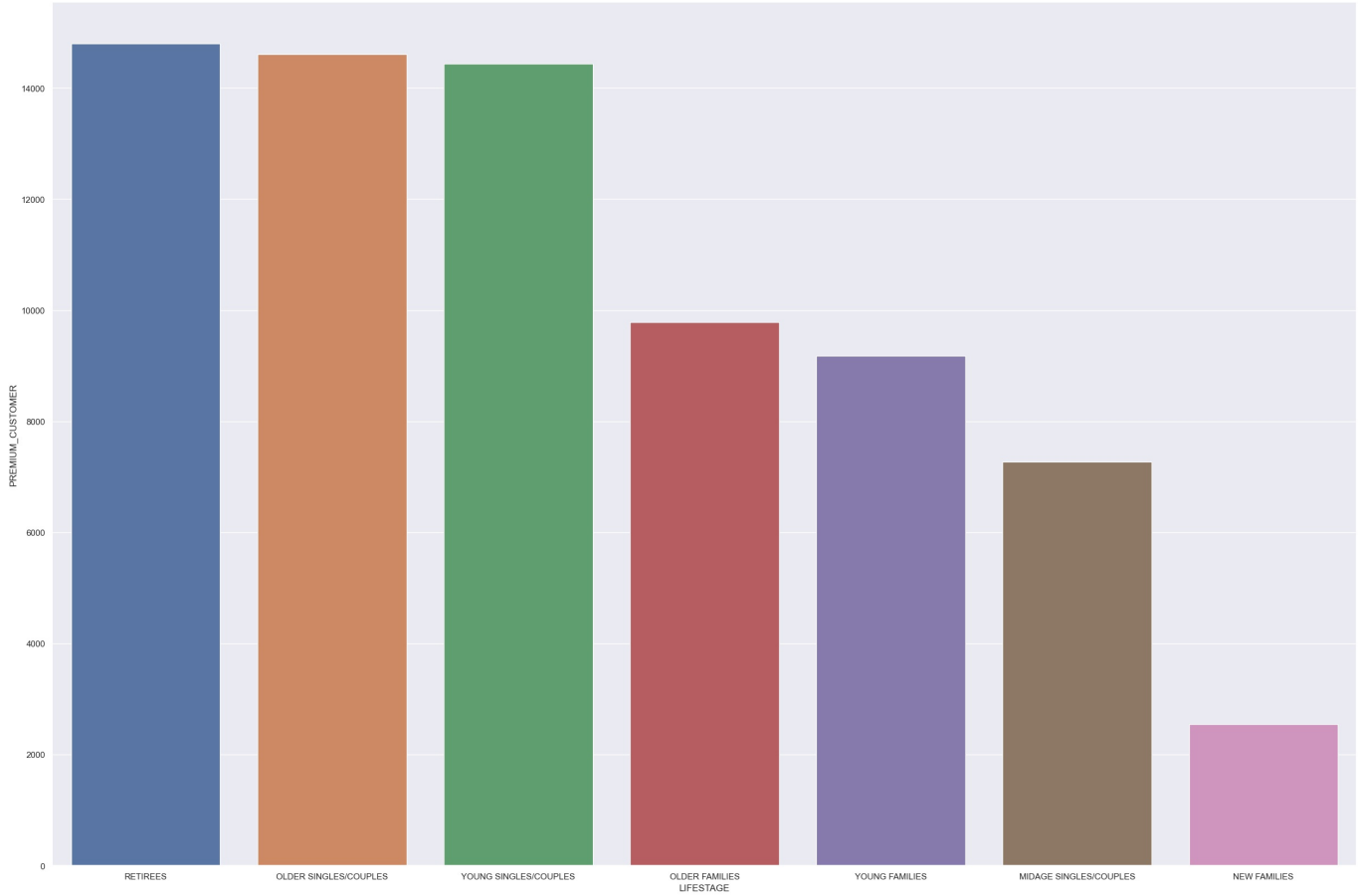
In [14]:
```
ax=sns.countplot(x='LIFESTAGE',data=df)
sns.set(rc={'figure.figsize':(30,20)})
for bars in ax.containers:
    ax.bar_label(bars)
```



In [16]:
```
ax=sns.countplot(x='PREMIUM_CUSTOMER',data=df)
sns.set(rc={'figure.figsize':(10,5)})
for bars in ax.containers:
    ax.bar_label(bars)
```



In [19]:
```
lifestage_customer=df.groupby(['LIFESTAGE'],as_index=False)['PREMIUM_CUSTOMER'].count().sort_values(by='PREMIUM_
sns.barplot(x='LIFESTAGE',y='PREMIUM_CUSTOMER',data= lifestage_customer)
sns.set(rc={'figure.figsize':(30,25)})
```



THANK YOU!

CONNECT WITH ME:

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GitHub: https://github.com/DATAPREDICTS