In [1]:
```
pip install seaborn
```

```
Requirement already satisfied: seaborn in c:\users\avcoe\anaconda3\lib\site-packages
(0.12.2)
Requirement already satisfied: pandas>=0.25 in c:\users\avcoe\anaconda3\lib\site-pack
ages (from seaborn) (1.4.4)
Requirement already satisfied: matplotlib!=3.6.1,>=3.1 in c:\users\avcoe\anaconda3\li
b\site-packages (from seaborn) (3.5.2)
Requirement already satisfied: numpy!=1.24.0,>=1.17 in c:\users\avcoe\anaconda3\lib\s
ite-packages (from seaborn) (1.26.4)
Requirement already satisfied: cycler>=0.10 in c:\users\avcoe\anaconda3\lib\site-pack
ages (from matplotlib!=3.6.1,>=3.1->seaborn) (0.11.0)
Requirement already satisfied: pillow>=6.2.0 in c:\users\avcoe\anaconda3\lib\site-pac
kages (from matplotlib!=3.6.1,>=3.1->seaborn) (9.2.0)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\avcoe\anaconda3\lib\s
ite-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (2.8.2)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\avcoe\anaconda3\lib\site
-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (4.25.0)
Requirement already satisfied: packaging>=20.0 in c:\users\avcoe\anaconda3\lib\site-p
ackages (from matplotlib!=3.6.1,>=3.1->seaborn) (21.3)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\avcoe\anaconda3\lib\site
-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (1.4.2)
Requirement already satisfied: pyparsing>=2.2.1 in c:\users\avcoe\anaconda3\lib\site-
packages (from matplotlib!=3.6.1,>=3.1->seaborn) (3.0.9)
Requirement already satisfied: pytz>=2020.1 in c:\users\avcoe\anaconda3\lib\site-pack
ages (from pandas>=0.25->seaborn) (2022.1)
Requirement already satisfied: six>=1.5 in c:\users\avcoe\anaconda3\lib\site-packages
(from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.1->seaborn) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
```

In [2]:
```
import pandas as pd
import numpy as np
```

In [3]:
```
import matplotlib.pyplot as plt
import seaborn as sns
```

```
C:\Users\avcoe\anaconda3\lib\site-packages\scipy\__init__.py:155: UserWarning: A NumP
y version >=1.18.5 and <1.25.0 is required for this version of SciPy (detected versio
n 1.26.4
  warnings.warn(f"A NumPy version >={np_minversion} and <{np_maxversion}"
```

In [4]:
```
dataset = sns.load_dataset('titanic')
dataset.head()
```

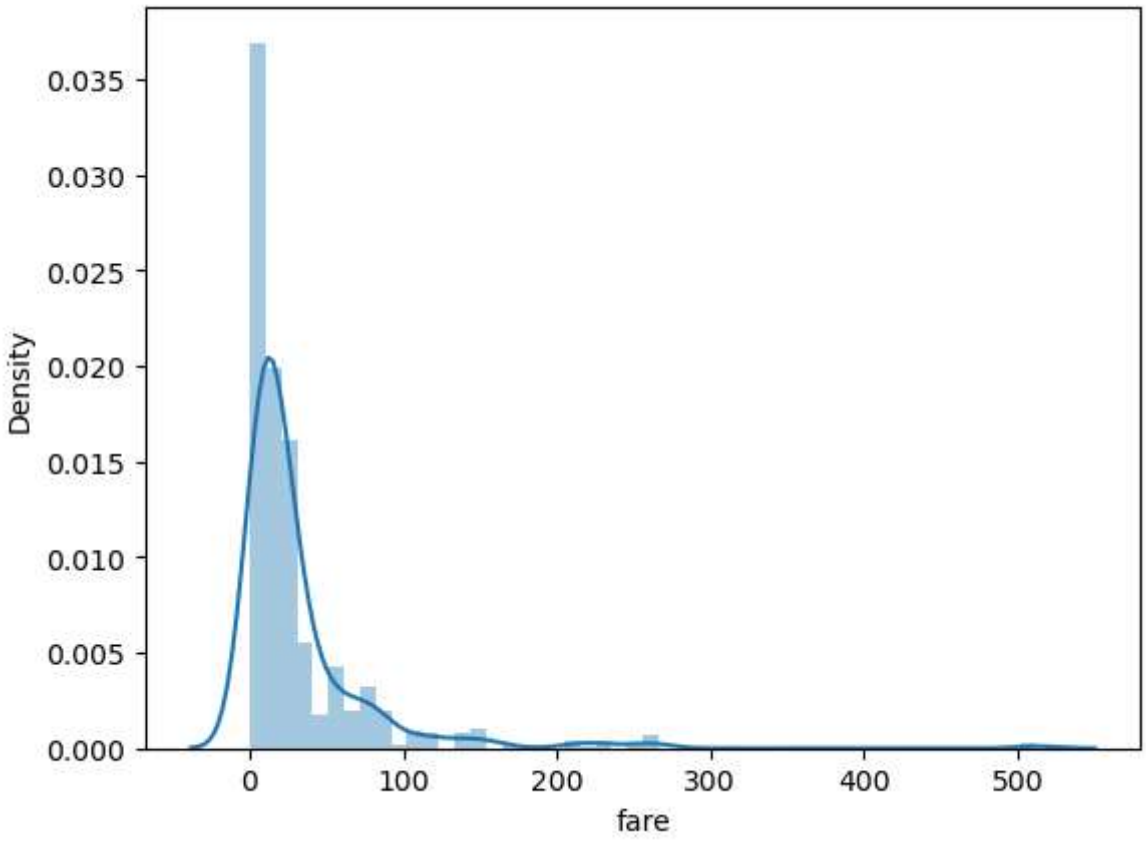
Out[4]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN

In [5]:
```
# Dist plot

sns.distplot(dataset['fare'])
```

```
C:\Users\avcoe\AppData\Local\Temp\ipykernel_16448\4189704398.py:3: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(dataset['fare'])
```

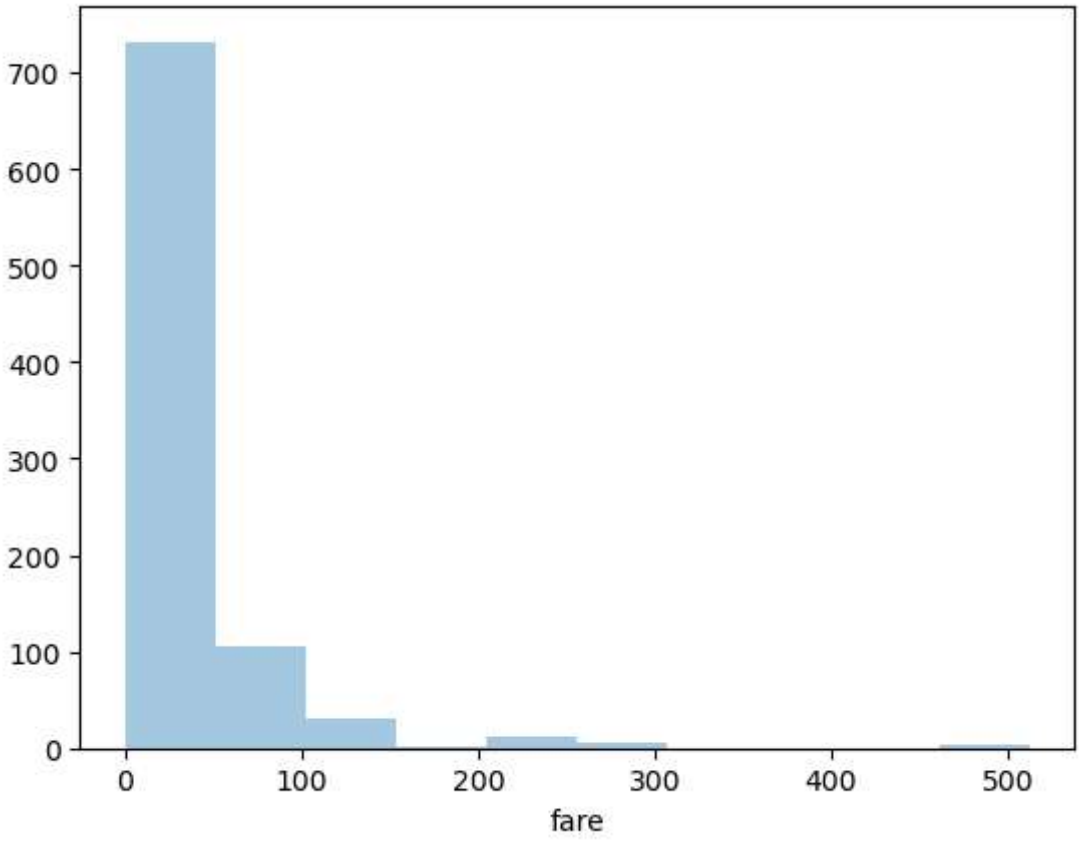
Out[5]:
```
<AxesSubplot:xlabel='fare', ylabel='Density'>
```



In [6]:
```
sns.distplot(dataset['fare'], kde=False, bins=10)
```

```
C:\Users\avcoe\AppData\Local\Temp\ipykernel_16448\1857470142.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(dataset['fare'], kde=False, bins=10)
```

Out[6]:
```
<AxesSubplot:xlabel='fare'>
```

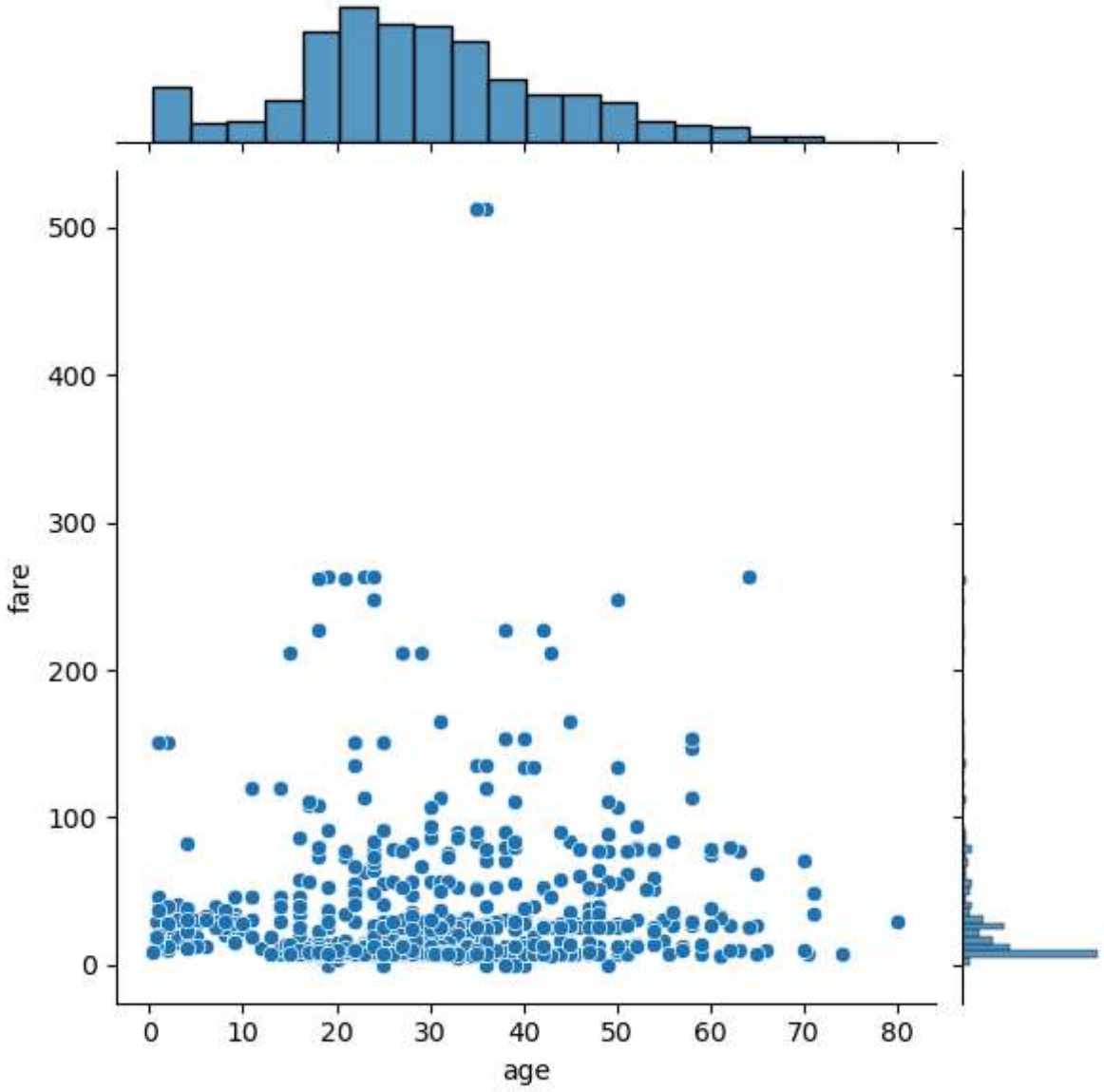


In [7]:
```
#The Joint Plot :
The jointplot()is used to display the mutual distribution of each column
```

```
  File "C:\Users\avcoe\AppData\Local\Temp\ipykernel_16448\4290351987.py", line 2
    The jointplot()is used to display the mutual distribution of each column
        ^
SyntaxError: invalid syntax
```

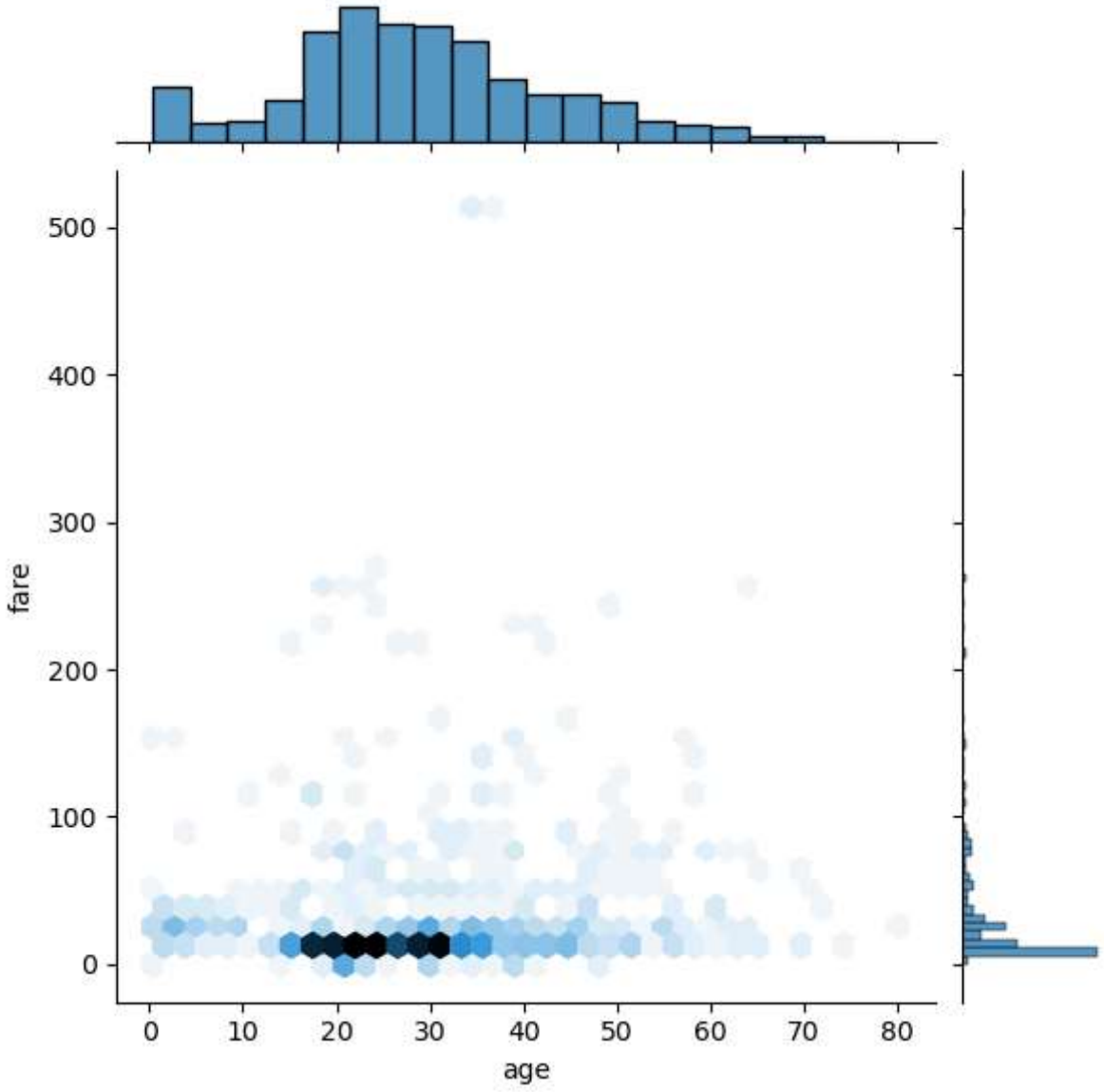
In [8]:
```
sns.jointplot(x='age', y='fare', data=dataset)
```

Out[8]:
```
<seaborn.axisgrid.JointGrid at 0x24ce9122f40>
```



In [9]:
```
sns.jointplot(x='age', y='fare', data=dataset, kind='hex')
#In the hexagonal plot, the hexagon with most number of points gets darker color.
```

Out[9]:
```
<seaborn.axisgrid.JointGrid at 0x24c86f72340>
```

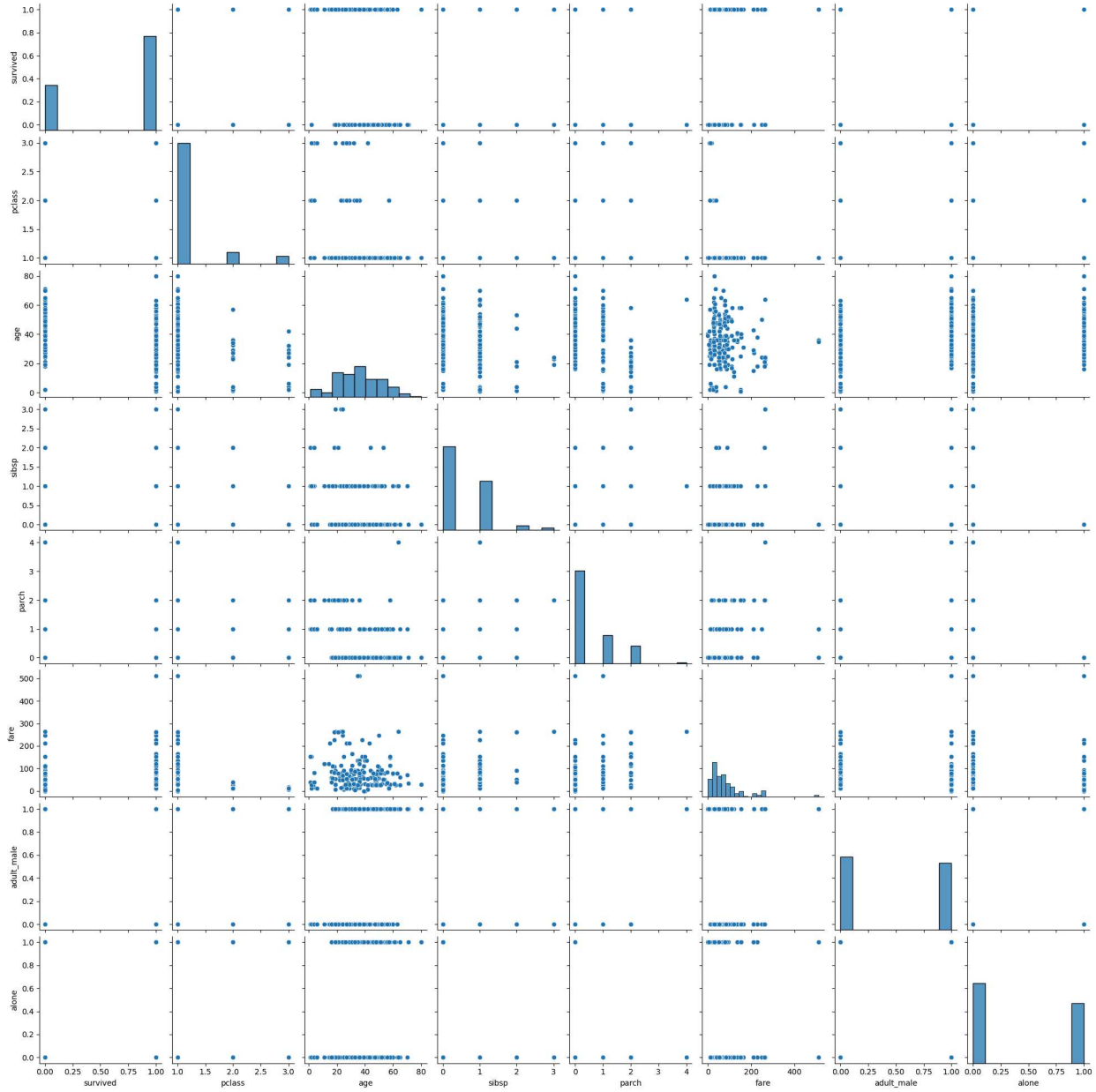


In [10]:
```
#3) the pair plot
dataset = dataset.dropna()
```

In [11]:
```
sns.pairplot(dataset)
```

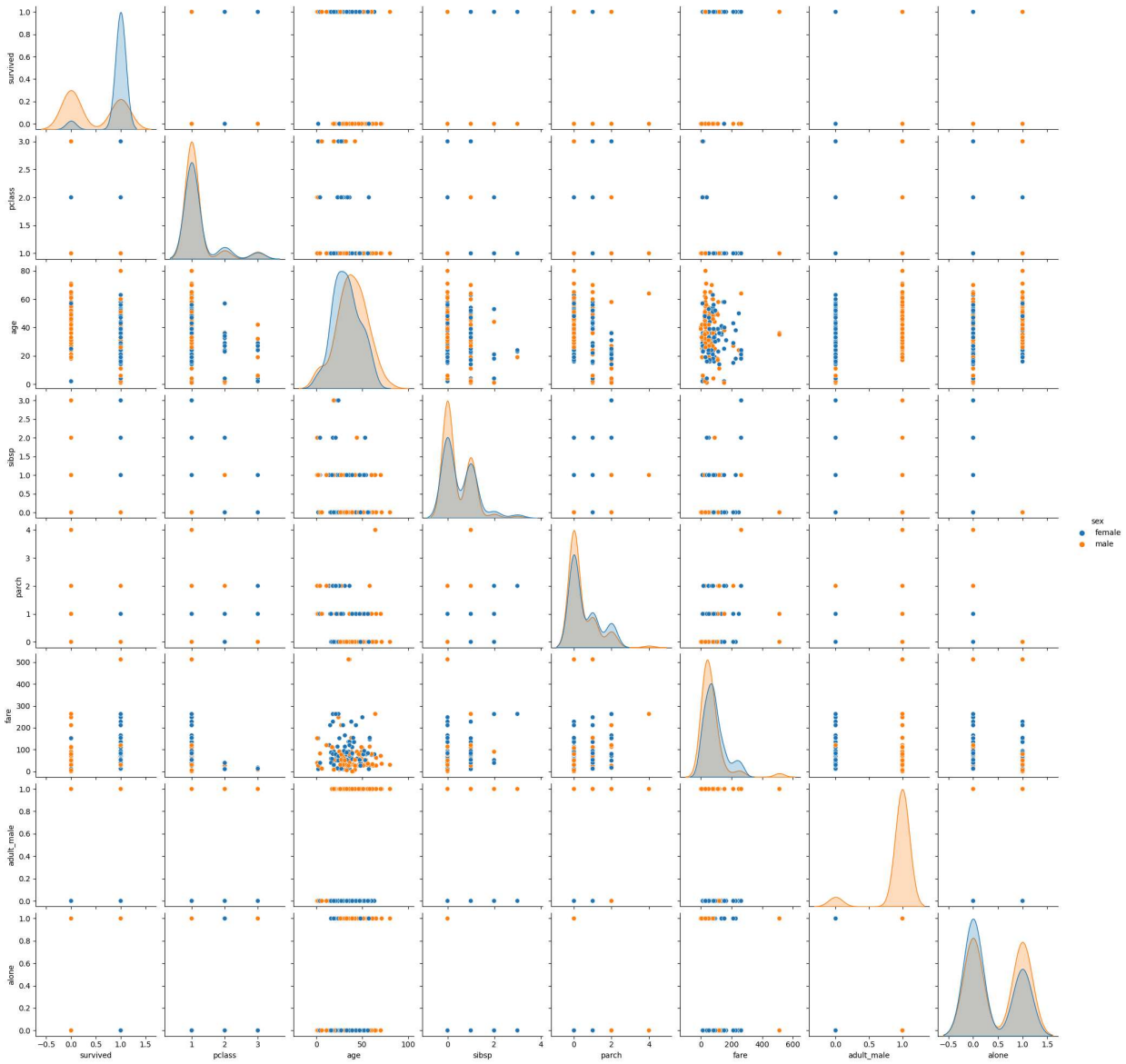
```
C:\Users\avcoe\anaconda3\lib\site-packages\seaborn\_stats\counting.py:137: RuntimeWar
ning: Converting input from bool to <class 'numpy.uint8'> for compatibility.
  bin_edges = np.histogram_bin_edges(vals, bins, binrange, weight)
C:\Users\avcoe\anaconda3\lib\site-packages\seaborn\_stats\counting.py:176: RuntimeWar
ning: Converting input from bool to <class 'numpy.uint8'> for compatibility.
  hist, edges = np.histogram(vals, **bin_kws, weights=weights, density=density)
C:\Users\avcoe\anaconda3\lib\site-packages\seaborn\_stats\counting.py:137: RuntimeWar
ning: Converting input from bool to <class 'numpy.uint8'> for compatibility.
  bin_edges = np.histogram_bin_edges(vals, bins, binrange, weight)
C:\Users\avcoe\anaconda3\lib\site-packages\seaborn\_stats\counting.py:176: RuntimeWar
ning: Converting input from bool to <class 'numpy.uint8'> for compatibility.
  hist, edges = np.histogram(vals, **bin_kws, weights=weights, density=density)
```

Out[11]:
```
<seaborn.axisgrid.PairGrid at 0x24c86c665b0>
```



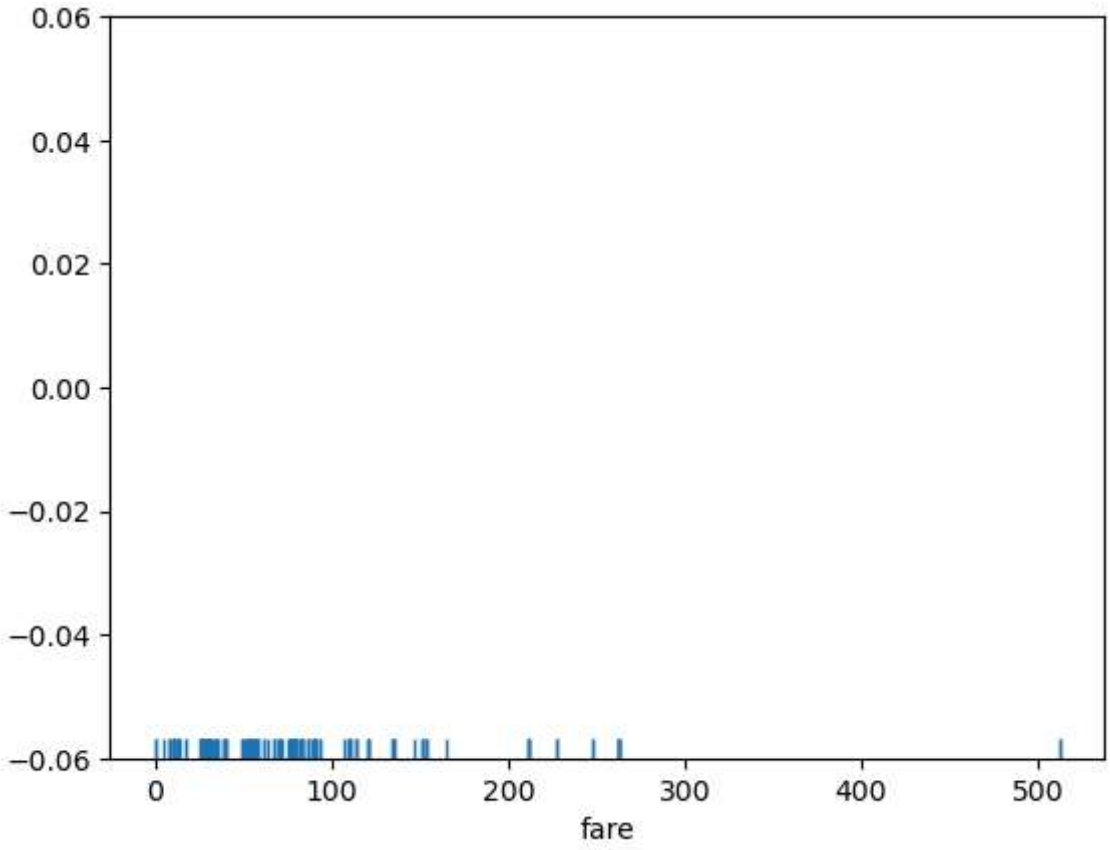
In [12]:
```
sns.pairplot(dataset, hue='sex')
```

Out[12]:
```
<seaborn.axisgrid.PairGrid at 0x24c86e38a30>
```



In [13]:
```
#4) The Rug plot
sns.rugplot(dataset['fare'])
```

Out[13]:
```
<AxesSubplot:xlabel='fare'>
```



In [ ]: