Practicle 9 DS

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import seaborn as sns

import matplotlib.pyplot as plt

import pandas as pd


# Load Titanic dataset

df = sns.load_dataset('titanic')


# Part 1: Box Plot for Age Distribution by Gender and Survival Status

plt.figure(figsize=(10, 6))

sns.boxplot(x='sex', y='age', hue='survived', data=df)

plt.title('Age Distribution by Gender and Survival Status')

plt.xlabel('Gender')

plt.ylabel('Age')

plt.legend(title='Survived', labels=['Not Survived', 'Survived'])

plt.show()


# Part 2: Observations

observations = """

Observations:

1. The median age of male passengers is higher compared to female passengers.

2. There are many young children among the survivors, indicating that younger individuals had a higher chance of survival.

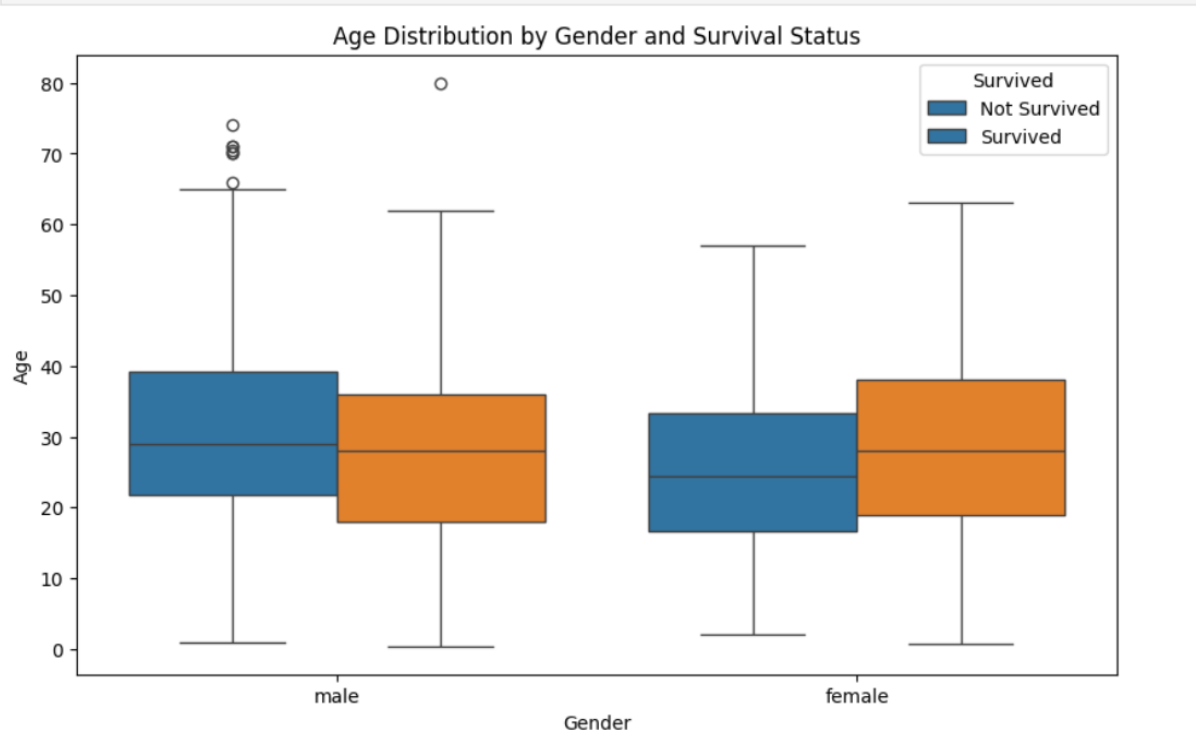
3. The age range of survivors is generally lower than that of non-survivors, especially among males.

4. Female passengers had a higher survival rate, particularly in the middle age range.

5. Outliers in the age distribution suggest a few very old passengers in both survived and non-survived groups.

"""


print(observations)
```



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