Collect accuracy scores from all models

In [361…
```
Model_name={"LogisticRegression":round(accuracy_log,2),
        "RandomForestClassifier":round(accuracy_rand,2),
        "DecisionTreeClassifier":round(accuracy_tree,2),
        "KNearestNeighbors":round(accuracy_knn,2) }
Model_name
```

Out[361…
```
{'LogisticRegression': 0.85,
 'RandomForestClassifier': 0.85,
 'DecisionTreeClassifier': 0.85,
 'KNearestNeighbors': 0.82}
```

Create a Dataframe for vizualization

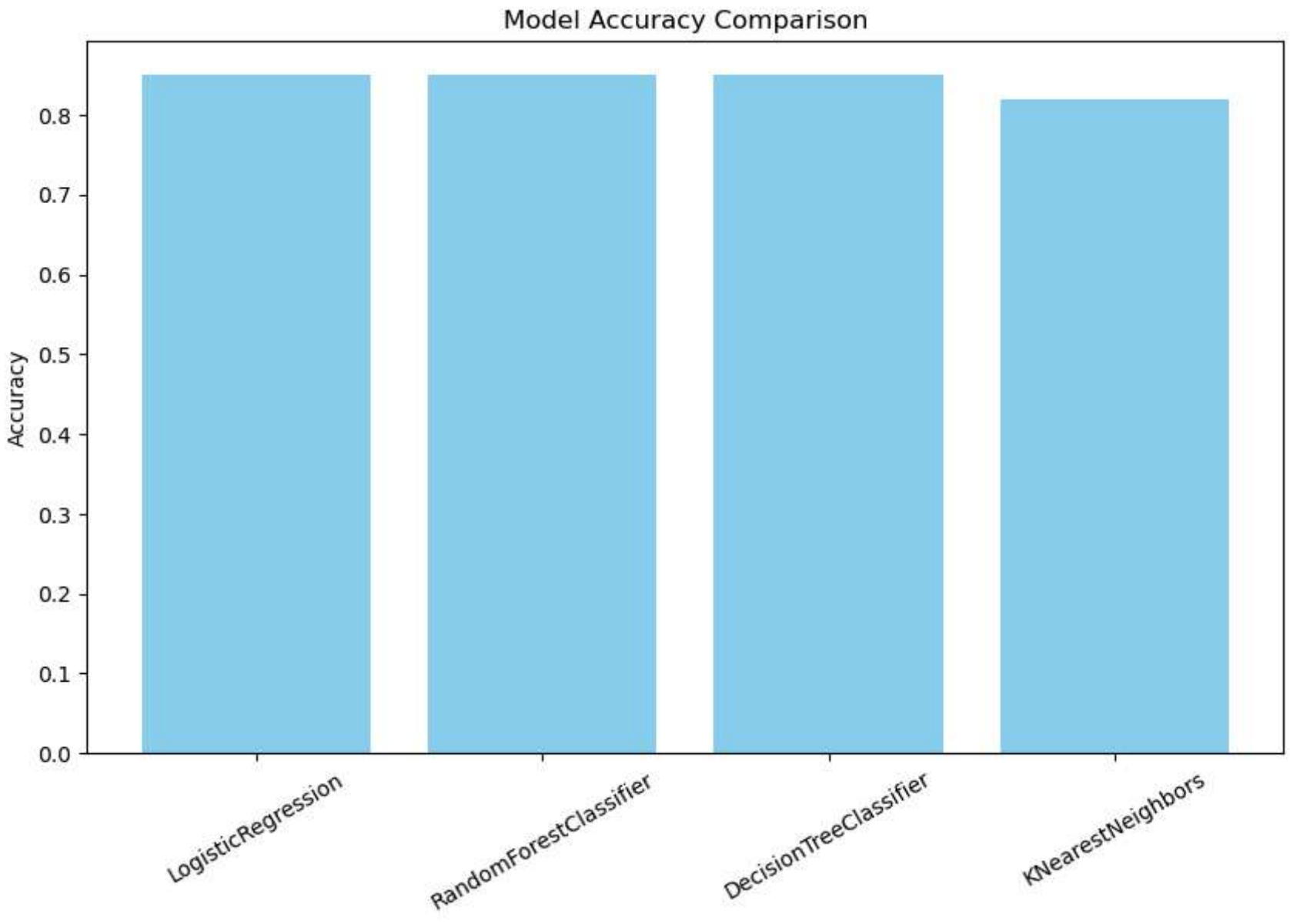
In [366…
```
project_report=pd.DataFrame(list(Model_name.items()),columns=["Model","Accuracy"])
project_report
```

Out[366…

	Model	Accuracy
0	LogisticRegression	0.85
1	RandomForestClassifier	0.85
2	DecisionTreeClassifier	0.85
3	KNearestNeighbors	0.82

In [368…
```
import matplotlib.pyplot as plt
```

In [370…
```
Model_name=['LogisticRegression','RandomForestClassifier','DecisionTreeClassifier','KNearestNeighbors']
Accuracies=[round(accuracy_log,2),round(accuracy_rand,2),round(accuracy_tree,2),round(accuracy_knn,2)]
plt.figure(figsize=(10,6))
plt.title('Model Accuracy Comparison')
plt.bar(Model_name,Accuracies,color='skyblue')
plt.ylabel('Accuracy')
plt.xticks(rotation=30)
plt.show()
```



The Logistic Regression, Random forest classifier and Decision tree classifier gave about 85% accuracy,while KNN gave 82% accuracy.

The Random forest as the best performing model. Because it had the highest F1 score, which balances both precision and recall.